**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 4941 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4942 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4943 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4944 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 93 | 6 | 584 | 0.067 | 0.190 | 165.1 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4945 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4946 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 118 | 6 | 584 | 0.067 | 0.190 | -13.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4947 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4948 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4949 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4950 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 117 | 6 | 584 | 0.067 | 0.190 | 62.9 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4951 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4952 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4953 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4954 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4955 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4956 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4957 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4958 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4959 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4960 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4961 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4962 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4963 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4964 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4965 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4966 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4967 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4968 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4969 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4970 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4971 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4972 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4973 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4974 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4975 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4976 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4977 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 116 | 6 | 584 | 0.067 | 0.190 | -39.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4978 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4979 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4980 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4981 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4982 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4983 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4984 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4985 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4986 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4987 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4988 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4989 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4990 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 107 | 6 | 584 | 0.067 | 0.190 | 88.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4991 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4992 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4993 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4994 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4995 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 119 | 6 | 584 | 0.067 | 0.190 | 37.3 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4996 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4997 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4998 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 4999 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5000 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5001 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5002 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5003 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 97 | 6 | 584 | 0.067 | 0.190 | 190.7 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5004 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 86 | 6 | 584 | 0.067 | 0.190 | 88.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5005 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 5006 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5007 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5008 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 111 | 6 | 584 | 0.067 | 0.190 | 114.0 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5009 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5010 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5011 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5012 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5013 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5014 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 130 | 6 | 584 | 0.067 | 0.190 | 114.0 | 486.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5015 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5016 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5017 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5018 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5019 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5020 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5021 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5022 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5023 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 113 | 6 | 584 | 0.067 | 0.190 | -39.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5024 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 91 | 6 | 584 | 0.067 | 0.190 | 114.0 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5025 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 122 | 6 | 584 | 0.067 | 0.190 | 114.0 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5026 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5027 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5028 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 106 | 6 | 584 | 0.067 | 0.190 | 88.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5029 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 112 | 6 | 584 | 0.067 | 0.190 | 62.9 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5030 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5031 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 109 | 6 | 584 | 0.067 | 0.190 | 185.1 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5032 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5033 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5034 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5035 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5036 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5037 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 114 | 6 | 584 | 0.067 | 0.190 | 88.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5038 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5039 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5040 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5041 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5042 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 131 | 6 | 584 | 0.067 | 0.190 | -39.4 | 495.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5043 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5044 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 118 | 6 | 584 | 0.067 | 0.190 | 37.3 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5045 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5046 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 102 | 6 | 584 | 0.067 | 0.190 | 185.1 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5047 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 118 | 6 | 584 | 0.067 | 0.190 | 62.9 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5048 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5049 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5050 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5051 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5052 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5053 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5054 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5055 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5056 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 117 | 6 | 584 | 0.067 | 0.190 | 62.9 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5057 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5058 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 124 | 6 | 584 | 0.067 | 0.190 | 37.3 | 431.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5059 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5060 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5061 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5062 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 114 | 6 | 584 | 0.067 | 0.190 | -13.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5063 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 117 | 6 | 584 | 0.067 | 0.190 | 11.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5064 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5065 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 117 | 6 | 584 | 0.067 | 0.190 | -39.4 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5066 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 120 | 6 | 584 | 0.067 | 0.190 | 37.3 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5067 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 116 | 6 | 584 | 0.067 | 0.190 | 114.0 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5068 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 128 | 6 | 584 | 0.067 | 0.190 | 37.3 | 467.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5069 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5070 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 5071 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5072 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5073 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 109 | 6 | 584 | 0.067 | 0.190 | 165.1 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5074 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 112 | 6 | 584 | 0.067 | 0.190 | 114.0 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5075 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5076 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5077 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 109 | 6 | 584 | 0.067 | 0.190 | 139.5 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5078 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5079 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 116 | 6 | 584 | 0.067 | 0.190 | 62.9 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5080 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 115 | 6 | 584 | 0.067 | 0.190 | 88.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5081 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 120 | 6 | 584 | 0.067 | 0.190 | 37.3 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5082 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5083 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5084 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5085 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5086 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5087 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 105 | 6 | 584 | 0.067 | 0.190 | 165.1 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5088 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5089 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 112 | 6 | 584 | 0.067 | 0.190 | -39.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5090 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5091 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5092 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5093 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 123 | 6 | 584 | 0.067 | 0.190 | 88.4 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5094 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5095 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5096 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5097 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5098 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5099 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 94 | 6 | 584 | 0.067 | 0.190 | 165.1 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5100 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5101 | 8/21/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 5102 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5103 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5104 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5105 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5106 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 77 | 6 | 584 | 0.074 | 0.192 | 85.3 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5107 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5108 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5109 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5110 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5111 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5112 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5113 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5114 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5115 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5116 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5117 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5118 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5119 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5120 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5121 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5122 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5123 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5124 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5125 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5126 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5127 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5128 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -94.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5129 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5130 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5131 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5132 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5133 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5134 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5135 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5136 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5137 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5138 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5139 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5140 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 107 | 6 | 584 | 0.074 | 0.192 | -30.4 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5141 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5142 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5143 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5144 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5145 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5146 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5147 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5148 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5149 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5150 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5151 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5152 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5153 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5154 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5155 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5156 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5157 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5158 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5159 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5160 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5161 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 108 | 6 | 584 | 0.074 | 0.192 | 39.0 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5162 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5163 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 113 | 6 | 584 | 0.074 | 0.192 | 15.9 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5164 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5165 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5166 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5167 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5168 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5169 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5170 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5171 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5172 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5173 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5174 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5175 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5176 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5177 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5178 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5179 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5180 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5181 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 103 | 6 | 584 | 0.074 | 0.192 | 62.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5182 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5183 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5184 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5185 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5186 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5187 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5188 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5189 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5190 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5191 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5192 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5193 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5194 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5195 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5196 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5197 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5198 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5199 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5200 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5201 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 97 | 6 | 584 | 0.074 | 0.192 | 85.3 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5202 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5203 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5204 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 108 | 6 | 584 | 0.074 | 0.192 | -7.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5205 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5206 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 99 | 6 | 584 | 0.074 | 0.192 | 131.8 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5207 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5208 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5209 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5210 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5211 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5212 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 101 | 6 | 584 | 0.074 | 0.192 | 62.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5213 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5214 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 114 | 6 | 584 | 0.074 | 0.192 | 15.9 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5215 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5216 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5217 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5218 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5219 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5220 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 118 | 6 | 584 | 0.074 | 0.192 | 62.2 | 275.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5221 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5222 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5223 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5224 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5225 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5226 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5227 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5228 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5229 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5230 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5231 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 113 | 6 | 584 | 0.074 | 0.192 | 62.2 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5232 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5233 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5234 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5235 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5236 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5237 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5238 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5239 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5240 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 107 | 6 | 584 | 0.074 | 0.192 | 62.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5241 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 111 | 6 | 584 | 0.074 | 0.192 | -30.4 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5242 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 111 | 6 | 584 | 0.074 | 0.192 | 39.0 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5243 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5244 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5245 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5246 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5247 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5248 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5249 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5250 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 114 | 6 | 584 | 0.074 | 0.192 | 108.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5251 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5252 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 105 | 6 | 584 | 0.074 | 0.192 | -53.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5253 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5254 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5255 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5256 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5257 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5258 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5259 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 96 | 6 | 584 | 0.074 | 0.192 | 62.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5260 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5261 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5262 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5263 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5264 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5265 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5266 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5267 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5268 | 8/21/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5269 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5270 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5271 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5272 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5273 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5274 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5275 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5276 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5277 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 100 | 6 | 584 | 0.074 | 0.192 | 85.3 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5278 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5279 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5280 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5281 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5282 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5283 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5284 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5285 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5286 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5287 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5288 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5289 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5290 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5291 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5292 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5293 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5294 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5295 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5296 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5297 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5298 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5299 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5300 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5301 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5302 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5303 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5304 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5305 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5306 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5307 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5308 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5309 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5310 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 52 | 6 | 584 | 0.074 | 0.192 | -7.2 | -313.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5311 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5312 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5313 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5314 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 56 | 6 | 584 | 0.074 | 0.192 | -53.5 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5315 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5316 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5317 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5318 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5319 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5320 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5321 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5322 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5323 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5324 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5325 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5326 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5327 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5328 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5329 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5330 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5331 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5332 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5333 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5334 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5335 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5336 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5337 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5338 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5339 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5340 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5341 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5342 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5343 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5344 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5345 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5346 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5347 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5348 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 54 | 6 | 584 | 0.074 | 0.192 | -30.4 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5349 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5350 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5351 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5352 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5353 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5354 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5355 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5356 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 60 | 6 | 584 | 0.074 | 0.192 | -53.5 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5357 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5358 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5359 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5360 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5361 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5362 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5363 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5364 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5365 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5366 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5367 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5368 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5369 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5370 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 99 | 6 | 584 | 0.074 | 0.192 | 108.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5371 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5372 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5373 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5374 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5375 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5376 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5377 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5378 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5379 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 111 | 6 | 584 | 0.074 | 0.192 | -53.5 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5380 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5381 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5382 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5383 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5384 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5385 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5386 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5387 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5388 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5389 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5390 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5391 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5392 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5393 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5394 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5395 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5396 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5397 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5398 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5399 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5400 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5401 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5402 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5403 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5404 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5405 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5406 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5407 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5408 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5409 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5410 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5411 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5412 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5413 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5414 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5415 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5416 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5417 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5418 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5419 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5420 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5421 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5422 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5423 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5424 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5425 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5426 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5427 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5428 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5429 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5430 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5431 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5432 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5433 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 75 | 6 | 584 | 0.074 | 0.192 | 85.3 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5434 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5435 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5436 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5437 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5438 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5439 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5440 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5441 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5442 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5443 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5444 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5445 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5446 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5447 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5448 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5449 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5450 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5451 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5452 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5453 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5454 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5455 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5456 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5457 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5458 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5459 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5460 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5461 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5462 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5463 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5464 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5465 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 73 | 6 | 584 | 0.074 | 0.192 | 108.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5466 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5467 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5468 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5469 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5470 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5471 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5472 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 60 | 6 | 584 | 0.074 | 0.192 | 39.0 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5473 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5474 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5475 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5476 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5477 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5478 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5479 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5480 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5481 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5482 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5483 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5484 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5485 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5486 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5487 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5488 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5489 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5490 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5491 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5492 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5493 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5494 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5495 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5496 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5497 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 93 | 6 | 584 | 0.074 | 0.192 | 131.6 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5498 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5499 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 84 | 6 | 584 | 0.074 | 0.192 | 108.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5500 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5501 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5502 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5503 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5504 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5505 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5506 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5507 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5508 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5509 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5510 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5511 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5512 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5513 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5514 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5515 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5516 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5517 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5518 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5519 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5520 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5521 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5522 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5523 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5524 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5525 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5526 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5527 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5528 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5529 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5530 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5531 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5532 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5533 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5534 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5535 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5536 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5537 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5538 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5539 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5540 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5541 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5542 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5543 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5544 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5545 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5546 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5547 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5548 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5549 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5550 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5551 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5552 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5553 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5554 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5555 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5556 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5557 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5558 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5559 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5560 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5561 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5562 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5563 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5564 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5565 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5566 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5567 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5568 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5569 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5570 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5571 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5572 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5573 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5574 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5575 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5576 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5577 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5578 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5579 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5580 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5581 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5582 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5583 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5584 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 111 | 6 | 584 | 0.074 | 0.192 | 62.2 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5585 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5586 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5587 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5588 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 10 | 97 | 6 | 584 | 0.074 | 0.192 | 177.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5589 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5590 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5591 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5592 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5593 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5594 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5595 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5596 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5597 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5598 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5599 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 71 | 6 | 584 | 0.074 | 0.192 | 85.3 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5600 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5601 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5602 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5603 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5604 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5605 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5606 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5607 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5608 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5609 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5610 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5611 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5612 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5613 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5614 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5615 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5616 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5617 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5618 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5619 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5620 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5621 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5622 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5623 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5624 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5625 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5626 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5627 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5628 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5629 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5630 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5631 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5632 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5633 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5634 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 110 | 6 | 584 | 0.074 | 0.192 | 62.2 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5635 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5636 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5637 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5638 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5639 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5640 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5641 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5642 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5643 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5644 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5645 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 61 | 6 | 584 | 0.074 | 0.192 | 15.9 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5646 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 85 | 6 | 584 | 0.074 | 0.192 | 85.3 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5647 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5648 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5649 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5650 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5651 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5652 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5653 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5654 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5655 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5656 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5657 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5658 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5659 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5660 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5661 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5662 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 67 | 6 | 584 | 0.074 | 0.192 | 39.0 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5663 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5664 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5665 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5666 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5667 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5668 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5669 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5670 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5671 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5672 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 105 | 6 | 584 | 0.074 | 0.192 | -53.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5673 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5674 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5675 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5676 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5677 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5678 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5679 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5680 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5681 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5682 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5683 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5684 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5685 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5686 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5687 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5688 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 91 | 6 | 584 | 0.074 | 0.192 | 108.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5689 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5690 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5691 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5692 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5693 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5694 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5695 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5696 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5697 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 87 | 6 | 584 | 0.074 | 0.192 | 85.3 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5698 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5699 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5700 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5701 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5702 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5703 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5704 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5705 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5706 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5707 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5708 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5709 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5710 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5711 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5712 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5713 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 117 | 6 | 584 | 0.074 | 0.192 | 39.0 | 266.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5714 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5715 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5716 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5717 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5718 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5719 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5720 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 109 | 6 | 584 | 0.074 | 0.192 | -7.2 | 195.1 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5721 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5722 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5723 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5724 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5725 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5726 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5727 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5728 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5729 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5730 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 90 | 6 | 584 | 0.074 | 0.192 | 131.6 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5731 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5732 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5733 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5734 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5735 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5736 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5737 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 103 | 6 | 584 | 0.074 | 0.192 | 85.3 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5738 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5739 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 111 | 6 | 584 | 0.074 | 0.192 | -7.2 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5740 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5741 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 103 | 6 | 584 | 0.074 | 0.192 | -53.5 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5742 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5743 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5744 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 106 | 6 | 584 | 0.074 | 0.192 | 85.3 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5745 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5746 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5747 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5748 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5749 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5750 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5751 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5752 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5753 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5754 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5755 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5756 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5757 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5758 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5759 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5760 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 104 | 6 | 584 | 0.074 | 0.192 | 85.3 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5761 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5762 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 112 | 6 | 584 | 0.074 | 0.192 | -7.2 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5763 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5764 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5765 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5766 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 108 | 6 | 584 | 0.074 | 0.192 | 62.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5767 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5768 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5769 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5770 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5771 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5772 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5773 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 125 | 6 | 584 | 0.074 | 0.192 | 15.9 | 337.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5774 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5775 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5776 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5777 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 110 | 6 | 584 | 0.074 | 0.192 | 15.9 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5778 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 108 | 6 | 584 | 0.074 | 0.192 | -7.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5779 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5780 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 112 | 6 | 584 | 0.074 | 0.192 | -7.2 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5781 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 96 | 6 | 584 | 0.074 | 0.192 | 62.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5782 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5783 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5784 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5785 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 5786 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5787 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5788 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5789 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5790 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5791 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5792 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 111 | 6 | 584 | 0.074 | 0.192 | 62.2 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5793 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5794 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5795 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5796 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 104 | 6 | 584 | 0.074 | 0.192 | 62.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5797 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5798 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5799 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5800 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 111 | 6 | 584 | 0.074 | 0.192 | -7.2 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5801 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5802 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5803 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5804 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5805 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5806 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5807 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5808 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5809 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5810 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5811 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5812 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5813 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5814 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5815 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5816 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5817 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5818 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5819 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5820 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5821 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5822 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5823 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5824 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5825 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5826 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 108 | 6 | 584 | 0.074 | 0.192 | 15.9 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5827 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5828 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5829 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5830 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 106 | 6 | 584 | 0.074 | 0.192 | -53.5 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5831 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5832 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5833 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5834 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5835 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5836 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5837 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 5838 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 5839 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5840 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5841 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5842 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5843 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5844 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5845 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5846 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5847 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5848 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5849 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5850 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 5851 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5852 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5853 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5854 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5855 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5856 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 72 | 6 | 584 | 0.067 | 0.190 | -13.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5857 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5858 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5859 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5860 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5861 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5862 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5863 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5864 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5865 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5866 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5867 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5868 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 121 | 6 | 584 | 0.067 | 0.190 | 62.9 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5869 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5870 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5871 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5872 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5873 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5874 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5875 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 98 | 6 | 584 | 0.067 | 0.190 | 139.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5876 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5877 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5878 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5879 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5880 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5881 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5882 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5883 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5884 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5885 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5886 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5887 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5888 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5889 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5890 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5891 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5892 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5893 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 116 | 6 | 584 | 0.067 | 0.190 | 62.9 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5894 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5895 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5896 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5897 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 113 | 6 | 584 | 0.067 | 0.190 | 88.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5898 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5899 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5900 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5901 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5902 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5903 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5904 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5905 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5906 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5907 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5908 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5909 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5910 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5911 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5912 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5913 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5914 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5915 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 5916 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5917 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5918 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5919 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5920 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5921 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5922 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5923 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5924 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5925 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5926 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5927 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5928 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5929 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5930 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5931 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5932 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5933 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5934 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5935 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5936 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5937 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5938 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5939 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 122 | 6 | 584 | 0.067 | 0.190 | 11.8 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5940 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5941 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5942 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 116 | 6 | 584 | 0.067 | 0.190 | 11.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5943 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5944 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 120 | 6 | 584 | 0.067 | 0.190 | -39.4 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5945 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5946 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5947 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5948 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5949 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5950 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5951 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5952 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5953 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5954 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 93 | 6 | 584 | 0.067 | 0.190 | 114.0 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5955 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5956 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5957 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5958 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5959 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5960 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5961 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5962 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 117 | 6 | 584 | 0.067 | 0.190 | -13.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5963 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5964 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5965 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5966 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 119 | 6 | 584 | 0.067 | 0.190 | 62.9 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5967 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5968 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5969 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5970 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5971 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 119 | 6 | 584 | 0.067 | 0.190 | 37.3 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5972 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5973 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5974 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 104 | 6 | 584 | 0.067 | 0.190 | 139.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5975 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 106 | 6 | 584 | 0.067 | 0.190 | 88.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5976 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5977 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5978 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5979 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5980 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 5981 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 116 | 6 | 584 | 0.067 | 0.190 | 62.9 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5982 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5983 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5984 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5985 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5986 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5987 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5988 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5989 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 108 | 6 | 584 | 0.067 | 0.190 | 88.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5990 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5991 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5992 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5993 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5994 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5995 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5996 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5997 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5998 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 5999 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6000 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6001 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6002 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6003 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 78 | 6 | 584 | 0.067 | 0.190 | 37.3 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6004 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6005 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6006 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6007 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6008 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 111 | 6 | 584 | 0.067 | 0.190 | 114.0 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6009 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6010 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6011 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6012 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6013 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6014 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6015 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6016 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6017 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6018 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6019 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6020 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6021 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 80 | 6 | 584 | 0.067 | 0.190 | 88.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6022 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6023 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 80 | 6 | 584 | 0.067 | 0.190 | 62.9 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6024 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6025 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6026 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6027 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6028 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6029 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 109 | 6 | 584 | 0.067 | 0.190 | 114.0 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6030 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6031 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6032 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6033 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 128 | 6 | 584 | 0.067 | 0.190 | -13.8 | 467.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6034 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6035 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6036 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6037 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6038 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6039 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6040 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6041 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6042 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6043 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6044 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6045 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6046 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6047 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6048 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6049 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6050 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6051 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6052 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6053 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6054 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6055 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6056 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6057 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 106 | 6 | 584 | 0.067 | 0.190 | 88.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6058 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 119 | 6 | 584 | 0.067 | 0.190 | 114.0 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6059 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6060 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6061 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6062 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6063 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6064 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6065 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6066 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6067 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6068 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6069 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6070 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6071 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6072 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6073 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6074 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 6075 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6076 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6077 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 9 | 92 | 6 | 584 | 0.074 | 0.192 | 154.7 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6078 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6079 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6080 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6081 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 88 | 6 | 584 | 0.074 | 0.192 | 85.3 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6082 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6083 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6084 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6085 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6086 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6087 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6088 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6089 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6090 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6091 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6092 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6093 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6094 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6095 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6096 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6097 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6098 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6099 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6100 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6101 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6102 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6103 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 72 | 6 | 584 | 0.074 | 0.192 | 108.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6104 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6105 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6106 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6107 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6108 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6109 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6110 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 6111 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6112 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6113 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6114 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6115 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6116 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6117 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6118 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6119 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6120 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6121 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6122 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 86 | 6 | 584 | 0.074 | 0.192 | 85.3 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6123 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6124 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6125 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6126 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6127 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6128 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 9 | 80 | 6 | 584 | 0.074 | 0.192 | 154.7 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6129 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6130 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6131 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6132 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6133 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6134 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6135 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6136 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6137 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6138 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6139 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6140 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6141 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6142 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6143 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6144 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6145 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6146 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6147 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6148 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6149 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6150 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6151 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6152 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6153 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6154 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6155 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6156 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6157 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6158 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6159 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6160 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6161 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6162 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6163 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6164 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6165 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6166 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6167 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6168 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 87 | 6 | 584 | 0.074 | 0.192 | 85.3 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6169 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6170 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 75 | 6 | 584 | 0.074 | 0.192 | 85.3 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6171 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6172 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6173 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6174 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 108 | 6 | 584 | 0.074 | 0.192 | 62.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6175 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 101 | 6 | 584 | 0.074 | 0.192 | 85.3 | 123.7 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 6176 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 117 | 6 | 584 | 0.074 | 0.192 | -7.2 | 266.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6177 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6178 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6179 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6180 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6181 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6182 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6183 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6184 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6185 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6186 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6187 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6188 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6189 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 106 | 6 | 584 | 0.074 | 0.192 | 62.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6190 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 57 | 6 | 584 | 0.074 | 0.192 | -30.4 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6191 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6192 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6193 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6194 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6195 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6196 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6197 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6198 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6199 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6200 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6201 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 106 | 6 | 584 | 0.074 | 0.192 | 62.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6202 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6203 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6204 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6205 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6206 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6207 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6208 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6209 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6210 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6211 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6212 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6213 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6214 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6215 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6216 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6217 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 103 | 6 | 584 | 0.074 | 0.192 | -53.5 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6218 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6219 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6220 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6221 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6222 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6223 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6224 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6225 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6226 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6227 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 108 | 6 | 584 | 0.074 | 0.192 | 62.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6228 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6229 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6230 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6231 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 107 | 6 | 584 | 0.074 | 0.192 | -30.4 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6232 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6233 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6234 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6235 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6236 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6237 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6238 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6239 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6240 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 112 | 6 | 584 | 0.074 | 0.192 | -7.2 | 221.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 6241 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6242 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6243 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6244 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6245 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6246 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6247 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6248 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 94 | 6 | 584 | 0.074 | 0.192 | 85.3 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6249 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6250 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6251 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6252 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6253 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6254 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6255 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6256 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6257 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 62 | 6 | 584 | 0.074 | 0.192 | 62.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6258 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6259 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6260 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6261 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6262 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6263 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6264 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6265 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6266 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6267 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6268 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6269 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6270 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6271 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6272 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6273 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6274 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6275 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6276 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6277 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6278 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6279 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6280 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6281 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6282 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6283 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6284 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6285 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6286 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6287 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6288 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6289 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6290 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6291 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6292 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 81 | 6 | 584 | 0.074 | 0.192 | 131.6 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6293 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6294 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6295 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6296 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6297 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6298 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6299 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 70 | 6 | 584 | 0.074 | 0.192 | 62.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6300 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 105 | 6 | 584 | 0.074 | 0.192 | -7.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6301 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6302 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6303 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6304 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 105 | 6 | 584 | 0.074 | 0.192 | -53.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6305 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 6306 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6307 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6308 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6309 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6310 | 8/22/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 6311 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6312 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6313 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6314 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6315 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 114 | 6 | 584 | 0.067 | 0.190 | -39.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6316 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6317 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6318 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6319 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6320 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6321 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6322 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6323 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6324 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6325 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6326 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6327 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6328 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6329 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6330 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6331 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6332 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6333 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6334 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 68 | 6 | 584 | 0.067 | 0.190 | 62.9 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6335 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6336 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 78 | 6 | 584 | 0.067 | 0.190 | 37.3 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6337 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6338 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6339 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 81 | 6 | 584 | 0.067 | 0.190 | 62.9 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6340 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6341 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6342 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6343 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6344 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6345 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6346 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6347 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6348 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6349 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6350 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 79 | 6 | 584 | 0.067 | 0.190 | 88.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6351 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6352 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 76 | 6 | 584 | 0.067 | 0.190 | 37.3 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6353 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6354 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6355 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6356 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6357 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 79 | 6 | 584 | 0.067 | 0.190 | 62.9 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6358 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6359 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6360 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6361 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6362 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6363 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6364 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6365 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 64 | 6 | 584 | 0.067 | 0.190 | -13.8 | -108.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6366 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6367 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 73 | 6 | 584 | 0.067 | 0.190 | 37.3 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6368 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 72 | 6 | 584 | 0.067 | 0.190 | 11.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6369 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6370 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6371 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6372 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6373 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 70 | 6 | 584 | 0.067 | 0.190 | -13.8 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6374 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 75 | 6 | 584 | 0.067 | 0.190 | 62.9 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6375 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6376 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6377 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6378 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6379 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6380 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6381 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6382 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6383 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6384 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6385 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6386 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6387 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6388 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6389 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6390 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6391 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6392 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6393 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6394 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6395 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6396 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6397 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6398 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6399 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6400 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6401 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6402 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 68 | 6 | 584 | 0.067 | 0.190 | -39.4 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6403 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | -39.4 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6404 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6405 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 68 | 6 | 584 | 0.067 | 0.190 | 62.9 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6406 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6407 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 105 | 6 | 584 | 0.067 | 0.190 | 88.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6408 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 71 | 6 | 584 | 0.067 | 0.190 | -13.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6409 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6410 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6411 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 67 | 6 | 584 | 0.067 | 0.190 | 11.8 | -81.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6412 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6413 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6414 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6415 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6416 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6417 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6418 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6419 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6420 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6421 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6422 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 74 | 6 | 584 | 0.067 | 0.190 | 37.3 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6423 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6424 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6425 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6426 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6427 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6428 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 74 | 6 | 584 | 0.067 | 0.190 | 11.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6429 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6430 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 77 | 6 | 584 | 0.067 | 0.190 | 88.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6431 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6432 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6433 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6434 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6435 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 71 | 6 | 584 | 0.067 | 0.190 | 88.4 | -45.8 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6436 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 85 | 6 | 584 | 0.067 | 0.190 | 62.9 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6437 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6438 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6439 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6440 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6441 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6442 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6443 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6444 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6445 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 72 | 6 | 584 | 0.067 | 0.190 | 114.0 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6446 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 79 | 6 | 584 | 0.067 | 0.190 | 62.9 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6447 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6448 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6449 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6450 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6451 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 74 | 6 | 584 | 0.067 | 0.190 | -39.4 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6452 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6453 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6454 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6455 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 86 | 6 | 584 | 0.067 | 0.190 | 114.0 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6456 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6457 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 118 | 6 | 584 | 0.067 | 0.190 | 37.3 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6458 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6459 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6460 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6461 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6462 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6463 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6464 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6465 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6466 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6467 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6468 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6469 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6470 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 78 | 6 | 584 | 0.067 | 0.190 | 37.3 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6471 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6472 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6473 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6474 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6475 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6476 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | -39.4 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6477 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6478 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6479 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6480 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 80 | 6 | 584 | 0.067 | 0.190 | 62.9 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6481 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6482 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6483 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 79 | 6 | 584 | 0.067 | 0.190 | 62.9 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6484 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6485 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6486 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6487 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6488 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6489 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6490 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6491 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6492 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6493 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6494 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6495 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6496 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6497 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6498 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 86 | 6 | 584 | 0.067 | 0.190 | 114.0 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6499 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6500 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 67 | 6 | 584 | 0.067 | 0.190 | 37.3 | -81.8 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6501 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 70 | 6 | 584 | 0.067 | 0.190 | 11.8 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6502 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6503 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6504 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6505 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6506 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6507 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6508 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6509 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6510 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6511 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6512 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6513 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6514 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6515 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6516 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 76 | 6 | 584 | 0.067 | 0.190 | 62.9 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6517 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 77 | 6 | 584 | 0.067 | 0.190 | 37.3 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6518 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6519 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6520 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6521 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6522 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6523 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6524 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6525 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6526 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6527 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6528 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6529 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6530 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6531 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6532 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6533 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 91 | 6 | 584 | 0.067 | 0.190 | 88.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6534 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6535 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6536 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 69 | 6 | 584 | 0.067 | 0.190 | -39.4 | -63.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6537 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6538 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6539 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6540 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6541 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 83 | 6 | 584 | 0.067 | 0.190 | 114.0 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6542 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6543 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6544 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6545 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6546 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6547 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6548 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6549 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6550 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6551 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6552 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6553 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 72 | 6 | 584 | 0.067 | 0.190 | 11.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6554 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6555 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6556 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6557 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6558 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6559 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6560 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6561 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6562 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6563 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6564 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6565 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6566 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6567 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6568 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6569 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6570 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6571 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6572 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6573 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6574 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 94 | 6 | 584 | 0.067 | 0.190 | 114.0 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6575 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6576 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6577 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6578 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6579 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6580 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6581 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6582 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6583 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6584 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6585 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6586 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6587 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 82 | 6 | 584 | 0.067 | 0.190 | 62.9 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6588 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6589 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6590 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6591 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6592 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6593 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6594 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6595 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6596 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6597 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6598 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6599 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6600 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6601 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6602 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6603 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6604 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6605 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6606 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 123 | 6 | 584 | 0.067 | 0.190 | 11.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6607 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6608 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6609 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6610 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6611 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6612 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6613 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6614 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6615 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6616 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6617 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6618 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 74 | 6 | 584 | 0.067 | 0.190 | 37.3 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6619 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6620 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6621 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6622 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6623 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6624 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6625 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6626 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6627 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6628 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 72 | 6 | 584 | 0.067 | 0.190 | 37.3 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6629 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6630 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6631 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6632 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6633 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6634 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6635 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6636 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6637 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6638 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 87 | 6 | 584 | 0.067 | 0.190 | 139.5 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6639 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6640 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6641 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6642 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6643 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 68 | 6 | 584 | 0.067 | 0.190 | 37.3 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6644 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6645 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6646 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 79 | 6 | 584 | 0.067 | 0.190 | 88.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6647 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 70 | 6 | 584 | 0.067 | 0.190 | 37.3 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6648 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6649 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6650 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 81 | 6 | 584 | 0.067 | 0.190 | 62.9 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6651 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6652 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6653 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6654 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6655 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6656 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6657 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6658 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6659 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6660 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6661 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6662 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6663 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6664 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6665 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6666 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6667 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6668 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 81 | 6 | 584 | 0.067 | 0.190 | 88.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6669 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6670 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6671 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6672 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6673 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6674 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6675 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6676 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6677 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6678 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6679 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6680 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6681 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6682 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6683 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6684 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 80 | 6 | 584 | 0.067 | 0.190 | 114.0 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6685 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6686 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6687 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6688 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6689 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6690 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6691 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6692 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 120 | 6 | 584 | 0.067 | 0.190 | 62.9 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6693 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6694 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6695 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6696 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6697 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6698 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6699 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6700 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6701 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6702 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6703 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6704 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6705 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6706 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6707 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6708 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6709 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6710 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6711 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6712 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6713 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6714 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6715 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6716 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6717 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6718 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6719 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6720 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6721 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6722 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6723 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6724 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6725 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6726 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6727 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6728 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6729 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6730 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6731 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 123 | 6 | 584 | 0.067 | 0.190 | 11.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6732 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6733 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6734 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6735 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6736 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6737 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6738 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6739 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6740 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6741 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6742 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6743 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6744 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 79 | 6 | 584 | 0.067 | 0.190 | 139.5 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6745 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6746 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6747 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6748 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6749 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6750 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6751 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6752 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6753 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 90 | 6 | 584 | 0.067 | 0.190 | 139.5 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6754 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6755 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6756 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 80 | 6 | 584 | 0.067 | 0.190 | 88.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6757 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6758 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6759 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 88 | 6 | 584 | 0.067 | 0.190 | 114.0 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6760 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area (cm²) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 cm²) | Beta (dpm/ 100 cm²) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6761 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 116 | 6 | 584 | 0.067 | 0.190 | 11.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6762 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6763 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6764 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6765 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 120 | 6 | 584 | 0.067 | 0.190 | 114.0 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6766 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6767 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6768 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6769 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6770 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6771 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6772 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6773 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6774 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6775 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 86 | 6 | 584 | 0.067 | 0.190 | 139.5 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6776 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6777 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6778 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 123 | 6 | 584 | 0.067 | 0.190 | 62.9 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6779 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6780 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 106 | 6 | 584 | 0.067 | 0.190 | 114.0 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6781 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6782 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 106 | 6 | 584 | 0.067 | 0.190 | 114.0 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6783 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 103 | 6 | 584 | 0.067 | 0.190 | 114.0 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6784 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6785 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 12 | 110 | 6 | 584 | 0.067 | 0.190 | 267.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6786 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6787 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 128 | 6 | 584 | 0.067 | 0.190 | 11.8 | 467.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6788 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6789 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6790 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6791 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6792 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 124 | 6 | 584 | 0.067 | 0.190 | 62.9 | 431.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6793 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6794 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6795 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6796 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6797 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6798 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6799 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6800 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6801 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6802 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6803 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6804 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6805 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 126 | 6 | 584 | 0.067 | 0.190 | 62.9 | 449.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6806 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6807 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6808 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6809 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6810 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 104 | 6 | 584 | 0.067 | 0.190 | 114.0 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6811 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6812 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 119 | 6 | 584 | 0.067 | 0.190 | 37.3 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6813 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6814 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 111 | 6 | 584 | 0.067 | 0.190 | 139.5 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6815 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6816 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6817 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 107 | 6 | 584 | 0.067 | 0.190 | 88.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6818 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6819 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 107 | 6 | 584 | 0.067 | 0.190 | 88.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6820 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6821 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 125 | 6 | 584 | 0.067 | 0.190 | 62.9 | 440.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6822 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6823 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6824 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6825 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6826 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6827 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6828 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6829 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 114 | 6 | 584 | 0.067 | 0.190 | 62.9 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6830 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 120 | 6 | 584 | 0.067 | 0.190 | -13.8 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6831 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6832 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6833 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6834 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 84 | 6 | 584 | 0.067 | 0.190 | 190.7 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6835 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6836 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6837 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6838 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 127 | 6 | 584 | 0.067 | 0.190 | 11.8 | 458.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6839 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6840 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6841 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6842 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 127 | 6 | 584 | 0.067 | 0.190 | 11.8 | 458.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6843 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6844 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6845 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6846 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 118 | 6 | 584 | 0.067 | 0.190 | 37.3 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6847 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 91 | 6 | 584 | 0.067 | 0.190 | 88.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6848 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6849 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 121 | 6 | 584 | 0.067 | 0.190 | 11.8 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6850 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6851 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6852 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6853 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6854 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6855 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6856 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6857 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 0 | 6 | 584 | 0.067 | 0.190 | -39.4 | -685.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6858 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6859 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 81 | 6 | 584 | 0.067 | 0.190 | 165.1 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6860 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6861 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6862 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6863 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6864 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6865 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6866 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 122 | 6 | 584 | 0.067 | 0.190 | 114.0 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6867 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6868 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 116 | 6 | 584 | 0.067 | 0.190 | 11.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6869 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6870 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6871 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 115 | 6 | 584 | 0.067 | 0.190 | 114.0 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6872 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6873 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6874 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6875 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6876 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6877 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6878 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 114 | 6 | 584 | 0.067 | 0.190 | 62.9 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6879 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6880 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6881 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 104 | 6 | 584 | 0.067 | 0.190 | 114.0 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6882 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6883 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6884 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6885 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6886 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6887 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6888 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6889 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6890 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6891 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6892 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6893 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6894 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6895 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6896 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 93 | 6 | 584 | 0.067 | 0.190 | 139.5 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6897 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6898 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6899 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 113 | 6 | 584 | 0.067 | 0.190 | 62.9 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6900 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6901 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6902 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6903 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6904 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6905 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6906 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6907 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6908 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6909 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6910 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6911 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 127 | 6 | 584 | 0.067 | 0.190 | 62.9 | 458.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6912 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 117 | 6 | 584 | 0.067 | 0.190 | 88.4 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6913 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 119 | 6 | 584 | 0.067 | 0.190 | -13.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6914 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 119 | 6 | 584 | 0.067 | 0.190 | 62.9 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6915 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 104 | 6 | 584 | 0.067 | 0.190 | 114.0 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6916 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 108 | 6 | 584 | 0.067 | 0.190 | 165.1 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6917 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6918 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 126 | 6 | 584 | 0.067 | 0.190 | 62.9 | 449.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6919 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 113 | 6 | 584 | 0.067 | 0.190 | 88.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6920 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6921 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6922 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6923 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6924 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6925 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 86 | 6 | 584 | 0.067 | 0.190 | 88.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6926 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 108 | 6 | 584 | 0.067 | 0.190 | 114.0 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6927 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6928 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6929 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6930 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 126 | 6 | 584 | 0.067 | 0.190 | 37.3 | 449.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6931 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 85 | 6 | 584 | 0.067 | 0.190 | 62.9 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6932 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6933 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6934 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6935 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6936 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6937 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 124 | 6 | 584 | 0.067 | 0.190 | 88.4 | 431.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6938 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 114 | 6 | 584 | 0.067 | 0.190 | 88.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6939 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6940 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6941 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6942 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6943 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6944 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 111 | 6 | 584 | 0.067 | 0.190 | 139.5 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6945 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6946 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6947 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6948 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6949 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6950 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6951 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6952 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6953 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 110 | 6 | 584 | 0.067 | 0.190 | 114.0 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6954 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6955 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 112 | 6 | 584 | 0.067 | 0.190 | 62.9 | 323.7 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 6956 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6957 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 107 | 6 | 584 | 0.067 | 0.190 | 114.0 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6958 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 113 | 6 | 584 | 0.067 | 0.190 | 62.9 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6959 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6960 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6961 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6962 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6963 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6964 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 120 | 6 | 584 | 0.067 | 0.190 | 62.9 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6965 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 97 | 6 | 584 | 0.067 | 0.190 | 114.0 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6966 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6967 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6968 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6969 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6970 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6971 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6972 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6973 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 77 | 6 | 584 | 0.067 | 0.190 | 88.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6974 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6975 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 82 | 6 | 584 | 0.067 | 0.190 | 88.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6976 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6977 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6978 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6979 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6980 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6981 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6982 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6983 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6984 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6985 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 79 | 6 | 584 | 0.067 | 0.190 | 62.9 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6986 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 6987 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 6988 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6989 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6990 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6991 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6992 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6993 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6994 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6995 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6996 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6997 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 60 | 6 | 584 | 0.074 | 0.192 | -7.2 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6998 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 6999 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7000 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7001 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7002 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7003 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7004 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7005 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7006 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 64 | 6 | 584 | 0.074 | 0.192 | 15.9 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7007 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7008 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 61 | 6 | 584 | 0.074 | 0.192 | -7.2 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7009 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 58 | 6 | 584 | 0.074 | 0.192 | -7.2 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7010 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7011 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 48 | 6 | 584 | 0.074 | 0.192 | -53.5 | -349.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7012 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7013 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7014 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7015 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7016 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7017 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7018 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 62 | 6 | 584 | 0.074 | 0.192 | 85.3 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7019 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7020 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7021 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7022 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7023 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7024 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7025 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7026 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7027 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 64 | 6 | 584 | 0.074 | 0.192 | 39.0 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7028 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7029 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7030 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7031 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7032 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7033 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7034 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7035 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7036 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7037 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7038 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7039 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7040 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7041 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7042 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7043 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7044 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7045 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7046 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7047 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7048 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7049 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7050 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 54 | 6 | 584 | 0.074 | 0.192 | 39.0 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7051 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7052 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7053 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7054 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7055 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7056 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7057 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7058 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 59 | 6 | 584 | 0.074 | 0.192 | -7.2 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7059 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7060 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7061 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7062 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7063 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7064 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 69 | 6 | 584 | 0.074 | 0.192 | 62.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7065 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7066 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7067 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7068 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7069 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7070 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7071 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7072 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7073 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7074 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7075 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7076 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7077 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7078 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7079 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7080 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7081 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7082 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 83 | 6 | 584 | 0.074 | 0.192 | 131.6 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7083 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7084 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7085 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7086 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7087 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7088 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7089 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7090 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7091 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7092 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 73 | 6 | 584 | 0.074 | 0.192 | 108.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7093 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7094 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7095 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7096 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7097 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 73 | 6 | 584 | 0.074 | 0.192 | 39.0 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7098 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 70 | 6 | 584 | 0.074 | 0.192 | 62.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7099 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7100 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7101 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7102 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7103 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7104 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7105 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7106 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7107 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 61 | 6 | 584 | 0.074 | 0.192 | -7.2 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7108 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7109 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7110 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7111 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7112 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7113 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7114 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7115 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7116 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7117 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7118 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7119 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7120 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7121 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7122 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7123 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7124 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7125 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7126 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7127 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7128 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7129 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 59 | 6 | 584 | 0.074 | 0.192 | 15.9 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7130 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7131 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7132 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7133 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7134 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7135 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 85 | 6 | 584 | 0.074 | 0.192 | 85.3 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7136 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7137 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7138 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7139 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7140 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7141 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7142 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7143 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 74 | 6 | 584 | 0.074 | 0.192 | 85.3 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7144 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7145 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 53 | 6 | 584 | 0.074 | 0.192 | -30.4 | -304.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7146 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7147 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7148 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7149 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7150 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7151 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7152 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 55 | 6 | 584 | 0.074 | 0.192 | 15.9 | -286.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7153 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7154 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7155 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 65 | 6 | 584 | 0.074 | 0.192 | 39.0 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7156 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 73 | 6 | 584 | 0.074 | 0.192 | 39.0 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7157 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7158 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7159 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7160 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7161 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7162 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7163 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 80 | 6 | 584 | 0.074 | 0.192 | 108.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7164 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7165 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7166 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7167 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7168 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7169 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7170 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7171 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 10 | 82 | 6 | 584 | 0.074 | 0.192 | 177.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7172 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7173 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7174 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7175 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7176 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7177 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7178 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7179 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7180 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7181 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7182 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 76 | 6 | 584 | 0.074 | 0.192 | 62.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7183 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7184 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7185 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7186 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7187 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7188 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7189 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 66 | 6 | 584 | 0.074 | 0.192 | 39.0 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7190 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7191 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7192 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7193 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7194 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7195 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7196 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7197 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7198 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7199 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7200 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 84 | 6 | 584 | 0.074 | 0.192 | 131.6 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7201 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7202 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7203 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 73 | 6 | 584 | 0.074 | 0.192 | 108.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7204 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7205 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7206 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7207 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7208 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7209 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7210 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7211 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7212 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7213 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7214 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7215 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7216 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7217 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7218 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7219 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 62 | 6 | 584 | 0.074 | 0.192 | 15.9 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7220 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7221 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7222 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7223 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 60 | 6 | 584 | 0.074 | 0.192 | 15.9 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7224 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7225 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7226 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 54 | 6 | 584 | 0.074 | 0.192 | -30.4 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7227 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7228 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7229 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7230 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7231 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7232 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7233 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7234 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7235 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7236 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7237 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7238 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 56 | 6 | 584 | 0.074 | 0.192 | -30.4 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7239 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7240 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7241 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7242 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7243 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7244 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7245 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 63 | 6 | 584 | 0.074 | 0.192 | -53.5 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7246 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7247 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7248 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7249 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7250 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 54 | 6 | 584 | 0.074 | 0.192 | -7.2 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7251 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7252 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7253 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7254 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7255 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7256 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7257 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7258 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7259 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7260 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7261 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7262 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 71 | 6 | 584 | 0.074 | 0.192 | 62.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7263 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 57 | 6 | 584 | 0.074 | 0.192 | -53.5 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7264 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7265 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 56 | 6 | 584 | 0.074 | 0.192 | -30.4 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7266 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 61 | 6 | 584 | 0.074 | 0.192 | -7.2 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7267 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 63 | 6 | 584 | 0.074 | 0.192 | 15.9 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7268 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7269 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7270 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7271 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 68 | 6 | 584 | 0.074 | 0.192 | 62.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7272 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7273 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7274 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7275 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7276 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7277 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 52 | 6 | 584 | 0.074 | 0.192 | -30.4 | -313.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7278 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7279 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7280 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7281 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7282 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7283 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7284 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7285 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7286 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7287 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7288 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7289 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7290 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 59 | 6 | 584 | 0.074 | 0.192 | -7.2 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7291 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 48 | 6 | 584 | 0.074 | 0.192 | 15.9 | -349.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7292 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 54 | 6 | 584 | 0.074 | 0.192 | -30.4 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7293 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7294 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 62 | 6 | 584 | 0.074 | 0.192 | -53.5 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7295 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7296 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7297 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7298 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7299 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 61 | 6 | 584 | 0.074 | 0.192 | 15.9 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7300 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7301 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 57 | 6 | 584 | 0.074 | 0.192 | -30.4 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7302 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7303 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7304 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 57 | 6 | 584 | 0.074 | 0.192 | -53.5 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7305 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 60 | 6 | 584 | 0.074 | 0.192 | 15.9 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7306 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7307 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 58 | 6 | 584 | 0.074 | 0.192 | 15.9 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7308 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 48 | 6 | 584 | 0.074 | 0.192 | -30.4 | -349.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7309 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7310 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7311 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7312 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7313 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7314 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7315 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7316 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7317 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7318 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7319 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7320 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 56 | 6 | 584 | 0.074 | 0.192 | -30.4 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7321 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7322 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7323 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 66 | 6 | 584 | 0.074 | 0.192 | 85.3 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7324 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7325 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7326 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7327 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7328 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 60 | 6 | 584 | 0.074 | 0.192 | -7.2 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7329 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7330 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 62 | 6 | 584 | 0.074 | 0.192 | 108.5 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7331 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 69 | 6 | 584 | 0.074 | 0.192 | 131.6 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7332 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7333 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 66 | 6 | 584 | 0.074 | 0.192 | 62.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7334 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 70 | 6 | 584 | 0.074 | 0.192 | 62.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7335 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 68 | 6 | 584 | 0.074 | 0.192 | 62.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7336 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 56 | 6 | 584 | 0.074 | 0.192 | -7.2 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7337 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7338 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 47 | 6 | 584 | 0.074 | 0.192 | -30.4 | -357.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7339 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7340 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 57 | 6 | 584 | 0.074 | 0.192 | -7.2 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7341 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7342 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7343 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 56 | 6 | 584 | 0.074 | 0.192 | 15.9 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7344 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 56 | 6 | 584 | 0.074 | 0.192 | -53.5 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7345 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7346 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7347 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7348 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7349 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7350 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7351 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7352 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7353 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7354 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 51 | 6 | 584 | 0.074 | 0.192 | 62.2 | -322.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7355 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 64 | 6 | 584 | 0.074 | 0.192 | 15.9 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7356 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7357 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7358 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7359 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 43 | 6 | 584 | 0.074 | 0.192 | -53.5 | -393.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7360 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 58 | 6 | 584 | 0.074 | 0.192 | 15.9 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7361 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7362 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7363 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7364 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 109 | 6 | 584 | 0.074 | 0.192 | -30.4 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7365 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7366 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7367 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7368 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7369 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7370 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7371 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7372 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7373 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7374 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7375 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7376 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7377 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7378 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7379 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7380 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7381 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7382 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7383 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7384 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7385 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7386 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7387 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7388 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7389 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7390 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7391 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7392 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7393 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7394 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7395 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7396 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7397 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7398 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7399 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7400 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7401 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 80 | 6 | 584 | 0.074 | 0.192 | 108.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7402 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7403 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7404 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 126 | 6 | 584 | 0.074 | 0.192 | -7.2 | 346.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7405 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7406 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7407 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7408 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 89 | 6 | 584 | 0.074 | 0.192 | 108.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7409 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7410 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7411 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7412 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7413 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7414 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7415 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7416 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 109 | 6 | 584 | 0.074 | 0.192 | -53.5 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7417 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7418 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7419 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7420 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7421 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7422 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7423 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7424 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7425 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7426 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7427 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7428 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7429 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7430 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7431 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7432 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7433 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7434 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 114 | 6 | 584 | 0.074 | 0.192 | 62.2 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7435 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7436 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7437 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7438 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7439 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7440 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7441 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7442 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7443 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7444 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7445 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7446 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7447 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7448 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7449 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7450 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7451 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7452 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7453 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7454 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7455 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7456 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 109 | 6 | 584 | 0.074 | 0.192 | 39.0 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7457 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7458 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7459 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7460 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 75 | 6 | 584 | 0.074 | 0.192 | 131.6 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7461 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 105 | 6 | 584 | 0.074 | 0.192 | -53.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7462 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7463 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7464 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7465 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7466 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 109 | 6 | 584 | 0.074 | 0.192 | -30.4 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7467 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7468 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7469 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7470 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7471 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 109 | 6 | 584 | 0.074 | 0.192 | -7.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7472 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 78 | 6 | 584 | 0.074 | 0.192 | 85.3 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7473 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7474 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7475 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7476 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 110 | 6 | 584 | 0.074 | 0.192 | -7.2 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7477 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7478 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7479 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7480 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7481 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 118 | 6 | 584 | 0.074 | 0.192 | -7.2 | 275.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7482 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 87 | 6 | 584 | 0.074 | 0.192 | 108.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7483 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7484 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7485 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 108 | 6 | 584 | 0.074 | 0.192 | -30.4 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7486 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7487 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7488 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7489 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7490 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7491 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7492 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7493 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7494 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7495 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 109 | 6 | 584 | 0.074 | 0.192 | -53.5 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7496 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7497 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7498 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7499 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7500 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7501 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7502 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7503 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7504 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7505 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7506 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 116 | 6 | 584 | 0.074 | 0.192 | -7.2 | 257.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7507 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7508 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7509 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7510 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7511 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7512 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 114 | 6 | 584 | 0.074 | 0.192 | -53.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7513 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 96 | 6 | 584 | 0.074 | 0.192 | 62.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7514 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7515 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7516 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7517 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7518 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7519 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 107 | 6 | 584 | 0.074 | 0.192 | -53.5 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7520 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7521 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7522 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7523 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7524 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 101 | 6 | 584 | 0.074 | 0.192 | 108.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7525 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7526 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7527 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7528 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 105 | 6 | 584 | 0.074 | 0.192 | 108.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7529 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 111 | 6 | 584 | 0.074 | 0.192 | 62.2 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7530 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7531 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 79 | 6 | 584 | 0.074 | 0.192 | 85.3 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7532 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7533 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7534 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7535 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7536 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 109 | 6 | 584 | 0.074 | 0.192 | -30.4 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7537 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7538 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7539 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 107 | 6 | 584 | 0.074 | 0.192 | -7.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7540 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7541 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7542 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7543 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7544 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7545 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7546 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7547 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7548 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 95 | 6 | 584 | 0.074 | 0.192 | 131.6 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7549 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7550 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7551 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 108 | 6 | 584 | 0.074 | 0.192 | -53.5 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7552 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7553 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7554 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7555 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7556 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7557 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 10 | 110 | 6 | 584 | 0.074 | 0.192 | 177.9 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7558 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7559 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7560 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7561 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7562 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7563 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7564 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7565 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7566 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7567 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7568 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7569 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7570 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7571 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7572 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7573 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7574 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7575 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7576 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7577 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7578 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 104 | 6 | 584 | 0.074 | 0.192 | 85.3 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7579 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7580 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 92 | 6 | 584 | 0.074 | 0.192 | 85.3 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7581 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 94 | 6 | 584 | 0.074 | 0.192 | 85.3 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7582 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7583 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7584 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7585 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7586 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7587 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7588 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7589 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7590 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7591 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7592 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7593 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 104 | 6 | 584 | 0.074 | 0.192 | -53.5 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7594 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7595 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7596 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7597 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7598 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7599 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7600 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7601 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7602 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7603 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7604 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7605 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7606 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7607 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7608 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7609 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 109 | 6 | 584 | 0.074 | 0.192 | 62.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7610 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7611 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7612 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7613 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7614 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7615 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7616 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7617 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7618 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7619 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7620 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7621 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7622 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7623 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 103 | 6 | 584 | 0.074 | 0.192 | 39.0 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7624 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 94 | 6 | 584 | 0.074 | 0.192 | 85.3 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7625 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7626 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7627 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7628 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7629 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7630 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7631 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7632 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 11 | 87 | 6 | 584 | 0.074 | 0.192 | 281.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7633 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7634 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7635 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7636 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 122 | 6 | 584 | 0.074 | 0.192 | 15.9 | 311.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7637 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7638 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7639 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7640 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 123 | 6 | 584 | 0.074 | 0.192 | -7.2 | 319.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7641 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7642 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7643 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 98 | 6 | 584 | 0.074 | 0.192 | 131.6 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7644 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7645 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7646 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7647 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7648 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7649 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7650 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7651 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7652 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7653 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7654 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7655 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7656 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7657 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7658 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7659 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7660 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7661 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7662 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7663 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7664 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 7665 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 108 | 6 | 584 | 0.067 | 0.190 | 88.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7666 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7667 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7668 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7669 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 100 | 6 | 584 | 0.067 | 0.190 | 114.0 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7670 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 7671 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 101 | 6 | 584 | 0.067 | 0.190 | 241.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7672 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7673 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7674 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 114 | 6 | 584 | 0.067 | 0.190 | -39.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7675 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 114 | 6 | 584 | 0.067 | 0.190 | 62.9 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7676 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7677 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7678 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7679 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7680 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7681 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7682 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7683 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7684 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7685 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 118 | 6 | 584 | 0.067 | 0.190 | 11.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7686 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7687 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7688 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7689 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7690 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7691 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7692 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7693 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7694 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7695 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7696 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7697 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7698 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7699 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7700 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7701 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 117 | 6 | 584 | 0.067 | 0.190 | 11.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7702 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7703 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7704 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7705 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7706 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7707 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7708 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 111 | 6 | 584 | 0.067 | 0.190 | 88.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7709 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7710 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 113 | 6 | 584 | 0.067 | 0.190 | -39.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7711 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7712 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7713 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7714 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7715 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7716 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7717 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7718 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7719 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7720 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7721 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7722 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7723 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 117 | 6 | 584 | 0.067 | 0.190 | -39.4 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7724 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7725 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7726 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7727 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7728 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7729 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7730 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7731 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7732 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7733 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 123 | 6 | 584 | 0.067 | 0.190 | 11.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7734 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7735 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 7736 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7737 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7738 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7739 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7740 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7741 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7742 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7743 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7744 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7745 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7746 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7747 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7748 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7749 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7750 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7751 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7752 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7753 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7754 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 113 | 6 | 584 | 0.067 | 0.190 | -39.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7755 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7756 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7757 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7758 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7759 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7760 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7761 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7762 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7763 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7764 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7765 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7766 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7767 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7768 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7769 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7770 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7771 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7772 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7773 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7774 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7775 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 72 | 6 | 584 | 0.067 | 0.190 | -39.4 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7776 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7777 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7778 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7779 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7780 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 111 | 6 | 584 | 0.067 | 0.190 | -39.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7781 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7782 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7783 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7784 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7785 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7786 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7787 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7788 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7789 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7790 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7791 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7792 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7793 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7794 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7795 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7796 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7797 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7798 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7799 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7800 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 7801 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7802 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 77 | 6 | 584 | 0.067 | 0.190 | 37.3 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7803 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7804 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7805 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 76 | 6 | 584 | 0.067 | 0.190 | 37.3 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7806 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7807 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 111 | 6 | 584 | 0.067 | 0.190 | 88.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7808 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7809 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7810 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7811 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7812 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 80 | 6 | 584 | 0.067 | 0.190 | -39.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7813 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7814 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7815 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7816 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7817 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7818 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7819 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7820 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7821 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 130 | 6 | 584 | 0.067 | 0.190 | 62.9 | 486.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7822 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7823 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7824 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7825 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7826 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7827 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7828 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7829 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 118 | 6 | 584 | 0.067 | 0.190 | -13.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7830 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7831 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7832 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7833 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 117 | 6 | 584 | 0.067 | 0.190 | -13.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7834 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7835 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7836 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7837 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7838 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7839 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 117 | 6 | 584 | 0.067 | 0.190 | -39.4 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7840 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7841 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7842 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7843 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7844 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7845 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7846 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7847 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7848 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7849 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7850 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7851 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7852 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7853 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7854 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7855 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7856 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7857 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7858 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7859 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7860 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7861 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7862 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7863 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 119 | 6 | 584 | 0.067 | 0.190 | 37.3 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7864 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7865 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 7866 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7867 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7868 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7869 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7870 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7871 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7872 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7873 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7874 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7875 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7876 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7877 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7878 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 115 | 6 | 584 | 0.067 | 0.190 | 11.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7879 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7880 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7881 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7882 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7883 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7884 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7885 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7886 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7887 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7888 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7889 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 101 | 6 | 584 | 0.067 | 0.190 | 114.0 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7890 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7891 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7892 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7893 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7894 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7895 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7896 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7897 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7898 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7899 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7900 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7901 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 85 | 6 | 584 | 0.067 | 0.190 | 62.9 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7902 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7903 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7904 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7905 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7906 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7907 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7908 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7909 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7910 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7911 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 116 | 6 | 584 | 0.067 | 0.190 | -13.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7912 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7913 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7914 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7915 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 116 | 6 | 584 | 0.067 | 0.190 | 37.3 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7916 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7917 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7918 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7919 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7920 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7921 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7922 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7923 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7924 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7925 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7926 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7927 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7928 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7929 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7930 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 7931 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7932 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7933 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7934 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 119 | 6 | 584 | 0.067 | 0.190 | -13.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7935 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 111 | 6 | 584 | 0.067 | 0.190 | -39.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7936 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7937 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7938 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7939 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7940 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7941 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 105 | 6 | 584 | 0.067 | 0.190 | 88.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7942 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7943 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7944 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7945 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7946 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7947 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7948 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7949 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7950 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7951 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7952 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7953 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7954 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7955 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7956 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 7957 | 8/23/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 7958 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7959 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 110 | 6 | 584 | 0.074 | 0.192 | 15.9 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7960 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7961 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7962 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7963 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 108 | 6 | 584 | 0.074 | 0.192 | -7.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7964 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 109 | 6 | 584 | 0.074 | 0.192 | 62.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7965 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7966 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7967 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7968 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7969 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7970 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7971 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 109 | 6 | 584 | 0.074 | 0.192 | -7.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7972 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7973 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7974 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7975 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7976 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7977 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7978 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7979 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7980 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7981 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7982 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7983 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7984 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7985 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7986 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7987 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 101 | 6 | 584 | 0.074 | 0.192 | 108.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7988 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7989 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7990 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7991 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7992 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7993 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7994 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 108 | 6 | 584 | 0.074 | 0.192 | 85.3 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7995 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 7996 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 94 | 6 | 584 | 0.074 | 0.192 | 108.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7997 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7998 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 7999 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8000 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8001 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8002 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8003 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8004 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8005 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8006 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 117 | 6 | 584 | 0.074 | 0.192 | -30.4 | 266.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8007 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8008 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8009 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8010 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8011 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8012 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8013 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 103 | 6 | 584 | 0.074 | 0.192 | 39.0 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8014 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8015 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8016 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 86 | 6 | 584 | 0.074 | 0.192 | 85.3 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8017 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 107 | 6 | 584 | 0.074 | 0.192 | -7.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8018 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8019 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8020 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 86 | 6 | 584 | 0.074 | 0.192 | 85.3 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8021 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 109 | 6 | 584 | 0.074 | 0.192 | 39.0 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8022 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8023 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8024 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8025 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8026 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8027 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8028 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8029 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8030 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8031 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8032 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8033 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8034 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8035 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8036 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8037 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8038 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8039 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8040 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8041 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8042 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 112 | 6 | 584 | 0.074 | 0.192 | 15.9 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8043 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8044 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8045 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8046 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8047 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8048 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8049 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8050 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8051 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8052 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8053 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8054 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8055 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8056 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8057 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8058 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8059 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8060 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 8061 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8062 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8063 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 66 | 6 | 584 | 0.074 | 0.192 | 85.3 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8064 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8065 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8066 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8067 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8068 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8069 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8070 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8071 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8072 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8073 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8074 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8075 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8076 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8077 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8078 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8079 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8080 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8081 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8082 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8083 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8084 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8085 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8086 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8087 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8088 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8089 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8090 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8091 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8092 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8093 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8094 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 107 | 6 | 584 | 0.074 | 0.192 | -7.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8095 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8096 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8097 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8098 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8099 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8100 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 107 | 6 | 584 | 0.074 | 0.192 | -53.5 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8101 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8102 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8103 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8104 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8105 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8106 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8107 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8108 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8109 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8110 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8111 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8112 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8113 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8114 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8115 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8116 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8117 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8118 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8119 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8120 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8121 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8122 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8123 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8124 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8125 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 8126 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8127 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8128 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8129 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 108 | 6 | 584 | 0.074 | 0.192 | 39.0 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8130 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8131 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8132 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8133 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8134 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8135 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8136 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8137 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8138 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8139 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8140 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8141 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8142 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8143 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8144 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8145 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 96 | 6 | 584 | 0.074 | 0.192 | 62.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8146 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8147 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8148 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8149 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8150 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8151 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8152 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8153 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8154 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8155 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8156 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8157 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8158 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8159 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8160 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8161 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8162 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8163 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8164 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8165 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8166 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8167 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8168 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8169 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8170 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 110 | 6 | 584 | 0.074 | 0.192 | 15.9 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8171 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8172 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8173 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8174 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8175 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8176 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8177 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8178 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8179 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8180 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8181 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8182 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8183 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8184 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8185 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 101 | 6 | 584 | 0.074 | 0.192 | 85.3 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8186 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8187 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8188 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8189 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8190 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 8191 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8192 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8193 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8194 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8195 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 103 | 6 | 584 | 0.074 | 0.192 | 39.0 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8196 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8197 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8198 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8199 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8200 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8201 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8202 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8203 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8204 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8205 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8206 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8207 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8208 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8209 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8210 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8211 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8212 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8213 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8214 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8215 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8216 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8217 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8218 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8219 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8220 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8221 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8222 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8223 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8224 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8225 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8226 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8227 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8228 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8229 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8230 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8231 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8232 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8233 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8234 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8235 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8236 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8237 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8238 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8239 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8240 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8241 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8242 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8243 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8244 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8245 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8246 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8247 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8248 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8249 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8250 | 8/23/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 8251 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8252 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | -39.4 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8253 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8254 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8255 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 70 | 6 | 584 | 0.067 | 0.190 | -39.4 | -54.8 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8256 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8257 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8258 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 72 | 6 | 584 | 0.067 | 0.190 | -39.4 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8259 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8260 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8261 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8262 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8263 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8264 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8265 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8266 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8267 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8268 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8269 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8270 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8271 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8272 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8273 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8274 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | -39.4 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8275 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 74 | 6 | 584 | 0.067 | 0.190 | 11.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8276 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | -39.4 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8277 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 72 | 6 | 584 | 0.067 | 0.190 | -39.4 | -26.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8278 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8279 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8280 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8281 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8282 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8283 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8284 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8285 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8286 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8287 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8288 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8289 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8290 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8291 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8292 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8293 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8294 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8295 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8296 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8297 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8298 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | -39.4 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8299 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8300 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8301 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8302 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8303 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8304 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8305 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8306 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8307 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8308 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8309 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8310 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8311 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8312 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8313 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8314 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8315 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8316 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8317 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8318 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8319 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8320 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8321 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 82 | 6 | 584 | 0.067 | 0.190 | 62.9 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8322 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8323 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8324 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8325 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8326 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8327 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8328 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | -39.4 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8329 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8330 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8331 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8332 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8333 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8334 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8335 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8336 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8337 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8338 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8339 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8340 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8341 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8342 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8343 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8344 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8345 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8346 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8347 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8348 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8349 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8350 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8351 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8352 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8353 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8354 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8355 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8356 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8357 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8358 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8359 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8360 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8361 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8362 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8363 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8364 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8365 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8366 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8367 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8368 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8369 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8370 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8371 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8372 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8373 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8374 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8375 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8376 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8377 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8378 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8379 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8380 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8381 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8382 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8383 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8384 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 114 | 6 | 584 | 0.067 | 0.190 | -39.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8385 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8386 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8387 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 116 | 6 | 584 | 0.067 | 0.190 | -13.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8388 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8389 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8390 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8391 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8392 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8393 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8394 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8395 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8396 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8397 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8398 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8399 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8400 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8401 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8402 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8403 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8404 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8405 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 68 | 6 | 584 | 0.067 | 0.190 | 11.8 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8406 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8407 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8408 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8409 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8410 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8411 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8412 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 91 | 6 | 584 | 0.067 | 0.190 | 114.0 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8413 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8414 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8415 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8416 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8417 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8418 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 65 | 6 | 584 | 0.067 | 0.190 | 11.8 | -99.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8419 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8420 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8421 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8422 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8423 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8424 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8425 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8426 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8427 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8428 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8429 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8430 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8431 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 115 | 6 | 584 | 0.067 | 0.190 | 11.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8432 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | -39.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8433 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8434 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8435 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8436 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8437 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8438 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8439 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8440 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8441 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8442 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8443 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8444 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8445 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8446 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8447 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 87 | 6 | 584 | 0.067 | 0.190 | 88.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8448 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8449 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8450 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8451 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8452 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8453 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8454 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8455 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8456 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8457 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8458 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8459 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8460 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8461 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8462 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8463 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 116 | 6 | 584 | 0.067 | 0.190 | -13.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8464 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8465 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8466 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8467 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8468 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8469 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | -39.4 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8470 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8471 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8472 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8473 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8474 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8475 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8476 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8477 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8478 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8479 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8480 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8481 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 100 | 6 | 584 | 0.067 | 0.190 | 241.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8482 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8483 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8484 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 115 | 6 | 584 | 0.067 | 0.190 | -39.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8485 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8486 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8487 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8488 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8489 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8490 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8491 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8492 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8493 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8494 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8495 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8496 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8497 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8498 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8499 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8500 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8501 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8502 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8503 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8504 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8505 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8506 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 118 | 6 | 584 | 0.067 | 0.190 | -39.4 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8507 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8508 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8509 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8510 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8511 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8512 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8513 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8514 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8515 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8516 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8517 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8518 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8519 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8520 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8521 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8522 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8523 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8524 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 112 | 6 | 584 | 0.067 | 0.190 | -39.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8525 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8526 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8527 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8528 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8529 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8530 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8531 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8532 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8533 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8534 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8535 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8536 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8537 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8538 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8539 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8540 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8541 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8542 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8543 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8544 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8545 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8546 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8547 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8548 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8549 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8550 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8551 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8552 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8553 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8554 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8555 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8556 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8557 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8558 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8559 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8560 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8561 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 72 | 6 | 584 | 0.067 | 0.190 | -13.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8562 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8563 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8564 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8565 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8566 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8567 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8568 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8569 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8570 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8571 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8572 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8573 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8574 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8575 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8576 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8577 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8578 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8579 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8580 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8581 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8582 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8583 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8584 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8585 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8586 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8587 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8588 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8589 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8590 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8591 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8592 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8593 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | -39.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8594 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8595 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 71 | 6 | 584 | 0.067 | 0.190 | -13.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8596 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8597 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8598 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8599 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8600 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8601 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 78 | 6 | 584 | 0.067 | 0.190 | 62.9 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8602 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8603 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 63 | 6 | 584 | 0.067 | 0.190 | 11.8 | -117.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8604 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8605 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 69 | 6 | 584 | 0.067 | 0.190 | 62.9 | -63.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8606 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 70 | 6 | 584 | 0.067 | 0.190 | 11.8 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8607 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8608 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8609 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8610 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8611 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 81 | 6 | 584 | 0.067 | 0.190 | -39.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8612 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8613 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8614 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8615 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8616 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8617 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 67 | 6 | 584 | 0.067 | 0.190 | -13.8 | -81.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8618 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8619 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8620 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8621 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8622 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8623 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | -39.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8624 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8625 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8626 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8627 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8628 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8629 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8630 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8631 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8632 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8633 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8634 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8635 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8636 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8637 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8638 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8639 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8640 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8641 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 80 | 6 | 584 | 0.067 | 0.190 | -39.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8642 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8643 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8644 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8645 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8646 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8647 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8648 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8649 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 111 | 6 | 584 | 0.067 | 0.190 | -39.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8650 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8651 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8652 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8653 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8654 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8655 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 116 | 6 | 584 | 0.067 | 0.190 | -39.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8656 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8657 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8658 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8659 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8660 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8661 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8662 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8663 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8664 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8665 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8666 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8667 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8668 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8669 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8670 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8671 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8672 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8673 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8674 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8675 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8676 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8677 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 123 | 6 | 584 | 0.067 | 0.190 | 11.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8678 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8679 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8680 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8681 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8682 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8683 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 116 | 6 | 584 | 0.067 | 0.190 | -39.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8684 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8685 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 85 | 6 | 584 | 0.067 | 0.190 | 62.9 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8686 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8687 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8688 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8689 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8690 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8691 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8692 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 121 | 6 | 584 | 0.067 | 0.190 | 37.3 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8693 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8694 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8695 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 123 | 6 | 584 | 0.067 | 0.190 | -13.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8696 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8697 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8698 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8699 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8700 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8701 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8702 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8703 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8704 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8705 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 112 | 6 | 584 | 0.067 | 0.190 | -39.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8706 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8707 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8708 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8709 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8710 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8711 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8712 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8713 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8714 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 117 | 6 | 584 | 0.067 | 0.190 | 11.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8715 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8716 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8717 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8718 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8719 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8720 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8721 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8722 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8723 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8724 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8725 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8726 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8727 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8728 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8729 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8730 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8731 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 117 | 6 | 584 | 0.067 | 0.190 | 62.9 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8732 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8733 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8734 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8735 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8736 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8737 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8738 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8739 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 114 | 6 | 584 | 0.067 | 0.190 | -13.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8740 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8741 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8742 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8743 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8744 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8745 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8746 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8747 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8748 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8749 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8750 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8751 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8752 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8753 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8754 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8755 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8756 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8757 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8758 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8759 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8760 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8761 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8762 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8763 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8764 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8765 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8766 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8767 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8768 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8769 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8770 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 73 | 6 | 584 | 0.067 | 0.190 | 11.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8771 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8772 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8773 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8774 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8775 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8776 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8777 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8778 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8779 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8780 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8781 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8782 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8783 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8784 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8785 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8786 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 81 | 6 | 584 | 0.067 | 0.190 | 62.9 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8787 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8788 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8789 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8790 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8791 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8792 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8793 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8794 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8795 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8796 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8797 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8798 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8799 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8800 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8801 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8802 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 120 | 6 | 584 | 0.067 | 0.190 | 37.3 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8803 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8804 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8805 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8806 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8807 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8808 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8809 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8810 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8811 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8812 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8813 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8814 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8815 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8816 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8817 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8818 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8819 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8820 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8821 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8822 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8823 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 116 | 6 | 584 | 0.067 | 0.190 | -13.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8824 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8825 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8826 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8827 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8828 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8829 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8830 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 108 | 6 | 584 | 0.067 | 0.190 | 138.5 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8831 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8832 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8833 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 121 | 6 | 584 | 0.067 | 0.190 | 37.3 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8834 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8835 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8836 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8837 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8838 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8839 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8840 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8841 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8842 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8843 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8844 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8845 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 131 | 6 | 584 | 0.067 | 0.190 | -13.8 | 495.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8846 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8847 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8848 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8849 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8850 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8851 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8852 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8853 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 122 | 6 | 584 | 0.067 | 0.190 | 11.8 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8854 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8855 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8856 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8857 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8858 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8859 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8860 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8861 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8862 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8863 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8864 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8865 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8866 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8867 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8868 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8869 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8870 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8871 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8872 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 117 | 6 | 584 | 0.067 | 0.190 | 62.9 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8873 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8874 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8875 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8876 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8877 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8878 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 114 | 6 | 584 | 0.067 | 0.190 | 88.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8879 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8880 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8881 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8882 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8883 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8884 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8885 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8886 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8887 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8888 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8889 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8890 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8891 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8892 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8893 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8894 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8895 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8896 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8897 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8898 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8899 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 116 | 6 | 584 | 0.067 | 0.190 | -39.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8900 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8901 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8902 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8903 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8904 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 111 | 6 | 584 | 0.067 | 0.190 | -39.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8905 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 8906 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8907 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8908 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 113 | 6 | 584 | 0.067 | 0.190 | 11.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8909 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8910 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8911 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8912 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8913 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8914 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8915 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8916 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8917 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 119 | 6 | 584 | 0.067 | 0.190 | 11.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8918 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8919 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8920 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8921 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8922 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8923 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 115 | 6 | 584 | 0.067 | 0.190 | -39.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8924 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 114 | 6 | 584 | 0.067 | 0.190 | -13.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8925 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8926 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8927 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8928 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8929 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8930 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8931 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 97 | 6 | 584 | 0.067 | 0.190 | 133.5 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8932 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8933 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8934 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8935 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8936 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8937 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 90 | 6 | 584 | 0.067 | 0.190 | 88.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8938 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 113 | 6 | 584 | 0.067 | 0.190 | 114.0 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8939 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 8940 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 8941 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8942 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8943 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8944 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 59 | 6 | 584 | 0.074 | 0.192 | -53.5 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8945 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8946 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8947 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8948 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8949 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8950 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8951 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8952 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8953 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8954 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8955 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8956 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8957 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8958 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8959 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8960 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8961 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8962 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8963 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8964 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8965 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8966 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8967 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8968 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8969 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8970 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 8971 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8972 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8973 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8974 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8975 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8976 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8977 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8978 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8979 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8980 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8981 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8982 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8983 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8984 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8985 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8986 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8987 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8988 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8989 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8990 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8991 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8992 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8993 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8994 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8995 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8996 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 61 | 6 | 584 | 0.074 | 0.192 | -53.5 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8997 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8998 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 8999 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9000 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9001 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9002 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9003 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9004 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9005 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9006 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9007 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9008 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9009 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9010 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9011 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9012 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9013 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9014 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9015 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9016 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9017 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9018 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9019 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9020 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9021 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9022 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9023 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9024 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9025 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9026 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9027 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9028 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9029 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9030 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9031 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9032 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9033 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9034 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9035 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9036 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9037 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9038 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9039 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9040 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9041 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9042 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9043 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9044 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9045 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9046 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9047 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9048 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9049 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9050 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9051 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9052 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9053 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9054 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9055 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9056 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9057 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9058 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9059 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9060 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9061 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9062 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9063 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9064 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9065 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9066 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9067 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9068 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9069 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9070 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9071 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 60 | 6 | 584 | 0.074 | 0.192 | -53.5 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9072 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9073 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9074 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9075 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9076 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9077 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9078 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9079 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9080 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9081 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9082 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9083 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9084 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9085 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9086 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9087 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9088 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9089 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9090 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9091 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9092 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9093 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9094 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9095 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9096 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9097 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9098 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9099 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9100 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9101 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9102 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9103 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9104 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9105 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9106 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9107 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9108 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9109 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9110 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9111 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9112 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9113 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9114 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9115 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9116 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9117 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9118 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9119 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9120 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9121 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9122 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9123 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9124 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9125 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9126 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9127 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9128 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9129 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9130 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9131 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9132 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9133 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9134 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9135 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9136 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 105 | 6 | 584 | 0.074 | 0.192 | -7.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9137 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9138 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9139 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9140 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9141 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9142 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 85 | 6 | 584 | 0.074 | 0.192 | 85.3 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9143 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9144 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9145 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9146 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9147 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9148 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9149 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9150 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 107 | 6 | 584 | 0.074 | 0.192 | -30.4 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9151 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9152 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9153 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9154 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9155 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9156 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9157 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9158 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9159 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9160 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9161 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9162 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9163 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9164 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9165 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9166 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9167 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9168 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9169 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9170 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9171 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9172 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9173 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9174 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9175 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9176 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9177 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9178 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9179 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9180 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9181 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9182 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9183 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9184 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9185 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9186 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9187 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9188 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9189 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9190 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9191 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9192 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9193 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9194 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9195 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9196 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9197 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9198 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9199 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 59 | 6 | 584 | 0.074 | 0.192 | -7.2 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9200 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9201 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9202 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9203 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9204 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9205 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9206 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9207 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9208 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9209 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9210 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9211 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9212 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9213 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9214 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9215 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9216 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9217 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9218 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9219 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9220 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9221 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9222 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9223 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9224 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9225 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9226 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9227 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9228 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9229 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9230 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9231 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9232 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9233 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9234 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9235 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9236 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9237 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9238 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9239 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9240 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9241 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9242 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9243 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9244 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9245 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9246 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9247 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9248 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9249 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9250 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9251 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9252 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9253 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9254 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9255 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 58 | 6 | 584 | 0.074 | 0.192 | -7.2 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9256 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9257 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9258 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9259 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9260 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9261 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9262 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9263 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9264 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9265 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9266 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9267 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9268 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9269 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9270 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9271 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9272 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9273 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9274 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9275 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9276 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9277 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9278 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 58 | 6 | 584 | 0.074 | 0.192 | -53.5 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9279 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9280 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9281 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9282 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9283 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9284 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9285 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9286 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9287 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9288 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9289 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9290 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9291 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9292 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9293 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 57 | 6 | 584 | 0.074 | 0.192 | -30.4 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9294 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9295 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9296 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9297 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9298 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9299 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9300 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9301 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9302 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9303 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9304 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9305 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9306 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9307 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9308 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9309 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9310 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 57 | 6 | 584 | 0.074 | 0.192 | -53.5 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9311 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9312 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9313 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9314 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9315 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9316 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9317 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9318 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9319 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9320 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 61 | 6 | 584 | 0.074 | 0.192 | -53.5 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9321 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9322 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9323 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9324 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9325 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9326 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9327 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9328 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9329 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9330 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9331 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9332 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9333 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9334 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9335 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9336 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9337 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9338 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9339 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9340 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9341 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 108 | 6 | 584 | 0.074 | 0.192 | -53.5 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9342 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9343 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9344 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9345 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9346 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9347 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9348 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9349 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9350 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9351 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9352 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9353 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9354 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9355 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9356 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9357 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9358 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9359 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9360 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9361 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9362 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9363 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9364 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9365 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9366 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9367 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9368 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9369 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9370 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9371 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9372 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9373 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9374 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9375 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9376 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9377 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9378 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9379 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9380 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9381 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9382 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9383 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9384 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9385 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9386 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9387 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9388 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9389 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9390 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9391 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9392 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 113 | 6 | 584 | 0.074 | 0.192 | -30.4 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9393 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9394 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9395 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9396 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9397 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9398 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9399 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 108 | 6 | 584 | 0.074 | 0.192 | -30.4 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9400 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9401 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9402 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9403 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9404 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9405 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9406 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9407 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9408 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9409 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9410 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9411 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9412 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9413 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9414 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9415 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9416 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9417 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9418 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9419 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9420 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9421 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9422 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9423 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9424 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9425 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 104 | 6 | 584 | 0.074 | 0.192 | -53.5 | 150.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9426 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9427 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9428 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9429 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9430 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9431 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9432 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9433 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9434 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9435 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 110 | 6 | 584 | 0.074 | 0.192 | -53.5 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9436 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9437 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9438 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9439 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9440 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9441 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9442 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9443 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9444 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9445 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9446 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9447 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9448 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9449 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9450 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9451 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9452 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9453 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9454 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9455 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9456 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9457 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9458 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9459 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9460 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9461 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9462 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9463 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9464 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9465 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 105 | 6 | 584 | 0.074 | 0.192 | -53.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9466 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9467 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9468 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9469 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9470 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9471 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9472 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9473 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9474 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9475 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9476 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9477 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9478 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9479 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9480 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9481 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9482 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9483 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9484 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9485 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9486 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9487 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9488 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9489 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9490 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9491 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9492 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9493 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9494 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9495 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9496 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9497 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9498 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9499 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9500 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9501 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9502 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9503 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9504 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9505 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9506 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9507 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 107 | 6 | 584 | 0.074 | 0.192 | 39.0 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9508 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9509 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9510 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9511 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9512 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9513 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9514 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9515 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9516 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9517 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9518 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9519 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9520 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9521 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 108 | 6 | 584 | 0.074 | 0.192 | -7.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9522 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9523 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9524 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9525 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9526 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9527 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9528 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9529 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9530 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9531 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9532 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9533 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9534 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9535 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9536 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9537 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9538 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9539 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 113 | 6 | 584 | 0.074 | 0.192 | -7.2 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9540 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 107 | 6 | 584 | 0.074 | 0.192 | -30.4 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9541 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 112 | 6 | 584 | 0.074 | 0.192 | 15.9 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9542 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9543 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9544 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9545 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9546 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9547 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9548 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9549 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9550 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 113 | 6 | 584 | 0.074 | 0.192 | -30.4 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9551 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9552 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9553 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9554 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9555 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 88 | 6 | 584 | 0.074 | 0.192 | 108.5 | 7.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9556 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9557 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9558 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9559 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9560 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9561 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9562 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9563 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9564 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9565 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9566 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9567 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9568 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9569 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9570 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9571 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9572 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9573 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9574 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9575 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9576 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9577 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9578 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9579 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9580 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9581 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9582 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 105 | 6 | 584 | 0.074 | 0.192 | -7.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9583 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 115 | 6 | 584 | 0.074 | 0.192 | 15.9 | 248.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9584 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9585 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9586 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9587 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9588 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9589 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9590 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9591 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9592 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9593 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9594 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9595 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9596 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9597 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9598 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9599 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9600 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9601 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9602 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 111 | 6 | 584 | 0.074 | 0.192 | -53.5 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9603 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9604 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9605 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9606 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9607 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9608 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9609 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9610 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9611 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 124 | 6 | 584 | 0.074 | 0.192 | -7.2 | 328.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9612 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9613 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9614 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9615 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9616 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9617 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9618 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9619 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9620 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 9621 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9622 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9623 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9624 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9625 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9626 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9627 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9628 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9629 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9630 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 9631 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 9632 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9633 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9634 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 79 | 6 | 584 | 0.067 | 0.190 | 88.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9635 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9636 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9637 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9638 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9639 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9640 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9641 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 85 | 6 | 584 | 0.067 | 0.190 | 88.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9642 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9643 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9644 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9645 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9646 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 76 | 6 | 584 | 0.067 | 0.190 | 62.9 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9647 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9648 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9649 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9650 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9651 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9652 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9653 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9654 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9655 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9656 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9657 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9658 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9659 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9660 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9661 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9662 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9663 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9664 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9665 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9666 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9667 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9668 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9669 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9670 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 83 | 6 | 584 | 0.067 | 0.190 | 114.0 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9671 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9672 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9673 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 82 | 6 | 584 | 0.067 | 0.190 | 114.0 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9674 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9675 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9676 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9677 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9678 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9679 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9680 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 102 | 6 | 584 | 0.067 | 0.190 | 165.1 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9681 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9682 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9683 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9684 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9685 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 9686 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9687 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9688 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 116 | 6 | 584 | 0.067 | 0.190 | 62.9 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9689 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9690 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9691 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9692 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9693 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9694 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 110 | 6 | 584 | 0.067 | 0.190 | 114.0 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9695 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9696 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9697 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9698 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9699 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9700 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 112 | 6 | 584 | 0.067 | 0.190 | 62.9 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9701 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9702 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9703 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9704 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9705 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9706 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9707 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9708 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9709 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9710 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9711 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 89 | 6 | 584 | 0.067 | 0.190 | 165.1 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9712 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9713 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9714 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9715 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 107 | 6 | 584 | 0.067 | 0.190 | 165.1 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9716 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9717 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9718 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9719 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 109 | 6 | 584 | 0.067 | 0.190 | 88.4 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9720 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9721 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9722 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9723 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 120 | 6 | 584 | 0.067 | 0.190 | 37.3 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9724 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9725 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9726 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9727 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9728 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9729 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9730 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9731 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9732 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9733 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9734 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9735 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9736 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 118 | 6 | 584 | 0.067 | 0.190 | 62.9 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9737 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 115 | 6 | 584 | 0.067 | 0.190 | -13.8 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9738 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9739 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9740 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9741 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9742 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9743 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 109 | 6 | 584 | 0.067 | 0.190 | 190.7 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9744 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9745 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9746 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 116 | 6 | 584 | 0.067 | 0.190 | 139.5 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9747 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 121 | 6 | 584 | 0.067 | 0.190 | 37.3 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9748 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9749 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9750 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 9751 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9752 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9753 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9754 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9755 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9756 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9757 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9758 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9759 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9760 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 110 | 6 | 584 | 0.067 | 0.190 | -13.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9761 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 113 | 6 | 584 | 0.067 | 0.190 | 11.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9762 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 92 | 6 | 584 | 0.067 | 0.190 | 139.5 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9763 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9764 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9765 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 119 | 6 | 584 | 0.067 | 0.190 | -13.8 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9766 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 107 | 6 | 584 | 0.067 | 0.190 | 114.0 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9767 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9768 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 113 | 6 | 584 | 0.067 | 0.190 | 62.9 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9769 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 137 | 6 | 584 | 0.067 | 0.190 | 88.4 | 549.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9770 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9771 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 87 | 6 | 584 | 0.067 | 0.190 | 88.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9772 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9773 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9774 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9775 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 105 | 6 | 584 | 0.067 | 0.190 | 88.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9776 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9777 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9778 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9779 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9780 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9781 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 123 | 6 | 584 | 0.067 | 0.190 | 11.8 | 422.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9782 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9783 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9784 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9785 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 112 | 6 | 584 | 0.067 | 0.190 | 139.5 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9786 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9787 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9788 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9789 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9790 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9791 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9792 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9793 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9794 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9795 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9796 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9797 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 112 | 6 | 584 | 0.067 | 0.190 | -39.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9798 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9799 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9800 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9801 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9802 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9803 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9804 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9805 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9806 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 109 | 6 | 584 | 0.067 | 0.190 | 88.4 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9807 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9808 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9809 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 118 | 6 | 584 | 0.067 | 0.190 | 11.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9810 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9811 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 114 | 6 | 584 | 0.067 | 0.190 | 62.9 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9812 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9813 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9814 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9815 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 9816 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9817 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9818 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 98 | 6 | 584 | 0.067 | 0.190 | 165.1 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9819 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9820 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9821 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 88 | 6 | 584 | 0.067 | 0.190 | 165.1 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9822 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 113 | 6 | 584 | 0.067 | 0.190 | 11.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9823 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9824 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9825 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9826 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9827 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9828 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9829 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9830 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 91 | 6 | 584 | 0.067 | 0.190 | 114.0 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9831 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9832 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9833 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9834 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9835 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9836 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9837 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9838 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9839 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9840 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 109 | 6 | 584 | 0.067 | 0.190 | 114.0 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9841 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9842 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9843 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9844 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9845 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 107 | 6 | 584 | 0.067 | 0.190 | 139.5 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9846 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9847 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9848 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9849 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 112 | 6 | 584 | 0.067 | 0.190 | 62.9 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9850 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9851 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9852 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 101 | 6 | 584 | 0.067 | 0.190 | 114.0 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9853 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9854 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9855 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9856 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9857 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9858 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9859 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9860 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9861 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 99 | 6 | 584 | 0.067 | 0.190 | 139.5 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9862 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9863 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9864 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 80 | 6 | 584 | 0.067 | 0.190 | 88.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9865 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9866 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 74 | 6 | 584 | 0.067 | 0.190 | 11.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9867 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9868 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9869 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 92 | 6 | 584 | 0.067 | 0.190 | 114.0 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9870 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 117 | 6 | 584 | 0.067 | 0.190 | 11.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9871 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9872 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 93 | 6 | 584 | 0.067 | 0.190 | 216.2 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9873 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 117 | 6 | 584 | 0.067 | 0.190 | -13.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9874 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9875 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9876 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 103 | 6 | 584 | 0.067 | 0.190 | 114.0 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9877 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 110 | 6 | 584 | 0.067 | 0.190 | 114.0 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9878 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9879 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9880 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 9881 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9882 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 100 | 6 | 584 | 0.067 | 0.190 | 114.0 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9883 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9884 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9885 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9886 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 106 | 6 | 584 | 0.067 | 0.190 | 139.5 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9887 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9888 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9889 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 101 | 6 | 584 | 0.067 | 0.190 | 165.1 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9890 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9891 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9892 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 75 | 6 | 584 | 0.067 | 0.190 | 114.0 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9893 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 94 | 6 | 584 | 0.067 | 0.190 | 139.5 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9894 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9895 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9896 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9897 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9898 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 105 | 6 | 584 | 0.067 | 0.190 | 88.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9899 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9900 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9901 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9902 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9903 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 97 | 6 | 584 | 0.067 | 0.190 | 114.0 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9904 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9905 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 109 | 6 | 584 | 0.067 | 0.190 | 139.5 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9906 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9907 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9908 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9909 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9910 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9911 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9912 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 115 | 6 | 584 | 0.067 | 0.190 | 88.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9913 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9914 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9915 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9916 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 114 | 6 | 584 | 0.067 | 0.190 | -13.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9917 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9918 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9919 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9920 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 93 | 6 | 584 | 0.067 | 0.190 | 114.0 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9921 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9922 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9923 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9924 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 103 | 6 | 584 | 0.067 | 0.190 | 139.5 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9925 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9926 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9927 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9928 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9929 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9930 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9931 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9932 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 110 | 6 | 584 | 0.067 | 0.190 | 139.5 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9933 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 118 | 6 | 584 | 0.067 | 0.190 | 37.3 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9934 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9935 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 107 | 6 | 584 | 0.067 | 0.190 | 88.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9936 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9937 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9938 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 109 | 6 | 584 | 0.067 | 0.190 | 114.0 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9939 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 115 | 6 | 584 | 0.067 | 0.190 | 88.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9940 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 106 | 6 | 584 | 0.067 | 0.190 | 88.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9941 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 113 | 6 | 584 | 0.067 | 0.190 | 88.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9942 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9943 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9944 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9945 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 9946 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9947 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 108 | 6 | 584 | 0.067 | 0.190 | 88.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9948 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9949 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 117 | 6 | 584 | 0.067 | 0.190 | 37.3 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9950 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9951 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9952 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 112 | 6 | 584 | 0.067 | 0.190 | 88.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9953 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9954 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9955 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9956 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9957 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 106 | 6 | 584 | 0.067 | 0.190 | 114.0 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9958 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 137 | 6 | 584 | 0.067 | 0.190 | 165.1 | 549.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9959 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9960 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9961 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9962 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9963 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 103 | 6 | 584 | 0.067 | 0.190 | 139.5 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9964 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 104 | 6 | 584 | 0.067 | 0.190 | 114.0 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9965 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9966 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9967 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9968 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9969 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 110 | 6 | 584 | 0.067 | 0.190 | 88.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9970 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 114 | 6 | 584 | 0.067 | 0.190 | -39.4 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9971 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9972 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9973 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 93 | 6 | 584 | 0.067 | 0.190 | 114.0 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9974 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9975 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 108 | 6 | 584 | 0.067 | 0.190 | 88.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9976 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9977 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9978 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9979 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 116 | 6 | 584 | 0.067 | 0.190 | 11.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9980 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9981 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9982 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9983 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9984 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9985 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9986 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9987 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 87 | 6 | 584 | 0.067 | 0.190 | 88.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9988 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9989 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9990 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9991 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9992 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9993 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9994 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9995 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9996 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9997 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9998 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 9999 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10000 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 117 | 6 | 584 | 0.067 | 0.190 | 165.1 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10001 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10002 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10003 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10004 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 111 | 6 | 584 | 0.067 | 0.190 | 88.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10005 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 99 | 6 | 584 | 0.067 | 0.190 | 88.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10006 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 117 | 6 | 584 | 0.067 | 0.190 | 62.9 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10007 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10008 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10009 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10010 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10011 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10012 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10013 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10014 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10015 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10016 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10017 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10018 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 99 | 6 | 584 | 0.067 | 0.190 | 139.5 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10019 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10020 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10021 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10022 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10023 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 109 | 6 | 584 | 0.067 | 0.190 | -39.4 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10024 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 93 | 6 | 584 | 0.067 | 0.190 | 139.5 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10025 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10026 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10027 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10028 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10029 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10030 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10031 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 124 | 6 | 584 | 0.067 | 0.190 | 62.9 | 431.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10032 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10033 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 108 | 6 | 584 | 0.067 | 0.190 | 114.0 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10034 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10035 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10036 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 103 | 6 | 584 | 0.067 | 0.190 | 216.2 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10037 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10038 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 102 | 6 | 584 | 0.067 | 0.190 | -39.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10039 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 104 | 6 | 584 | 0.067 | 0.190 | 139.5 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10040 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10041 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 111 | 6 | 584 | 0.067 | 0.190 | 62.9 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10042 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 125 | 6 | 584 | 0.067 | 0.190 | 11.8 | 440.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10043 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10044 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10045 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10046 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10047 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10048 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10049 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10050 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10051 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10052 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10053 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10054 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 119 | 6 | 584 | 0.067 | 0.190 | 139.5 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10055 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10056 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 107 | 6 | 584 | 0.067 | 0.190 | 88.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10057 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10058 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 120 | 6 | 584 | 0.067 | 0.190 | 62.9 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10059 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10060 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10061 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10062 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10063 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10064 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10065 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10066 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10067 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10068 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 90 | 6 | 584 | 0.067 | 0.190 | 88.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10069 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10070 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10071 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 91 | 6 | 584 | 0.067 | 0.190 | 88.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10072 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10073 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10074 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 108 | 6 | 584 | 0.067 | 0.190 | 185.1 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10075 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10076 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10077 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10078 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10079 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10080 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10081 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 111 | 6 | 584 | 0.067 | 0.190 | 88.4 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10082 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 121 | 6 | 584 | 0.067 | 0.190 | 11.8 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10083 | 8/26/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 10084 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10085 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10086 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10087 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10088 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10089 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10090 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10091 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10092 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10093 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10094 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10095 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10096 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10097 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 105 | 6 | 584 | 0.074 | 0.192 | -7.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10098 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10099 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10100 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10101 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10102 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10103 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10104 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10105 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10106 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10107 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10108 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10109 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10110 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10111 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10112 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10113 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10114 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10115 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10116 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10117 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10118 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10119 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10120 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10121 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10122 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10123 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10124 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10125 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 109 | 6 | 584 | 0.074 | 0.192 | 62.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10126 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10127 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10128 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10129 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10130 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10131 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10132 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10133 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10134 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10135 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10136 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10137 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10138 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10139 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10140 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10141 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10142 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 87.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10143 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10144 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10145 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10146 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10147 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10148 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10149 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 106 | 6 | 584 | 0.074 | 0.192 | 39.0 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10150 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10151 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10152 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10153 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10154 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10155 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10156 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10157 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10158 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10159 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10160 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10161 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10162 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10163 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10164 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 107 | 6 | 584 | 0.074 | 0.192 | 39.0 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10165 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10166 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10167 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10168 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10169 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10170 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10171 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10172 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10173 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10174 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10175 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10176 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10177 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10178 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10179 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 85 | 6 | 584 | 0.074 | 0.192 | 108.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10180 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10181 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 119 | 6 | 584 | 0.074 | 0.192 | -30.4 | 284.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10182 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10183 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10184 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10185 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10186 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10187 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10188 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10189 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10190 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10191 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10192 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10193 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10194 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10195 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10196 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10197 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10198 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10199 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10200 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10201 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10202 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10203 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10204 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10205 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10206 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10207 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10208 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 121 | 6 | 584 | 0.074 | 0.192 | -7.2 | 302.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10209 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10210 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10211 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10212 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10213 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10214 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 108 | 6 | 584 | 0.074 | 0.192 | -53.5 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10215 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10216 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10217 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10218 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 105 | 6 | 584 | 0.074 | 0.192 | 62.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10219 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10220 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10221 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10222 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10223 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10224 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10225 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 104 | 6 | 584 | 0.074 | 0.192 | -53.5 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10226 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10227 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10228 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10229 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10230 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 102 | 6 | 584 | 0.074 | 0.192 | 85.3 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10231 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10232 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10233 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10234 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10235 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10236 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10237 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10238 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10239 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10240 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10241 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10242 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10243 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10244 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10245 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10246 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10247 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10248 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10249 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10250 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10251 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10252 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10253 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10254 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 114 | 6 | 584 | 0.074 | 0.192 | 15.9 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10255 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10256 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10257 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10258 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10259 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10260 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10261 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10262 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10263 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10264 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10265 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 82 | 6 | 584 | 0.074 | 0.192 | 108.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10266 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10267 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 110 | 6 | 584 | 0.074 | 0.192 | -7.2 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10268 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10269 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10270 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10271 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 111 | 6 | 584 | 0.074 | 0.192 | 15.9 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10272 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10273 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10274 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10275 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10276 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10277 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10278 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 82 | 6 | 584 | 0.074 | 0.192 | 85.3 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10279 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10280 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10281 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10282 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10283 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10284 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 84 | 6 | 584 | 0.074 | 0.192 | 85.3 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10285 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10286 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 88 | 6 | 584 | 0.074 | 0.192 | 85.3 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10287 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 87 | 6 | 584 | 0.074 | 0.192 | 108.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10288 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10289 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10290 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10291 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10292 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10293 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 88 | 6 | 584 | 0.074 | 0.192 | 108.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10294 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10295 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10296 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10297 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10298 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10299 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10300 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10301 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10302 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10303 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10304 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10305 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10306 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10307 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10308 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10309 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10310 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10311 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10312 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10313 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10314 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10315 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10316 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10317 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10318 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10319 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10320 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10321 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10322 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10323 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10324 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10325 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 91 | 6 | 584 | 0.074 | 0.192 | 108.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10326 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10327 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10328 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 85 | 6 | 584 | 0.074 | 0.192 | 108.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10329 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10330 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10331 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10332 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10333 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10334 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 108 | 6 | 584 | 0.074 | 0.192 | 85.3 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10335 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10336 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 116 | 6 | 584 | 0.074 | 0.192 | 85.3 | 257.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10337 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10338 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10339 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10340 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10341 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10342 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10343 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 103 | 6 | 584 | 0.074 | 0.192 | 62.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10344 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10345 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 93 | 6 | 584 | 0.074 | 0.192 | 85.3 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10346 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 108 | 6 | 584 | 0.074 | 0.192 | -30.4 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10347 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10348 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10349 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10350 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10351 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10352 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10353 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10354 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 108 | 6 | 584 | 0.074 | 0.192 | -7.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10355 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10356 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 114 | 6 | 584 | 0.074 | 0.192 | 108.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10357 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10358 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10359 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10360 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10361 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10362 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10363 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10364 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10365 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10366 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10367 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10368 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10369 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10370 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10371 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10372 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10373 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10374 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 103 | 6 | 584 | 0.074 | 0.192 | -53.5 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10375 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10376 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10377 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10378 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 92 | 6 | 584 | 0.074 | 0.192 | 85.3 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10379 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10380 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10381 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 104 | 6 | 584 | 0.074 | 0.192 | 62.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10382 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10383 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10384 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 89 | 6 | 584 | 0.074 | 0.192 | 85.3 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10385 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10386 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10387 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10388 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10389 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 112 | 6 | 584 | 0.074 | 0.192 | -7.2 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10390 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10391 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 114 | 6 | 584 | 0.074 | 0.192 | 108.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10392 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10393 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10394 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10395 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 105 | 6 | 584 | 0.074 | 0.192 | 108.5 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10396 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10397 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 106 | 6 | 584 | 0.074 | 0.192 | -53.5 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10398 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 110 | 6 | 584 | 0.074 | 0.192 | 39.0 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10399 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10400 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10401 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10402 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10403 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10404 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 88 | 6 | 584 | 0.074 | 0.192 | 108.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10405 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 85 | 6 | 584 | 0.074 | 0.192 | 108.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10406 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10407 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10408 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 89 | 6 | 584 | 0.074 | 0.192 | 85.3 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10409 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10410 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10411 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10412 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10413 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10414 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10415 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10416 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 103 | 6 | 584 | 0.074 | 0.192 | 108.5 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10417 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10418 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10419 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10420 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10421 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10422 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10423 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10424 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10425 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10426 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10427 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10428 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10429 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10430 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10431 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10432 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10433 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10434 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10435 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10436 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10437 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10438 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10439 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10440 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 110 | 6 | 584 | 0.074 | 0.192 | 85.3 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10441 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10442 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10443 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10444 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10445 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10446 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10447 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10448 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10449 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10450 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10451 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10452 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10453 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10454 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10455 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10456 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10457 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10458 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10459 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10460 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10461 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10462 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10463 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10464 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10465 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 113 | 6 | 584 | 0.074 | 0.192 | 15.9 | 230.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10466 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10467 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10468 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10469 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10470 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10471 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10472 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10473 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10474 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 100 | 6 | 584 | 0.074 | 0.192 | 131.8 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10475 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10476 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 105 | 6 | 584 | 0.074 | 0.192 | 131.8 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10477 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10478 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10479 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10480 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10481 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10482 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10483 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 109 | 6 | 584 | 0.074 | 0.192 | -53.5 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10484 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10485 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10486 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 109 | 6 | 584 | 0.074 | 0.192 | -7.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10487 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10488 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10489 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10490 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10491 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10492 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10493 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10494 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10495 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10496 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10497 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10498 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10499 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10500 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10501 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10502 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10503 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10504 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10505 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10506 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10507 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10508 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10509 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10510 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10511 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10512 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10513 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10514 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10515 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10516 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10517 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10518 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 92 | 6 | 584 | 0.074 | 0.192 | 85.3 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10519 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10520 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10521 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 93 | 6 | 584 | 0.074 | 0.192 | 85.3 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10522 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 108 | 6 | 584 | 0.074 | 0.192 | 62.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10523 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10524 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10525 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10526 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10527 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10528 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10529 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10530 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 10531 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10532 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10533 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10534 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 109 | 6 | 584 | 0.074 | 0.192 | -30.4 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 10535 | 8/26/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 10536 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 59 | 6 | 584 | 0.067 | 0.190 | -39.4 | -153.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10537 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10538 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10539 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10540 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10541 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 74 | 6 | 584 | 0.067 | 0.190 | 11.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10542 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 72 | 6 | 584 | 0.067 | 0.190 | -39.4 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10543 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10544 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10545 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10546 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10547 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10548 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10549 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10550 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10551 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 73 | 6 | 584 | 0.067 | 0.190 | -39.4 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10552 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10553 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10554 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10555 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10556 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 73 | 6 | 584 | 0.067 | 0.190 | -39.4 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10557 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | -39.4 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10558 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10559 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10560 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10561 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10562 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10563 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10564 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10565 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10566 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10567 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10568 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10569 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10570 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10571 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10572 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 77 | 6 | 584 | 0.067 | 0.190 | 37.3 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10573 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10574 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10575 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10576 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10577 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10578 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10579 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10580 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10581 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10582 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10583 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10584 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10585 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10586 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10587 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10588 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10589 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 67 | 6 | 584 | 0.067 | 0.190 | -13.8 | -81.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10590 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10591 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10592 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10593 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10594 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10595 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10596 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 79 | 6 | 584 | 0.067 | 0.190 | 88.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10597 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10598 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | -39.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10599 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10600 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10601 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10602 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10603 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10604 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10605 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10606 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10607 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10608 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 72 | 6 | 584 | 0.067 | 0.190 | 11.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10609 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10610 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10611 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10612 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10613 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10614 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10615 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10616 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10617 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 74 | 6 | 584 | 0.067 | 0.190 | -39.4 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10618 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10619 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10620 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10621 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10622 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10623 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10624 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10625 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10626 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10627 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10628 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10629 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10630 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 117 | 6 | 584 | 0.067 | 0.190 | 11.8 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10631 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10632 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10633 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10634 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10635 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10636 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | -39.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10637 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10638 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10639 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10640 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 74 | 6 | 584 | 0.067 | 0.190 | 37.3 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10641 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10642 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10643 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10644 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10645 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10646 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10647 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10648 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10649 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10650 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10651 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10652 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10653 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10654 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10655 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10656 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10657 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 72 | 6 | 584 | 0.067 | 0.190 | -13.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10658 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10659 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10660 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10661 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10662 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10663 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 73 | 6 | 584 | 0.067 | 0.190 | 88.4 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10664 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10665 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10666 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10667 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10668 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10669 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10670 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10671 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10672 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10673 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10674 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10675 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10676 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10677 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10678 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10679 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10680 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 73 | 6 | 584 | 0.067 | 0.190 | 11.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10681 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10682 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10683 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10684 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10685 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 74 | 6 | 584 | 0.067 | 0.190 | -39.4 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10686 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10687 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10688 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10689 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10690 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10691 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10692 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10693 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10694 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 112 | 6 | 584 | 0.067 | 0.190 | -39.4 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10695 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10696 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10697 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10698 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10699 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10700 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10701 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10702 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10703 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10704 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10705 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10706 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10707 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10708 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10709 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10710 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10711 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10712 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10713 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10714 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10715 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 80 | 6 | 584 | 0.067 | 0.190 | -39.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10716 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10717 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10718 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10719 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10720 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10721 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10722 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10723 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10724 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 85 | 6 | 584 | 0.067 | 0.190 | 62.9 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10725 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10726 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10727 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10728 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10729 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10730 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10731 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10732 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10733 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10734 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10735 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10736 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10737 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10738 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10739 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10740 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10741 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10742 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10743 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10744 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10745 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10746 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10747 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10748 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10749 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10750 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10751 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10752 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10753 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10754 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10755 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10756 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10757 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10758 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10759 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10760 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10761 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10762 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10763 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10764 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10765 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10766 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10767 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10768 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10769 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10770 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10771 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10772 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10773 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 75 | 6 | 584 | 0.067 | 0.190 | 88.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10774 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10775 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10776 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10777 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10778 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10779 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10780 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10781 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10782 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10783 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10784 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10785 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10786 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10787 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 81 | 6 | 584 | 0.067 | 0.190 | -39.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10788 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10789 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10790 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10791 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10792 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10793 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10794 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 93 | 6 | 584 | 0.067 | 0.190 | 62.9 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10795 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10796 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 115 | 6 | 584 | 0.067 | 0.190 | 37.3 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10797 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10798 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10799 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10800 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 81 | 6 | 584 | 0.067 | 0.190 | -39.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10801 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10802 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10803 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10804 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10805 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10806 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10807 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10808 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10809 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10810 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 82 | 6 | 584 | 0.067 | 0.190 | 62.9 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10811 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10812 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10813 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10814 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10815 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10816 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10817 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10818 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10819 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10820 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10821 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10822 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10823 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10824 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 79 | 6 | 584 | 0.067 | 0.190 | 62.9 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10825 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 77 | 6 | 584 | 0.067 | 0.190 | 62.9 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10826 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10827 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 83 | 6 | 584 | 0.067 | 0.190 | 88.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10828 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10829 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10830 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10831 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10832 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10833 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10834 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10835 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10836 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10837 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10838 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10839 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10840 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10841 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 75 | 6 | 584 | 0.067 | 0.190 | 37.3 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10842 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10843 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10844 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10845 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10846 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10847 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 81 | 6 | 584 | 0.067 | 0.190 | -39.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10848 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10849 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10850 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10851 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10852 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10853 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10854 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10855 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10856 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10857 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10858 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10859 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 95 | 6 | 584 | 0.067 | 0.190 | 139.5 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10860 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10861 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10862 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10863 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 73 | 6 | 584 | 0.067 | 0.190 | 11.8 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10864 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10865 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10866 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10867 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10868 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10869 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 73 | 6 | 584 | 0.067 | 0.190 | 62.9 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10870 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10871 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10872 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10873 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10874 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10875 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10876 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10877 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10878 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | -39.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10879 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10880 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10881 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10882 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10883 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10884 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10885 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10886 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10887 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10888 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 88 | 6 | 584 | 0.067 | 0.190 | -39.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10889 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10890 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10891 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10892 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10893 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10894 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10895 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | -39.4 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10896 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10897 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10898 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10899 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10900 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 84 | 6 | 584 | 0.067 | 0.190 | 139.5 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10901 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10902 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10903 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10904 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10905 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10906 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10907 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10908 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10909 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10910 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10911 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10912 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10913 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10914 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 98 | 6 | 584 | 0.067 | 0.190 | -39.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10915 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10916 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10917 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10918 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10919 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10920 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10921 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10922 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10923 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10924 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10925 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 101 | 6 | 584 | 0.067 | 0.190 | -39.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10926 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10927 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10928 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 94 | 6 | 584 | 0.067 | 0.190 | 139.5 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10929 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10930 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10931 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10932 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10933 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10934 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 68 | 6 | 584 | 0.067 | 0.190 | 37.3 | -72.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10935 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10936 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10937 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10938 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10939 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | -39.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10940 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10941 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10942 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10943 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10944 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10945 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | -39.4 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10946 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10947 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10948 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10949 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10950 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10951 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10952 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10953 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10954 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10955 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10956 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10957 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10958 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10959 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10960 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 69 | 6 | 584 | 0.067 | 0.190 | -39.4 | -63.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10961 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10962 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10963 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10964 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10965 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10966 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10967 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10968 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10969 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10970 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10971 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10972 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10973 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10974 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10975 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10976 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10977 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10978 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 91 | 6 | 584 | 0.067 | 0.190 | 88.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10979 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10980 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10981 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 112 | 6 | 584 | 0.067 | 0.190 | -13.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10982 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 86 | 6 | 584 | 0.067 | 0.190 | 88.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10983 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10984 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10985 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 97 | 6 | 584 | 0.067 | 0.190 | 165.1 | 188.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 10986 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10987 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10988 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10989 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 109 | 6 | 584 | 0.067 | 0.190 | -39.4 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10990 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10991 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10992 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 113 | 6 | 584 | 0.067 | 0.190 | -39.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10993 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10994 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10995 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10996 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 72 | 6 | 584 | 0.067 | 0.190 | -13.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10997 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10998 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 79 | 6 | 584 | 0.067 | 0.190 | 88.4 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 10999 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11000 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11001 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11002 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11003 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11004 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11005 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11006 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11007 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11008 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11009 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11010 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11011 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11012 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11013 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11014 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11015 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11016 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11017 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11018 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11019 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11020 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11021 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11022 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 75 | 6 | 584 | 0.067 | 0.190 | 37.3 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11023 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11024 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 118 | 6 | 584 | 0.067 | 0.190 | -13.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11025 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11026 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11027 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 107 | 6 | 584 | 0.067 | 0.190 | -39.4 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11028 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11029 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11030 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11031 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11032 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11033 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11034 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11035 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11036 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11037 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11038 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11039 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11040 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 85 | 6 | 584 | 0.067 | 0.190 | 88.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11041 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11042 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11043 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11044 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | -13.8 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11045 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11046 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 72 | 6 | 584 | 0.067 | 0.190 | 62.9 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11047 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11048 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11049 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11050 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 11051 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11052 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11053 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11054 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11055 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11056 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11057 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11058 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11059 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11060 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11061 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11062 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11063 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11064 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11065 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11066 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11067 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 86 | 6 | 584 | 0.067 | 0.190 | 62.9 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11068 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11069 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 83 | 6 | 584 | 0.067 | 0.190 | 88.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11070 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 82 | 6 | 584 | 0.067 | 0.190 | 62.9 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11071 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11072 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11073 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11074 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11075 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11076 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11077 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11078 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 69 | 6 | 584 | 0.067 | 0.190 | -39.4 | -63.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11079 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11080 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11081 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 81 | 6 | 584 | 0.067 | 0.190 | 88.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11082 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11083 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11084 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11085 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11086 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11087 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 74 | 6 | 584 | 0.067 | 0.190 | 11.8 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11088 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11089 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11090 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11091 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11092 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11093 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11094 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11095 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11096 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11097 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11098 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11099 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11100 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11101 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11102 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11103 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11104 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11105 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11106 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11107 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11108 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11109 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11110 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 83 | 6 | 584 | 0.067 | 0.190 | -13.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11111 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11112 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11113 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11114 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11115 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 11116 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 120 | 6 | 584 | 0.067 | 0.190 | -13.8 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11117 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11118 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11119 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11120 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11121 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11122 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11123 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11124 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11125 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11126 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11127 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11128 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11129 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 77 | 6 | 584 | 0.067 | 0.190 | -39.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11130 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11131 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11132 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11133 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11134 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11135 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11136 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11137 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11138 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11139 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11140 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11141 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11142 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11143 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11144 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11145 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11146 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11147 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11148 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11149 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 101 | 6 | 584 | 0.067 | 0.190 | 114.0 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11150 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11151 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11152 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11153 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11154 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11155 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11156 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11157 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 98 | 6 | 584 | 0.067 | 0.190 | 114.0 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11158 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11159 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11160 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11161 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11162 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11163 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11164 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11165 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 78 | 6 | 584 | 0.067 | 0.190 | -13.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11166 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11167 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11168 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11169 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11170 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 87 | 6 | 584 | 0.067 | 0.190 | 138.5 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11171 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 77 | 6 | 584 | 0.067 | 0.190 | 88.4 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11172 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11173 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11174 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11175 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11176 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11177 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11178 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11179 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11180 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 107 | 6 | 584 | 0.067 | 0.190 | 114.0 | 278.7 | 2.3 | 14.6 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 11181 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11182 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11183 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11184 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11185 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11186 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11187 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11188 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11189 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 122 | 6 | 584 | 0.067 | 0.190 | 11.8 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11190 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11191 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 106 | 6 | 584 | 0.067 | 0.190 | 37.3 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11192 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 110 | 6 | 584 | 0.067 | 0.190 | 62.9 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11193 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 107 | 6 | 584 | 0.067 | 0.190 | 139.5 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11194 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 90 | 6 | 584 | 0.067 | 0.190 | 88.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11195 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11196 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 116 | 6 | 584 | 0.067 | 0.190 | 88.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11197 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11198 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11199 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11200 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11201 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11202 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 81 | 6 | 584 | 0.067 | 0.190 | 62.9 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11203 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11204 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11205 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 101 | 6 | 584 | 0.067 | 0.190 | 114.0 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11206 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11207 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11208 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11209 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11210 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11211 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11212 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11213 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11214 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11215 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11216 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11217 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11218 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 113 | 6 | 584 | 0.067 | 0.190 | -39.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11219 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11220 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11221 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11222 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11223 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11224 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11225 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11226 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 99 | 6 | 584 | 0.067 | 0.190 | 114.0 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11227 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11228 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11229 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11230 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11231 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11232 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11233 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11234 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11235 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11236 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11237 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11238 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11239 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11240 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11241 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11242 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11243 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11244 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11245 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 11246 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11247 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11248 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11249 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11250 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11251 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11252 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11253 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11254 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11255 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11256 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 112 | 6 | 584 | 0.067 | 0.190 | 114.0 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11257 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 107 | 6 | 584 | 0.067 | 0.190 | 62.9 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11258 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 102 | 6 | 584 | 0.067 | 0.190 | 62.9 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11259 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 120 | 6 | 584 | 0.067 | 0.190 | 11.8 | 395.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11260 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11261 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11262 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 76 | 6 | 584 | 0.067 | 0.190 | 62.9 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11263 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11264 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 96 | 6 | 584 | 0.067 | 0.190 | 114.0 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11265 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11266 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11267 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11268 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11269 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11270 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11271 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 70 | 6 | 584 | 0.067 | 0.190 | 114.0 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11272 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 104 | 6 | 584 | 0.067 | 0.190 | -13.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11273 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11274 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 105 | 6 | 584 | 0.067 | 0.190 | 114.0 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11275 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11276 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11277 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 96 | 6 | 584 | 0.067 | 0.190 | 165.1 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11278 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11279 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11280 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11281 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11282 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11283 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 113 | 6 | 584 | 0.067 | 0.190 | 11.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11284 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11285 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11286 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11287 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11288 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 99 | 6 | 584 | 0.067 | 0.190 | -13.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11289 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 81 | 6 | 584 | 0.067 | 0.190 | 88.4 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11290 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11291 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11292 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11293 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11294 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 86 | 6 | 584 | 0.067 | 0.190 | -39.4 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11295 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11296 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11297 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11298 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11299 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11300 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11301 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11302 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11303 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11304 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11305 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11306 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 79 | 6 | 584 | 0.067 | 0.190 | 37.3 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11307 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11308 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 11309 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 105 | 6 | 584 | 0.067 | 0.190 | 88.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 11310 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 62 | 6 | 584 | 0.074 | 0.192 | -53.5 | -224.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11311 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11312 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11313 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11314 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11315 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 62 | 6 | 584 | 0.074 | 0.192 | -53.5 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11316 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11317 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11318 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11319 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11320 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11321 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11322 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11323 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11324 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11325 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11326 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11327 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11328 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11329 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11330 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11331 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11332 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11333 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11334 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11335 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11336 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11337 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 63 | 6 | 584 | 0.074 | 0.192 | -53.5 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11338 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11339 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11340 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11341 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11342 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11343 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11344 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11345 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11346 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11347 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11348 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11349 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11350 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11351 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11352 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11353 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11354 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11355 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11356 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11357 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11358 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11359 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11360 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11361 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11362 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11363 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11364 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11365 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11366 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11367 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11368 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11369 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11370 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11371 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11372 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11373 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11374 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11375 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11376 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11377 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11378 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11379 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11380 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11381 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11382 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11383 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11384 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11385 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11386 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11387 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11388 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11389 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11390 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11391 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11392 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11393 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11394 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11395 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11396 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11397 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11398 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11399 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11400 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11401 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11402 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11403 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11404 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11405 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11406 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11407 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11408 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11409 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11410 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11411 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11412 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 66 | 6 | 584 | 0.074 | 0.192 | 62.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11413 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11414 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11415 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11416 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11417 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 62 | 6 | 584 | 0.074 | 0.192 | 62.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11418 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11419 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11420 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11421 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11422 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11423 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11424 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11425 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11426 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 57 | 6 | 584 | 0.074 | 0.192 | -30.4 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11427 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11428 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11429 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11430 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11431 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11432 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11433 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11434 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11435 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11436 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11437 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11438 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11439 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11440 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11441 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11442 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11443 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11444 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11445 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11446 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11447 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11448 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11449 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11450 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11451 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11452 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11453 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11454 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11455 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11456 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 73 | 6 | 584 | 0.074 | 0.192 | 39.0 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11457 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11458 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11459 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11460 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11461 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11462 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11463 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11464 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11465 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11466 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11467 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11468 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11469 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11470 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11471 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11472 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11473 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11474 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11475 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11476 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11477 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11478 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11479 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11480 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11481 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11482 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11483 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11484 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11485 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11486 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11487 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11488 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11489 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11490 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11491 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11492 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11493 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11494 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11495 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11496 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11497 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11498 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11499 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11500 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11501 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11502 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11503 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11504 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11505 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11506 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11507 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11508 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11509 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11510 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11511 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11512 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11513 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11514 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11515 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11516 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11517 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11518 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11519 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11520 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11521 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11522 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11523 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11524 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11525 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11526 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11527 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11528 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11529 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11530 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11531 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11532 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11533 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11534 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11535 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11536 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11537 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11538 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11539 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11540 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11541 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11542 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11543 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11544 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11545 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11546 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11547 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11548 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11549 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11550 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11551 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11552 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11553 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 82 | 6 | 584 | 0.074 | 0.192 | 85.3 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11554 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11555 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11556 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11557 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11558 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11559 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11560 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11561 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11562 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11563 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11564 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11565 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11566 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11567 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11568 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11569 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11570 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11571 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11572 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11573 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11574 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11575 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11576 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11577 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11578 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11579 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11580 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11581 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11582 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11583 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11584 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11585 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11586 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11587 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11588 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11589 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11590 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 113 | 6 | 584 | 0.074 | 0.192 | -53.5 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11591 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11592 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11593 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11594 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11595 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11596 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11597 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11598 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11599 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11600 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11601 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11602 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11603 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11604 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11605 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11606 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11607 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11608 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11609 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 61 | 6 | 584 | 0.074 | 0.192 | -7.2 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11610 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11611 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11612 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11613 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11614 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11615 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11616 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11617 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11618 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11619 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11620 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11621 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11622 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11623 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11624 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11625 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11626 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11627 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11628 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11629 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11630 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11631 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11632 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11633 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11634 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11635 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 73 | 6 | 584 | 0.074 | 0.192 | 85.3 | -126.0 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11636 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11637 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11638 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 58 | 6 | 584 | 0.074 | 0.192 | -7.2 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11639 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11640 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11641 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11642 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11643 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11644 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11645 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11646 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11647 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11648 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11649 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11650 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11651 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11652 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11653 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11654 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11655 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11656 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11657 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11658 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11659 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11660 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11661 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11662 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11663 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11664 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11665 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11666 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11667 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11668 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11669 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11670 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11671 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11672 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11673 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11674 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11675 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11676 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11677 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11678 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11679 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11680 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11681 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11682 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11683 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11684 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11685 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11686 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11687 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11688 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11689 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11690 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11691 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11692 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11693 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11694 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11695 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11696 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11697 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11698 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11699 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11700 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11701 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11702 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11703 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11704 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11705 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11706 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11707 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11708 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11709 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11710 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11711 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11712 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11713 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11714 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11715 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11716 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11717 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11718 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11719 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11720 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11721 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11722 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11723 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11724 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11725 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11726 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11727 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11728 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11729 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11730 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11731 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11732 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11733 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11734 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11735 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11736 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11737 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11738 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11739 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11740 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11741 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11742 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11743 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11744 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11745 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11746 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11747 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11748 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11749 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11750 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11751 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11752 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11753 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 103 | 6 | 584 | 0.074 | 0.192 | 39.0 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11754 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11755 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11756 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11757 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11758 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11759 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11760 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11761 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11762 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11763 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11764 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11765 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11766 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11767 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11768 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11769 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11770 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11771 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11772 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11773 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11774 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11775 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11776 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11777 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11778 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11779 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11780 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11781 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 63 | 6 | 584 | 0.074 | 0.192 | -53.5 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11782 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11783 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11784 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11785 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11786 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11787 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 89 | 6 | 584 | 0.074 | 0.192 | 131.6 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11788 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11789 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11790 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 58 | 6 | 584 | 0.074 | 0.192 | -30.4 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11791 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11792 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11793 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11794 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11795 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11796 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11797 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11798 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11799 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11800 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11801 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11802 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11803 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11804 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11805 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11806 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11807 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11808 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 67 | 6 | 584 | 0.074 | 0.192 | 39.0 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11809 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11810 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11811 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11812 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11813 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11814 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11815 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11816 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11817 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11818 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11819 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11820 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11821 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11822 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11823 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11824 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11825 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11826 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11827 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 76 | 6 | 584 | 0.074 | 0.192 | 62.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11828 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11829 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11830 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11831 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11832 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11833 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11834 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 69 | 6 | 584 | 0.074 | 0.192 | 62.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11835 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11836 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11837 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11838 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11839 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11840 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11841 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11842 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11843 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11844 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11845 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11846 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11847 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11848 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11849 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11850 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11851 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11852 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11853 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11854 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11855 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11856 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11857 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11858 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11859 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11860 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11861 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11862 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11863 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11864 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11865 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11866 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11867 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11868 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11869 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11870 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11871 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11872 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11873 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11874 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11875 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11876 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11877 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11878 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 69 | 6 | 584 | 0.074 | 0.192 | 85.3 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11879 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11880 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 62 | 6 | 584 | 0.074 | 0.192 | 15.9 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11881 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11882 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11883 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11884 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11885 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11886 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11887 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11888 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11889 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11890 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11891 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11892 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11893 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11894 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11895 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11896 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11897 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11898 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11899 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11900 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11901 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11902 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11903 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11904 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11905 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11906 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11907 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11908 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11909 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11910 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11911 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11912 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11913 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 87 | 6 | 584 | 0.074 | 0.192 | 85.3 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11914 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11915 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11916 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11917 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11918 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 114 | 6 | 584 | 0.074 | 0.192 | -30.4 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11919 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11920 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11921 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11922 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11923 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11924 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11925 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11926 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11927 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11928 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11929 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11930 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11931 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11932 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11933 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11934 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11935 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11936 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11937 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11938 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11939 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11940 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11941 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11942 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11943 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11944 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11945 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11946 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11947 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11948 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11949 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11950 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11951 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11952 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11953 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11954 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11955 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11956 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11957 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11958 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11959 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11960 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 109 | 6 | 584 | 0.074 | 0.192 | 39.0 | 195.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 11961 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11962 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11963 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11964 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11965 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11966 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 108 | 6 | 584 | 0.074 | 0.192 | 15.9 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11967 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11968 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11969 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11970 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11971 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11972 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11973 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11974 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11975 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11976 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11977 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11978 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11979 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11980 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11981 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11982 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11983 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11984 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11985 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11986 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11987 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 104 | 6 | 584 | 0.074 | 0.192 | -53.5 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11988 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11989 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11990 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11991 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11992 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11993 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 107 | 6 | 584 | 0.074 | 0.192 | 39.0 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11994 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11995 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11996 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11997 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11998 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 11999 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12000 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12001 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12002 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12003 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12004 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12005 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12006 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12007 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12008 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12009 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12010 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12011 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12012 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12013 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12014 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12015 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12016 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12017 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12018 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12019 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12020 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12021 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12022 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12023 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12024 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 108 | 6 | 584 | 0.074 | 0.192 | 62.2 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12025 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12026 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12027 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12028 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12029 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12030 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12031 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12032 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12033 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12034 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12035 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 102 | 6 | 584 | 0.074 | 0.192 | 85.3 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12036 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12037 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 104 | 6 | 584 | 0.074 | 0.192 | 62.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12038 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12039 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 107 | 6 | 584 | 0.074 | 0.192 | 39.0 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12040 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12041 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12042 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12043 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12044 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12045 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12046 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12047 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12048 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12049 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12050 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12051 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12052 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 106 | 6 | 584 | 0.074 | 0.192 | 62.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12053 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12054 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 90 | 6 | 584 | 0.074 | 0.192 | 108.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12055 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12056 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 116 | 6 | 584 | 0.074 | 0.192 | 62.2 | 257.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12057 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12058 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12059 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12060 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12061 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12062 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12063 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12064 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12065 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12066 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12067 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12068 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12069 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12070 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 78 | 6 | 584 | 0.074 | 0.192 | 108.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12071 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12072 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12073 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12074 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12075 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12076 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 110 | 6 | 584 | 0.074 | 0.192 | 39.0 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12077 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12078 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12079 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12080 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12081 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 106 | 6 | 584 | 0.074 | 0.192 | 39.0 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12082 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 73 | 6 | 584 | 0.074 | 0.192 | 85.3 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12083 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M2 | Floor | 12084 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12085 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12086 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12087 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12088 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12089 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 90 | 6 | 584 | 0.067 | 0.190 | 62.9 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12090 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12091 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 116 | 6 | 584 | 0.067 | 0.190 | 11.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12092 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12093 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 111 | 6 | 584 | 0.067 | 0.190 | 11.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12094 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12095 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12096 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12097 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12098 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 80 | 6 | 584 | 0.067 | 0.190 | -39.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12099 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12100 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12101 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12102 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12103 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12104 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12105 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12106 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12107 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12108 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12109 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12110 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12111 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12112 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12113 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12114 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 108 | 6 | 584 | 0.067 | 0.190 | 11.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12115 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12116 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12117 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12118 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12119 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12120 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12121 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12122 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12123 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12124 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12125 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12126 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12127 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12128 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12129 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 99 | 6 | 584 | 0.067 | 0.190 | -39.4 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12130 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12131 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12132 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12133 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12134 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12135 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 102 | 6 | 584 | 0.067 | 0.190 | 114.0 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12136 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12137 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12138 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12139 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 103 | 6 | 584 | 0.067 | 0.190 | 114.0 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12140 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12141 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 73 | 6 | 584 | 0.067 | 0.190 | 37.3 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12142 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12143 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12144 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12145 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12146 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12147 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12148 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12149 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | -39.4 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12150 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12151 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12152 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | -39.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12153 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 70 | 6 | 584 | 0.067 | 0.190 | -13.8 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12154 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12155 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12156 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12157 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12158 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12159 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12160 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 108 | 6 | 584 | 0.067 | 0.190 | -39.4 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12161 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 103 | 6 | 584 | 0.067 | 0.190 | -13.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12162 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 81 | 6 | 584 | 0.067 | 0.190 | 114.0 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12163 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 84 | 6 | 584 | 0.067 | 0.190 | -13.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12164 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12165 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12166 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12167 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 111 | 6 | 584 | 0.067 | 0.190 | 37.3 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12168 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12169 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 118 | 6 | 584 | 0.067 | 0.190 | -13.8 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12170 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12171 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12172 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 116 | 6 | 584 | 0.067 | 0.190 | -13.8 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12173 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12174 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 91 | 6 | 584 | 0.067 | 0.190 | 88.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12175 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12176 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12177 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12178 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 103 | 6 | 584 | 0.067 | 0.190 | 37.3 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12179 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12180 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 73 | 6 | 584 | 0.067 | 0.190 | 88.4 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12181 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12182 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 72 | 6 | 584 | 0.067 | 0.190 | 37.3 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12183 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12184 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12185 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12186 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12187 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12188 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12189 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12190 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12191 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 121 | 6 | 584 | 0.067 | 0.190 | 62.9 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12192 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12193 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 126 | 6 | 584 | 0.067 | 0.190 | -13.8 | 449.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12194 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12195 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12196 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12197 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 76 | 6 | 584 | 0.067 | 0.190 | 190.7 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12198 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12199 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12200 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | -39.4 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12201 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12202 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12203 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12204 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12205 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12206 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12207 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 112 | 6 | 584 | 0.067 | 0.190 | 37.3 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12208 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12209 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12210 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12211 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12212 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 88 | 6 | 584 | 0.067 | 0.190 | 165.1 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12213 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12214 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12215 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 76 | 6 | 584 | 0.067 | 0.190 | 37.3 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12216 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12217 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12218 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12219 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12220 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12221 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12222 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12223 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 96 | 6 | 584 | 0.067 | 0.190 | -39.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12224 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12225 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12226 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12227 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12228 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12229 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 92 | 6 | 584 | 0.067 | 0.190 | 88.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12230 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 103 | 6 | 584 | 0.067 | 0.190 | -39.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12231 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12232 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 78 | 6 | 584 | 0.067 | 0.190 | 37.3 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12233 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12234 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12235 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12236 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 94 | 6 | 584 | 0.067 | 0.190 | 88.4 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12237 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12238 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12239 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 86 | 6 | 584 | 0.067 | 0.190 | 114.0 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12240 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12241 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12242 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12243 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12244 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 83 | 6 | 584 | 0.067 | 0.190 | 139.5 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12245 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 80 | 6 | 584 | 0.067 | 0.190 | -13.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12246 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12247 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12248 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12249 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12250 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12251 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12252 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12253 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12254 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12255 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12256 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12257 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12258 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 95 | 6 | 584 | 0.067 | 0.190 | 114.0 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12259 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12260 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12261 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 91 | 6 | 584 | 0.067 | 0.190 | 114.0 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12262 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12263 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 87 | 6 | 584 | 0.067 | 0.190 | 165.1 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12264 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12265 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12266 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 88 | 6 | 584 | 0.067 | 0.190 | 62.9 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12267 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12268 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 104 | 6 | 584 | 0.067 | 0.190 | -39.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12269 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12270 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12271 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12272 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12273 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12274 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12275 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 106 | 6 | 584 | 0.067 | 0.190 | 11.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12276 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12277 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 110 | 6 | 584 | 0.067 | 0.190 | 37.3 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12278 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12279 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12280 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12281 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 86 | 6 | 584 | 0.067 | 0.190 | 114.0 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12282 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 105 | 6 | 584 | 0.067 | 0.190 | 62.9 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12283 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12284 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12285 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12286 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12287 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12288 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 108 | 6 | 584 | 0.067 | 0.190 | 62.9 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12289 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12290 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12291 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 108 | 6 | 584 | 0.067 | 0.190 | -13.8 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12292 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 84 | 6 | 584 | 0.067 | 0.190 | 88.4 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12293 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12294 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12295 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12296 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12297 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12298 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 103 | 6 | 584 | 0.067 | 0.190 | 114.0 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12299 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12300 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12301 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12302 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 102 | 6 | 584 | 0.067 | 0.190 | 165.1 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12303 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12304 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 114 | 6 | 584 | 0.067 | 0.190 | 37.3 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12305 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12306 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12307 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12308 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12309 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12310 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12311 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 97 | 6 | 584 | 0.067 | 0.190 | 114.0 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12312 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12313 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 110 | 6 | 584 | 0.067 | 0.190 | -39.4 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12314 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12315 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12316 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12317 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12318 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 100 | 6 | 584 | 0.067 | 0.190 | 11.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12319 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 131 | 6 | 584 | 0.067 | 0.190 | 88.4 | 495.0 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12320 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12321 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12322 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12323 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 122 | 6 | 584 | 0.067 | 0.190 | 114.0 | 413.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12324 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12325 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12326 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12327 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12328 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12329 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12330 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 105 | 6 | 584 | 0.067 | 0.190 | -39.4 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12331 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12332 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12333 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12334 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12335 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12336 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12337 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 96 | 6 | 584 | 0.067 | 0.190 | 62.9 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12338 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12339 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 97 | 6 | 584 | 0.067 | 0.190 | 62.9 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12340 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 100 | 6 | 584 | 0.067 | 0.190 | 138.5 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12341 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12342 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12343 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12344 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12345 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12346 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 86 | 6 | 584 | 0.067 | 0.190 | 190.7 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12347 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12348 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 118 | 6 | 584 | 0.067 | 0.190 | 37.3 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12349 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | -13.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12350 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12351 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 97 | 6 | 584 | 0.067 | 0.190 | 241.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12352 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12353 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12354 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12355 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12356 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 110 | 6 | 584 | 0.067 | 0.190 | 11.8 | 305.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12357 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12358 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 102 | 6 | 584 | 0.067 | 0.190 | 11.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12359 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 98 | 6 | 584 | 0.067 | 0.190 | 62.9 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12360 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12361 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 101 | 6 | 584 | 0.067 | 0.190 | -13.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12362 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 109 | 6 | 584 | 0.067 | 0.190 | 37.3 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12363 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12364 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12365 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12366 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12367 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 113 | 6 | 584 | 0.067 | 0.190 | 37.3 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12368 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 80 | 6 | 584 | 0.067 | 0.190 | 88.4 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12369 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 83 | 6 | 584 | 0.067 | 0.190 | 88.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12370 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12371 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 106 | 6 | 584 | 0.067 | 0.190 | -39.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12372 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12373 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12374 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12375 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 92 | 6 | 584 | 0.067 | 0.190 | -39.4 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12376 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12377 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12378 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 117 | 6 | 584 | 0.067 | 0.190 | 114.0 | 368.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12379 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12380 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12381 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 91 | 6 | 584 | 0.067 | 0.190 | 37.3 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12382 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 80 | 6 | 584 | 0.067 | 0.190 | 11.8 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12383 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 86 | 6 | 584 | 0.067 | 0.190 | 114.0 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12384 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12385 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12386 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12387 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12388 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12389 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 113 | 6 | 584 | 0.067 | 0.190 | 88.4 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12390 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 115 | 6 | 584 | 0.067 | 0.190 | 88.4 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12391 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 118 | 6 | 584 | 0.067 | 0.190 | 139.5 | 377.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12392 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 93 | 6 | 584 | 0.067 | 0.190 | -13.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12393 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12394 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12395 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 106 | 6 | 584 | 0.067 | 0.190 | 88.4 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12396 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12397 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 109 | 6 | 584 | 0.067 | 0.190 | 88.4 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12398 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12399 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12400 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 97 | 6 | 584 | 0.067 | 0.190 | 114.0 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12401 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 0 | 6 | 584 | 0.067 | 0.190 | -39.4 | -685.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12402 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 93 | 6 | 584 | 0.067 | 0.190 | 88.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12403 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12404 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 85 | 6 | 584 | 0.067 | 0.190 | 88.4 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12405 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12406 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 73 | 6 | 584 | 0.067 | 0.190 | -39.4 | -27.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12407 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12408 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12409 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 97 | 6 | 584 | 0.067 | 0.190 | 11.8 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12410 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 98 | 6 | 584 | 0.067 | 0.190 | 88.4 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12411 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 85 | 6 | 584 | 0.067 | 0.190 | 139.5 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12412 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12413 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 99 | 6 | 584 | 0.067 | 0.190 | 62.9 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12414 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12415 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 86 | 6 | 584 | 0.067 | 0.190 | -13.8 | 89.4 | 2.3 | 14.6 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12416 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12417 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12418 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 104 | 6 | 584 | 0.067 | 0.190 | 165.1 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12419 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12420 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 105 | 6 | 584 | 0.067 | 0.190 | 11.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12421 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 91 | 6 | 584 | 0.067 | 0.190 | -39.4 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12422 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12423 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 97 | 6 | 584 | 0.067 | 0.190 | -39.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12424 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12425 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 71 | 6 | 584 | 0.067 | 0.190 | 62.9 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12426 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12427 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12428 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 87 | 6 | 584 | 0.067 | 0.190 | -39.4 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12429 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 100 | 6 | 584 | 0.067 | 0.190 | 62.9 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12430 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12431 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 107 | 6 | 584 | 0.067 | 0.190 | -13.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12432 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 103 | 6 | 584 | 0.067 | 0.190 | 11.8 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12433 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 121 | 6 | 584 | 0.067 | 0.190 | -13.8 | 404.9 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12434 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12435 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 116 | 6 | 584 | 0.067 | 0.190 | -39.4 | 359.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12436 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | -13.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12437 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12438 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 75 | 6 | 584 | 0.067 | 0.190 | 62.9 | -9.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12439 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 102 | 6 | 584 | 0.067 | 0.190 | 37.3 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12440 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 104 | 6 | 584 | 0.067 | 0.190 | 62.9 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12441 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 72 | 6 | 584 | 0.067 | 0.190 | 11.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12442 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12443 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 90 | 6 | 584 | 0.067 | 0.190 | 11.8 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12444 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12445 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12446 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 93 | 6 | 584 | 0.067 | 0.190 | 11.8 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12447 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12448 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 112 | 6 | 584 | 0.067 | 0.190 | 11.8 | 323.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12449 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12450 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 82 | 6 | 584 | 0.067 | 0.190 | 88.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12451 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12452 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 108 | 6 | 584 | 0.067 | 0.190 | 37.3 | 287.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12453 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12454 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 119 | 6 | 584 | 0.067 | 0.190 | 88.4 | 386.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12455 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12456 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 109 | 6 | 584 | 0.067 | 0.190 | 62.9 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12457 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 102 | 6 | 584 | 0.067 | 0.190 | 88.4 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12458 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 109 | 6 | 584 | 0.067 | 0.190 | -13.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12459 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12460 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12461 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12462 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | -39.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12463 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12464 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12465 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 99 | 6 | 584 | 0.067 | 0.190 | 37.3 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12466 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 114 | 6 | 584 | 0.067 | 0.190 | 11.8 | 341.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12467 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 96 | 6 | 584 | 0.067 | 0.190 | -13.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12468 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12469 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 88 | 6 | 584 | 0.067 | 0.190 | -13.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12470 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 95 | 6 | 584 | 0.067 | 0.190 | 37.3 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12471 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12472 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 72 | 6 | 584 | 0.067 | 0.190 | 11.8 | -36.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12473 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12474 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 101 | 6 | 584 | 0.067 | 0.190 | 37.3 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12475 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 74 | 6 | 584 | 0.067 | 0.190 | -39.4 | -18.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12476 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12477 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 95 | 6 | 584 | 0.067 | 0.190 | 62.9 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12478 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 109 | 6 | 584 | 0.067 | 0.190 | 11.8 | 296.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12479 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12480 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 98 | 6 | 584 | 0.067 | 0.190 | 11.8 | 197.6 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12481 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12482 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 86 | 6 | 584 | 0.067 | 0.190 | 37.3 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12483 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12484 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12485 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 101 | 6 | 584 | 0.067 | 0.190 | 11.8 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12486 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 99 | 6 | 584 | 0.067 | 0.190 | 11.8 | 206.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12487 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12488 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 101 | 6 | 584 | 0.067 | 0.190 | 62.9 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12489 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 100 | 6 | 584 | 0.067 | 0.190 | 88.4 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12490 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 89 | 6 | 584 | 0.067 | 0.190 | 62.9 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12491 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12492 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12493 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | -39.4 | 62.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12494 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 95 | 6 | 584 | 0.067 | 0.190 | -39.4 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12495 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 80 | 6 | 584 | 0.067 | 0.190 | 37.3 | 35.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12496 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 94 | 6 | 584 | 0.067 | 0.190 | 11.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12497 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 107 | 6 | 584 | 0.067 | 0.190 | 11.8 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12498 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12499 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12500 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 113 | 6 | 584 | 0.067 | 0.190 | 11.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12501 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 115 | 6 | 584 | 0.067 | 0.190 | 62.9 | 350.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12502 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 89 | 6 | 584 | 0.067 | 0.190 | 37.3 | 116.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12503 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 113 | 6 | 584 | 0.067 | 0.190 | -13.8 | 332.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12504 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12505 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12506 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 78 | 6 | 584 | 0.067 | 0.190 | 37.3 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12507 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 98 | 6 | 584 | 0.067 | 0.190 | -13.8 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12508 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 82 | 6 | 584 | 0.067 | 0.190 | 88.4 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12509 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 96 | 6 | 584 | 0.067 | 0.190 | 88.4 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12510 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 86 | 6 | 584 | 0.067 | 0.190 | 11.8 | 89.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12511 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 92 | 6 | 584 | 0.067 | 0.190 | -13.8 | 143.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12512 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12513 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 98 | 6 | 584 | 0.067 | 0.190 | 37.3 | 197.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12514 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12515 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 105 | 6 | 584 | 0.067 | 0.190 | 37.3 | 260.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12516 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | -13.8 | 233.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12517 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 104 | 6 | 584 | 0.067 | 0.190 | 88.4 | 251.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12518 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12519 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 101 | 6 | 584 | 0.067 | 0.190 | 88.4 | 224.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12520 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 95 | 6 | 584 | 0.067 | 0.190 | 11.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12521 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 94 | 6 | 584 | 0.067 | 0.190 | 62.9 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12522 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12523 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 111 | 6 | 584 | 0.067 | 0.190 | -13.8 | 314.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12524 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12525 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 95 | 6 | 584 | 0.067 | 0.190 | -13.8 | 170.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12526 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 103 | 6 | 584 | 0.067 | 0.190 | 62.9 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12527 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 91 | 6 | 584 | 0.067 | 0.190 | 11.8 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12528 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 103 | 6 | 584 | 0.067 | 0.190 | 88.4 | 242.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12529 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 100 | 6 | 584 | 0.067 | 0.190 | 37.3 | 215.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12530 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 107 | 6 | 584 | 0.067 | 0.190 | 37.3 | 278.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12531 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12532 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12533 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 91 | 6 | 584 | 0.067 | 0.190 | 62.9 | 134.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12534 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 93 | 6 | 584 | 0.067 | 0.190 | 37.3 | 152.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12535 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12536 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 70 | 6 | 584 | 0.067 | 0.190 | 11.8 | -54.8 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12537 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12538 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 96 | 6 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12539 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 78 | 6 | 584 | 0.067 | 0.190 | 62.9 | 17.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12540 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 84 | 6 | 584 | 0.067 | 0.190 | 62.9 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12541 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 77 | 6 | 584 | 0.067 | 0.190 | 62.9 | 8.3 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12542 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 82 | 6 | 584 | 0.067 | 0.190 | 11.8 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12543 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 87 | 6 | 584 | 0.067 | 0.190 | 11.8 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12544 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 82 | 6 | 584 | 0.067 | 0.190 | 37.3 | 53.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12545 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 97 | 6 | 584 | 0.067 | 0.190 | -13.8 | 188.6 | 2.3 | 14.6 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M2 | Floor | 12546 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12547 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 88 | 6 | 584 | 0.067 | 0.190 | 88.4 | 107.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12548 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12549 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 97 | 6 | 584 | 0.067 | 0.190 | 37.3 | 188.6 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12550 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 94 | 6 | 584 | 0.067 | 0.190 | 37.3 | 161.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12551 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 106 | 6 | 584 | 0.067 | 0.190 | 62.9 | 269.7 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12552 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 90 | 6 | 584 | 0.067 | 0.190 | 37.3 | 125.5 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12553 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M2 | Floor | 12554 | 8/27/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU 6 | | | Scan | M3 | Floor | 12555 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12556 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12557 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12558 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12559 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 59 | 6 | 584 | 0.074 | 0.192 | 39.0 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12560 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12561 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12562 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12563 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12564 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12565 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12566 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 97 | 6 | 584 | 0.074 | 0.192 | -53.5 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12567 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12568 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12569 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12570 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12571 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12572 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12573 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12574 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12575 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12576 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12577 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12578 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12579 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12580 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12581 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12582 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12583 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12584 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12585 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12586 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12587 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12588 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12589 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12590 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12591 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12592 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12593 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12594 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12595 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12596 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12597 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12598 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12599 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12600 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 105 | 6 | 584 | 0.074 | 0.192 | 85.3 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12601 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12602 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12603 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12604 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12605 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12606 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12607 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12608 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12609 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12610 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12611 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12612 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12613 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 114 | 6 | 584 | 0.074 | 0.192 | -53.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12614 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12615 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12616 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12617 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12618 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12619 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12620 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12621 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12622 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 114 | 6 | 584 | 0.074 | 0.192 | -53.5 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12623 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12624 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12625 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12626 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12627 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12628 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12629 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12630 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12631 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12632 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12633 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12634 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 77 | 6 | 584 | 0.074 | 0.192 | 85.3 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12635 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12636 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12637 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12638 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12639 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12640 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12641 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12642 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12643 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12644 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12645 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12646 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12647 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12648 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12649 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12650 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12651 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12652 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12653 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12654 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12655 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12656 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12657 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12658 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12659 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12660 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12661 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12662 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12663 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12664 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12665 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12666 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 101 | 6 | 584 | 0.074 | 0.192 | 62.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12667 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12668 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12669 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12670 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 96 | 6 | 584 | 0.074 | 0.192 | 108.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12671 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12672 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12673 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12674 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12675 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12676 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12677 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12678 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12679 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12680 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12681 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12682 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12683 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12684 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12685 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12686 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12687 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12688 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12689 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12690 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12691 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12692 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12693 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12694 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12695 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12696 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12697 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12698 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12699 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12700 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12701 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12702 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12703 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12704 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12705 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12706 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12707 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12708 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12709 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12710 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12711 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12712 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12713 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12714 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12715 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12716 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12717 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12718 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12719 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12720 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12721 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12722 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12723 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12724 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12725 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12726 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12727 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12728 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12729 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12730 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12731 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12732 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12733 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12734 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 95 | 6 | 584 | 0.074 | 0.192 | 85.3 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12735 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12736 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12737 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12738 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12739 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12740 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12741 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12742 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12743 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12744 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12745 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12746 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12747 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12748 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12749 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12750 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12751 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12752 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12753 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12754 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12755 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12756 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12757 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12758 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12759 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12760 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12761 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12762 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12763 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12764 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12765 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12766 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12767 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12768 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12769 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12770 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 95 | 6 | 584 | 0.074 | 0.192 | 131.6 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12771 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12772 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 103 | 6 | 584 | 0.074 | 0.192 | 39.0 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12773 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12774 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12775 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12776 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12777 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12778 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12779 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12780 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12781 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12782 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12783 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12784 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12785 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12786 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 85 | 6 | 584 | 0.074 | 0.192 | 85.3 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12787 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12788 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12789 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12790 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 111 | 6 | 584 | 0.074 | 0.192 | 39.0 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12791 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12792 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12793 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12794 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12795 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12796 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12797 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12798 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12799 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12800 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12801 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12802 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12803 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12804 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12805 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12806 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12807 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12808 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12809 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12810 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 67 | 6 | 584 | 0.074 | 0.192 | 131.6 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12811 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12812 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12813 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12814 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12815 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12816 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12817 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12818 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 98 | 6 | 584 | 0.074 | 0.192 | 39.0 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12819 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 87 | 6 | 584 | 0.074 | 0.192 | 108.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12820 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12821 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12822 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12823 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12824 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12825 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12826 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12827 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12828 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12829 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12830 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 84 | 6 | 584 | 0.074 | 0.192 | 85.3 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12831 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12832 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12833 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12834 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12835 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12836 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12837 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12838 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12839 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12840 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 102 | 6 | 584 | 0.074 | 0.192 | 85.3 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12841 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12842 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12843 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12844 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12845 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12846 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12847 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12848 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12849 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12850 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12851 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12852 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12853 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12854 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12855 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12856 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12857 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12858 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12859 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12860 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12861 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12862 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12863 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12864 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12865 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12866 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 106 | 6 | 584 | 0.074 | 0.192 | -30.4 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12867 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12868 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12869 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12870 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12871 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12872 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12873 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 121 | 6 | 584 | 0.074 | 0.192 | 85.3 | 302.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12874 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12875 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12876 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12877 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12878 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12879 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12880 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12881 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12882 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12883 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12884 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12885 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12886 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12887 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12888 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12889 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12890 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12891 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12892 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12893 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12894 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12895 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12896 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12897 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12898 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 84 | 6 | 584 | 0.074 | 0.192 | 108.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12899 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12900 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12901 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12902 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12903 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12904 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12905 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12906 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12907 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12908 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12909 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 9 | 72 | 6 | 584 | 0.074 | 0.192 | 154.7 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12910 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12911 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 91 | 6 | 584 | 0.074 | 0.192 | 108.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12912 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12913 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 76 | 6 | 584 | 0.074 | 0.192 | 85.3 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12914 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12915 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12916 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12917 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12918 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12919 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12920 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12921 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12922 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12923 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 71 | 6 | 584 | 0.074 | 0.192 | 62.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12924 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12925 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 93 | 6 | 584 | 0.074 | 0.192 | 108.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12926 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12927 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12928 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12929 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12930 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12931 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12932 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12933 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12934 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12935 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 12936 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12937 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12938 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12939 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12940 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12941 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12942 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12943 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12944 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12945 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12946 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12947 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 103 | 6 | 584 | 0.074 | 0.192 | 15.9 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12948 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12949 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12950 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12951 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12952 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12953 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12954 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12955 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12956 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12957 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12958 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12959 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12960 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12961 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12962 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12963 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12964 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12965 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12966 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12967 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12968 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12969 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12970 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12971 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12972 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12973 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12974 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12975 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12976 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12977 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12978 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12979 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12980 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12981 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12982 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12983 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12984 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12985 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12986 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12987 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12988 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12989 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 75 | 6 | 584 | 0.074 | 0.192 | 62.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12990 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12991 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12992 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12993 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12994 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12995 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12996 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12997 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 107 | 6 | 584 | 0.074 | 0.192 | -7.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12998 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 12999 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13000 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13001 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13002 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13003 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13004 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13005 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13006 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13007 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 76 | 6 | 584 | 0.074 | 0.192 | 62.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13008 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13009 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13010 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13011 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13012 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13013 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13014 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13015 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13016 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13017 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13018 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13019 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13020 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13021 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13022 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13023 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13024 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13025 | 8/27/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13026 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13027 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13028 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13029 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 66 | 6 | 584 | 0.074 | 0.192 | 39.0 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13030 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13031 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13032 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13033 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13034 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 105 | 6 | 584 | 0.074 | 0.192 | 15.9 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13035 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13036 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13037 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13038 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13039 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13040 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13041 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13042 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13043 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 76 | 6 | 584 | 0.074 | 0.192 | 85.3 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13044 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13045 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13046 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13047 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13048 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13049 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13050 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13051 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13052 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13053 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13054 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13055 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13056 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13057 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13058 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13059 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13060 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13061 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 85 | 6 | 584 | 0.074 | 0.192 | 85.3 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13062 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13063 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13064 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13065 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13066 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13067 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13068 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13069 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13070 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13071 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 107 | 6 | 584 | 0.074 | 0.192 | -30.4 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13072 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13073 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13074 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13075 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 61 | 6 | 584 | 0.074 | 0.192 | -7.2 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13076 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13077 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13078 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13079 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13080 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13081 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13082 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13083 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13084 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13085 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13086 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13087 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13088 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13089 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13090 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13091 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13092 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13093 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13094 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13095 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13096 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13097 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13098 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13099 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13100 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13101 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13102 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13103 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13104 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13105 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13106 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13107 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13108 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13109 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13110 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13111 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13112 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13113 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13114 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13115 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13116 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13117 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13118 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13119 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 67 | 6 | 584 | 0.074 | 0.192 | 39.0 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13120 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13121 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13122 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13123 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13124 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13125 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13126 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13127 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13128 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13129 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13130 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13131 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13132 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13133 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13134 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13135 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13136 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13137 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13138 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13139 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13140 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13141 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13142 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13143 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13144 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13145 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 66 | 6 | 584 | 0.074 | 0.192 | 39.0 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13146 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13147 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 94 | 6 | 584 | 0.074 | 0.192 | 85.3 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13148 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13149 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13150 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13151 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13152 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13153 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13154 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13155 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13156 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13157 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13158 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13159 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13160 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13161 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13162 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 63 | 6 | 584 | 0.074 | 0.192 | 15.9 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13163 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13164 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13165 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13166 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13167 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13168 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13169 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13170 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13171 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13172 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13173 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13174 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13175 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13176 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13177 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13178 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13179 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13180 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13181 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13182 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 92 | 6 | 584 | 0.074 | 0.192 | 85.3 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13183 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13184 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13185 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13186 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13187 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13188 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13189 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 63 | 6 | 584 | 0.074 | 0.192 | 15.9 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13190 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13191 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 80 | 6 | 584 | 0.074 | 0.192 | 85.3 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13192 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13193 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13194 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13195 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13196 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13197 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13198 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13199 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13200 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 73 | 6 | 584 | 0.074 | 0.192 | 39.0 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13201 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13202 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13203 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13204 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13205 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13206 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13207 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13208 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13209 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13210 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13211 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13212 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13213 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13214 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13215 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13216 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13217 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13218 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13219 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13220 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13221 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13222 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13223 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13224 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13225 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13226 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13227 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13228 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13229 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13230 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13231 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13232 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13233 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13234 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13235 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13236 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13237 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13238 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13239 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13240 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13241 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13242 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13243 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13244 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13245 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13246 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13247 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13248 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13249 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13250 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13251 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13252 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13253 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13254 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13255 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13256 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13257 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13258 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 86 | 6 | 584 | 0.074 | 0.192 | 108.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13259 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13260 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13261 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13262 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 70 | 6 | 584 | 0.074 | 0.192 | 108.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13263 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13264 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13265 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13266 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13267 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13268 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13269 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13270 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13271 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13272 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13273 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13274 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13275 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13276 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13277 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13278 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 56 | 6 | 584 | 0.074 | 0.192 | -30.4 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13279 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13280 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13281 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13282 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 101 | 6 | 584 | 0.074 | 0.192 | 62.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13283 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 88 | 6 | 584 | 0.074 | 0.192 | 85.3 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13284 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13285 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13286 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13287 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13288 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 93 | 6 | 584 | 0.074 | 0.192 | 108.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13289 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13290 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 114 | 6 | 584 | 0.074 | 0.192 | 39.0 | 239.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13291 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13292 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13293 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13294 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13295 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13296 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13297 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13298 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13299 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13300 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13301 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13302 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13303 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13304 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13305 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13306 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13307 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 56 | 6 | 584 | 0.074 | 0.192 | -7.2 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13308 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13309 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13310 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13311 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13312 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13313 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13314 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13315 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13316 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13317 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13318 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13319 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13320 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13321 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13322 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 66 | 6 | 584 | 0.074 | 0.192 | 85.3 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13323 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13324 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13325 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13326 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13327 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13328 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13329 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13330 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13331 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13332 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13333 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13334 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13335 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13336 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13337 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13338 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13339 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13340 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13341 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13342 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13343 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13344 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13345 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13346 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13347 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13348 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 80 | 6 | 584 | 0.074 | 0.192 | 131.6 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13349 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13350 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13351 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13352 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13353 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13354 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13355 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13356 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13357 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13358 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13359 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13360 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 63 | 6 | 584 | 0.074 | 0.192 | 39.0 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13361 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13362 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13363 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13364 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13365 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13366 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13367 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 73 | 6 | 584 | 0.074 | 0.192 | 85.3 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13368 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13369 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13370 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13371 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13372 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13373 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13374 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13375 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 57 | 6 | 584 | 0.074 | 0.192 | -7.2 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13376 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13377 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13378 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13379 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13380 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13381 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13382 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13383 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13384 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13385 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13386 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13387 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13388 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13389 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13390 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13391 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13392 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13393 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13394 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13395 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13396 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13397 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13398 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13399 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13400 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13401 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13402 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13403 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13404 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13405 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13406 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13407 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13408 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13409 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13410 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13411 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13412 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13413 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13414 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13415 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13416 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13417 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13418 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13419 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13420 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13421 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13422 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13423 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13424 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13425 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13426 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13427 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 71 | 6 | 584 | 0.074 | 0.192 | 62.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13428 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13429 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 85 | 6 | 584 | 0.074 | 0.192 | 108.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13430 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13431 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13432 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13433 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13434 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13435 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13436 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13437 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13438 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13439 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13440 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 90 | 6 | 584 | 0.074 | 0.192 | 108.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13441 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 63 | 6 | 584 | 0.074 | 0.192 | 15.9 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13442 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13443 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13444 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13445 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13446 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13447 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13448 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13449 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 112 | 6 | 584 | 0.074 | 0.192 | -7.2 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13450 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13451 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13452 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13453 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13454 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13455 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13456 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 76 | 6 | 584 | 0.074 | 0.192 | 108.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13457 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13458 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13459 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13460 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13461 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 69 | 6 | 584 | 0.074 | 0.192 | 62.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13462 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13463 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13464 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13465 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13466 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13467 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13468 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13469 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13470 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 70 | 6 | 584 | 0.074 | 0.192 | 85.3 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13471 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13472 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13473 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13474 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13475 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13476 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13477 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13478 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13479 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13480 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13481 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13482 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13483 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13484 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13485 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13486 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13487 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13488 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13489 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13490 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13491 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13492 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13493 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13494 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13495 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13496 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13497 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13498 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13499 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13500 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13501 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13502 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13503 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13504 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13505 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 102 | 6 | 584 | 0.074 | 0.192 | -53.5 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13506 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13507 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13508 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13509 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13510 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13511 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13512 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13513 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13514 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13515 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13516 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13517 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13518 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 82 | 6 | 584 | 0.074 | 0.192 | 85.3 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13519 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13520 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13521 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13522 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13523 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13524 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13525 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13526 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13527 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13528 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13529 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 104 | 6 | 584 | 0.074 | 0.192 | -30.4 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13530 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13531 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13532 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13533 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13534 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 104 | 6 | 584 | 0.074 | 0.192 | 15.9 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13535 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13536 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13537 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13538 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13539 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13540 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13541 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13542 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13543 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 107 | 6 | 584 | 0.074 | 0.192 | -7.2 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13544 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13545 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 109 | 6 | 584 | 0.074 | 0.192 | 39.0 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13546 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13547 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13548 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13549 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13550 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13551 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13552 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13553 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13554 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13555 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13556 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13557 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13558 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13559 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13560 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13561 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13562 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 78 | 6 | 584 | 0.074 | 0.192 | 108.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13563 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13564 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13565 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13566 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13567 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13568 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13569 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13570 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 94 | 6 | 584 | 0.074 | 0.192 | -53.5 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13571 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13572 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13573 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13574 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13575 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13576 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13577 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13578 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13579 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13580 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13581 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13582 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13583 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13584 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13585 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13586 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13587 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13588 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13589 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13590 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13591 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13592 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13593 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13594 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13595 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13596 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13597 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13598 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13599 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13600 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13601 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13602 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13603 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13604 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13605 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 99 | 6 | 584 | 0.074 | 0.192 | -30.4 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13606 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13607 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13608 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 101 | 6 | 584 | 0.074 | 0.192 | 39.0 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13609 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 105 | 6 | 584 | 0.074 | 0.192 | -30.4 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13610 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13611 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13612 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13613 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13614 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13615 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13616 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13617 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13618 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13619 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13620 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13621 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13622 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13623 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13624 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13625 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13626 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13627 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13628 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13629 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13630 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13631 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13632 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13633 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13634 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13635 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13636 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 101 | 6 | 584 | 0.074 | 0.192 | -30.4 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13637 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13638 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13639 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13640 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13641 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13642 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13643 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 98 | 6 | 584 | 0.074 | 0.192 | 15.9 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13644 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13645 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13646 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13647 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13648 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13649 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13650 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13651 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13652 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13653 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13654 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13655 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13656 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13657 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13658 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13659 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13660 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13661 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13662 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13663 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13664 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13665 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13666 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13667 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13668 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13669 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13670 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13671 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13672 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13673 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13674 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13675 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13676 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13677 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13678 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 52 | 6 | 584 | 0.074 | 0.192 | -53.5 | -313.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13679 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13680 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13681 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13682 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 87 | 6 | 584 | 0.074 | 0.192 | 85.3 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13683 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13684 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13685 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13686 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13687 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13688 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13689 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13690 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13691 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13692 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13693 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13694 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13695 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13696 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 78 | 6 | 584 | 0.074 | 0.192 | 85.3 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13697 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13698 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13699 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13700 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13701 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13702 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13703 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13704 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13705 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13706 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13707 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13708 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13709 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13710 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13711 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13712 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13713 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13714 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13715 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13716 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13717 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13718 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13719 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 78 | 6 | 584 | 0.074 | 0.192 | 85.3 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13720 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13721 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13722 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13723 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13724 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13725 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13726 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13727 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13728 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13729 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13730 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13731 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13732 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13733 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13734 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13735 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 110 | 6 | 584 | 0.074 | 0.192 | 15.9 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13736 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13737 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 59 | 6 | 584 | 0.074 | 0.192 | 62.2 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13738 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13739 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13740 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13741 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13742 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13743 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13744 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13745 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13746 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13747 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13748 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 69 | 6 | 584 | 0.074 | 0.192 | 39.0 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13749 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13750 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13751 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13752 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13753 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13754 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13755 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13756 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13757 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13758 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13759 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13760 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13761 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13762 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13763 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13764 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13765 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13766 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13767 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 112 | 6 | 584 | 0.074 | 0.192 | 62.2 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13768 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13769 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13770 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13771 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 48 | 6 | 584 | 0.074 | 0.192 | -7.2 | -349.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13772 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13773 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13774 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13775 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13776 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 71 | 6 | 584 | 0.074 | 0.192 | 39.0 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13777 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13778 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13779 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13780 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13781 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13782 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13783 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13784 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13785 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13786 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13787 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13788 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13789 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13790 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13791 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13792 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13793 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13794 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13795 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13796 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13797 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 62 | 6 | 584 | 0.074 | 0.192 | 15.9 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13798 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13799 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13800 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13801 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13802 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13803 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13804 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13805 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13806 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13807 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13808 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13809 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13810 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13811 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13812 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13813 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13814 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13815 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13816 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13817 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13818 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13819 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13820 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13821 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13822 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13823 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13824 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13825 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13826 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13827 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13828 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 81 | 6 | 584 | 0.074 | 0.192 | 108.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13829 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13830 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13831 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13832 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13833 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13834 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 102 | 6 | 584 | 0.074 | 0.192 | 62.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13835 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13836 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13837 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13838 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13839 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13840 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13841 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13842 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13843 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13844 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13845 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13846 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13847 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 87.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13848 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13849 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13850 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13851 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13852 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13853 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13854 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13855 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13856 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13857 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13858 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13859 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13860 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13861 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13862 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13863 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13864 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13865 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 105 | 6 | 584 | 0.074 | 0.192 | 39.0 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13866 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 92 | 6 | 584 | 0.074 | 0.192 | 108.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13867 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 106 | 6 | 584 | 0.074 | 0.192 | 108.5 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13868 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13869 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13870 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13871 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13872 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13873 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13874 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13875 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13876 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13877 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13878 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 101 | 6 | 584 | 0.074 | 0.192 | 15.9 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13879 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13880 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13881 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13882 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 111 | 6 | 584 | 0.074 | 0.192 | -30.4 | 212.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13883 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 93 | 6 | 584 | 0.074 | 0.192 | 85.3 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13884 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13885 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13886 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13887 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13888 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 10 | 103 | 6 | 584 | 0.074 | 0.192 | 177.8 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13889 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13890 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13891 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13892 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 104 | 6 | 584 | 0.074 | 0.192 | 85.3 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13893 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13894 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13895 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13896 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13897 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13898 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13899 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13900 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13901 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13902 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13903 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 97 | 6 | 584 | 0.074 | 0.192 | 15.9 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13904 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13905 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13906 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13907 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13908 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13909 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13910 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13911 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13912 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13913 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13914 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13915 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13916 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13917 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13918 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13919 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13920 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 110 | 6 | 584 | 0.074 | 0.192 | -30.4 | 204.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13921 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13922 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13923 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 81 | 6 | 584 | 0.074 | 0.192 | 108.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13924 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 68 | 6 | 584 | 0.074 | 0.192 | 62.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13925 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13926 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13927 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13928 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13929 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13930 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13931 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13932 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13933 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13934 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 94 | 6 | 584 | 0.074 | 0.192 | 39.0 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13935 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13936 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13937 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13938 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13939 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13940 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13941 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13942 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13943 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13944 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13945 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13946 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13947 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13948 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13949 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13950 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13951 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13952 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13953 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13954 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13955 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13956 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13957 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13958 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 94 | 6 | 584 | 0.074 | 0.192 | 62.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13959 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13960 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13961 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13962 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13963 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13964 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13965 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13966 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13967 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13968 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13969 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 102 | 6 | 584 | 0.074 | 0.192 | 39.0 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13970 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 98 | 6 | 584 | 0.074 | 0.192 | 85.3 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13971 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13972 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 98 | 6 | 584 | 0.074 | 0.192 | 62.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13973 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13974 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 96 | 6 | 584 | 0.074 | 0.192 | 85.3 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13975 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 13976 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13977 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13978 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 109 | 6 | 584 | 0.074 | 0.192 | 15.9 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13979 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13980 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13981 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13982 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13983 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13984 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13985 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13986 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13987 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13988 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 100 | 6 | 584 | 0.074 | 0.192 | 15.9 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13989 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13990 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 105 | 6 | 584 | 0.074 | 0.192 | 62.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13991 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13992 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13993 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13994 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13995 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13996 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13997 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13998 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 13999 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14000 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14001 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14002 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14003 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14004 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14005 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14006 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14007 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 81 | 6 | 584 | 0.074 | 0.192 | 108.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14008 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 90 | 6 | 584 | 0.074 | 0.192 | 62.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14009 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14010 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14011 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14012 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14013 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 86 | 6 | 584 | 0.074 | 0.192 | 85.3 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14014 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14015 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 105 | 6 | 584 | 0.074 | 0.192 | 85.3 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14016 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14017 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14018 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14019 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14020 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14021 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14022 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14023 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14024 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14025 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14026 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 73 | 6 | 584 | 0.074 | 0.192 | 39.0 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14027 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14028 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14029 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14030 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14031 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14032 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14033 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14034 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14035 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14036 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14037 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14038 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14039 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14040 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14041 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14042 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 99 | 6 | 584 | 0.074 | 0.192 | 15.9 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14043 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14044 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14045 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14046 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14047 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 104 | 6 | 584 | 0.074 | 0.192 | -7.2 | 150.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14048 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14049 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 81 | 6 | 584 | 0.074 | 0.192 | 108.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14050 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14051 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 90 | 6 | 584 | 0.074 | 0.192 | 85.3 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14052 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14053 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14054 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14055 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14056 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14057 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14058 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14059 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14060 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14061 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14062 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14063 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 77 | 6 | 584 | 0.074 | 0.192 | 39.0 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14064 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14065 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14066 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14067 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14068 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 88 | 6 | 584 | 0.074 | 0.192 | 85.3 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14069 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14070 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 99 | 6 | 584 | 0.074 | 0.192 | -53.5 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14071 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14072 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14073 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14074 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14075 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14076 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14077 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14078 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14079 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14080 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14081 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14082 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14083 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14084 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14085 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14086 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14087 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14088 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14089 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14090 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14091 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14092 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14093 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14094 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 112 | 6 | 584 | 0.074 | 0.192 | -30.4 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14095 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14096 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14097 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14098 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14099 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 77 | 6 | 584 | 0.074 | 0.192 | 85.3 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14100 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14101 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14102 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 102 | 6 | 584 | 0.074 | 0.192 | -30.4 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14103 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14104 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14105 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14106 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14107 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14108 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14109 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14110 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14111 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14112 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14113 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14114 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14115 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14116 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14117 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14118 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14119 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 102 | 6 | 584 | 0.074 | 0.192 | -7.2 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14120 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14121 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14122 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14123 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14124 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14125 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14126 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14127 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14128 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 64 | 6 | 584 | 0.074 | 0.192 | 15.9 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14129 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14130 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14131 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14132 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14133 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14134 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 72 | 6 | 584 | 0.074 | 0.192 | 85.3 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14135 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14136 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14137 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14138 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14139 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14140 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14141 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14142 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14143 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14144 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14145 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14146 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14147 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14148 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14149 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14150 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14151 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14152 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14153 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14154 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14155 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14156 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14157 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14158 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14159 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14160 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 100 | 6 | 584 | 0.074 | 0.192 | -30.4 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14161 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 88 | 6 | 584 | 0.074 | 0.192 | 108.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14162 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14163 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14164 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14165 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14166 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14167 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14168 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14169 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14170 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14171 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14172 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14173 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 0 | 6 | 584 | 0.074 | 0.192 | -53.5 | -777.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14174 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14175 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14176 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14177 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14178 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14179 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14180 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14181 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 108 | 6 | 584 | 0.074 | 0.192 | 108.5 | 186.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14182 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 98 | 6 | 584 | 0.074 | 0.192 | 85.3 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14183 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 79 | 6 | 584 | 0.074 | 0.192 | 85.3 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14184 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14185 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14186 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14187 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14188 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14189 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14190 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14191 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14192 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14193 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14194 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14195 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14196 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14197 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14198 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14199 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14200 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14201 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14202 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14203 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 97 | 6 | 584 | 0.074 | 0.192 | 85.3 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14204 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14205 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14206 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14207 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14208 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14209 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14210 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14211 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14212 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14213 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14214 | 8/28/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14215 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14216 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14217 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14218 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14219 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14220 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14221 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14222 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14223 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14224 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14225 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14226 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14227 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14228 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14229 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14230 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14231 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14232 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14233 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14234 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 64 | 6 | 584 | 0.074 | 0.192 | 15.9 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14235 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14236 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14237 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14238 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14239 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14240 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14241 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14242 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14243 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14244 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14245 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14246 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14247 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14248 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14249 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14250 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14251 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14252 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14253 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14254 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14255 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14256 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14257 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14258 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14259 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14260 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14261 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14262 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14263 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14264 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14265 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14266 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14267 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14268 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14269 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14270 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14271 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14272 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14273 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14274 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 69 | 6 | 584 | 0.074 | 0.192 | 62.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14275 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14276 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14277 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 92 | 6 | 584 | 0.074 | 0.192 | 62.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14278 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14279 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14280 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14281 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14282 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14283 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14284 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14285 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14286 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14287 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 64 | 6 | 584 | 0.074 | 0.192 | -53.5 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14288 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14289 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14290 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14291 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14292 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14293 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14294 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14295 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14296 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14297 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14298 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14299 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14300 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14301 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 73 | 6 | 584 | 0.074 | 0.192 | 85.3 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14302 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14303 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14304 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14305 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14306 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14307 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14308 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 62 | 6 | 584 | 0.074 | 0.192 | -30.4 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14309 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14310 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14311 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14312 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14313 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14314 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 78 | 6 | 584 | 0.074 | 0.192 | 62.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14315 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14316 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14317 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 63 | 6 | 584 | 0.074 | 0.192 | 39.0 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14318 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14319 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14320 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14321 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14322 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14323 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14324 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14325 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14326 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14327 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14328 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14329 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14330 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14331 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14332 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14333 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14334 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14335 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14336 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14337 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14338 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14339 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14340 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14341 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14342 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14343 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14344 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14345 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14346 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14347 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14348 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14349 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14350 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14351 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 59 | 6 | 584 | 0.074 | 0.192 | -53.5 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14352 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14353 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14354 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14355 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14356 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14357 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14358 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14359 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14360 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14361 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14362 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14363 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14364 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14365 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14366 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14367 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14368 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14369 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14370 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14371 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14372 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14373 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14374 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14375 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 73 | 6 | 584 | 0.074 | 0.192 | 62.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14376 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14377 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 94 | 6 | 584 | 0.074 | 0.192 | -30.4 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14378 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14379 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14380 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14381 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14382 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14383 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14384 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14385 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14386 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14387 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14388 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14389 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14390 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14391 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14392 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14393 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14394 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14395 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14396 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14397 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 89 | 6 | 584 | 0.074 | 0.192 | 62.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14398 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14399 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14400 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14401 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14402 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14403 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14404 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14405 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14406 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14407 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14408 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14409 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14410 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14411 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14412 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14413 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14414 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14415 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14416 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14417 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14418 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14419 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14420 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14421 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14422 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14423 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14424 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14425 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14426 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14427 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14428 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14429 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14430 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14431 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14432 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14433 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14434 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14435 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14436 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14437 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 62 | 6 | 584 | 0.074 | 0.192 | -53.5 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14438 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14439 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 74 | 6 | 584 | 0.074 | 0.192 | 39.0 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14440 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 76 | 6 | 584 | 0.074 | 0.192 | 85.3 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14441 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14442 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14443 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14444 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 63 | 6 | 584 | 0.074 | 0.192 | 39.0 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14445 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14446 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14447 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14448 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14449 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14450 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 65 | 6 | 584 | 0.074 | 0.192 | 39.0 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14451 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14452 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14453 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14454 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14455 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14456 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14457 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 62 | 6 | 584 | 0.074 | 0.192 | 15.9 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14458 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 71 | 6 | 584 | 0.074 | 0.192 | 62.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14459 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14460 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14461 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 60 | 6 | 584 | 0.074 | 0.192 | 39.0 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14462 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14463 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14464 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14465 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14466 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14467 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14468 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14469 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14470 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14471 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14472 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14473 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14474 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14475 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14476 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14477 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14478 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 75 | 6 | 584 | 0.074 | 0.192 | 108.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14479 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14480 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14481 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14482 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14483 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14484 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14485 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14486 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 90 | 6 | 584 | 0.074 | 0.192 | -53.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14487 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14488 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14489 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 106 | 6 | 584 | 0.074 | 0.192 | 15.9 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14490 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14491 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14492 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14493 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14494 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 65 | 6 | 584 | 0.074 | 0.192 | -7.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14495 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14496 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14497 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14498 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14499 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14500 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14501 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14502 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14503 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14504 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14505 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14506 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 75 | 6 | 584 | 0.074 | 0.192 | 39.0 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14507 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14508 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14509 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 66 | 6 | 584 | 0.074 | 0.192 | -7.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14510 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14511 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 95 | 6 | 584 | 0.074 | 0.192 | 62.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14512 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 55 | 6 | 584 | 0.074 | 0.192 | -7.2 | -286.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14513 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14514 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14515 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14516 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14517 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14518 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14519 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14520 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14521 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 68 | 6 | 584 | 0.074 | 0.192 | 39.0 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14522 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14523 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14524 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14525 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14526 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 62 | 6 | 584 | 0.074 | 0.192 | 15.9 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14527 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14528 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14529 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14530 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14531 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14532 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14533 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 70 | 6 | 584 | 0.074 | 0.192 | 15.9 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14534 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14535 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14536 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14537 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14538 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14539 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14540 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14541 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 61 | 6 | 584 | 0.074 | 0.192 | -53.5 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14542 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 55 | 6 | 584 | 0.074 | 0.192 | -7.2 | -286.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14543 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 42 | 6 | 584 | 0.074 | 0.192 | -30.4 | -402.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14544 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14545 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14546 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14547 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 89 | 6 | 584 | 0.074 | 0.192 | -7.2 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14548 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14549 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14550 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14551 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14552 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14553 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14554 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14555 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14556 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14557 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14558 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14559 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14560 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14561 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14562 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14563 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 79 | 6 | 584 | 0.074 | 0.192 | 85.3 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14564 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14565 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14566 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 89 | 6 | 584 | 0.074 | 0.192 | 85.3 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14567 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14568 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14569 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14570 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14571 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14572 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14573 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14574 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14575 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14576 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14577 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14578 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14579 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14580 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14581 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14582 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14583 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14584 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14585 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14586 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14587 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14588 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14589 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14590 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14591 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 88 | 6 | 584 | 0.074 | 0.192 | -53.5 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14592 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14593 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14594 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14595 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14596 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14597 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14598 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14599 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 91 | 6 | 584 | 0.074 | 0.192 | 39.0 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14600 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14601 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14602 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14603 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14604 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14605 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14606 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14607 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14608 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14609 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14610 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14611 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14612 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 98 | 6 | 584 | 0.074 | 0.192 | -30.4 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14613 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14614 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14615 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 72 | 6 | 584 | 0.074 | 0.192 | 15.9 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14616 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14617 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14618 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14619 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14620 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14621 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14622 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14623 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14624 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 60 | 6 | 584 | 0.074 | 0.192 | -7.2 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14625 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14626 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14627 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 70 | 6 | 584 | 0.074 | 0.192 | 39.0 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14628 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14629 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 89 | 6 | 584 | 0.074 | 0.192 | -53.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14630 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14631 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14632 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14633 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 62 | 6 | 584 | 0.074 | 0.192 | -7.2 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14634 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14635 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14636 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 71 | 6 | 584 | 0.074 | 0.192 | -53.5 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14637 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 54 | 6 | 584 | 0.074 | 0.192 | -30.4 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14638 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14639 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14640 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 102 | 6 | 584 | 0.074 | 0.192 | 15.9 | 132.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14641 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14642 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14643 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 66 | 6 | 584 | 0.074 | 0.192 | -30.4 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14644 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14645 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14646 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14647 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14648 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14649 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 76 | 6 | 584 | 0.074 | 0.192 | 39.0 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14650 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 74 | 6 | 584 | 0.074 | 0.192 | 62.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14651 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 95 | 6 | 584 | 0.074 | 0.192 | -53.5 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14652 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 63 | 6 | 584 | 0.074 | 0.192 | 39.0 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14653 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 60 | 6 | 584 | 0.074 | 0.192 | -30.4 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14654 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14655 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14656 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14657 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14658 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14659 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14660 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 88 | 6 | 584 | 0.074 | 0.192 | 62.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14661 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 97 | 6 | 584 | 0.074 | 0.192 | -30.4 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14662 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14663 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14664 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14665 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14666 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14667 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14668 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14669 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14670 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14671 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 93 | 6 | 584 | 0.074 | 0.192 | -53.5 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14672 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14673 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14674 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14675 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14676 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14677 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14678 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 61 | 6 | 584 | 0.074 | 0.192 | -30.4 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14679 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14680 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14681 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14682 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14683 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14684 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 88 | 6 | 584 | 0.074 | 0.192 | 39.0 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14685 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14686 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14687 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14688 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14689 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14690 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 14691 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14692 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14693 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14694 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14695 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14696 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14697 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14698 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14699 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14700 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14701 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14702 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 14703 | 9/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 67 | 6 | 584 | 0.074 | 0.192 | 39.0 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M5 | Floor | 14704 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14705 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14706 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 116 | 6 | 584 | 0.077 | 0.206 | 64.0 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14707 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14708 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 120 | 6 | 584 | 0.077 | 0.206 | -69.4 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14709 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14710 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14711 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 101 | 6 | 584 | 0.077 | 0.206 | -69.4 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14712 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 114 | 6 | 584 | 0.077 | 0.206 | 19.6 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14713 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14714 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14715 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14716 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14717 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14718 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 100 | 6 | 584 | 0.077 | 0.206 | -24.9 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14719 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14720 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14721 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14722 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 85 | 6 | 584 | 0.077 | 0.206 | -2.7 | -197.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14723 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14724 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14725 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 113 | 6 | 584 | 0.077 | 0.206 | 41.8 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14726 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14727 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 119 | 6 | 584 | 0.077 | 0.206 | -69.4 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14728 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14729 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 115 | 6 | 584 | 0.077 | 0.206 | 19.6 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14730 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14731 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14732 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 108 | 6 | 584 | 0.077 | 0.206 | 19.6 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14733 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14734 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14735 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14736 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 112 | 6 | 584 | 0.077 | 0.206 | 19.6 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14737 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14738 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14739 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14740 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14741 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 102 | 6 | 584 | 0.077 | 0.206 | -2.7 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14742 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14743 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14744 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 95 | 6 | 584 | 0.077 | 0.206 | -47.1 | -114.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14745 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 106 | 6 | 584 | 0.077 | 0.206 | 19.6 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14746 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 133 | 6 | 584 | 0.077 | 0.206 | 19.6 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14747 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 105 | 6 | 584 | 0.077 | 0.206 | -2.7 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14748 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 136 | 6 | 584 | 0.077 | 0.206 | -24.9 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14749 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14750 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14751 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14752 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 101 | 6 | 584 | 0.077 | 0.206 | -2.7 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14753 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 106 | 6 | 584 | 0.077 | 0.206 | -2.7 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14754 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 138 | 6 | 584 | 0.077 | 0.206 | 41.8 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14755 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 14756 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14757 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14758 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 105 | 6 | 584 | 0.077 | 0.206 | -47.1 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14759 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14760 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 109 | 6 | 584 | 0.077 | 0.206 | -2.7 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14761 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14762 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14763 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14764 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14765 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 104 | 6 | 584 | 0.077 | 0.206 | -47.1 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14766 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14767 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 128 | 6 | 584 | 0.077 | 0.206 | 41.8 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14768 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14769 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14770 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14771 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 125 | 6 | 584 | 0.077 | 0.206 | 19.6 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14772 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 103 | 6 | 584 | 0.077 | 0.206 | -47.1 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14773 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14774 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14775 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 150 | 6 | 584 | 0.077 | 0.206 | 19.6 | 342.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14776 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14777 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14778 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14779 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 141 | 6 | 584 | 0.077 | 0.206 | -24.9 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14780 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14781 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 126 | 6 | 584 | 0.077 | 0.206 | 64.0 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14782 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14783 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14784 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 119 | 6 | 584 | 0.077 | 0.206 | -69.4 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14785 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 114 | 6 | 584 | 0.077 | 0.206 | -69.4 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14786 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 134 | 6 | 584 | 0.077 | 0.206 | 86.3 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14787 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 104 | 6 | 584 | 0.077 | 0.206 | -47.1 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14788 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14789 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 124 | 6 | 584 | 0.077 | 0.206 | 64.0 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14790 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 110 | 6 | 584 | 0.077 | 0.206 | 41.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14791 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 139 | 6 | 584 | 0.077 | 0.206 | -69.4 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14792 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14793 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 137 | 6 | 584 | 0.077 | 0.206 | 19.6 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14794 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 126 | 6 | 584 | 0.077 | 0.206 | -69.4 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14795 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14796 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 111 | 6 | 584 | 0.077 | 0.206 | 41.8 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14797 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 112 | 6 | 584 | 0.077 | 0.206 | 41.8 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14798 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 110 | 6 | 584 | 0.077 | 0.206 | 64.0 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14799 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 147 | 6 | 584 | 0.077 | 0.206 | -47.1 | 318.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14800 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14801 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 112 | 6 | 584 | 0.077 | 0.206 | 64.0 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14802 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14803 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14804 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14805 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14806 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14807 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14808 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14809 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 114 | 6 | 584 | 0.077 | 0.206 | 41.8 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14810 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14811 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14812 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14813 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14814 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 129 | 6 | 584 | 0.077 | 0.206 | 19.6 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14815 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14816 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 118 | 6 | 584 | 0.077 | 0.206 | -69.4 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14817 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 97 | 6 | 584 | 0.077 | 0.206 | -47.1 | -97.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14818 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 110 | 6 | 584 | 0.077 | 0.206 | 41.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14819 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 141 | 6 | 584 | 0.077 | 0.206 | 41.8 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14820 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 14821 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14822 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 116 | 6 | 584 | 0.077 | 0.206 | 41.8 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14823 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 136 | 6 | 584 | 0.077 | 0.206 | -47.1 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14824 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14825 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14826 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 114 | 6 | 584 | 0.077 | 0.206 | 64.0 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14827 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 109 | 6 | 584 | 0.077 | 0.206 | -47.1 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14828 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 104 | 6 | 584 | 0.077 | 0.206 | 19.6 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14829 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 128 | 6 | 584 | 0.077 | 0.206 | 64.0 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14830 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 124 | 6 | 584 | 0.077 | 0.206 | -47.1 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14831 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14832 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 129 | 6 | 584 | 0.077 | 0.206 | 86.3 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14833 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14834 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 118 | 6 | 584 | 0.077 | 0.206 | 41.8 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14835 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14836 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 117 | 6 | 584 | 0.077 | 0.206 | 41.8 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14837 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 131 | 6 | 584 | 0.077 | 0.206 | -24.9 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14838 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14839 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14840 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14841 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 112 | 6 | 584 | 0.077 | 0.206 | 86.3 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14842 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14843 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14844 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14845 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 114 | 6 | 584 | 0.077 | 0.206 | -69.4 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14846 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14847 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 134 | 6 | 584 | 0.077 | 0.206 | -2.7 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14848 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14849 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14850 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14851 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14852 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14853 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 116 | 6 | 584 | 0.077 | 0.206 | 41.8 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14854 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14855 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14856 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 106 | 6 | 584 | 0.077 | 0.206 | -24.9 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14857 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14858 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14859 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14860 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14861 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 97 | 6 | 584 | 0.077 | 0.206 | 41.8 | -97.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14862 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 112 | 6 | 584 | 0.077 | 0.206 | 41.8 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14863 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 110 | 6 | 584 | 0.077 | 0.206 | -47.1 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14864 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14865 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14866 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14867 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14868 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 140 | 6 | 584 | 0.077 | 0.206 | 19.6 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14869 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14870 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 142 | 6 | 584 | 0.077 | 0.206 | -47.1 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14871 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 141 | 6 | 584 | 0.077 | 0.206 | 19.6 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14872 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14873 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 139 | 6 | 584 | 0.077 | 0.206 | -47.1 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14874 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14875 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 110 | 6 | 584 | 0.077 | 0.206 | 86.3 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14876 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14877 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 129 | 6 | 584 | 0.077 | 0.206 | 19.6 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14878 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14879 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14880 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 133 | 6 | 584 | 0.077 | 0.206 | 19.6 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14881 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 128 | 6 | 584 | 0.077 | 0.206 | -2.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14882 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14883 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 130 | 6 | 584 | 0.077 | 0.206 | -69.4 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14884 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14885 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 14886 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14887 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 106 | 6 | 584 | 0.077 | 0.206 | -69.4 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14888 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 138 | 6 | 584 | 0.077 | 0.206 | -2.7 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14889 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14890 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14891 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14892 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 126 | 6 | 584 | 0.077 | 0.206 | 19.6 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14893 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 108 | 6 | 584 | 0.077 | 0.206 | -24.9 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14894 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14895 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14896 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 133 | 6 | 584 | 0.077 | 0.206 | -2.7 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14897 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 130 | 6 | 584 | 0.077 | 0.206 | -69.4 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14898 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14899 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 139 | 6 | 584 | 0.077 | 0.206 | -69.4 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14900 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14901 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14902 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14903 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 130 | 6 | 584 | 0.077 | 0.206 | -69.4 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14904 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 133 | 6 | 584 | 0.077 | 0.206 | 41.8 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14905 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14906 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14907 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 101 | 6 | 584 | 0.077 | 0.206 | 64.0 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14908 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14909 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 103 | 6 | 584 | 0.077 | 0.206 | -47.1 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14910 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 93 | 6 | 584 | 0.077 | 0.206 | -47.1 | -130.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14911 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 98 | 6 | 584 | 0.077 | 0.206 | -47.1 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14912 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14913 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14914 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14915 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 142 | 6 | 584 | 0.077 | 0.206 | 41.8 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14916 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 112 | 6 | 584 | 0.077 | 0.206 | -69.4 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14917 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14918 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 137 | 6 | 584 | 0.077 | 0.206 | -2.7 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14919 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14920 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 128 | 6 | 584 | 0.077 | 0.206 | -69.4 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14921 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 119 | 6 | 584 | 0.077 | 0.206 | -69.4 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14922 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 131 | 6 | 584 | 0.077 | 0.206 | 19.6 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14923 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 134 | 6 | 584 | 0.077 | 0.206 | -2.7 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14924 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14925 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14926 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 104 | 6 | 584 | 0.077 | 0.206 | -24.9 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14927 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 99 | 6 | 584 | 0.077 | 0.206 | 41.8 | -81.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14928 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 107 | 6 | 584 | 0.077 | 0.206 | -24.9 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14929 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 107 | 6 | 584 | 0.077 | 0.206 | -2.7 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14930 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 118 | 6 | 584 | 0.077 | 0.206 | -47.1 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14931 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 141 | 6 | 584 | 0.077 | 0.206 | 41.8 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14932 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 133 | 6 | 584 | 0.077 | 0.206 | -2.7 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14933 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14934 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14935 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14936 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 108 | 6 | 584 | 0.077 | 0.206 | 19.6 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14937 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 102 | 6 | 584 | 0.077 | 0.206 | -47.1 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14938 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14939 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 109 | 6 | 584 | 0.077 | 0.206 | -2.7 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14940 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14941 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 132 | 6 | 584 | 0.077 | 0.206 | -24.9 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14942 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14943 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 114 | 6 | 584 | 0.077 | 0.206 | -47.1 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14944 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 120 | 6 | 584 | 0.077 | 0.206 | 64.0 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14945 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 110 | 6 | 584 | 0.077 | 0.206 | 19.6 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14946 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 115 | 6 | 584 | 0.077 | 0.206 | -69.4 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14947 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14948 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14949 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 130 | 6 | 584 | 0.077 | 0.206 | 64.0 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14950 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 141 | 6 | 584 | 0.077 | 0.206 | -47.1 | 268.1 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 14951 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 102 | 6 | 584 | 0.077 | 0.206 | -47.1 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14952 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14953 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 115 | 6 | 584 | 0.077 | 0.206 | 19.6 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14954 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14955 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 130 | 6 | 584 | 0.077 | 0.206 | -47.1 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14956 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14957 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14958 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 109 | 6 | 584 | 0.077 | 0.206 | -69.4 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14959 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 130 | 6 | 584 | 0.077 | 0.206 | -69.4 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14960 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 108 | 6 | 584 | 0.077 | 0.206 | -24.9 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14961 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14962 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14963 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 103 | 6 | 584 | 0.077 | 0.206 | -69.4 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14964 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14965 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14966 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14967 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 122 | 6 | 584 | 0.077 | 0.206 | -69.4 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14968 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 128 | 6 | 584 | 0.077 | 0.206 | -2.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14969 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 98 | 6 | 584 | 0.077 | 0.206 | -24.9 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14970 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 141 | 6 | 584 | 0.077 | 0.206 | -47.1 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14971 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 110 | 6 | 584 | 0.077 | 0.206 | 41.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14972 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 105 | 6 | 584 | 0.077 | 0.206 | -2.7 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14973 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14974 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 96 | 6 | 584 | 0.077 | 0.206 | -47.1 | -105.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14975 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 119 | 6 | 584 | 0.077 | 0.206 | 41.8 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14976 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 108 | 6 | 584 | 0.077 | 0.206 | -2.7 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14977 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14978 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14979 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14980 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 108 | 6 | 584 | 0.077 | 0.206 | -24.9 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14981 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 109 | 6 | 584 | 0.077 | 0.206 | 19.6 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14982 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14983 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 110 | 6 | 584 | 0.077 | 0.206 | -69.4 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14984 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14985 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14986 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14987 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 114 | 6 | 584 | 0.077 | 0.206 | -47.1 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14988 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 83 | 6 | 584 | 0.077 | 0.206 | -47.1 | -214.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14989 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14990 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14991 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 111 | 6 | 584 | 0.077 | 0.206 | -47.1 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14992 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14993 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14994 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14995 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 101 | 6 | 584 | 0.077 | 0.206 | -24.9 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14996 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 98 | 6 | 584 | 0.077 | 0.206 | -24.9 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14997 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14998 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 14999 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 134 | 6 | 584 | 0.077 | 0.206 | 19.6 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15000 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 108 | 6 | 584 | 0.077 | 0.206 | -69.4 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15001 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 140 | 6 | 584 | 0.077 | 0.206 | -2.7 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15002 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 133 | 6 | 584 | 0.077 | 0.206 | -69.4 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15003 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15004 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15005 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 118 | 6 | 584 | 0.077 | 0.206 | 19.6 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15006 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 106 | 6 | 584 | 0.077 | 0.206 | 64.0 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15007 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15008 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 120 | 6 | 584 | 0.077 | 0.206 | -69.4 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15009 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15010 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 136 | 6 | 584 | 0.077 | 0.206 | -47.1 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15011 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15012 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15013 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15014 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15015 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 92 | 6 | 584 | 0.077 | 0.206 | -24.9 | -139.2 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15016 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 166 | 6 | 584 | 0.077 | 0.206 | 64.0 | 475.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15017 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15018 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 112 | 6 | 584 | 0.077 | 0.206 | 64.0 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15019 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15020 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15021 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 110 | 6 | 584 | 0.077 | 0.206 | 130.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15022 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 131 | 6 | 584 | 0.077 | 0.206 | -24.9 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15023 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 0 | 6 | 584 | 0.077 | 0.206 | -69.4 | -903.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15024 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15025 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 109 | 6 | 584 | 0.077 | 0.206 | 41.8 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15026 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 103 | 6 | 584 | 0.077 | 0.206 | 86.3 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15027 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15028 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15029 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15030 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15031 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15032 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 151 | 6 | 584 | 0.077 | 0.206 | -2.7 | 351.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15033 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 115 | 6 | 584 | 0.077 | 0.206 | -69.4 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15034 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15035 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15036 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15037 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 98 | 6 | 584 | 0.077 | 0.206 | -2.7 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15038 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15039 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 130 | 6 | 584 | 0.077 | 0.206 | 41.8 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15040 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 125 | 6 | 584 | 0.077 | 0.206 | -69.4 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15041 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15042 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 106 | 6 | 584 | 0.077 | 0.206 | -47.1 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15043 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15044 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 105 | 6 | 584 | 0.077 | 0.206 | -47.1 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15045 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15046 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 141 | 6 | 584 | 0.077 | 0.206 | -24.9 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15047 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 107 | 6 | 584 | 0.077 | 0.206 | -24.9 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15048 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15049 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15050 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15051 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15052 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15053 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15054 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15055 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15056 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15057 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 138 | 6 | 584 | 0.077 | 0.206 | 19.6 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15058 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15059 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 108 | 6 | 584 | 0.077 | 0.206 | 86.3 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15060 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15061 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 101 | 6 | 584 | 0.077 | 0.206 | -47.1 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15062 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15063 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15064 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15065 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 143 | 6 | 584 | 0.077 | 0.206 | -24.9 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15066 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 143 | 6 | 584 | 0.077 | 0.206 | 41.8 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15067 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15068 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15069 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15070 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 130 | 6 | 584 | 0.077 | 0.206 | 41.8 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15071 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15072 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 134 | 6 | 584 | 0.077 | 0.206 | -24.9 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15073 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 108 | 6 | 584 | 0.077 | 0.206 | 19.6 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15074 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15075 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 134 | 6 | 584 | 0.077 | 0.206 | -24.9 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15076 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15077 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15078 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15079 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 118 | 6 | 584 | 0.077 | 0.206 | -47.1 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15080 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15081 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 115 | 6 | 584 | 0.077 | 0.206 | 19.6 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15082 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 129 | 6 | 584 | 0.077 | 0.206 | 41.8 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15083 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 112 | 6 | 584 | 0.077 | 0.206 | 64.0 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15084 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 143 | 6 | 584 | 0.077 | 0.206 | 86.3 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15085 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15086 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15087 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 119 | 6 | 584 | 0.077 | 0.206 | -2.7 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15088 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 117 | 6 | 584 | 0.077 | 0.206 | 86.3 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15089 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15090 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 132 | 6 | 584 | 0.077 | 0.206 | -2.7 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15091 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 103 | 6 | 584 | 0.077 | 0.206 | -47.1 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15092 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 91 | 6 | 584 | 0.077 | 0.206 | -24.9 | -147.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15093 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15094 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 128 | 6 | 584 | 0.077 | 0.206 | 19.6 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15095 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15096 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15097 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15098 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15099 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15100 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 144 | 6 | 584 | 0.077 | 0.206 | -24.9 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15101 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15102 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 102 | 6 | 584 | 0.077 | 0.206 | 19.6 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15103 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 124 | 6 | 584 | 0.077 | 0.206 | 19.6 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15104 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 107 | 6 | 584 | 0.077 | 0.206 | -24.9 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15105 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15106 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15107 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 125 | 6 | 584 | 0.077 | 0.206 | 41.8 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15108 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 127 | 6 | 584 | 0.077 | 0.206 | 86.3 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15109 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15110 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 120 | 6 | 584 | 0.077 | 0.206 | 19.6 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15111 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 130 | 6 | 584 | 0.077 | 0.206 | -69.4 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15112 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 104 | 6 | 584 | 0.077 | 0.206 | 19.6 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15113 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15114 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 114 | 6 | 584 | 0.077 | 0.206 | 19.6 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15115 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 113 | 6 | 584 | 0.077 | 0.206 | 41.8 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15116 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 135 | 6 | 584 | 0.077 | 0.206 | 41.8 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15117 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15118 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 127 | 6 | 584 | 0.077 | 0.206 | -69.4 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15119 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15120 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15121 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 117 | 6 | 584 | 0.077 | 0.206 | 41.8 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15122 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 111 | 6 | 584 | 0.077 | 0.206 | 41.8 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15123 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15124 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 137 | 6 | 584 | 0.077 | 0.206 | -2.7 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15125 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 111 | 6 | 584 | 0.077 | 0.206 | -47.1 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15126 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 136 | 6 | 584 | 0.077 | 0.206 | 19.6 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15127 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 118 | 6 | 584 | 0.077 | 0.206 | -47.1 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15128 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 136 | 6 | 584 | 0.077 | 0.206 | 19.6 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15129 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15130 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 107 | 6 | 584 | 0.077 | 0.206 | -47.1 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15131 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15132 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15133 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15134 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15135 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 118 | 6 | 584 | 0.077 | 0.206 | 19.6 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15136 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15137 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 139 | 6 | 584 | 0.077 | 0.206 | -47.1 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15138 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15139 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15140 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15141 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15142 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 148 | 6 | 584 | 0.077 | 0.206 | -2.7 | 326.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15143 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15144 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15145 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15146 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 114 | 6 | 584 | 0.077 | 0.206 | 41.8 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15147 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 130 | 6 | 584 | 0.077 | 0.206 | 41.8 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15148 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15149 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15150 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15151 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15152 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15153 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 133 | 6 | 584 | 0.077 | 0.206 | -24.9 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15154 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15155 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15156 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15157 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 118 | 6 | 584 | 0.077 | 0.206 | -47.1 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15158 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 114 | 6 | 584 | 0.077 | 0.206 | -24.9 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15159 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 98 | 6 | 584 | 0.077 | 0.206 | -47.1 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15160 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 100 | 6 | 584 | 0.077 | 0.206 | -47.1 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15161 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15162 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15163 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 114 | 6 | 584 | 0.077 | 0.206 | 64.0 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15164 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15165 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15166 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 118 | 6 | 584 | 0.077 | 0.206 | 64.0 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15167 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15168 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 136 | 6 | 584 | 0.077 | 0.206 | 19.6 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15169 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15170 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 131 | 6 | 584 | 0.077 | 0.206 | 19.6 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15171 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15172 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 138 | 6 | 584 | 0.077 | 0.206 | -47.1 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15173 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15174 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15175 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15176 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 128 | 6 | 584 | 0.077 | 0.206 | -69.4 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15177 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 124 | 6 | 584 | 0.077 | 0.206 | -47.1 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15178 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15179 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15180 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 137 | 6 | 584 | 0.077 | 0.206 | -47.1 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15181 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15182 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15183 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15184 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15185 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15186 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15187 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15188 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 121 | 6 | 584 | 0.077 | 0.206 | -69.4 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15189 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 147 | 6 | 584 | 0.077 | 0.206 | -24.9 | 318.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15190 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 142 | 6 | 584 | 0.077 | 0.206 | -24.9 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15191 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 136 | 6 | 584 | 0.077 | 0.206 | -24.9 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15192 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15193 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15194 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 123 | 6 | 584 | 0.077 | 0.206 | -69.4 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15195 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15196 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15197 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15198 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15199 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 132 | 6 | 584 | 0.077 | 0.206 | -2.7 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15200 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15201 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 126 | 6 | 584 | 0.077 | 0.206 | 64.0 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15202 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15203 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 139 | 6 | 584 | 0.077 | 0.206 | -47.1 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15204 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 109 | 6 | 584 | 0.077 | 0.206 | 41.8 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15205 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15206 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15207 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15208 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 132 | 6 | 584 | 0.077 | 0.206 | -2.7 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15209 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 105 | 6 | 584 | 0.077 | 0.206 | -47.1 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15210 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15211 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 133 | 6 | 584 | 0.077 | 0.206 | -2.7 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15212 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15213 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15214 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 130 | 6 | 584 | 0.077 | 0.206 | 64.0 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15215 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 113 | 6 | 584 | 0.077 | 0.206 | 86.3 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15216 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15217 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15218 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 107 | 6 | 584 | 0.077 | 0.206 | -24.9 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15219 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15220 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15221 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15222 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15223 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 105 | 6 | 584 | 0.077 | 0.206 | 19.6 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15224 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 120 | 6 | 584 | 0.077 | 0.206 | 64.0 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15225 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15226 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15227 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 134 | 6 | 584 | 0.077 | 0.206 | 19.6 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15228 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 134 | 6 | 584 | 0.077 | 0.206 | -24.9 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15229 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15230 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15231 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 107 | 6 | 584 | 0.077 | 0.206 | -2.7 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15232 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15233 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15234 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 139 | 6 | 584 | 0.077 | 0.206 | 41.8 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15235 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 144 | 6 | 584 | 0.077 | 0.206 | -24.9 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15236 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 136 | 6 | 584 | 0.077 | 0.206 | -69.4 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15237 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15238 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15239 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 120 | 6 | 584 | 0.077 | 0.206 | 108.5 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15240 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 138 | 6 | 584 | 0.077 | 0.206 | 86.3 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15241 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15242 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15243 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 129 | 6 | 584 | 0.077 | 0.206 | -69.4 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15244 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 148 | 6 | 584 | 0.077 | 0.206 | -2.7 | 326.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15245 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15246 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15247 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 96 | 6 | 584 | 0.077 | 0.206 | -24.9 | -105.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15248 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15249 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 125 | 6 | 584 | 0.077 | 0.206 | -69.4 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15250 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15251 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15252 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 114 | 6 | 584 | 0.077 | 0.206 | 108.5 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15253 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 99 | 6 | 584 | 0.077 | 0.206 | -69.4 | -81.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15254 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 140 | 6 | 584 | 0.077 | 0.206 | -24.9 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15255 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15256 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15257 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 131 | 6 | 584 | 0.077 | 0.206 | 41.8 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15258 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15259 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15260 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 131 | 6 | 584 | 0.077 | 0.206 | 41.8 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15261 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15262 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 97 | 6 | 584 | 0.077 | 0.206 | 108.5 | -97.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15263 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 104 | 6 | 584 | 0.077 | 0.206 | -47.1 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15264 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15265 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 126 | 6 | 584 | 0.077 | 0.206 | 108.5 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15266 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 137 | 6 | 584 | 0.077 | 0.206 | 41.8 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15267 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15268 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 127 | 6 | 584 | 0.077 | 0.206 | -69.4 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15269 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 139 | 6 | 584 | 0.077 | 0.206 | -24.9 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15270 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 145 | 6 | 584 | 0.077 | 0.206 | -24.9 | 301.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15271 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15272 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 109 | 6 | 584 | 0.077 | 0.206 | 64.0 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15273 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 115 | 6 | 584 | 0.077 | 0.206 | 41.8 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15274 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 141 | 6 | 584 | 0.077 | 0.206 | -47.1 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15275 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15276 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 107 | 6 | 584 | 0.077 | 0.206 | -2.7 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15277 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15278 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 137 | 6 | 584 | 0.077 | 0.206 | 41.8 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15279 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 126 | 6 | 584 | 0.077 | 0.206 | -69.4 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15280 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15281 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15282 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 120 | 6 | 584 | 0.077 | 0.206 | 19.6 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15283 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 116 | 6 | 584 | 0.077 | 0.206 | 41.8 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15284 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15285 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 136 | 6 | 584 | 0.077 | 0.206 | -47.1 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15286 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15287 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15288 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 106 | 6 | 584 | 0.077 | 0.206 | 41.8 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15289 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15290 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15291 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 113 | 6 | 584 | 0.077 | 0.206 | 41.8 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15292 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15293 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15294 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15295 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15296 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15297 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 139 | 6 | 584 | 0.077 | 0.206 | 108.9 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15298 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15299 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15300 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15301 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 119 | 6 | 584 | 0.077 | 0.206 | -2.7 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15302 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 108 | 6 | 584 | 0.077 | 0.206 | -24.9 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15303 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15304 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15305 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15306 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15307 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15308 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 135 | 6 | 584 | 0.077 | 0.206 | 19.6 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15309 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15310 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 131 | 6 | 584 | 0.077 | 0.206 | 19.6 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15311 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 100 | 6 | 584 | 0.077 | 0.206 | -24.9 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15312 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15313 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15314 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15315 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15316 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15317 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 111 | 6 | 584 | 0.077 | 0.206 | 41.8 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15318 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15319 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 139 | 6 | 584 | 0.077 | 0.206 | -69.4 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15320 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 107 | 6 | 584 | 0.077 | 0.206 | -47.1 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15321 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15322 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 142 | 6 | 584 | 0.077 | 0.206 | -2.7 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15323 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15324 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 127 | 6 | 584 | 0.077 | 0.206 | -47.1 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15325 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 114 | 6 | 584 | 0.077 | 0.206 | -24.9 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15326 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 106 | 6 | 584 | 0.077 | 0.206 | 19.6 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15327 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 103 | 6 | 584 | 0.077 | 0.206 | -69.4 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15328 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15329 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15330 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15331 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15332 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15333 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 139 | 6 | 584 | 0.077 | 0.206 | -24.9 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15334 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15335 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15336 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15337 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 116 | 6 | 584 | 0.077 | 0.206 | 19.6 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15338 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 119 | 6 | 584 | 0.077 | 0.206 | 86.3 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15339 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15340 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15341 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15342 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15343 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 118 | 6 | 584 | 0.077 | 0.206 | 64.0 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15344 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15345 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15346 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 128 | 6 | 584 | 0.077 | 0.206 | 19.6 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15347 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15348 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 98 | 6 | 584 | 0.077 | 0.206 | 19.6 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15349 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15350 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15351 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15352 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 102 | 6 | 584 | 0.077 | 0.206 | -24.9 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15353 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15354 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15355 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15356 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 107 | 6 | 584 | 0.077 | 0.206 | 19.6 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15357 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 136 | 6 | 584 | 0.077 | 0.206 | 64.0 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15358 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15359 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15360 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 107 | 6 | 584 | 0.077 | 0.206 | 64.0 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15361 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15362 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 119 | 6 | 584 | 0.077 | 0.206 | 41.8 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15363 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15364 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 113 | 6 | 584 | 0.077 | 0.206 | 64.0 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15365 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15366 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15367 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 104 | 6 | 584 | 0.077 | 0.206 | -24.9 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15368 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15369 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15370 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15371 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 104 | 6 | 584 | 0.077 | 0.206 | -24.9 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15372 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15373 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15374 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15375 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 114 | 6 | 584 | 0.077 | 0.206 | 19.6 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15376 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15377 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 105 | 6 | 584 | 0.077 | 0.206 | 41.8 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15378 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15379 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 116 | 6 | 584 | 0.077 | 0.206 | -69.4 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15380 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15381 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15382 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 107 | 6 | 584 | 0.077 | 0.206 | -2.7 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15383 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15384 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15385 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15386 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 104 | 6 | 584 | 0.077 | 0.206 | -47.1 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15387 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15388 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 144 | 6 | 584 | 0.077 | 0.206 | -24.9 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15389 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 137 | 6 | 584 | 0.077 | 0.206 | -2.7 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15390 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15391 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 109 | 6 | 584 | 0.077 | 0.206 | 64.0 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15392 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15393 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15394 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 125 | 6 | 584 | 0.077 | 0.206 | 64.0 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15395 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15396 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 124 | 6 | 584 | 0.077 | 0.206 | 64.0 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15397 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15398 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15399 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15400 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 146 | 6 | 584 | 0.077 | 0.206 | 41.8 | 309.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15401 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15402 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15403 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 132 | 6 | 584 | 0.077 | 0.206 | -2.7 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15404 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15405 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 114 | 6 | 584 | 0.077 | 0.206 | -24.9 | 43.7 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15406 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 112 | 6 | 584 | 0.077 | 0.206 | 41.8 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15407 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15408 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 123 | 6 | 584 | 0.077 | 0.206 | 64.0 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15409 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15410 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15411 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 107 | 6 | 584 | 0.077 | 0.206 | -47.1 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15412 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15413 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15414 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15415 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 129 | 6 | 584 | 0.077 | 0.206 | 41.8 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15416 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 136 | 6 | 584 | 0.077 | 0.206 | -2.7 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15417 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 121 | 6 | 584 | 0.077 | 0.206 | 108.5 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15418 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 101 | 6 | 584 | 0.077 | 0.206 | -24.9 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15419 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15420 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 134 | 6 | 584 | 0.077 | 0.206 | -69.4 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15421 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 141 | 6 | 584 | 0.077 | 0.206 | -2.7 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15422 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 129 | 6 | 584 | 0.077 | 0.206 | 86.3 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15423 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 141 | 6 | 584 | 0.077 | 0.206 | -24.9 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15424 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 116 | 6 | 584 | 0.077 | 0.206 | 19.6 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15425 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 104 | 6 | 584 | 0.077 | 0.206 | -24.9 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15426 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15427 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 106 | 6 | 584 | 0.077 | 0.206 | -47.1 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15428 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15429 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 111 | 6 | 584 | 0.077 | 0.206 | 64.0 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15430 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15431 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15432 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15433 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15434 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15435 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15436 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15437 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 134 | 6 | 584 | 0.077 | 0.206 | -2.7 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15438 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15439 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 131 | 6 | 584 | 0.077 | 0.206 | -24.9 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15440 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 92 | 6 | 584 | 0.077 | 0.206 | -69.4 | -139.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15441 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 143 | 6 | 584 | 0.077 | 0.206 | -2.7 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15442 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 125 | 6 | 584 | 0.077 | 0.206 | 64.0 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15443 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15444 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15445 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 119 | 6 | 584 | 0.077 | 0.206 | -2.7 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15446 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15447 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15448 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15449 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 112 | 6 | 584 | 0.077 | 0.206 | 64.0 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15450 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 126 | 6 | 584 | 0.077 | 0.206 | 19.6 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15451 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 118 | 6 | 584 | 0.077 | 0.206 | 19.6 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15452 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 136 | 6 | 584 | 0.077 | 0.206 | -24.9 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15453 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 131 | 6 | 584 | 0.077 | 0.206 | -69.4 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15454 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 108 | 6 | 584 | 0.077 | 0.206 | -24.9 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15455 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15456 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 127 | 6 | 584 | 0.077 | 0.206 | -24.9 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15457 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15458 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 140 | 6 | 584 | 0.077 | 0.206 | -69.4 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15459 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15460 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 136 | 6 | 584 | 0.077 | 0.206 | 19.6 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15461 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 10 | 156 | 6 | 584 | 0.077 | 0.206 | 153.0 | 392.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15462 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 109 | 6 | 584 | 0.077 | 0.206 | -2.7 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15463 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15464 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 139 | 6 | 584 | 0.077 | 0.206 | 19.6 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15465 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15466 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15467 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15468 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15469 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15470 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15471 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15472 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15473 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 126 | 6 | 584 | 0.077 | 0.206 | 19.6 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15474 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 141 | 6 | 584 | 0.077 | 0.206 | -69.4 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15475 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 109 | 6 | 584 | 0.077 | 0.206 | 64.0 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15476 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 112 | 6 | 584 | 0.077 | 0.206 | 19.6 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15477 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15478 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15479 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 105 | 6 | 584 | 0.077 | 0.206 | -47.1 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15480 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 116 | 6 | 584 | 0.077 | 0.206 | -69.4 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15481 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15482 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15483 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 112 | 6 | 584 | 0.077 | 0.206 | 41.8 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15484 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 114 | 6 | 584 | 0.077 | 0.206 | -69.4 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15485 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15486 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15487 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15488 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15489 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 112 | 6 | 584 | 0.077 | 0.206 | -69.4 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15490 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 137 | 6 | 584 | 0.077 | 0.206 | -47.1 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15491 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 140 | 6 | 584 | 0.077 | 0.206 | -69.4 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15492 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 125 | 6 | 584 | 0.077 | 0.206 | 19.6 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15493 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15494 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15495 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15496 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15497 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15498 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 103 | 6 | 584 | 0.077 | 0.206 | -2.7 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15499 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15500 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15501 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 153 | 6 | 584 | 0.077 | 0.206 | 19.6 | 367.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15502 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15503 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 131 | 6 | 584 | 0.077 | 0.206 | 19.6 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15504 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 140 | 6 | 584 | 0.077 | 0.206 | -47.1 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15505 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15506 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 125 | 6 | 584 | 0.077 | 0.206 | 19.6 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15507 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 100 | 6 | 584 | 0.077 | 0.206 | -2.7 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15508 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15509 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15510 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15511 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15512 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15513 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15514 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 143 | 6 | 584 | 0.077 | 0.206 | -69.4 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15515 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 119 | 6 | 584 | 0.077 | 0.206 | 41.8 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15516 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 103 | 6 | 584 | 0.077 | 0.206 | -69.4 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15517 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 128 | 6 | 584 | 0.077 | 0.206 | 19.6 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15518 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15519 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 134 | 6 | 584 | 0.077 | 0.206 | -24.9 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15520 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 101 | 6 | 584 | 0.077 | 0.206 | 19.6 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15521 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15522 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 101 | 6 | 584 | 0.077 | 0.206 | -47.1 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15523 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 136 | 6 | 584 | 0.077 | 0.206 | -47.1 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15524 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 110 | 6 | 584 | 0.077 | 0.206 | 41.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15525 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15526 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15527 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15528 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 105 | 6 | 584 | 0.077 | 0.206 | -2.7 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15529 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 91 | 6 | 584 | 0.077 | 0.206 | -2.7 | -147.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15530 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15531 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 105 | 6 | 584 | 0.077 | 0.206 | -24.9 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15532 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15533 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15534 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15535 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 116 | 6 | 584 | 0.077 | 0.206 | 41.8 | 60.3 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15536 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 117 | 6 | 584 | 0.077 | 0.206 | 41.8 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15537 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 116 | 6 | 584 | 0.077 | 0.206 | 64.0 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15538 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15539 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 145 | 6 | 584 | 0.077 | 0.206 | 86.3 | 301.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15540 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15541 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15542 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15543 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 113 | 6 | 584 | 0.077 | 0.206 | -47.1 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15544 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 106 | 6 | 584 | 0.077 | 0.206 | -69.4 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15545 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 112 | 6 | 584 | 0.077 | 0.206 | -69.4 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15546 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15547 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15548 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 137 | 6 | 584 | 0.077 | 0.206 | -2.7 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15549 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 127 | 6 | 584 | 0.077 | 0.206 | -69.4 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15550 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 101 | 6 | 584 | 0.077 | 0.206 | 19.6 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15551 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15552 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15553 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15554 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 132 | 6 | 584 | 0.077 | 0.206 | 64.0 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15555 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 101 | 6 | 584 | 0.077 | 0.206 | -47.1 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15556 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 114 | 6 | 584 | 0.077 | 0.206 | -47.1 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15557 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15558 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 133 | 6 | 584 | 0.077 | 0.206 | 86.3 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15559 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 111 | 6 | 584 | 0.077 | 0.206 | -47.1 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15560 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 105 | 6 | 584 | 0.077 | 0.206 | -2.7 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15561 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 104 | 6 | 584 | 0.077 | 0.206 | 19.6 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15562 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 98 | 6 | 584 | 0.077 | 0.206 | -24.9 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15563 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 132 | 6 | 584 | 0.077 | 0.206 | -24.9 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15564 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15565 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15566 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 138 | 6 | 584 | 0.077 | 0.206 | -24.9 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15567 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 131 | 6 | 584 | 0.077 | 0.206 | -69.4 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15568 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15569 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15570 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 97 | 6 | 584 | 0.077 | 0.206 | -24.9 | -97.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15571 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15572 | 9/10/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 110 | 6 | 584 | 0.077 | 0.206 | 19.6 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M3 | Floor | 15573 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 47 | 6 | 584 | 0.074 | 0.192 | -7.2 | -357.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15574 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15575 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 56 | 6 | 584 | 0.074 | 0.192 | -7.2 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15576 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15577 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15578 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15579 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15580 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15581 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 62 | 6 | 584 | 0.074 | 0.192 | -53.5 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15582 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 60 | 6 | 584 | 0.074 | 0.192 | 39.0 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15583 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15584 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15585 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15586 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 67 | 6 | 584 | 0.074 | 0.192 | 15.9 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15587 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15588 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15589 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15590 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15591 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15592 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15593 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15594 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15595 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15596 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15597 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15598 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15599 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15600 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN MEASUREMENTS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 15601 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 56 | 6 | 584 | 0.074 | 0.192 | -53.5 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15602 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15603 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15604 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15605 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 92 | 6 | 584 | 0.074 | 0.192 | -53.5 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15606 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15607 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15608 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15609 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15610 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15611 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15612 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15613 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15614 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15615 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15616 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15617 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15618 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15619 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15620 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15621 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15622 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15623 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15624 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15625 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15626 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15627 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 64 | 6 | 584 | 0.074 | 0.192 | -30.4 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15628 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 79 | 6 | 584 | 0.074 | 0.192 | 62.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15629 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 56 | 6 | 584 | 0.074 | 0.192 | -30.4 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15630 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15631 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15632 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 63 | 6 | 584 | 0.074 | 0.192 | -53.5 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15633 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15634 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15635 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 65 | 6 | 584 | 0.074 | 0.192 | -53.5 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15636 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15637 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 59 | 6 | 584 | 0.074 | 0.192 | -30.4 | -250.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15638 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15639 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 56 | 6 | 584 | 0.074 | 0.192 | -7.2 | -277.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15640 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 69 | 6 | 584 | 0.074 | 0.192 | -7.2 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15641 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 76 | 6 | 584 | 0.074 | 0.192 | -53.5 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15642 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15643 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15644 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15645 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15646 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15647 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15648 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15649 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15650 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 57 | 6 | 584 | 0.074 | 0.192 | -7.2 | -268.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15651 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15652 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15653 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15654 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15655 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15656 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15657 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15658 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15659 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15660 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15661 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15662 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15663 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 60 | 6 | 584 | 0.074 | 0.192 | 15.9 | -241.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15664 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 88 | 6 | 584 | 0.074 | 0.192 | 15.9 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15665 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 15666 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 72 | 6 | 584 | 0.074 | 0.192 | -53.5 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15667 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15668 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15669 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 64 | 6 | 584 | 0.074 | 0.192 | -7.2 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15670 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15671 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15672 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15673 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15674 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 78 | 6 | 584 | 0.074 | 0.192 | -53.5 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15675 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15676 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15677 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15678 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 79 | 6 | 584 | 0.074 | 0.192 | 108.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15679 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 73 | 6 | 584 | 0.074 | 0.192 | -30.4 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15680 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15681 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15682 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15683 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 63 | 6 | 584 | 0.074 | 0.192 | -7.2 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15684 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15685 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 61 | 6 | 584 | 0.074 | 0.192 | -53.5 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15686 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15687 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15688 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 54 | 6 | 584 | 0.074 | 0.192 | -30.4 | -295.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15689 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15690 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15691 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15692 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15693 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15694 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15695 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15696 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 78 | 6 | 584 | 0.074 | 0.192 | -7.2 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15697 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15698 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 79 | 6 | 584 | 0.074 | 0.192 | -53.5 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15699 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15700 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15701 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 87 | 6 | 584 | 0.074 | 0.192 | -53.5 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15702 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15703 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15704 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15705 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 55 | 6 | 584 | 0.074 | 0.192 | -30.4 | -286.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15706 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15707 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 72 | 6 | 584 | 0.074 | 0.192 | -30.4 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15708 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 68 | 6 | 584 | 0.074 | 0.192 | -53.5 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15709 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15710 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15711 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15712 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15713 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15714 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15715 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15716 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15717 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15718 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 73 | 6 | 584 | 0.074 | 0.192 | 85.3 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15719 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15720 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15721 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15722 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15723 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15724 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 66 | 6 | 584 | 0.074 | 0.192 | -53.5 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15725 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15726 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15727 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15728 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 68 | 6 | 584 | 0.074 | 0.192 | 15.9 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15729 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 69 | 6 | 584 | 0.074 | 0.192 | -53.5 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15730 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 15731 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 68 | 6 | 584 | 0.074 | 0.192 | -30.4 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15732 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 70 | 6 | 584 | 0.074 | 0.192 | -53.5 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15733 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15734 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 74 | 6 | 584 | 0.074 | 0.192 | -53.5 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15735 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15736 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15737 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 69 | 6 | 584 | 0.074 | 0.192 | -30.4 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15738 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 63 | 6 | 584 | 0.074 | 0.192 | -30.4 | -215.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15739 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 65 | 6 | 584 | 0.074 | 0.192 | -30.4 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15740 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15741 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15742 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15743 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 96 | 6 | 584 | 0.074 | 0.192 | -53.5 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15744 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15745 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 103 | 6 | 584 | 0.074 | 0.192 | -53.5 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15746 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15747 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15748 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15749 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15750 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15751 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 78 | 6 | 584 | 0.074 | 0.192 | -30.4 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15752 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15753 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15754 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15755 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 75 | 6 | 584 | 0.074 | 0.192 | -30.4 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15756 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15757 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15758 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15759 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15760 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15761 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15762 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 82 | 6 | 584 | 0.074 | 0.192 | -53.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15763 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 64 | 6 | 584 | 0.074 | 0.192 | 39.0 | -206.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15764 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15765 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15766 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15767 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15768 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15769 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15770 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15771 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15772 | 9/11/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M5 | Floor | 15773 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 131 | 6 | 584 | 0.077 | 0.206 | -24.9 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15774 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 131 | 6 | 584 | 0.077 | 0.206 | 64.0 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15775 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 106 | 6 | 584 | 0.077 | 0.206 | -47.1 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15776 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15777 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 134 | 6 | 584 | 0.077 | 0.206 | -24.9 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15778 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15779 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15780 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15781 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15782 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 103 | 6 | 584 | 0.077 | 0.206 | -47.1 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15783 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 106 | 6 | 584 | 0.077 | 0.206 | -47.1 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15784 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15785 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 109 | 6 | 584 | 0.077 | 0.206 | 19.6 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15786 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15787 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15788 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 108 | 6 | 584 | 0.077 | 0.206 | -2.7 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15789 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15790 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 102 | 6 | 584 | 0.077 | 0.206 | -47.1 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15791 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 105 | 6 | 584 | 0.077 | 0.206 | -2.7 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15792 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15793 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15794 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 93 | 6 | 584 | 0.077 | 0.206 | -2.7 | -130.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15795 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 97 | 6 | 584 | 0.077 | 0.206 | 19.6 | -97.6 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15796 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15797 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 112 | 6 | 584 | 0.077 | 0.206 | -69.4 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15798 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 113 | 6 | 584 | 0.077 | 0.206 | -69.4 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15799 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15800 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15801 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15802 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15803 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 131 | 6 | 584 | 0.077 | 0.206 | -69.4 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15804 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 126 | 6 | 584 | 0.077 | 0.206 | 19.6 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15805 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 99 | 6 | 584 | 0.077 | 0.206 | -24.9 | -81.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15806 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15807 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 97 | 6 | 584 | 0.077 | 0.206 | 86.3 | -97.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15808 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 96 | 6 | 584 | 0.077 | 0.206 | 41.8 | -105.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15809 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 124 | 6 | 584 | 0.077 | 0.206 | -47.1 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15810 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15811 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15812 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 107 | 6 | 584 | 0.077 | 0.206 | -24.9 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15813 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15814 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15815 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 119 | 6 | 584 | 0.077 | 0.206 | 64.0 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15816 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15817 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15818 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15819 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15820 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 136 | 6 | 584 | 0.077 | 0.206 | 19.6 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15821 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15822 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 108 | 6 | 584 | 0.077 | 0.206 | 19.6 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15823 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 110 | 6 | 584 | 0.077 | 0.206 | -69.4 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15824 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 109 | 6 | 584 | 0.077 | 0.206 | -47.1 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15825 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 103 | 6 | 584 | 0.077 | 0.206 | -24.9 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15826 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15827 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15828 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15829 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 102 | 6 | 584 | 0.077 | 0.206 | -24.9 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15830 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 95 | 6 | 584 | 0.077 | 0.206 | 41.8 | -114.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15831 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 122 | 6 | 584 | 0.077 | 0.206 | -69.4 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15832 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15833 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 98 | 6 | 584 | 0.077 | 0.206 | -2.7 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15834 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15835 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15836 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 132 | 6 | 584 | 0.077 | 0.206 | -2.7 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15837 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 130 | 6 | 584 | 0.077 | 0.206 | -47.1 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15838 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15839 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 101 | 6 | 584 | 0.077 | 0.206 | 19.6 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15840 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 123 | 6 | 584 | 0.077 | 0.206 | -47.1 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15841 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15842 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 101 | 6 | 584 | 0.077 | 0.206 | -47.1 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15843 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15844 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 138 | 6 | 584 | 0.077 | 0.206 | -69.4 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15845 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15846 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15847 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 108 | 6 | 584 | 0.077 | 0.206 | -2.7 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15848 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15849 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15850 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 131 | 6 | 584 | 0.077 | 0.206 | -69.4 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15851 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15852 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15853 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15854 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 111 | 6 | 584 | 0.077 | 0.206 | -24.9 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15855 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15856 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15857 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15858 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15859 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15860 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15861 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 110 | 6 | 584 | 0.077 | 0.206 | -47.1 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15862 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15863 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 141 | 6 | 584 | 0.077 | 0.206 | -47.1 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15864 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15865 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 122 | 6 | 584 | 0.077 | 0.206 | 64.0 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15866 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 121 | 6 | 584 | 0.077 | 0.206 | -47.1 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15867 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 104 | 6 | 584 | 0.077 | 0.206 | 86.3 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15868 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15869 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 106 | 6 | 584 | 0.077 | 0.206 | -24.9 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15870 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 109 | 6 | 584 | 0.077 | 0.206 | -47.1 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15871 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15872 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 108 | 6 | 584 | 0.077 | 0.206 | -2.7 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15873 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15874 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15875 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15876 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15877 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15878 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 104 | 6 | 584 | 0.077 | 0.206 | 19.6 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15879 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15880 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15881 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15882 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15883 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 112 | 6 | 584 | 0.077 | 0.206 | -24.9 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15884 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15885 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 130 | 6 | 584 | 0.077 | 0.206 | -47.1 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15886 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 99 | 6 | 584 | 0.077 | 0.206 | -47.1 | -81.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15887 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 115 | 6 | 584 | 0.077 | 0.206 | 64.0 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15888 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15889 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 138 | 6 | 584 | 0.077 | 0.206 | 19.6 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15890 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15891 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15892 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 107 | 6 | 584 | 0.077 | 0.206 | -2.7 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15893 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 122 | 6 | 584 | 0.077 | 0.206 | -69.4 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15894 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 113 | 6 | 584 | 0.077 | 0.206 | -69.4 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15895 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15896 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 132 | 6 | 584 | 0.077 | 0.206 | -47.1 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15897 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15898 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15899 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15900 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 136 | 6 | 584 | 0.077 | 0.206 | -24.9 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15901 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 101 | 6 | 584 | 0.077 | 0.206 | -24.9 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15902 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 134 | 6 | 584 | 0.077 | 0.206 | -2.7 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15903 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 138 | 6 | 584 | 0.077 | 0.206 | -2.7 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15904 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 119 | 6 | 584 | 0.077 | 0.206 | 64.0 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15905 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 107 | 6 | 584 | 0.077 | 0.206 | -47.1 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15906 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15907 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15908 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 151 | 6 | 584 | 0.077 | 0.206 | -2.7 | 351.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15909 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 114 | 6 | 584 | 0.077 | 0.206 | -24.9 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15910 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 142 | 6 | 584 | 0.077 | 0.206 | -24.9 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15911 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 115 | 6 | 584 | 0.077 | 0.206 | -47.1 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15912 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15913 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 136 | 6 | 584 | 0.077 | 0.206 | -2.7 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15914 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 106 | 6 | 584 | 0.077 | 0.206 | -47.1 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15915 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 135 | 6 | 584 | 0.077 | 0.206 | 19.6 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15916 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15917 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 120 | 6 | 584 | 0.077 | 0.206 | 41.8 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15918 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 128 | 6 | 584 | 0.077 | 0.206 | -24.9 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15919 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15920 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 130 | 6 | 584 | 0.077 | 0.206 | 41.8 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15921 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 124 | 6 | 584 | 0.077 | 0.206 | -69.4 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15922 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15923 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 104 | 6 | 584 | 0.077 | 0.206 | -2.7 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15924 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15925 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 15926 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 127 | 6 | 584 | 0.077 | 0.206 | -47.1 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15927 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15928 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 109 | 6 | 584 | 0.077 | 0.206 | -2.7 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15929 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15930 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 128 | 6 | 584 | 0.077 | 0.206 | -69.4 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15931 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15932 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15933 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 108 | 6 | 584 | 0.077 | 0.206 | -2.7 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15934 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15935 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15936 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 128 | 6 | 584 | 0.077 | 0.206 | -47.1 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15937 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15938 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15939 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 133 | 6 | 584 | 0.077 | 0.206 | -24.9 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15940 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 120 | 6 | 584 | 0.077 | 0.206 | -69.4 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15941 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 111 | 6 | 584 | 0.077 | 0.206 | 86.3 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15942 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 103 | 6 | 584 | 0.077 | 0.206 | -24.9 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15943 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 119 | 6 | 584 | 0.077 | 0.206 | -69.4 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15944 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 123 | 6 | 584 | 0.077 | 0.206 | 64.0 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15945 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15946 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15947 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 89 | 6 | 584 | 0.077 | 0.206 | -47.1 | -164.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15948 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 125 | 6 | 584 | 0.077 | 0.206 | 86.3 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15949 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 114 | 6 | 584 | 0.077 | 0.206 | -47.1 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15950 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 114 | 6 | 584 | 0.077 | 0.206 | 41.8 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15951 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15952 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 116 | 6 | 584 | 0.077 | 0.206 | -47.1 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15953 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15954 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15955 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 125 | 6 | 584 | 0.077 | 0.206 | -69.4 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15956 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15957 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 119 | 6 | 584 | 0.077 | 0.206 | -24.9 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15958 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15959 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15960 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 129 | 6 | 584 | 0.077 | 0.206 | 41.8 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15961 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 144 | 6 | 584 | 0.077 | 0.206 | 19.6 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15962 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 133 | 6 | 584 | 0.077 | 0.206 | -24.9 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15963 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15964 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15965 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 113 | 6 | 584 | 0.077 | 0.206 | -69.4 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15966 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 102 | 6 | 584 | 0.077 | 0.206 | -24.9 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15967 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 116 | 6 | 584 | 0.077 | 0.206 | -24.9 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15968 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 128 | 6 | 584 | 0.077 | 0.206 | -2.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15969 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15970 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 119 | 6 | 584 | 0.077 | 0.206 | -69.4 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15971 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 15972 | 9/11/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 109 | 6 | 584 | 0.077 | 0.206 | 41.8 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M3 | Floor | 15973 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15974 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15975 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 99 | 6 | 584 | 0.074 | 0.192 | 62.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15976 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15977 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 95 | 6 | 584 | 0.074 | 0.192 | -30.4 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15978 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 82 | 6 | 584 | 0.074 | 0.192 | 85.3 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15979 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15980 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15981 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15982 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15983 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15984 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 79 | 6 | 584 | 0.074 | 0.192 | -7.2 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15985 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 99 | 6 | 584 | 0.074 | 0.192 | 39.0 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15986 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15987 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15988 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 92 | 6 | 584 | 0.074 | 0.192 | 39.0 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15989 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 71 | 6 | 584 | 0.074 | 0.192 | -30.4 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15990 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 15991 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15992 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 97 | 6 | 584 | 0.074 | 0.192 | 39.0 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15993 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 71 | 6 | 584 | 0.074 | 0.192 | -7.2 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15994 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15995 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 89 | 6 | 584 | 0.074 | 0.192 | 39.0 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15996 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 113 | 6 | 584 | 0.074 | 0.192 | 15.9 | 230.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15997 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15998 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 15999 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16000 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16001 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16002 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16003 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16004 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16005 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16006 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 103 | 6 | 584 | 0.074 | 0.192 | -7.2 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16007 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16008 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 99 | 6 | 584 | 0.074 | 0.192 | -7.2 | 105.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16009 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16010 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16011 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16012 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 95 | 6 | 584 | 0.074 | 0.192 | 15.9 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16013 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 91 | 6 | 584 | 0.074 | 0.192 | 131.8 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16014 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 96 | 6 | 584 | 0.074 | 0.192 | 15.9 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16015 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 94 | 6 | 584 | 0.074 | 0.192 | 85.3 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16016 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16017 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16018 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 77 | 6 | 584 | 0.074 | 0.192 | 62.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16019 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16020 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16021 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 97 | 6 | 584 | 0.074 | 0.192 | 62.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16022 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 95 | 6 | 584 | 0.074 | 0.192 | 39.0 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16023 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16024 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16025 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16026 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16027 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16028 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16029 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16030 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16031 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 105 | 6 | 584 | 0.074 | 0.192 | -7.2 | 159.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16032 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16033 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16034 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16035 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 69 | 6 | 584 | 0.074 | 0.192 | 15.9 | -161.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16036 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 89 | 6 | 584 | 0.074 | 0.192 | 108.5 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16037 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 100 | 6 | 584 | 0.074 | 0.192 | 39.0 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16038 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 109 | 6 | 584 | 0.074 | 0.192 | 62.2 | 195.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16039 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16040 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16041 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16042 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 91 | 6 | 584 | 0.074 | 0.192 | 15.9 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16043 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16044 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16045 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16046 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 81 | 6 | 584 | 0.074 | 0.192 | 85.3 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16047 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16048 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16049 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16050 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16051 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 79 | 6 | 584 | 0.074 | 0.192 | 131.8 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16052 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 82 | 6 | 584 | 0.074 | 0.192 | 108.5 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16053 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16054 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 85 | 6 | 584 | 0.074 | 0.192 | 62.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16055 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 16056 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16057 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16058 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16059 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16060 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 83 | 6 | 584 | 0.074 | 0.192 | 85.3 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16061 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16062 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 79 | 6 | 584 | 0.074 | 0.192 | 39.0 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16063 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 90 | 6 | 584 | 0.074 | 0.192 | 108.5 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16064 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 7 | 86 | 6 | 584 | 0.074 | 0.192 | 108.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16065 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16066 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16067 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16068 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16069 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16070 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 82 | 6 | 584 | 0.074 | 0.192 | -7.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16071 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16072 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 87 | 6 | 584 | 0.074 | 0.192 | 15.9 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16073 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16074 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16075 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16076 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16077 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16078 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16079 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16080 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 101 | 6 | 584 | 0.074 | 0.192 | -53.5 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16081 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16082 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 65 | 6 | 584 | 0.074 | 0.192 | 62.2 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16083 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 82 | 6 | 584 | 0.074 | 0.192 | 62.2 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16084 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 91 | 6 | 584 | 0.074 | 0.192 | 85.3 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16085 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16086 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 66 | 6 | 584 | 0.074 | 0.192 | 62.2 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16087 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 106 | 6 | 584 | 0.074 | 0.192 | -7.2 | 168.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16088 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 73 | 6 | 584 | 0.074 | 0.192 | 15.9 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16089 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 87 | 6 | 584 | 0.074 | 0.192 | 62.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16090 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 91 | 6 | 584 | 0.074 | 0.192 | 62.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16091 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 96 | 6 | 584 | 0.074 | 0.192 | 39.0 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16092 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16093 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16094 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 103 | 6 | 584 | 0.074 | 0.192 | -30.4 | 141.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16095 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16096 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 86 | 6 | 584 | 0.074 | 0.192 | -7.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16097 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16098 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 8 | 82 | 6 | 584 | 0.074 | 0.192 | 131.6 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16099 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16100 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16101 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 87 | 6 | 584 | 0.074 | 0.192 | -30.4 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16102 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 83 | 6 | 584 | 0.074 | 0.192 | 39.0 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16103 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 107 | 6 | 584 | 0.074 | 0.192 | 39.0 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16104 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16105 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16106 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16107 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 86 | 6 | 584 | 0.074 | 0.192 | 39.0 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16108 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16109 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 94 | 6 | 584 | 0.074 | 0.192 | -7.2 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16110 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 91 | 6 | 584 | 0.074 | 0.192 | -53.5 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16111 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16112 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16113 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16114 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 80 | 6 | 584 | 0.074 | 0.192 | 39.0 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16115 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 77 | 6 | 584 | 0.074 | 0.192 | -7.2 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16116 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16117 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16118 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16119 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16120 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 16121 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16122 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 77 | 6 | 584 | 0.074 | 0.192 | 85.3 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16123 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16124 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 100 | 6 | 584 | 0.074 | 0.192 | 62.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16125 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 93 | 6 | 584 | 0.074 | 0.192 | -30.4 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16126 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16127 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 81 | 6 | 584 | 0.074 | 0.192 | 39.0 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16128 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16129 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 72 | 6 | 584 | 0.074 | 0.192 | 62.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16130 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 104 | 6 | 584 | 0.074 | 0.192 | 39.0 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16131 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 84 | 6 | 584 | 0.074 | 0.192 | 62.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16132 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16133 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16134 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 62 | 6 | 584 | 0.074 | 0.192 | 85.3 | -224.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16135 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 61 | 6 | 584 | 0.074 | 0.192 | -53.5 | -233.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16136 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 104 | 6 | 584 | 0.074 | 0.192 | 62.2 | 150.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16137 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16138 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 65 | 6 | 584 | 0.074 | 0.192 | 15.9 | -197.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16139 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16140 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16141 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 70 | 6 | 584 | 0.074 | 0.192 | -7.2 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16142 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16143 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 67 | 6 | 584 | 0.074 | 0.192 | -53.5 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16144 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16145 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 70 | 6 | 584 | 0.074 | 0.192 | -30.4 | -152.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16146 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16147 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16148 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 79 | 6 | 584 | 0.074 | 0.192 | 15.9 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16149 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 71 | 6 | 584 | 0.074 | 0.192 | 15.9 | -143.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16150 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16151 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 77 | 6 | 584 | 0.074 | 0.192 | -53.5 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16152 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16153 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16154 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16155 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16156 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16157 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16158 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16159 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 84 | 6 | 584 | 0.074 | 0.192 | -30.4 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16160 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16161 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 74 | 6 | 584 | 0.074 | 0.192 | -7.2 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16162 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 85 | 6 | 584 | 0.074 | 0.192 | -7.2 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16163 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 97 | 6 | 584 | 0.074 | 0.192 | -7.2 | 88.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16164 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16165 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16166 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16167 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16168 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 89 | 6 | 584 | 0.074 | 0.192 | -30.4 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16169 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 80 | 6 | 584 | 0.074 | 0.192 | -30.4 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16170 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 84 | 6 | 584 | 0.074 | 0.192 | -53.5 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16171 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16172 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16173 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16174 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16175 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16176 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16177 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16178 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16179 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16180 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 81 | 6 | 584 | 0.074 | 0.192 | -30.4 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16181 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16182 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16183 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16184 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16185 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 16186 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 85 | 6 | 584 | 0.074 | 0.192 | 39.0 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16187 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16188 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 73 | 6 | 584 | 0.074 | 0.192 | -53.5 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16189 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 80 | 6 | 584 | 0.074 | 0.192 | -7.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16190 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16191 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16192 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16193 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 98 | 6 | 584 | 0.074 | 0.192 | -53.5 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16194 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 91 | 6 | 584 | 0.074 | 0.192 | -7.2 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16195 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 84 | 6 | 584 | 0.074 | 0.192 | 15.9 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16196 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 73 | 6 | 584 | 0.074 | 0.192 | -7.2 | -126.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16197 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 94 | 6 | 584 | 0.074 | 0.192 | 15.9 | 61.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16198 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 96 | 6 | 584 | 0.074 | 0.192 | -7.2 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16199 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16200 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 85 | 6 | 584 | 0.074 | 0.192 | -53.5 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16201 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 75 | 6 | 584 | 0.074 | 0.192 | -53.5 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16202 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16203 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16204 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 67 | 6 | 584 | 0.074 | 0.192 | -7.2 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16205 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16206 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 83 | 6 | 584 | 0.074 | 0.192 | 62.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16207 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16208 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16209 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 93 | 6 | 584 | 0.074 | 0.192 | 62.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16210 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 86 | 6 | 584 | 0.074 | 0.192 | -30.4 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16211 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16212 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 100 | 6 | 584 | 0.074 | 0.192 | -53.5 | 114.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16213 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 76 | 6 | 584 | 0.074 | 0.192 | 15.9 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16214 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 84 | 6 | 584 | 0.074 | 0.192 | 39.0 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16215 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 78 | 6 | 584 | 0.074 | 0.192 | 15.9 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16216 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 93 | 6 | 584 | 0.074 | 0.192 | -7.2 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16217 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 81 | 6 | 584 | 0.074 | 0.192 | 15.9 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16218 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 80 | 6 | 584 | 0.074 | 0.192 | 62.2 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16219 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 93 | 6 | 584 | 0.074 | 0.192 | 39.0 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16220 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 6 | 84 | 6 | 584 | 0.074 | 0.192 | 85.3 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16221 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 80 | 6 | 584 | 0.074 | 0.192 | 15.9 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16222 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16223 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 74 | 6 | 584 | 0.074 | 0.192 | -30.4 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16224 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 83 | 6 | 584 | 0.074 | 0.192 | -7.2 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16225 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 75 | 6 | 584 | 0.074 | 0.192 | -7.2 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16226 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 74 | 6 | 584 | 0.074 | 0.192 | 15.9 | -117.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16227 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 84 | 6 | 584 | 0.074 | 0.192 | -7.2 | -27.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16228 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16229 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 72 | 6 | 584 | 0.074 | 0.192 | 39.0 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16230 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 82 | 6 | 584 | 0.074 | 0.192 | 15.9 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16231 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16232 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 82 | 6 | 584 | 0.074 | 0.192 | -30.4 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16233 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16234 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 92 | 6 | 584 | 0.074 | 0.192 | -7.2 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16235 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 86 | 6 | 584 | 0.074 | 0.192 | -53.5 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16236 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 83 | 6 | 584 | 0.074 | 0.192 | 15.9 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16237 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16238 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16239 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 107 | 6 | 584 | 0.074 | 0.192 | 15.9 | 177.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16240 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 98 | 6 | 584 | 0.074 | 0.192 | -7.2 | 97.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16241 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 58 | 6 | 584 | 0.074 | 0.192 | -53.5 | -259.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16242 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 101 | 6 | 584 | 0.074 | 0.192 | -7.2 | 123.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16243 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 83 | 6 | 584 | 0.074 | 0.192 | -30.4 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16244 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 85 | 6 | 584 | 0.074 | 0.192 | -30.4 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16245 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 92 | 6 | 584 | 0.074 | 0.192 | 15.9 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16246 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 81 | 6 | 584 | 0.074 | 0.192 | -53.5 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16247 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 96 | 6 | 584 | 0.074 | 0.192 | -30.4 | 79.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16248 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 81 | 6 | 584 | 0.074 | 0.192 | -7.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16249 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16250 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 100 | 6 | 584 | 0.074 | 0.192 | -7.2 | 114.8 | 2.8 | 15.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M3 | Floor | 16251 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 75 | 6 | 584 | 0.074 | 0.192 | 15.9 | -108.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16252 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 87 | 6 | 584 | 0.074 | 0.192 | -7.2 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16253 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 68 | 6 | 584 | 0.074 | 0.192 | -7.2 | -170.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16254 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 76 | 6 | 584 | 0.074 | 0.192 | -7.2 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16255 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16256 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 90 | 6 | 584 | 0.074 | 0.192 | -7.2 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16257 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 85 | 6 | 584 | 0.074 | 0.192 | 15.9 | -19.0 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16258 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 95 | 6 | 584 | 0.074 | 0.192 | -7.2 | 70.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16259 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 89 | 6 | 584 | 0.074 | 0.192 | 15.9 | 16.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16260 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 88 | 6 | 584 | 0.074 | 0.192 | -7.2 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16261 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 86 | 6 | 584 | 0.074 | 0.192 | 15.9 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16262 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 77 | 6 | 584 | 0.074 | 0.192 | 15.9 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16263 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 92 | 6 | 584 | 0.074 | 0.192 | -30.4 | 43.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16264 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 93 | 6 | 584 | 0.074 | 0.192 | 15.9 | 52.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16265 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 66 | 6 | 584 | 0.074 | 0.192 | 15.9 | -188.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16266 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 78 | 6 | 584 | 0.074 | 0.192 | 39.0 | -81.4 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16267 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 91 | 6 | 584 | 0.074 | 0.192 | -30.4 | 34.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16268 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 76 | 6 | 584 | 0.074 | 0.192 | -30.4 | -99.2 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16269 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 2 | 72 | 6 | 584 | 0.074 | 0.192 | -7.2 | -134.9 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16270 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 90 | 6 | 584 | 0.074 | 0.192 | 39.0 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16271 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 83 | 6 | 584 | 0.074 | 0.192 | -53.5 | -36.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16272 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 0 | 80 | 6 | 584 | 0.074 | 0.192 | -53.5 | -63.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16273 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 88 | 6 | 584 | 0.074 | 0.192 | -30.4 | 7.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16274 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 79 | 6 | 584 | 0.074 | 0.192 | -30.4 | -72.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16275 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 90 | 6 | 584 | 0.074 | 0.192 | 15.9 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16276 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 86 | 6 | 584 | 0.074 | 0.192 | 62.2 | -10.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16277 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 67 | 6 | 584 | 0.074 | 0.192 | -30.4 | -179.5 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16278 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 87 | 6 | 584 | 0.074 | 0.192 | 39.0 | -1.1 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16279 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 3 | 112 | 6 | 584 | 0.074 | 0.192 | 15.9 | 221.8 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16280 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 4 | 82 | 6 | 584 | 0.074 | 0.192 | 39.0 | -45.7 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16281 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 90 | 6 | 584 | 0.074 | 0.192 | -30.4 | 25.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16282 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 5 | 81 | 6 | 584 | 0.074 | 0.192 | 62.2 | -54.6 | 2.8 | 15.7 |
| SU 6 | | | Scan | M3 | Floor | 16283 | 9/16/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 1 | 77 | 6 | 584 | 0.074 | 0.192 | -30.4 | -90.3 | 2.8 | 15.7 |
| SU 6 | | | Scan | M5 | Floor | 16284 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16285 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 121 | 6 | 584 | 0.077 | 0.206 | 86.3 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16286 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 125 | 6 | 584 | 0.077 | 0.206 | 41.8 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16287 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 122 | 6 | 584 | 0.077 | 0.206 | 64.0 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16288 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 128 | 6 | 584 | 0.077 | 0.206 | 86.3 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16289 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16290 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 143 | 6 | 584 | 0.077 | 0.206 | -24.9 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16291 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16292 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 113 | 6 | 584 | 0.077 | 0.206 | 108.5 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16293 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16294 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 142 | 6 | 584 | 0.077 | 0.206 | 19.6 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16295 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 134 | 6 | 584 | 0.077 | 0.206 | 64.0 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16296 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 122 | 6 | 584 | 0.077 | 0.206 | 86.3 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16297 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 114 | 6 | 584 | 0.077 | 0.206 | -2.7 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16298 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 119 | 6 | 584 | 0.077 | 0.206 | 19.6 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16299 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 128 | 6 | 584 | 0.077 | 0.206 | 19.6 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16300 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16301 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 132 | 6 | 584 | 0.077 | 0.206 | 108.5 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16302 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16303 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 140 | 6 | 584 | 0.077 | 0.206 | -2.7 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16304 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16305 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 113 | 6 | 584 | 0.077 | 0.206 | 64.0 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16306 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16307 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 143 | 6 | 584 | 0.077 | 0.206 | 19.6 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16308 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 118 | 6 | 584 | 0.077 | 0.206 | 130.8 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16309 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 113 | 6 | 584 | 0.077 | 0.206 | -24.9 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16310 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16311 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 134 | 6 | 584 | 0.077 | 0.206 | -47.1 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16312 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16313 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 134 | 6 | 584 | 0.077 | 0.206 | 41.8 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16314 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 133 | 6 | 584 | 0.077 | 0.206 | 19.6 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16315 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 127 | 6 | 584 | 0.077 | 0.206 | 41.8 | 151.7 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 16316 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 121 | 6 | 584 | 0.077 | 0.206 | -24.9 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16317 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 133 | 6 | 584 | 0.077 | 0.206 | 108.5 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16318 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 126 | 6 | 584 | 0.077 | 0.206 | -24.9 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16319 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 127 | 6 | 584 | 0.077 | 0.206 | 41.8 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16320 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 110 | 6 | 584 | 0.077 | 0.206 | 86.3 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16321 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 134 | 6 | 584 | 0.077 | 0.206 | 41.8 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16322 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 124 | 6 | 584 | 0.077 | 0.206 | -24.9 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16323 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16324 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 125 | 6 | 584 | 0.077 | 0.206 | -2.7 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16325 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16326 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16327 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 159 | 6 | 584 | 0.077 | 0.206 | 86.3 | 417.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16328 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16329 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 129 | 6 | 584 | 0.077 | 0.206 | 86.3 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16330 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 11 | 113 | 6 | 584 | 0.077 | 0.206 | 175.2 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16331 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 116 | 6 | 584 | 0.077 | 0.206 | 86.3 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16332 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16333 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 105 | 6 | 584 | 0.077 | 0.206 | 41.8 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16334 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16335 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16336 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 113 | 6 | 584 | 0.077 | 0.206 | 19.6 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16337 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 130 | 6 | 584 | 0.077 | 0.206 | -24.9 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16338 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 133 | 6 | 584 | 0.077 | 0.206 | -2.7 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16339 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 136 | 6 | 584 | 0.077 | 0.206 | 41.8 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16340 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 134 | 6 | 584 | 0.077 | 0.206 | 86.3 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16341 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 153 | 6 | 584 | 0.077 | 0.206 | 41.8 | 367.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16342 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 112 | 6 | 584 | 0.077 | 0.206 | 41.8 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16343 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16344 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 123 | 6 | 584 | 0.077 | 0.206 | 130.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16345 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 147 | 6 | 584 | 0.077 | 0.206 | 19.6 | 318.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16346 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16347 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16348 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 135 | 6 | 584 | 0.077 | 0.206 | 41.8 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16349 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 122 | 6 | 584 | 0.077 | 0.206 | 64.0 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16350 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 140 | 6 | 584 | 0.077 | 0.206 | -47.1 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16351 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16352 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 131 | 6 | 584 | 0.077 | 0.206 | 64.0 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16353 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 120 | 6 | 584 | 0.077 | 0.206 | 108.5 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16354 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 115 | 6 | 584 | 0.077 | 0.206 | -2.7 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16355 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 143 | 6 | 584 | 0.077 | 0.206 | 19.6 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16356 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 103 | 6 | 584 | 0.077 | 0.206 | 86.3 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16357 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 128 | 6 | 584 | 0.077 | 0.206 | 41.8 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16358 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 120 | 6 | 584 | 0.077 | 0.206 | 108.5 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16359 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 122 | 6 | 584 | 0.077 | 0.206 | 86.3 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16360 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 130 | 6 | 584 | 0.077 | 0.206 | 41.8 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16361 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16362 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16363 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 124 | 6 | 584 | 0.077 | 0.206 | 41.8 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16364 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 132 | 6 | 584 | 0.077 | 0.206 | 130.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16365 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16366 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 117 | 6 | 584 | 0.077 | 0.206 | 108.5 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16367 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 119 | 6 | 584 | 0.077 | 0.206 | 41.8 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16368 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16369 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 100 | 6 | 584 | 0.077 | 0.206 | 41.8 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16370 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 136 | 6 | 584 | 0.077 | 0.206 | 108.5 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16371 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 149 | 6 | 584 | 0.077 | 0.206 | -24.9 | 334.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16372 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 108 | 6 | 584 | 0.077 | 0.206 | 108.5 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16373 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 139 | 6 | 584 | 0.077 | 0.206 | -47.1 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16374 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 123 | 6 | 584 | 0.077 | 0.206 | 19.6 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16375 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 111 | 6 | 584 | 0.077 | 0.206 | 19.6 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16376 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 122 | 6 | 584 | 0.077 | 0.206 | 86.3 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16377 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 111 | 6 | 584 | 0.077 | 0.206 | 41.8 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16378 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 122 | 6 | 584 | 0.077 | 0.206 | 41.8 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16379 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 132 | 6 | 584 | 0.077 | 0.206 | 41.8 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16380 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 138 | 6 | 584 | 0.077 | 0.206 | 41.8 | 243.2 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 16381 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 127 | 6 | 584 | 0.077 | 0.206 | 86.3 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16382 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 140 | 6 | 584 | 0.077 | 0.206 | 41.8 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16383 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 104 | 6 | 584 | 0.077 | 0.206 | -24.9 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16384 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 122 | 6 | 584 | 0.077 | 0.206 | 41.8 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16385 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16386 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 132 | 6 | 584 | 0.077 | 0.206 | 64.0 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16387 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16388 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 136 | 6 | 584 | 0.077 | 0.206 | -24.9 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16389 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 131 | 6 | 584 | 0.077 | 0.206 | 41.8 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16390 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 106 | 6 | 584 | 0.077 | 0.206 | -2.7 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16391 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 110 | 6 | 584 | 0.077 | 0.206 | 130.8 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16392 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16393 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 118 | 6 | 584 | 0.077 | 0.206 | -2.7 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16394 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 142 | 6 | 584 | 0.077 | 0.206 | -2.7 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16395 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 135 | 6 | 584 | 0.077 | 0.206 | 108.5 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16396 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16397 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 13 | 128 | 6 | 584 | 0.077 | 0.206 | 219.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16398 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 105 | 6 | 584 | 0.077 | 0.206 | 19.6 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16399 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 134 | 6 | 584 | 0.077 | 0.206 | -69.4 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16400 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 124 | 6 | 584 | 0.077 | 0.206 | -2.7 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16401 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 122 | 6 | 584 | 0.077 | 0.206 | 86.3 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16402 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16403 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 142 | 6 | 584 | 0.077 | 0.206 | 19.6 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16404 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 151 | 6 | 584 | 0.077 | 0.206 | 64.0 | 351.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16405 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 143 | 6 | 584 | 0.077 | 0.206 | -2.7 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16406 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16407 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 118 | 6 | 584 | 0.077 | 0.206 | 108.5 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16408 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 112 | 6 | 584 | 0.077 | 0.206 | 108.5 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16409 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 125 | 6 | 584 | 0.077 | 0.206 | 108.5 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16410 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 141 | 6 | 584 | 0.077 | 0.206 | 64.0 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16411 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 105 | 6 | 584 | 0.077 | 0.206 | 86.3 | -31.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16412 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 133 | 6 | 584 | 0.077 | 0.206 | 64.0 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16413 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 120 | 6 | 584 | 0.077 | 0.206 | 108.5 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16414 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16415 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 128 | 6 | 584 | 0.077 | 0.206 | 41.8 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16416 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 110 | 6 | 584 | 0.077 | 0.206 | 19.6 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16417 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16418 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 124 | 6 | 584 | 0.077 | 0.206 | 86.3 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16419 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 126 | 6 | 584 | 0.077 | 0.206 | 64.0 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16420 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 104 | 6 | 584 | 0.077 | 0.206 | -47.1 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16421 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 119 | 6 | 584 | 0.077 | 0.206 | 86.3 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16422 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16423 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 117 | 6 | 584 | 0.077 | 0.206 | 19.6 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16424 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 132 | 6 | 584 | 0.077 | 0.206 | -24.9 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16425 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16426 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 141 | 6 | 584 | 0.077 | 0.206 | 19.6 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16427 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 128 | 6 | 584 | 0.077 | 0.206 | 41.8 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16428 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 119 | 6 | 584 | 0.077 | 0.206 | -2.7 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16429 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 130 | 6 | 584 | 0.077 | 0.206 | 64.0 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16430 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16431 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 112 | 6 | 584 | 0.077 | 0.206 | 86.3 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16432 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 109 | 6 | 584 | 0.077 | 0.206 | -24.9 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16433 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16434 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 141 | 6 | 584 | 0.077 | 0.206 | 64.0 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16435 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 131 | 6 | 584 | 0.077 | 0.206 | 19.6 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16436 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 125 | 6 | 584 | 0.077 | 0.206 | 19.6 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16437 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 118 | 6 | 584 | 0.077 | 0.206 | -69.4 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16438 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 131 | 6 | 584 | 0.077 | 0.206 | 64.0 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16439 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 107 | 6 | 584 | 0.077 | 0.206 | -47.1 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16440 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 127 | 6 | 584 | 0.077 | 0.206 | -2.7 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16441 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16442 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16443 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16444 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 124 | 6 | 584 | 0.077 | 0.206 | -69.4 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16445 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 121 | 6 | 584 | 0.077 | 0.206 | 108.5 | 101.9 | 3.2 | 17.5 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 16446 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 141 | 6 | 584 | 0.077 | 0.206 | 19.6 | 268.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16447 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16448 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16449 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 117 | 6 | 584 | 0.077 | 0.206 | -2.7 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16450 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 109 | 6 | 584 | 0.077 | 0.206 | 41.8 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16451 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 130 | 6 | 584 | 0.077 | 0.206 | 19.6 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16452 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 116 | 6 | 584 | 0.077 | 0.206 | 41.8 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16453 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 100 | 6 | 584 | 0.077 | 0.206 | 64.0 | -72.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16454 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 124 | 6 | 584 | 0.077 | 0.206 | -69.4 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16455 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16456 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 103 | 6 | 584 | 0.077 | 0.206 | -69.4 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16457 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16458 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 104 | 6 | 584 | 0.077 | 0.206 | -2.7 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16459 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 114 | 6 | 584 | 0.077 | 0.206 | -24.9 | 43.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16460 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 120 | 6 | 584 | 0.077 | 0.206 | -2.7 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16461 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 101 | 6 | 584 | 0.077 | 0.206 | 19.6 | -64.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16462 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 131 | 6 | 584 | 0.077 | 0.206 | 64.0 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16463 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16464 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 120 | 6 | 584 | 0.077 | 0.206 | 41.8 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16465 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 124 | 6 | 584 | 0.077 | 0.206 | -69.4 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16466 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16467 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16468 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 116 | 6 | 584 | 0.077 | 0.206 | -69.4 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16469 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 116 | 6 | 584 | 0.077 | 0.206 | -2.7 | 60.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16470 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 109 | 6 | 584 | 0.077 | 0.206 | 41.8 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16471 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 117 | 6 | 584 | 0.077 | 0.206 | 108.5 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16472 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16473 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16474 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 147 | 6 | 584 | 0.077 | 0.206 | 19.6 | 318.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16475 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 150 | 6 | 584 | 0.077 | 0.206 | 19.6 | 342.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16476 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 9 | 120 | 6 | 584 | 0.077 | 0.206 | 130.8 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16477 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 128 | 6 | 584 | 0.077 | 0.206 | 86.3 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16478 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 109 | 6 | 584 | 0.077 | 0.206 | -2.7 | 2.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16479 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 144 | 6 | 584 | 0.077 | 0.206 | -2.7 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16480 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 124 | 6 | 584 | 0.077 | 0.206 | 64.0 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16481 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 134 | 6 | 584 | 0.077 | 0.206 | 41.8 | 209.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16482 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 112 | 6 | 584 | 0.077 | 0.206 | -47.1 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16483 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 106 | 6 | 584 | 0.077 | 0.206 | 41.8 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16484 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 131 | 6 | 584 | 0.077 | 0.206 | 86.3 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16485 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 125 | 6 | 584 | 0.077 | 0.206 | 64.0 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16486 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 108 | 6 | 584 | 0.077 | 0.206 | 41.8 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16487 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 107 | 6 | 584 | 0.077 | 0.206 | 19.6 | -14.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16488 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 125 | 6 | 584 | 0.077 | 0.206 | 41.8 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16489 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16490 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 118 | 6 | 584 | 0.077 | 0.206 | -47.1 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16491 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 143 | 6 | 584 | 0.077 | 0.206 | 64.0 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16492 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 104 | 6 | 584 | 0.077 | 0.206 | 19.6 | -39.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16493 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 119 | 6 | 584 | 0.077 | 0.206 | 64.0 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16494 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 133 | 6 | 584 | 0.077 | 0.206 | 19.6 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16495 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 129 | 6 | 584 | 0.077 | 0.206 | -24.9 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16496 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 108 | 6 | 584 | 0.077 | 0.206 | -47.1 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16497 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 144 | 6 | 584 | 0.077 | 0.206 | -24.9 | 293.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16498 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 95 | 6 | 584 | 0.077 | 0.206 | -47.1 | -114.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16499 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16500 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 139 | 6 | 584 | 0.077 | 0.206 | 64.0 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16501 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 119 | 6 | 584 | 0.077 | 0.206 | 41.8 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16502 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16503 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 135 | 6 | 584 | 0.077 | 0.206 | -24.9 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16504 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 122 | 6 | 584 | 0.077 | 0.206 | -24.9 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16505 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 121 | 6 | 584 | 0.077 | 0.206 | 19.6 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16506 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 102 | 6 | 584 | 0.077 | 0.206 | 64.0 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16507 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 126 | 6 | 584 | 0.077 | 0.206 | -2.7 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16508 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16509 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 118 | 6 | 584 | 0.077 | 0.206 | -24.9 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16510 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 99 | 6 | 584 | 0.077 | 0.206 | -24.9 | -81.0 | 3.2 | 17.5 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 16511 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16512 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 123 | 6 | 584 | 0.077 | 0.206 | 41.8 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16513 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 127 | 6 | 584 | 0.077 | 0.206 | 19.6 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16514 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 106 | 6 | 584 | 0.077 | 0.206 | 19.6 | -22.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16515 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16516 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 112 | 6 | 584 | 0.077 | 0.206 | -2.7 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16517 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 128 | 6 | 584 | 0.077 | 0.206 | -2.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16518 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 140 | 6 | 584 | 0.077 | 0.206 | 19.6 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16519 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 119 | 6 | 584 | 0.077 | 0.206 | 64.0 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16520 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 126 | 6 | 584 | 0.077 | 0.206 | -47.1 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16521 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 121 | 6 | 584 | 0.077 | 0.206 | 41.8 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16522 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 125 | 6 | 584 | 0.077 | 0.206 | 19.6 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16523 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 110 | 6 | 584 | 0.077 | 0.206 | -2.7 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16524 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 143 | 6 | 584 | 0.077 | 0.206 | 41.8 | 284.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16525 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16526 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 140 | 6 | 584 | 0.077 | 0.206 | -2.7 | 259.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16527 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 125 | 6 | 584 | 0.077 | 0.206 | -24.9 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16528 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 126 | 6 | 584 | 0.077 | 0.206 | -69.4 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16529 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16530 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 125 | 6 | 584 | 0.077 | 0.206 | 64.0 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16531 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 126 | 6 | 584 | 0.077 | 0.206 | 41.8 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16532 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 135 | 6 | 584 | 0.077 | 0.206 | -47.1 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16533 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 112 | 6 | 584 | 0.077 | 0.206 | 19.6 | 27.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16534 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 111 | 6 | 584 | 0.077 | 0.206 | -2.7 | 18.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16535 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16536 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 139 | 6 | 584 | 0.077 | 0.206 | 86.3 | 251.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16537 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 128 | 6 | 584 | 0.077 | 0.206 | -2.7 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16538 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16539 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 123 | 6 | 584 | 0.077 | 0.206 | 64.0 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16540 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 131 | 6 | 584 | 0.077 | 0.206 | -47.1 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16541 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 110 | 6 | 584 | 0.077 | 0.206 | -24.9 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16542 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 131 | 6 | 584 | 0.077 | 0.206 | 64.0 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16543 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 115 | 6 | 584 | 0.077 | 0.206 | -24.9 | 52.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16544 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16545 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 129 | 6 | 584 | 0.077 | 0.206 | -2.7 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16546 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 117 | 6 | 584 | 0.077 | 0.206 | -47.1 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16547 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 122 | 6 | 584 | 0.077 | 0.206 | 19.6 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16548 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 120 | 6 | 584 | 0.077 | 0.206 | 19.6 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16549 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 124 | 6 | 584 | 0.077 | 0.206 | 19.6 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16550 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 152 | 6 | 584 | 0.077 | 0.206 | -47.1 | 359.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16551 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 122 | 6 | 584 | 0.077 | 0.206 | -47.1 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16552 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 126 | 6 | 584 | 0.077 | 0.206 | -69.4 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16553 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 124 | 6 | 584 | 0.077 | 0.206 | 19.6 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16554 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 128 | 6 | 584 | 0.077 | 0.206 | 64.0 | 160.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16555 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 108 | 6 | 584 | 0.077 | 0.206 | 19.6 | -6.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16556 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 118 | 6 | 584 | 0.077 | 0.206 | 19.6 | 76.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16557 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 117 | 6 | 584 | 0.077 | 0.206 | -24.9 | 68.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16558 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 136 | 6 | 584 | 0.077 | 0.206 | -2.7 | 226.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16559 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 122 | 6 | 584 | 0.077 | 0.206 | -2.7 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16560 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 126 | 6 | 584 | 0.077 | 0.206 | 86.3 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16561 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 150 | 6 | 584 | 0.077 | 0.206 | 64.0 | 342.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16562 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 130 | 6 | 584 | 0.077 | 0.206 | -2.7 | 176.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16563 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16564 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 120 | 6 | 584 | 0.077 | 0.206 | -47.1 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16565 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 98 | 6 | 584 | 0.077 | 0.206 | 19.6 | -89.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16566 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 125 | 6 | 584 | 0.077 | 0.206 | -47.1 | 135.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16567 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 138 | 6 | 584 | 0.077 | 0.206 | -2.7 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16568 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 7 | 127 | 6 | 584 | 0.077 | 0.206 | 86.3 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16569 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 127 | 6 | 584 | 0.077 | 0.206 | -47.1 | 151.7 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16570 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 119 | 6 | 584 | 0.077 | 0.206 | -47.1 | 85.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16571 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 8 | 122 | 6 | 584 | 0.077 | 0.206 | 138.5 | 110.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16572 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 131 | 6 | 584 | 0.077 | 0.206 | -2.7 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16573 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16574 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 102 | 6 | 584 | 0.077 | 0.206 | -2.7 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16575 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 125 | 6 | 584 | 0.077 | 0.206 | 41.8 | 135.1 | 3.2 | 17.5 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 6 - SCAN MEASUREMENTS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | | | Scan | M5 | Floor | 16576 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 120 | 6 | 584 | 0.077 | 0.206 | -69.4 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16577 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 110 | 6 | 584 | 0.077 | 0.206 | -69.4 | 10.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16578 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 124 | 6 | 584 | 0.077 | 0.206 | 19.6 | 126.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16579 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 123 | 6 | 584 | 0.077 | 0.206 | -24.9 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16580 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 133 | 6 | 584 | 0.077 | 0.206 | -47.1 | 201.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16581 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 4 | 126 | 6 | 584 | 0.077 | 0.206 | 19.6 | 143.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16582 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 1 | 129 | 6 | 584 | 0.077 | 0.206 | -47.1 | 168.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16583 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 138 | 6 | 584 | 0.077 | 0.206 | 41.8 | 243.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16584 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 132 | 6 | 584 | 0.077 | 0.206 | -24.9 | 193.3 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16585 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 137 | 6 | 584 | 0.077 | 0.206 | -24.9 | 234.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16586 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 6 | 102 | 6 | 584 | 0.077 | 0.206 | 64.0 | -56.1 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16587 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 120 | 6 | 584 | 0.077 | 0.206 | -24.9 | 93.6 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16588 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 5 | 131 | 6 | 584 | 0.077 | 0.206 | 41.8 | 185.0 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16589 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 113 | 6 | 584 | 0.077 | 0.206 | -2.7 | 35.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16590 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 121 | 6 | 584 | 0.077 | 0.206 | -2.7 | 101.9 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16591 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 123 | 6 | 584 | 0.077 | 0.206 | -2.7 | 118.5 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16592 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 3 | 135 | 6 | 584 | 0.077 | 0.206 | -2.7 | 218.2 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16593 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 0 | 142 | 6 | 584 | 0.077 | 0.206 | -69.4 | 276.4 | 3.2 | 17.5 |
| SU 6 | | | Scan | M5 | Floor | 16594 | 9/16/2019 | Concrete | 2360 SN220263/ 43-37 PR216985 | 63.5 | 2183 | 120 | 2 | 103 | 6 | 584 | 0.077 | 0.206 | -24.9 | -47.8 | 3.2 | 17.5 |
| SU 6 | | | Scan | M9 | Floor | 16595 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 101 | 6 | 584 | 0.076 | 0.193 | -16.2 | 122.9 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16596 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 107 | 6 | 584 | 0.076 | 0.193 | -38.8 | 176.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16597 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 108 | 6 | 584 | 0.076 | 0.193 | -16.2 | 185.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16598 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 108 | 6 | 584 | 0.076 | 0.193 | -61.5 | 185.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16599 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 98 | 6 | 584 | 0.076 | 0.193 | -16.2 | 96.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16600 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 100 | 6 | 584 | 0.076 | 0.193 | -38.8 | 114.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16601 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 92 | 6 | 584 | 0.076 | 0.193 | -61.5 | 43.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16602 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 98 | 6 | 584 | 0.076 | 0.193 | 6.4 | 96.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16603 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 119 | 6 | 584 | 0.076 | 0.193 | -16.2 | 282.6 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16604 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 116 | 6 | 584 | 0.076 | 0.193 | -16.2 | 256.0 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16605 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 114 | 6 | 584 | 0.076 | 0.193 | -16.2 | 238.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16606 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 122 | 6 | 584 | 0.076 | 0.193 | 6.4 | 309.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16607 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 102 | 6 | 584 | 0.076 | 0.193 | -16.2 | 131.8 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16608 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 103 | 6 | 584 | 0.076 | 0.193 | -16.2 | 140.7 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16609 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 100 | 6 | 584 | 0.076 | 0.193 | -16.2 | 114.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16610 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 109 | 6 | 584 | 0.076 | 0.193 | 6.4 | 193.9 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16611 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 111 | 6 | 584 | 0.076 | 0.193 | -38.8 | 211.7 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16612 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 113 | 6 | 584 | 0.076 | 0.193 | 6.4 | 229.4 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16613 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 123 | 6 | 584 | 0.076 | 0.193 | 6.4 | 318.1 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16614 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 115 | 6 | 584 | 0.076 | 0.193 | -38.8 | 247.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16615 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 110 | 6 | 584 | 0.076 | 0.193 | 6.4 | 202.8 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16616 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 112 | 6 | 584 | 0.076 | 0.193 | -16.2 | 220.5 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16617 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 107 | 6 | 584 | 0.076 | 0.193 | -61.5 | 176.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16618 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 98 | 6 | 584 | 0.076 | 0.193 | 6.4 | 96.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16619 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 112 | 6 | 584 | 0.076 | 0.193 | 6.4 | 220.5 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16620 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 117 | 6 | 584 | 0.076 | 0.193 | 6.4 | 264.9 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16621 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 118 | 6 | 584 | 0.076 | 0.193 | 6.4 | 273.8 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16622 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 114 | 6 | 584 | 0.076 | 0.193 | -16.2 | 238.3 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16623 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 121 | 6 | 584 | 0.076 | 0.193 | 6.4 | 300.4 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16624 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 115 | 6 | 584 | 0.076 | 0.193 | 6.4 | 247.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16625 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 97 | 6 | 584 | 0.076 | 0.193 | -16.2 | 87.5 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16626 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 110 | 6 | 584 | 0.076 | 0.193 | -61.5 | 202.8 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16627 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 109 | 6 | 584 | 0.076 | 0.193 | -61.5 | 193.9 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16628 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 119 | 6 | 584 | 0.076 | 0.193 | -38.8 | 282.6 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16629 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 115 | 6 | 584 | 0.076 | 0.193 | -16.2 | 247.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16630 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 110 | 6 | 584 | 0.076 | 0.193 | -38.8 | 202.8 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16631 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 99 | 6 | 584 | 0.076 | 0.193 | 6.4 | 105.2 | 3.0 | 15.7 |
| SU 6 | | | Scan | M9 | Floor | 16632 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 110 | 6 | 584 | 0.076 | 0.193 | -61.5 | 202.8 | 3.0 | 15.7 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | MH | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU6 | | GR-1 | Scan | M2 | Floor | 1 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 77 | 6 | 584 | 0.067 | 0.190 | 114.0 | 8.3 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 2 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 77 | 6 | 584 | 0.067 | 0.190 | 114.0 | 8.3 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 3 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 80 | 6 | 584 | 0.067 | 0.190 | 88.4 | 35.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 4 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 71 | 6 | 584 | 0.067 | 0.190 | 114.0 | -45.8 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 5 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 6 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 7 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 75 | 6 | 584 | 0.067 | 0.190 | 62.9 | -9.7 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 8 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 90 | 6 | 584 | 0.067 | 0.190 | 139.5 | 125.5 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 9 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 82 | 6 | 584 | 0.067 | 0.190 | -13.8 | 53.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 10 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 11 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 12 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 85 | 6 | 584 | 0.067 | 0.190 | 88.4 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 13 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 84 | 6 | 584 | 0.067 | 0.190 | 11.8 | 71.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 14 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 15 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 88 | 6 | 584 | 0.067 | 0.190 | 11.8 | 107.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 16 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 100 | 6 | 584 | 0.067 | 0.190 | 39.4 | 215.6 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 17 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 87 | 6 | 584 | 0.067 | 0.190 | 37.3 | 98.4 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 18 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 97 | 6 | 584 | 0.067 | 0.190 | 88.4 | 188.6 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 19 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 104 | 6 | 584 | 0.067 | 0.190 | 37.3 | 251.6 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 20 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 76 | 6 | 584 | 0.067 | 0.190 | 39.4 | -0.7 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 21 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 79 | 6 | 584 | 0.067 | 0.190 | 11.8 | 26.3 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 22 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 75 | 6 | 584 | 0.067 | 0.190 | 37.3 | -9.7 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 23 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 89 | 6 | 584 | 0.067 | 0.190 | 39.4 | 116.5 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 24 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 105 | 6 | 584 | 0.067 | 0.190 | -13.8 | 260.7 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 25 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 68 | 6 | 584 | 0.067 | 0.190 | 11.8 | -72.8 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 26 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 92 | 6 | 584 | 0.067 | 0.190 | 11.8 | 143.5 | 2.3 | 14.6 |
| SU6 | | GR-1 | Scan | M2 | Floor | 27 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 104 | 6 | 584 | 0.067 | 0.190 | 11.8 | 251.6 | 2.3 | 14.6 |
| SU6 | | GR-10 | Scan | M9 | Floor | 28 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 70 | 6 | 584 | 0.076 | 0.193 | 61.5 | 152.1 | 3.0 | 15.7 |
| SU6 | | GR-10 | Scan | M9 | Floor | 29 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 62 | 6 | 584 | 0.076 | 0.193 | 16.2 | -223.1 | 3.0 | 15.7 |
| SU6 | | GR-10 | Scan | M9 | Floor | 30 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 79 | 6 | 584 | 0.076 | 0.193 | 16.2 | -72.2 | 3.0 | 15.7 |
| SU6 | | GR-10 | Scan | M9 | Floor | 31 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 77 | 6 | 584 | 0.076 | 0.193 | -38.8 | -90.0 | 3.0 | 15.7 |
| SU6 | | GR-11 | Scan | M9 | Floor | 32 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 70 | 6 | 584 | 0.076 | 0.193 | 16.2 | -152.1 | 3.0 | 15.7 |
| SU6 | | GR-11 | Scan | M9 | Floor | 33 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 62 | 6 | 584 | 0.076 | 0.193 | 16.2 | -223.1 | 3.0 | 15.7 |
| SU6 | | GR-11 | Scan | M9 | Floor | 34 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 79 | 6 | 584 | 0.076 | 0.193 | -38.8 | -72.2 | 3.0 | 15.7 |
| SU6 | | GR-11 | Scan | M9 | Floor | 35 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 77 | 6 | 584 | 0.076 | 0.193 | -16.2 | -90.0 | 3.0 | 15.7 |
| SU6 | | GR-12 | Scan | M9 | Floor | 36 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 80 | 6 | 584 | 0.076 | 0.193 | -61.5 | -63.4 | 3.0 | 15.7 |
| SU6 | | GR-12 | Scan | M9 | Floor | 37 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 93 | 6 | 584 | 0.076 | 0.193 | 61.5 | 52.0 | 3.0 | 15.7 |
| SU6 | | GR-12 | Scan | M9 | Floor | 38 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 73 | 6 | 584 | 0.076 | 0.193 | 38.8 | 125.5 | 3.0 | 15.7 |
| SU6 | | GR-12 | Scan | M9 | Floor | 39 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 73 | 6 | 584 | 0.076 | 0.193 | 61.5 | 125.5 | 3.0 | 15.7 |
| SU6 | | GR-13 | Scan | M9 | Floor | 40 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 80 | 6 | 584 | 0.076 | 0.193 | 38.8 | -63.4 | 3.0 | 15.7 |
| SU6 | | GR-13 | Scan | M9 | Floor | 41 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 92 | 6 | 584 | 0.076 | 0.193 | 38.8 | 43.1 | 3.0 | 15.7 |
| SU6 | | GR-13 | Scan | M9 | Floor | 42 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 3 | 81 | 6 | 584 | 0.076 | 0.193 | 6.4 | -54.5 | 3.0 | 15.7 |
| SU6 | | GR-13 | Scan | M9 | Floor | 43 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 79 | 6 | 584 | 0.076 | 0.193 | 61.5 | -72.2 | 3.0 | 15.7 |
| SU6 | | GR-14 | Scan | M2 | Floor | 44 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | -13.8 | 44.4 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 45 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 106 | 6 | 584 | 0.067 | 0.190 | -13.8 | 269.7 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 46 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 71 | 6 | 584 | 0.067 | 0.190 | 39.4 | -45.8 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 47 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 109 | 6 | 584 | 0.067 | 0.190 | 39.4 | 296.7 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 48 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 61 | 6 | 584 | 0.067 | 0.190 | 13.8 | -135.9 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 49 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 78 | 6 | 584 | 0.067 | 0.190 | 39.4 | 17.3 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 50 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 91 | 6 | 584 | 0.067 | 0.190 | 13.8 | 134.5 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 51 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 66 | 6 | 584 | 0.067 | 0.190 | 39.4 | -90.8 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 52 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 81 | 6 | 584 | 0.067 | 0.190 | 13.8 | 44.4 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 53 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 54 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 53 | 6 | 584 | 0.067 | 0.190 | -13.8 | -208.0 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 55 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 63 | 6 | 584 | 0.067 | 0.190 | 37.3 | 117.9 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 56 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 69 | 6 | 584 | 0.067 | 0.190 | 11.8 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-14 | Scan | M2 | Floor | 57 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 85 | 6 | 584 | 0.067 | 0.190 | 88.4 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 58 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 90 | 6 | 584 | 0.067 | 0.190 | 39.4 | 125.5 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 59 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 72 | 6 | 584 | 0.067 | 0.190 | 62.9 | -36.7 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 60 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 74 | 6 | 584 | 0.067 | 0.190 | -13.8 | -18.7 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 61 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 85 | 6 | 584 | 0.067 | 0.190 | 39.4 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 62 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 67 | 6 | 584 | 0.067 | 0.190 | -13.8 | -81.8 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 63 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 59 | 6 | 584 | 0.067 | 0.190 | -39.4 | -153.9 | 2.3 | 14.6 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | MH | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU6 | | GR-15 | Scan | M2 | Floor | 64 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 65 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 72 | 6 | 584 | 0.067 | 0.190 | -13.8 | -36.7 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 66 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 85 | 6 | 584 | 0.067 | 0.190 | 11.8 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 67 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 82 | 6 | 584 | 0.067 | 0.190 | 190.7 | 53.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 68 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 95 | 6 | 584 | 0.067 | 0.190 | 88.4 | 170.5 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 69 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 85 | 6 | 584 | 0.067 | 0.190 | -13.8 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 70 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 73 | 6 | 584 | 0.067 | 0.190 | -13.8 | -27.7 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 71 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 79 | 6 | 584 | 0.067 | 0.190 | -13.8 | 26.3 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 72 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | -39.4 | 71.4 | 2.3 | 14.6 |
| SU6 | | GR-15 | Scan | M2 | Floor | 73 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 49 | 6 | 584 | 0.067 | 0.190 | -13.8 | -244.0 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 74 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 70 | 6 | 584 | 0.067 | 0.190 | 114.0 | -54.8 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 75 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 88 | 6 | 584 | 0.067 | 0.190 | 37.3 | 107.4 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 76 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 71 | 6 | 584 | 0.067 | 0.190 | 11.8 | -45.8 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 77 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 69 | 6 | 584 | 0.067 | 0.190 | 37.3 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 78 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 72 | 6 | 584 | 0.067 | 0.190 | -39.4 | -36.7 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 79 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 89 | 6 | 584 | 0.067 | 0.190 | 11.8 | 116.5 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 80 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 69 | 6 | 584 | 0.067 | 0.190 | -39.4 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 81 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 89 | 6 | 584 | 0.067 | 0.190 | 88.4 | 116.5 | 2.3 | 14.6 |
| SU6 | | GR-2 | Scan | M2 | Floor | 82 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 83 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 74 | 6 | 584 | 0.067 | 0.190 | 37.3 | -18.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 84 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 68 | 6 | 584 | 0.067 | 0.190 | 37.3 | -72.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 85 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 66 | 6 | 584 | 0.067 | 0.190 | -13.8 | -90.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 86 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 65 | 6 | 584 | 0.067 | 0.190 | -13.8 | -99.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 87 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 62 | 6 | 584 | 0.067 | 0.190 | 11.8 | -126.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 88 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 59 | 6 | 584 | 0.067 | 0.190 | -39.4 | -153.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 89 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 57 | 6 | 584 | 0.067 | 0.190 | 37.3 | -171.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 90 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 75 | 6 | 584 | 0.067 | 0.190 | -13.8 | -9.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 91 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 77 | 6 | 584 | 0.067 | 0.190 | 13.8 | 8.3 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 92 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 69 | 6 | 584 | 0.067 | 0.190 | 39.4 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 93 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 77 | 6 | 584 | 0.067 | 0.190 | 11.8 | 8.3 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 94 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 59 | 6 | 584 | 0.067 | 0.190 | -13.8 | -153.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 95 | 9/10/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 59 | 6 | 584 | 0.067 | 0.190 | 37.3 | -153.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 96 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 96 | 6 | 584 | 0.067 | 0.190 | 37.3 | 179.5 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 97 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 74 | 6 | 584 | 0.067 | 0.190 | -39.4 | -18.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 98 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 92 | 6 | 584 | 0.067 | 0.190 | 62.9 | 143.5 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 99 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 100 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 84 | 6 | 584 | 0.067 | 0.190 | 39.4 | 71.4 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 101 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 83 | 6 | 584 | 0.067 | 0.190 | 11.8 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 102 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | 39.4 | 161.5 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 103 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 94 | 6 | 584 | 0.067 | 0.190 | -13.8 | 161.5 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 104 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 84 | 6 | 584 | 0.067 | 0.190 | 37.3 | 71.4 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 105 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 100 | 6 | 584 | 0.067 | 0.190 | -13.8 | 215.6 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 106 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 68 | 6 | 584 | 0.067 | 0.190 | -13.8 | -72.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 107 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 78 | 6 | 584 | 0.067 | 0.190 | 11.8 | 17.3 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 108 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 62 | 6 | 584 | 0.067 | 0.190 | 39.4 | -126.9 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 109 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 71 | 6 | 584 | 0.067 | 0.190 | 62.9 | -45.8 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 110 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 75 | 6 | 584 | 0.067 | 0.190 | 39.4 | -9.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 111 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 75 | 6 | 584 | 0.067 | 0.190 | 11.8 | -9.7 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 112 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 85 | 6 | 584 | 0.067 | 0.190 | 133.5 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-3 | Scan | M2 | Floor | 113 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 92 | 6 | 584 | 0.067 | 0.190 | 190.7 | 143.5 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 114 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 85 | 6 | 584 | 0.067 | 0.190 | 37.3 | 80.4 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 115 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 89 | 6 | 584 | 0.067 | 0.190 | -13.8 | 116.5 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 116 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 83 | 6 | 584 | 0.067 | 0.190 | 62.9 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 117 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 76 | 6 | 584 | 0.067 | 0.190 | -13.8 | -0.7 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 118 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 64 | 6 | 584 | 0.067 | 0.190 | 37.3 | 108.8 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 119 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 8 | 79 | 6 | 584 | 0.067 | 0.190 | 165.1 | 26.3 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 120 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | 39.4 | 26.3 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 121 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 83 | 6 | 584 | 0.067 | 0.190 | 39.4 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 122 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 92 | 6 | 584 | 0.067 | 0.190 | 37.3 | 143.5 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 123 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 81 | 6 | 584 | 0.067 | 0.190 | 37.3 | 44.4 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 124 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 68 | 6 | 584 | 0.067 | 0.190 | 11.8 | -72.8 | 2.3 | 14.6 |
| SU6 | | GR-4 | Scan | M2 | Floor | 125 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 87 | 6 | 584 | 0.067 | 0.190 | -13.8 | 98.4 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 126 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 79 | 6 | 584 | 0.067 | 0.190 | -39.4 | 26.3 | 2.3 | 14.6 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SCAN ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | M/I | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU6 | | GR-5 | Scan | M2 | Floor | 127 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 57 | 6 | 584 | 0.067 | 0.190 | 37.3 | -171.9 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 128 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 64 | 6 | 584 | 0.067 | 0.190 | 11.8 | -108.8 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 129 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 63 | 6 | 584 | 0.067 | 0.190 | 88.4 | -117.9 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 130 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 61 | 6 | 584 | 0.067 | 0.190 | 37.3 | -135.9 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 131 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 69 | 6 | 584 | 0.067 | 0.190 | 37.3 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 132 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 65 | 6 | 584 | 0.067 | 0.190 | 37.3 | -99.8 | 2.3 | 14.6 |
| SU6 | | GR-5 | Scan | M2 | Floor | 133 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 87 | 6 | 584 | 0.067 | 0.190 | 62.9 | 98.4 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 134 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 93 | 6 | 584 | 0.067 | 0.190 | -39.4 | 152.5 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 135 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 83 | 6 | 584 | 0.067 | 0.190 | 37.3 | 62.4 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 136 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 94 | 6 | 584 | 0.067 | 0.190 | 39.4 | 161.5 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 137 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 57 | 6 | 584 | 0.067 | 0.190 | 13.8 | 171.9 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 138 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 102 | 6 | 584 | 0.067 | 0.190 | 13.8 | 233.6 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 139 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 81 | 6 | 584 | 0.067 | 0.190 | 11.8 | 44.4 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 140 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 1 | 90 | 6 | 584 | 0.067 | 0.190 | 13.8 | 125.5 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 141 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 74 | 6 | 584 | 0.067 | 0.190 | 114.0 | -18.7 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 142 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 92 | 6 | 584 | 0.067 | 0.190 | 133.5 | 143.5 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 143 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 69 | 6 | 584 | 0.067 | 0.190 | 11.8 | -63.8 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 144 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 76 | 6 | 584 | 0.067 | 0.190 | 11.8 | -0.7 | 2.3 | 14.6 |
| SU6 | | GR-6 | Scan | M2 | Floor | 145 | 9/6/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 0 | 82 | 6 | 584 | 0.067 | 0.190 | 39.4 | 53.4 | 2.3 | 14.6 |
| SU6 | | GR-7 | Scan | M9 | Floor | 146 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 82 | 6 | 584 | 0.076 | 0.193 | 61.5 | -45.6 | 3.0 | 15.7 |
| SU6 | | GR-7 | Scan | M9 | Floor | 147 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 79 | 6 | 584 | 0.076 | 0.193 | 16.2 | -72.2 | 3.0 | 15.7 |
| SU6 | | GR-7 | Scan | M9 | Floor | 148 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 68 | 6 | 584 | 0.076 | 0.193 | 16.2 | -169.8 | 3.0 | 15.7 |
| SU6 | | GR-7 | Scan | M9 | Floor | 149 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 73 | 6 | 584 | 0.076 | 0.193 | 38.8 | -125.5 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 150 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 73 | 6 | 584 | 0.076 | 0.193 | 38.8 | -125.5 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 151 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 87 | 6 | 584 | 0.076 | 0.193 | 38.8 | -1.3 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 152 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 108 | 6 | 584 | 0.076 | 0.193 | 38.8 | 185.1 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 153 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 76 | 6 | 584 | 0.076 | 0.193 | 38.8 | -98.9 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 154 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 57 | 6 | 584 | 0.076 | 0.193 | 16.2 | 267.4 | 3.0 | 15.7 |
| SU6 | | GR-8 | Scan | M9 | Floor | 155 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 96 | 6 | 584 | 0.076 | 0.193 | 16.2 | 78.6 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 156 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 60 | 6 | 584 | 0.076 | 0.193 | 61.5 | 240.8 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 157 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 83 | 6 | 584 | 0.076 | 0.193 | 16.2 | -36.8 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 158 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 2 | 98 | 6 | 584 | 0.076 | 0.193 | 16.2 | 96.3 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 159 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 0 | 95 | 6 | 584 | 0.076 | 0.193 | 61.5 | 69.7 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 160 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 98 | 6 | 584 | 0.076 | 0.193 | 38.8 | 96.3 | 3.0 | 15.7 |
| SU6 | | GR-9 | Scan | M9 | Floor | 161 | 3/10/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 1 | 91 | 6 | 584 | 0.076 | 0.193 | 38.8 | 34.2 | 3.0 | 15.7 |

# Finger Piers Alpha Scan Data Summary Statistics

General Statistics for Uncensored Data Sets

| Variable | NumObs | # Missing | Minimum | Maximum | Mean | Geo-Mean | SD | SEM | MAD/0.675 | Skewness | CV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Alpha | 32306 | 0 | -69.38 | 330.9 | 15.62 | N/A | 49.16 | 0.273 | 41.85 | 0.886 | 3.147 |
| SU 5 Alpha | 37500 | 0 | -69.38 | 264.2 | 5.007 | N/A | 43.91 | 0.227 | 41.07 | 0.916 | 8.768 |
| SU 6 Alpha | 16632 | 0 | -69.38 | 267.3 | 1.25 | N/A | 40.23 | 0.312 | 34.31 | 0.921 | 32.19 |
| SU 4 Manhole Alpha | 415 | 0 | -61.47 | 152.6 | -28.82 | N/A | 31.44 | 1.543 | 38.46 | 1.671 | -1.091 |
| SU 5 Manhole Alpha | 449 | 0 | -54.94 | 204.5 | -5.161 | N/A | 40.49 | 1.911 | 37.89 | 1.711 | -7.845 |
| SU 6 Manhole Alpha | 161 | 0 | -61.47 | 190.7 | 6.369 | N/A | 51.66 | 4.072 | 37.89 | 1.329 | 8.112 |

Percentiles for Uncensored Data Sets

| Variable | NumObs | # Missing | 10%ile | 20%ile | 25%ile(Q1) | 50%ile(Q2) | 75%ile(Q3) | 80%ile | 90%ile | 95%ile | 99%ile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Alpha | 32306 | 0 | -47.14 | -26.32 | -24.91 | -0.767 | 41.81 | 50.35 | 85.33 | 108.5 | 154.7 |
| SU 5 Alpha | 37500 | 0 | -47.14 | -30.37 | -30.37 | -2.669 | 37.31 | 39.05 | 62.87 | 86.28 | 131.6 |
| SU 6 Alpha | 16632 | 0 | -47.14 | -30.37 | -30.37 | -7.231 | 15.91 | 37.31 | 62.19 | 85.33 | 114 |
| SU 4 Manhole Alpha | 415 | 0 | -54.94 | -54.94 | -54.94 | -28.99 | -3.048 | -3.048 | 2.615 | 22.9 | 74.78 |
| SU 5 Manhole Alpha | 449 | 0 | -39.36 | -39.36 | -39.36 | -13.8 | 11.76 | 16.21 | 37.31 | 62.87 | 152.6 |
| SU 6 Manhole Alpha | 161 | 0 | -39.36 | -39.36 | -38.85 | -13.8 | 37.31 | 37.31 | 88.43 | 114 | 175.3 |

# Finger Piers Beta Scan Data Summary Statistics

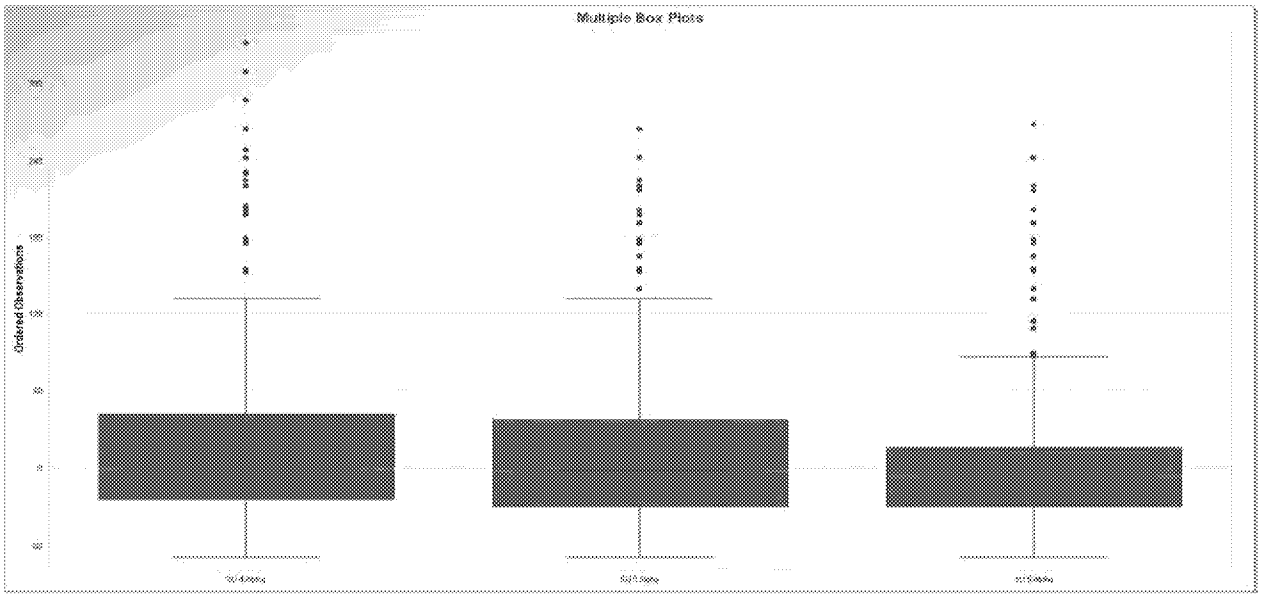
General Statistics for Uncensored Data Sets

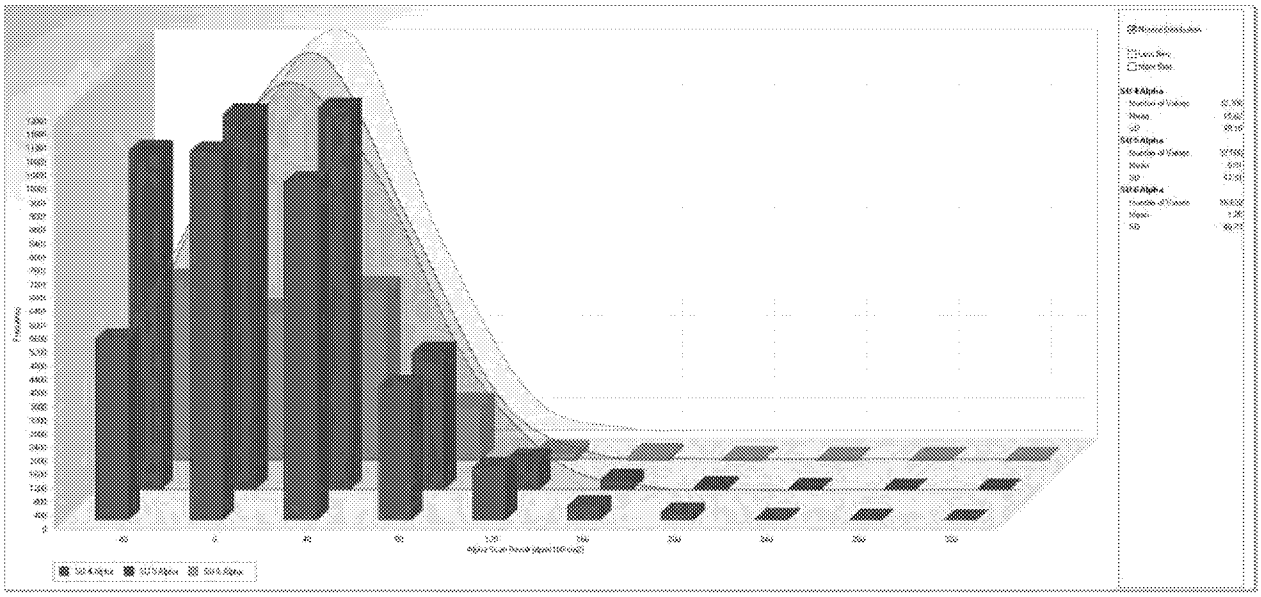
| Variable | NumObs | # Missing | Minimum | Maximum | Mean | Geo-Mean | SD | SEM | MAD/0.675 | Skewness | CV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Beta | 32306 | 0 | -817.7 | 588.9 | 29.98 | N/A | 146.7 | 0.816 | 131.9 | -0.857 | 4.894 |
| SU 5 Beta | 37500 | 0 | -759.2 | 576.1 | 46.85 | N/A | 118.7 | 0.613 | 119.3 | 0.177 | 2.533 |
| SU 6 Beta | 16632 | 0 | -903.9 | 549 | 21.17 | N/A | 141.6 | 1.098 | 149.4 | 0.102 | 6.687 |
| SU 4 Manhole Beta | 415 | 0 | -551.3 | 417.6 | -199.4 | N/A | 99.12 | 4.866 | 98.11 | 0.978 | -0.497 |
| SU 5 Manhole Beta | 449 | 0 | -343.5 | 260.7 | -39.42 | N/A | 110.5 | 5.213 | 106.9 | 0.0456 | -2.802 |
| SU 6 Manhole Beta | 161 | 0 | -267.4 | 296.7 | 6.165 | N/A | 114.9 | 9.053 | 119.4 | 0.0822 | 18.63 |

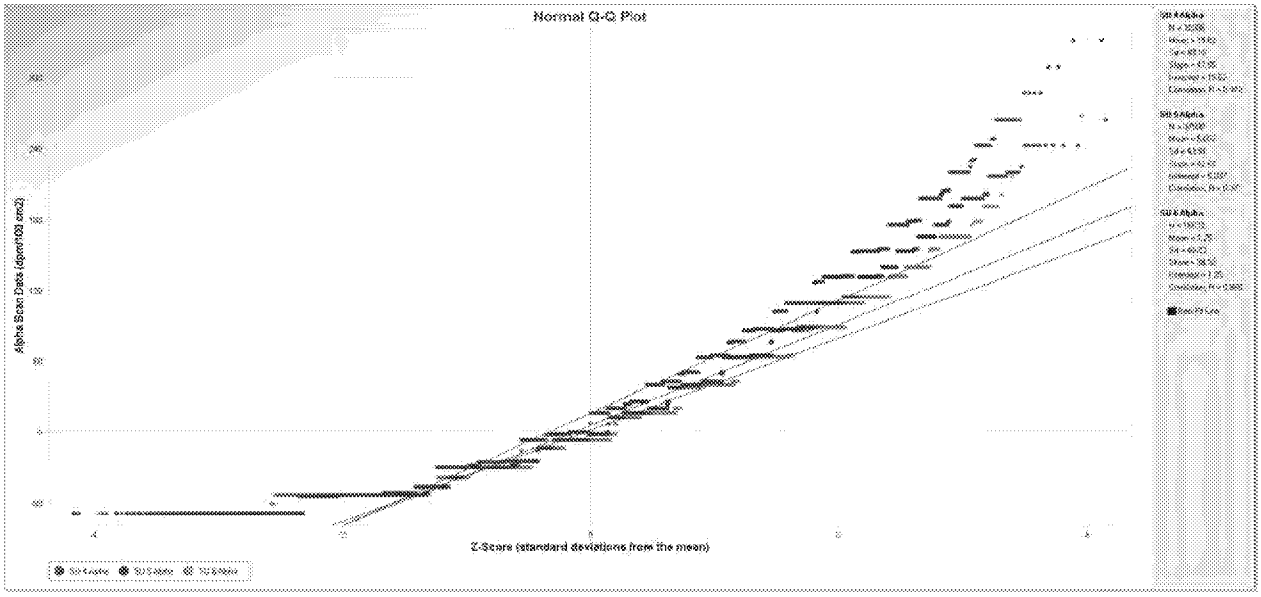
Percentiles for Uncensored Data Sets

| Variable | NumObs | # Missing | 10%ile | 20%ile | 25%ile(Q1) | 50%ile(Q2) | 75%ile(Q3) | 80%ile | 90%ile | 95%ile | 99%ile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Beta | 32306 | 0 | -152.7 | -72.48 | -47.75 | 43.68 | 126.8 | 143.4 | 195.8 | 239.4 | 318.1 |
| SU 5 Beta | 37500 | 0 | -99.24 | -54.65 | -36.81 | 43.68 | 125.5 | 143.5 | 197.6 | 248.6 | 341.8 |
| SU 6 Beta | 16632 | 0 | -152.7 | -99.24 | -81.4 | 10.43 | 116.5 | 143.5 | 212.9 | 268.1 | 350.8 |
| SU 4 Manhole Beta | 415 | 0 | -310.4 | -277.3 | -269 | -202.8 | -143.2 | -128.4 | -87.02 | -45.66 | 41.09 |
| SU 5 Manhole Beta | 449 | 0 | -178 | -136.7 | -117.9 | -36.75 | 26.34 | 53.38 | 116.5 | 143.5 | 220.3 |
| SU 6 Manhole Beta | 161 | 0 | -135.9 | -90.82 | -72.24 | 8.314 | 80.41 | 98.44 | 143.5 | 188.6 | 264.3 |

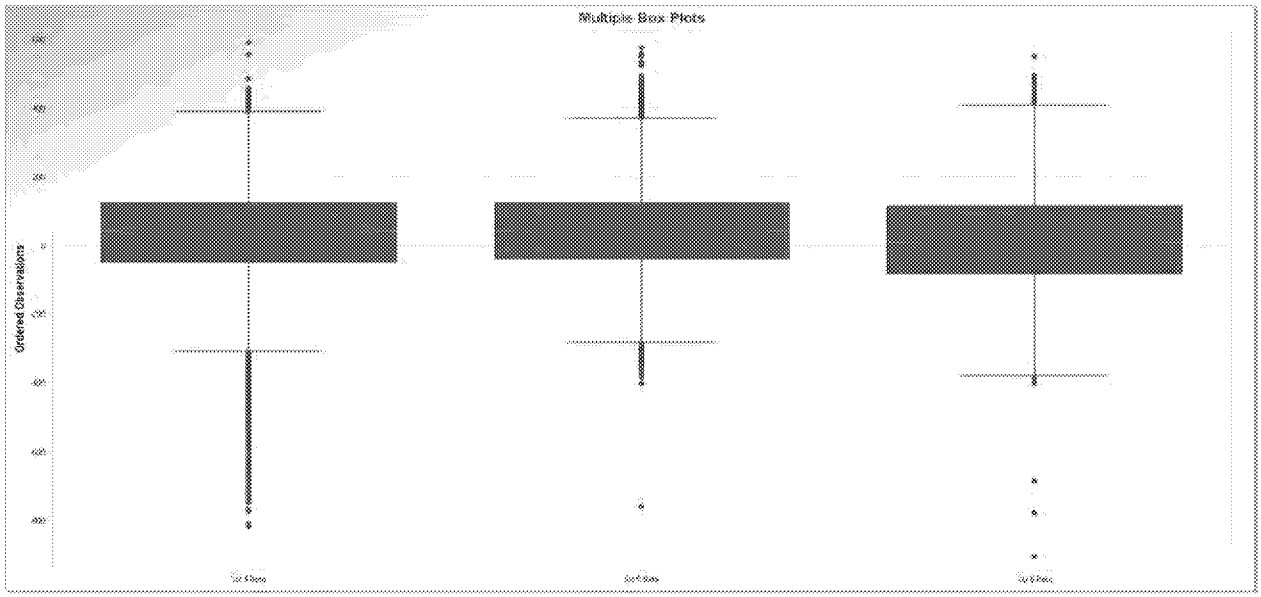
# Finger Piers Alpha Scan Data Plots

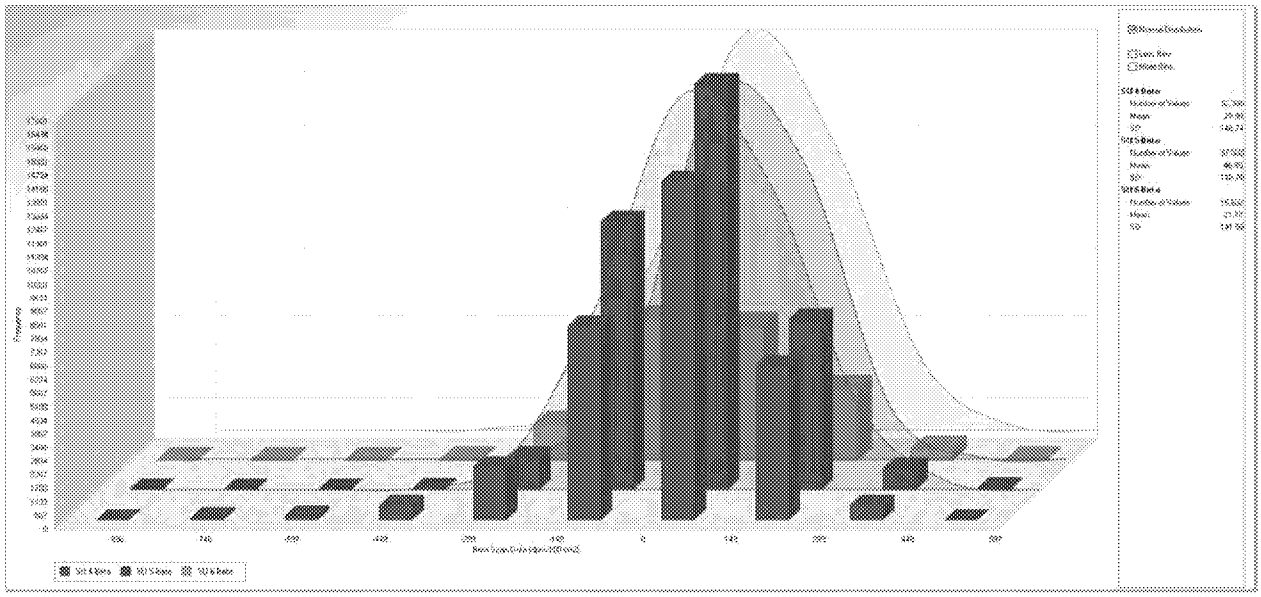


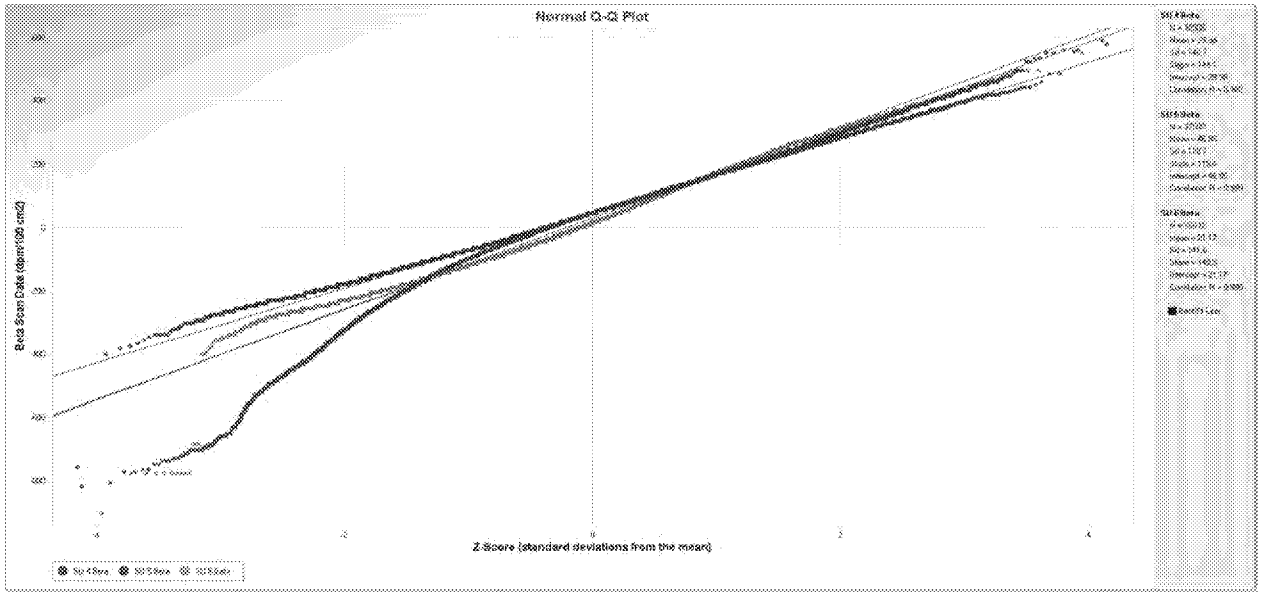





# Finger Piers Beta Scan Data Plots





# Finger Piers Alpha and Beta Scan Data Distribution Analysis

| Survey Unit | Data Set | Normal? | BTV | Basis | Exceedances |
|---|---|---|---|---|---|
| 4 | Alpha Scan | No | 244.9 | 95% USL | 18 |
| | Alpha Manhole | No | 85.76 | 95% USL | 3 |
| 5 | Alpha Scan | No | 211.1 | 95% USL | 25 |
| | Alpha Manhole | No | 143.3 | 95% USL | 6 |
| 6 | Alpha Scan | No | 183.3 | 95% USL | 13 |
| | Alpha Manhole | No | 180.2 | 95% USL | 2 |

| Survey Unit | Data Set | Normal? | BTV | Basis | Exceedances |
|---|---|---|---|---|---|
| 4 | Beta Scan | No | 714.3 | 95% USL | 0 |
| | Beta Manhole | No | 161.8 | 95% USL | 2 |
| 5 | Beta Scan | No | 604 | 95% USL | 0 |
| | Beta Manhole | No | 365.5 | 95% USL | 0 |
| 6 | Beta Scan | No | 661.8 | 95% USL | 0 |
| | Beta Manhole | No | 392.7 | 95% USL | 0 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 4 - STATIC ALPHA BETA MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 | FSS | | Static | M3 | Floor | 1 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 26 | 1943 | 120 | 584 | 0.074 | 0.192 | -23.4 | 89.4 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 2 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 21 | 2029 | 120 | 584 | 0.074 | 0.192 | 29.2 | 127.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 3 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 39 | 2093 | 120 | 584 | 0.074 | 0.192 | -8.4 | 156.3 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 4 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 25 | 2026 | 120 | 584 | 0.074 | 0.192 | 24.6 | 126.4 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 5 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 2207 | 120 | 584 | 0.074 | 0.192 | -18.8 | 207.1 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 6 | 9/19/2019 | Metal | 2360 SN215271/ 43-37 PR216985 | 10 | 833 | 120 | 10 | 1623 | 120 | 584 | 0.074 | 0.192 | -0.6 | 352.3 | 5.8 | 49.0 |
| SU 4 | FSS | | Static | M3 | Floor | 7 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 51 | 2243 | 120 | 584 | 0.074 | 0.192 | 5.5 | 223.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 8 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 20 | 2013 | 120 | 584 | 0.074 | 0.192 | -30.4 | 120.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 9 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 26 | 2103 | 120 | 584 | 0.074 | 0.192 | -23.4 | 160.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 10 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 33 | 2124 | 120 | 584 | 0.074 | 0.192 | 15.3 | 170.1 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 11 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 47 | 2112 | 120 | 584 | 0.074 | 0.192 | 0.9 | 164.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 12 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 22 | 2124 | 120 | 584 | 0.074 | 0.192 | -28.1 | 170.1 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 13 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 27 | 2173 | 120 | 584 | 0.074 | 0.192 | -22.3 | 191.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 14 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 23 | 2226 | 120 | 584 | 0.074 | 0.192 | -26.9 | 215.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 15 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 18 | 2190 | 120 | 584 | 0.074 | 0.192 | -32.7 | 199.5 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 16 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 27 | 2063 | 120 | 584 | 0.074 | 0.192 | -22.3 | 142.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 17 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 19 | 2078 | 120 | 584 | 0.074 | 0.192 | -31.5 | 149.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 18 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 23 | 2137 | 120 | 584 | 0.074 | 0.192 | -26.9 | 175.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 19 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 43 | 2169 | 120 | 584 | 0.074 | 0.192 | 3.8 | 190.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 20 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 22 | 2173 | 120 | 584 | 0.074 | 0.192 | -28.1 | 191.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 21 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 27 | 2134 | 120 | 584 | 0.074 | 0.192 | 22.3 | 174.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 22 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 23 | 2092 | 120 | 584 | 0.074 | 0.192 | 26.9 | 155.8 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 23 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 32 | 2104 | 120 | 584 | 0.074 | 0.192 | -16.5 | 161.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 24 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 22 | 2091 | 120 | 584 | 0.074 | 0.192 | -28.1 | 155.4 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 25 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 2202 | 120 | 584 | 0.074 | 0.192 | -18.8 | 204.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 26 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 2074 | 120 | 584 | 0.074 | 0.192 | -18.8 | 147.8 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 27 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 29 | 2114 | 120 | 584 | 0.074 | 0.192 | -20.0 | 165.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 28 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 55 | 2191 | 120 | 584 | 0.074 | 0.192 | 10.1 | 200.0 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 29 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 25 | 2068 | 120 | 584 | 0.074 | 0.192 | 24.6 | 145.1 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 30 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 50 | 2185 | 120 | 584 | 0.074 | 0.192 | 4.3 | 197.3 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 31 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 48 | 2306 | 120 | 584 | 0.074 | 0.192 | 2.0 | 251.3 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 32 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 55 | 2163 | 120 | 584 | 0.074 | 0.192 | 10.1 | 187.5 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 33 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 50 | 2090 | 120 | 584 | 0.074 | 0.192 | 4.3 | 154.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 34 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 35 | 2096 | 120 | 584 | 0.074 | 0.192 | -13.0 | 157.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 35 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 53 | 2172 | 120 | 584 | 0.074 | 0.192 | 7.8 | 191.5 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 36 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 43 | 2132 | 120 | 584 | 0.074 | 0.192 | -3.8 | 173.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 37 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 46 | 2209 | 120 | 584 | 0.074 | 0.192 | 0.3 | 208.0 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 38 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 32 | 2148 | 120 | 584 | 0.074 | 0.192 | -16.5 | 180.8 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 39 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 32 | 2169 | 120 | 584 | 0.074 | 0.192 | -16.5 | 190.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 40 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 36 | 2075 | 120 | 584 | 0.074 | 0.192 | -11.9 | 148.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 41 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 27 | 2090 | 120 | 584 | 0.074 | 0.192 | -22.3 | 154.9 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 42 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 42 | 2191 | 120 | 584 | 0.074 | 0.192 | -4.9 | 200.0 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 43 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 38 | 2078 | 120 | 584 | 0.074 | 0.192 | -9.5 | 149.6 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 44 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 37 | 2074 | 120 | 584 | 0.074 | 0.192 | -10.7 | 147.8 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 45 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 36 | 2112 | 120 | 584 | 0.074 | 0.192 | 11.9 | 164.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 46 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 35 | 2012 | 120 | 584 | 0.074 | 0.192 | 13.0 | 120.2 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 47 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 23 | 2092 | 120 | 584 | 0.074 | 0.192 | 26.9 | 155.8 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 48 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 28 | 2028 | 120 | 584 | 0.074 | 0.192 | 21.1 | 127.3 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 49 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 37 | 2014 | 120 | 584 | 0.074 | 0.192 | 10.7 | 121.0 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 50 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 1963 | 120 | 584 | 0.074 | 0.192 | 18.8 | 98.3 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 51 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 1996 | 120 | 584 | 0.074 | 0.192 | -18.8 | 113.0 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 52 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 18 | 2011 | 120 | 584 | 0.074 | 0.192 | -32.7 | 119.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 53 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 28 | 1993 | 120 | 584 | 0.074 | 0.192 | -21.1 | 111.7 | 11.8 | 70.7 |
| SU 4 | FSS | | Static | M3 | Floor | 54 | 9/19/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 25 | 2096 | 120 | 584 | 0.074 | 0.192 | -24.6 | 157.6 | 11.8 | 70.7 |

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 4 - STATIC ALPHA BETA MEASUREMENTS - BIAS**

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 | Bias | | Static | M3 | Floor | 1 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 56 | 1972 | 120 | 584 | 0.074 | 0.192 | 11.3 | 102.3 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 2 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 62 | 1904 | 120 | 584 | 0.074 | 0.192 | 18.2 | 72.0 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 3 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 75 | 1858 | 120 | 584 | 0.074 | 0.192 | 33.3 | 51.5 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 4 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 88 | 1951 | 120 | 584 | 0.074 | 0.192 | 48.3 | 93.0 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 5 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 62 | 1838 | 120 | 584 | 0.074 | 0.192 | 18.2 | 42.6 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 6 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 64 | 1849 | 120 | 584 | 0.074 | 0.192 | 20.5 | 47.5 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 7 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 80 | 1824 | 120 | 584 | 0.074 | 0.192 | 39.0 | 36.3 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 8 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 76 | 1900 | 120 | 584 | 0.074 | 0.192 | 34.4 | 70.2 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 9 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 80 | 1988 | 120 | 584 | 0.074 | 0.192 | 39.0 | 109.5 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 10 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 65 | 1828 | 120 | 584 | 0.074 | 0.192 | 21.7 | 38.1 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 11 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 54 | 1816 | 120 | 584 | 0.074 | 0.192 | 9.0 | 32.8 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 12 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 78 | 1918 | 120 | 584 | 0.074 | 0.192 | 36.7 | 78.2 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 13 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 74 | 1904 | 120 | 584 | 0.074 | 0.192 | 32.1 | 72.0 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 14 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 63 | 1775 | 120 | 584 | 0.074 | 0.192 | 19.4 | 14.5 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 15 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 75 | 1722 | 120 | 584 | 0.074 | 0.192 | 33.3 | 9.2 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 16 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 70 | 1789 | 120 | 584 | 0.074 | 0.192 | 27.5 | 20.7 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 17 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 65 | 1867 | 120 | 584 | 0.074 | 0.192 | 21.7 | 55.5 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 18 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 73 | 1898 | 120 | 584 | 0.074 | 0.192 | 30.9 | 69.3 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 19 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 54 | 1691 | 120 | 584 | 0.074 | 0.192 | 9.0 | -23.0 | 11.8 | 70.7 |
| SU 4 | Bias | | Static | M3 | Floor | 20 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 68 | 1828 | 120 | 584 | 0.074 | 0.192 | 25.2 | 38.1 | 11.8 | 70.7 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 4 - STATIC ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | MH | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU4 | | MH | Static | M7 | Floor | 416 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 10 | 1464 | 120 | 584 | 0.066 | 0.207 | -42.0 | -217.7 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 417 | 9/25/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 10 | 1525 | 120 | 584 | 0.066 | 0.207 | -42.0 | -192.5 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 418 | 9/25/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 31 | 1525 | 120 | 584 | 0.066 | 0.207 | -14.7 | -192.5 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 419 | 9/25/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 15 | 1524 | 120 | 584 | 0.066 | 0.207 | -35.5 | -192.9 | 11.3 | 75.5 |
| SU4 | | MH | Static | M9 | Floor | 420 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 23 | 1566 | 120 | 584 | 0.076 | 0.193 | -35.5 | -78.5 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 421 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 23 | 1538 | 120 | 584 | 0.076 | 0.193 | -35.5 | -90.9 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 422 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 22 | 1332 | 120 | 584 | 0.076 | 0.193 | -36.6 | -182.3 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 423 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 46 | 1481 | 120 | 584 | 0.076 | 0.193 | -9.4 | -116.2 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 424 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 24 | 1355 | 120 | 584 | 0.076 | 0.193 | -34.3 | -172.1 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 425 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 29 | 1682 | 120 | 584 | 0.076 | 0.193 | -28.7 | -27.0 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 426 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 20 | 1564 | 120 | 584 | 0.076 | 0.193 | -38.8 | -79.3 | 12.8 | 70.7 |
| SU4 | | MH | Static | M9 | Floor | 427 | 3/11/2020 | Concrete | 2360 SN220242/ 43-37 PR124946 | 52 | 1742.5 | 120 | 34 | 1425 | 120 | 584 | 0.076 | 0.193 | -23.0 | -141.0 | 12.8 | 70.7 |
| SU4 | | MH | Static | M7 | Floor | 428 | 9/25/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 27 | 1506 | 120 | 584 | 0.066 | 0.207 | -19.9 | -200.4 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 429 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 5 | 1441 | 120 | 584 | 0.066 | 0.207 | -48.5 | -227.2 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 430 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 11 | 1560 | 120 | 584 | 0.066 | 0.207 | -40.7 | -178.0 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 431 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 7 | 1401 | 120 | 584 | 0.066 | 0.207 | -45.9 | -243.8 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 432 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 14 | 1392 | 120 | 584 | 0.066 | 0.207 | -36.8 | -247.5 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 433 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 7 | 1433 | 120 | 584 | 0.066 | 0.207 | -45.9 | -230.5 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 434 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 12 | 1453 | 120 | 584 | 0.066 | 0.207 | -39.4 | -222.3 | 11.3 | 75.5 |
| SU4 | | MH | Static | M7 | Floor | 435 | 9/24/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 14 | 1526 | 120 | 584 | 0.066 | 0.207 | -36.8 | -192.1 | 11.3 | 75.5 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 5 - STATIC ALPHA BETA MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area (cm²) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 cm²) | Beta (dpm/ 100 cm²) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 5 | FSS | | Static | M3 | Floor | 1 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 89 | 1656 | 120 | 584 | 0.074 | 0.192 | 49.5 | -38.6 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 2 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 57 | 1497 | 120 | 584 | 0.074 | 0.192 | 12.4 | -109.5 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 3 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 71 | 1533 | 120 | 584 | 0.074 | 0.192 | 28.6 | -93.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 4 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 75 | 1653 | 120 | 584 | 0.074 | 0.192 | 33.3 | -39.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 5 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 79 | 1666 | 120 | 584 | 0.074 | 0.192 | 37.9 | -34.1 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 6 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 93 | 1582 | 120 | 584 | 0.074 | 0.192 | 54.1 | -71.6 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 7 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 64 | 1556 | 120 | 584 | 0.074 | 0.192 | 20.5 | -83.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 8 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 71 | 1527 | 120 | 584 | 0.074 | 0.192 | 28.6 | -96.1 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 9 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 76 | 1649 | 120 | 584 | 0.074 | 0.192 | 34.4 | -41.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 10 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 108 | 1662 | 120 | 584 | 0.074 | 0.192 | 71.4 | -35.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 11 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 71 | 1548 | 120 | 584 | 0.074 | 0.192 | 28.6 | -86.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 12 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 54 | 1597 | 120 | 584 | 0.074 | 0.192 | 9.0 | -64.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 13 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 80 | 1588 | 120 | 584 | 0.074 | 0.192 | 39.0 | -68.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 14 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 62 | 1501 | 120 | 584 | 0.074 | 0.192 | 18.2 | -107.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 15 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 49 | 1616 | 120 | 584 | 0.074 | 0.192 | 3.2 | -56.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 16 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 70 | 1554 | 120 | 584 | 0.074 | 0.192 | 27.5 | -84.1 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 17 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 59 | 1576 | 120 | 584 | 0.074 | 0.192 | 14.8 | -74.3 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 18 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 64 | 1561 | 120 | 584 | 0.074 | 0.192 | 20.5 | -81.0 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 19 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 78 | 1611 | 120 | 584 | 0.074 | 0.192 | 36.7 | -58.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 20 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 64 | 1607 | 120 | 584 | 0.074 | 0.192 | 20.5 | -60.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 21 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 43 | 1434 | 120 | 584 | 0.074 | 0.192 | -3.8 | -137.6 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 22 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 65 | 1577 | 120 | 584 | 0.074 | 0.192 | 21.7 | -73.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 23 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 80 | 1515 | 120 | 584 | 0.074 | 0.192 | 39.0 | -101.5 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 24 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 62 | 1680 | 120 | 584 | 0.074 | 0.192 | 18.2 | -27.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 25 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 63 | 1676 | 120 | 584 | 0.074 | 0.192 | 19.4 | -29.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 26 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 51 | 1653 | 120 | 584 | 0.074 | 0.192 | 5.5 | -39.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 27 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 63 | 1603 | 120 | 584 | 0.074 | 0.192 | 19.4 | -62.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 28 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 45 | 1607 | 120 | 584 | 0.074 | 0.192 | -1.4 | -60.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 29 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 66 | 1661 | 120 | 584 | 0.074 | 0.192 | 22.9 | -36.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 30 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 67 | 1622 | 120 | 584 | 0.074 | 0.192 | 24.0 | -53.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 31 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 71 | 1652 | 120 | 584 | 0.074 | 0.192 | 28.6 | -40.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 32 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 47 | 1632 | 120 | 584 | 0.074 | 0.192 | 0.9 | -49.3 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 33 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 70 | 1714 | 120 | 584 | 0.074 | 0.192 | 27.5 | -12.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 34 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 26 | 1399 | 120 | 584 | 0.074 | 0.192 | -23.4 | -153.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 35 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 67 | 1660 | 120 | 584 | 0.074 | 0.192 | 24.0 | -36.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 36 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 48 | 1542 | 120 | 584 | 0.074 | 0.192 | 2.0 | -89.4 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 37 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 63 | 1621 | 120 | 584 | 0.074 | 0.192 | 19.4 | -54.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 38 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 58 | 1490 | 120 | 584 | 0.074 | 0.192 | 13.6 | -112.6 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 39 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 68 | 1628 | 120 | 584 | 0.074 | 0.192 | 25.2 | -51.1 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 40 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 43 | 1662 | 120 | 584 | 0.074 | 0.192 | -3.8 | -35.9 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 41 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 60 | 1517 | 120 | 584 | 0.074 | 0.192 | 15.9 | -100.6 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 42 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 66 | 1548 | 120 | 584 | 0.074 | 0.192 | 22.9 | -86.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 43 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 55 | 1497 | 120 | 584 | 0.074 | 0.192 | 10.1 | -109.5 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 44 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 50 | 1500 | 120 | 584 | 0.074 | 0.192 | 4.3 | -108.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 45 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 30 | 1456 | 120 | 584 | 0.074 | 0.192 | -18.8 | -127.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 46 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 54 | 1438 | 120 | 584 | 0.074 | 0.192 | 9.0 | -135.8 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 47 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 60 | 1556 | 120 | 584 | 0.074 | 0.192 | 15.9 | -83.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 48 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 50 | 1510 | 120 | 584 | 0.074 | 0.192 | 4.3 | -103.7 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 49 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 49 | 1529 | 120 | 584 | 0.074 | 0.192 | 3.2 | -95.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 50 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 67 | 1553 | 120 | 584 | 0.074 | 0.192 | 24.0 | -84.5 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 51 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 51 | 1448 | 120 | 584 | 0.074 | 0.192 | 5.5 | -131.3 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 52 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 52 | 1520 | 120 | 584 | 0.074 | 0.192 | 6.7 | -99.2 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 53 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 84 | 1632 | 120 | 584 | 0.074 | 0.192 | 43.7 | -49.3 | 11.8 | 70.7 |
| SU 5 | FSS | | Static | M3 | Floor | 54 | 10/10/2019 | Concrete | 2360 SN215271/ 43-37 PR216985 | 47 | 1747 | 120 | 42 | 1595 | 120 | 584 | 0.074 | 0.192 | -4.9 | -65.8 | 11.8 | 70.7 |

Appendix G

**HUNTERS POINT NAVAL STATION - PARCEL F**

**SURVEY UNIT 5 - STATIC ALPHA BETA MEASUREMENTS - SYSTEMATIC**

| SU | Survey Type | Room | Meas Type | Meter | Floor/ Wall/ Ceiling | Sec. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 5 | Bias | | Static | M7 | Floor | 1 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 38 | 1792 | 120 | 584 | 0.066 | 0.207 | -5.6 | -82.1 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 2 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 65 | 1846 | 120 | 584 | 0.066 | 0.207 | 29.4 | -59.7 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 3 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 63 | 1897 | 120 | 584 | 0.066 | 0.207 | 26.8 | -38.6 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 4 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 75 | 1942 | 120 | 584 | 0.066 | 0.207 | 42.4 | -20.0 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 5 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 89 | 1969 | 120 | 584 | 0.066 | 0.207 | 60.5 | -8.9 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 6 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 67 | 2015 | 120 | 584 | 0.066 | 0.207 | 32.0 | 10.2 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 7 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 54 | 1901 | 120 | 584 | 0.066 | 0.207 | 15.1 | -37.0 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 8 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 70 | 1839 | 120 | 584 | 0.066 | 0.207 | 35.9 | -62.6 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 9 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 45 | 1822 | 120 | 584 | 0.066 | 0.207 | 3.4 | -69.7 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 10 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 81 | 1927 | 120 | 584 | 0.066 | 0.207 | 50.1 | -26.2 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 11 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 66 | 1886 | 120 | 584 | 0.066 | 0.207 | 30.7 | -43.2 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 12 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 72 | 1932 | 120 | 584 | 0.066 | 0.207 | 38.5 | -24.2 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 13 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 65 | 1825 | 120 | 584 | 0.066 | 0.207 | 29.4 | -68.4 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 14 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 48 | 1742 | 120 | 584 | 0.066 | 0.207 | 7.3 | -102.7 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 15 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 57 | 1796 | 120 | 584 | 0.066 | 0.207 | 19.0 | -80.4 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 16 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 52 | 1691 | 120 | 584 | 0.066 | 0.207 | 12.5 | -123.8 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 17 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 61 | 1699 | 120 | 584 | 0.066 | 0.207 | 24.2 | -120.5 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 18 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 45 | 1797 | 120 | 584 | 0.066 | 0.207 | 3.4 | -80.0 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 19 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 71 | 1923 | 120 | 584 | 0.066 | 0.207 | 37.2 | -27.9 | 11.3 | 75.5 |
| SU 5 | Bias | | Static | M7 | Floor | 20 | 10/1/2019 | Concrete | 2360 SN245779/ 43-37 PR190618 | 40.5 | 1991 | 120 | 58 | 1712 | 120 | 584 | 0.066 | 0.207 | 20.3 | -115.1 | 11.3 | 75.5 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 5 - STATIC ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | MH | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU5 | | MH-1 | Static | M2 | Floor | 450 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 17 | 1410 | 120 | 584 | 0.067 | 0.190 | -17.6 | -50.3 | 9.7 | 66.1 |
| SU5 | | MH-10 | Static | M2 | Floor | 451 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 12 | 1410 | 120 | 584 | 0.067 | 0.190 | 24.0 | -50.3 | 9.7 | 66.1 |
| SU5 | | MH-12 | Static | M2 | Floor | 452 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 1453 | 120 | 584 | 0.067 | 0.190 | -26.6 | -30.9 | 9.7 | 66.1 |
| SU5 | | MH-13 | Static | M2 | Floor | 453 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 17 | 1471 | 120 | 584 | 0.067 | 0.190 | 17.6 | -22.8 | 9.7 | 66.1 |
| SU5 | | MH-14 | Static | M2 | Floor | 454 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 27 | 1390 | 120 | 584 | 0.067 | 0.190 | 4.9 | -59.3 | 9.7 | 66.1 |
| SU5 | | MH-15 | Static | M2 | Floor | 455 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 1529 | 120 | 584 | 0.067 | 0.190 | -25.3 | 3.4 | 9.7 | 66.1 |
| SU5 | | MH-17 | Static | M2 | Floor | 456 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 14 | 1335 | 120 | 584 | 0.067 | 0.190 | -21.5 | -84.1 | 9.7 | 66.1 |
| SU5 | | MH-18 | Static | M2 | Floor | 457 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 1545 | 120 | 584 | 0.067 | 0.190 | -31.7 | 10.6 | 9.7 | 66.1 |
| SU5 | | MH-2 | Static | M2 | Floor | 458 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 19 | 1363 | 120 | 584 | 0.067 | 0.190 | -15.1 | -71.4 | 9.7 | 66.1 |
| SU5 | | MH-21 | Static | M2 | Floor | 459 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 1444 | 120 | 584 | 0.067 | 0.190 | 25.3 | -34.9 | 9.7 | 66.1 |
| SU5 | | MH-23 | Static | M2 | Floor | 460 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 1394 | 120 | 584 | 0.067 | 0.190 | 26.6 | -57.5 | 9.7 | 66.1 |
| SU5 | | MH-3 | Static | M2 | Floor | 461 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 18 | 1303 | 120 | 584 | 0.067 | 0.190 | -16.4 | -98.5 | 9.7 | 66.1 |
| SU5 | | MH-4 | Static | M2 | Floor | 462 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 1344 | 120 | 584 | 0.067 | 0.190 | -30.4 | -80.0 | 9.7 | 66.1 |
| SU5 | | MH-5 | Static | M2 | Floor | 463 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 1631 | 120 | 584 | 0.067 | 0.190 | -27.9 | 49.3 | 9.7 | 66.1 |
| SU5 | | MH-6 | Static | M2 | Floor | 464 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 1587 | 120 | 584 | 0.067 | 0.190 | -34.2 | 29.5 | 9.7 | 66.1 |
| SU5 | | MH-7 | Static | M2 | Floor | 465 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 18 | 1513 | 120 | 584 | 0.067 | 0.190 | -16.4 | -3.9 | 9.7 | 66.1 |
| SU5 | | MH-8 | Static | M2 | Floor | 466 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 1347 | 120 | 584 | 0.067 | 0.190 | -31.7 | -78.7 | 9.7 | 66.1 |
| SU5 | | MH-9 | Static | M2 | Floor | 467 | 9/11/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 1383 | 120 | 584 | 0.067 | 0.190 | -25.3 | -62.4 | 9.7 | 66.1 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - STATIC ALPHA BETA MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | Systematic | | Static | M2 | Floor | 1 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 1565 | 120 | 584 | 0.067 | 0.190 | -27.9 | 19.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 2 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 11 | 1578 | 120 | 584 | 0.067 | 0.190 | -25.3 | 25.4 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 3 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 28 | 1816 | 120 | 584 | 0.067 | 0.190 | 3.6 | 132.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 4 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 22 | 1625 | 120 | 584 | 0.067 | 0.190 | -11.2 | 46.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 5 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 32 | 1810 | 120 | 584 | 0.067 | 0.190 | 1.5 | 130.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 6 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 22 | 1715 | 120 | 584 | 0.067 | 0.190 | -11.2 | 87.2 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 7 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 37 | 1810 | 120 | 584 | 0.067 | 0.190 | 7.9 | 130.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 8 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 29 | 1878 | 120 | 584 | 0.067 | 0.190 | -2.3 | 160.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 9 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 12 | 1836 | 120 | 584 | 0.067 | 0.190 | -24.0 | 141.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 10 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 20 | 1898 | 120 | 584 | 0.067 | 0.190 | 13.8 | 169.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 11 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 29 | 2020 | 120 | 584 | 0.067 | 0.190 | 2.3 | 224.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 12 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 45 | 1987 | 120 | 584 | 0.067 | 0.190 | 18.1 | 209.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 13 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 1834 | 120 | 584 | 0.067 | 0.190 | -30.4 | 140.8 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 14 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 1772 | 120 | 584 | 0.067 | 0.190 | -31.7 | 112.9 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 15 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 1743 | 120 | 584 | 0.067 | 0.190 | -33.0 | 99.8 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 16 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 1716 | 120 | 584 | 0.067 | 0.190 | -26.6 | 87.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 17 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 37 | 1773 | 120 | 584 | 0.067 | 0.190 | 7.9 | 113.3 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 18 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 17 | 1668 | 120 | 584 | 0.067 | 0.190 | -17.6 | 66.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 19 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 23 | 1756 | 120 | 584 | 0.067 | 0.190 | 10.0 | 105.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 20 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 28 | 1746 | 120 | 584 | 0.067 | 0.190 | 3.6 | 101.1 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 21 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 17 | 1814 | 120 | 584 | 0.067 | 0.190 | -17.6 | 131.8 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 22 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 23 | 1738 | 120 | 584 | 0.067 | 0.190 | 10.0 | 97.5 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 23 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 33 | 1822 | 120 | 584 | 0.067 | 0.190 | 2.8 | 135.4 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 24 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 33 | 1747 | 120 | 584 | 0.067 | 0.190 | 2.8 | 101.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 25 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 31 | 1875 | 120 | 584 | 0.067 | 0.190 | 0.3 | 159.3 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 26 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 65 | 1943 | 120 | 584 | 0.067 | 0.190 | 43.7 | 189.9 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 27 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 44 | 1932 | 120 | 584 | 0.067 | 0.190 | 16.9 | 185.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 28 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 57 | 1959 | 120 | 584 | 0.067 | 0.190 | 33.5 | 197.1 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 29 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 47 | 1868 | 120 | 584 | 0.067 | 0.190 | 20.7 | 156.1 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 30 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 72 | 1977 | 120 | 584 | 0.067 | 0.190 | 52.6 | 205.2 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 31 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 51 | 2038 | 120 | 584 | 0.067 | 0.190 | 25.8 | 232.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 32 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 50 | 1974 | 120 | 584 | 0.067 | 0.190 | 24.5 | 203.9 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 33 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 50 | 2008 | 120 | 584 | 0.067 | 0.190 | 24.5 | 219.2 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 34 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 35 | 1922 | 120 | 584 | 0.067 | 0.190 | 5.4 | 180.4 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 35 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 49 | 1890 | 120 | 584 | 0.067 | 0.190 | 23.3 | 166.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 36 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 47 | 2089 | 120 | 584 | 0.067 | 0.190 | 20.7 | 255.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 37 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 45 | 2017 | 120 | 584 | 0.067 | 0.190 | 18.1 | 223.3 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 38 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 35 | 1826 | 120 | 584 | 0.067 | 0.190 | 5.4 | 137.2 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 39 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 9 | 1861 | 120 | 584 | 0.067 | 0.190 | 27.9 | 153.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 40 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 36 | 1909 | 120 | 584 | 0.067 | 0.190 | 6.6 | 174.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 41 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 61 | 1992 | 120 | 584 | 0.067 | 0.190 | 38.6 | 212.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 42 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 51 | 1975 | 120 | 584 | 0.067 | 0.190 | 25.8 | 204.3 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 43 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 39 | 1803 | 120 | 584 | 0.067 | 0.190 | 10.5 | 126.8 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 44 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 23 | 1876 | 120 | 584 | 0.067 | 0.190 | -10.0 | 159.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 45 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 24 | 1981 | 120 | 584 | 0.067 | 0.190 | 8.7 | 207.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 46 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 29 | 1986 | 120 | 584 | 0.067 | 0.190 | 2.3 | 209.3 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 47 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 37 | 1960 | 120 | 584 | 0.067 | 0.190 | 7.9 | 197.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 48 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 30 | 1838 | 120 | 584 | 0.067 | 0.190 | 1.0 | 142.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 49 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 39 | 2040 | 120 | 584 | 0.067 | 0.190 | 10.5 | 233.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 50 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 44 | 2014 | 120 | 584 | 0.067 | 0.190 | 16.9 | 221.9 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 51 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 40 | 1920 | 120 | 584 | 0.067 | 0.190 | 11.8 | 179.5 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 52 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 39 | 1967 | 120 | 584 | 0.067 | 0.190 | 10.5 | 200.7 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 53 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 45 | 1952 | 120 | 584 | 0.067 | 0.190 | 18.1 | 194.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 54 | 8/22/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 57 | 2002 | 120 | 584 | 0.067 | 0.190 | 33.5 | 216.5 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 55 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 48 | 1771 | 120 | 584 | 0.067 | 0.190 | 22.0 | 112.4 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 56 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 61 | 1790 | 120 | 584 | 0.067 | 0.190 | 38.6 | 121.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 57 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 48 | 1878 | 120 | 584 | 0.067 | 0.190 | 22.0 | 160.6 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 58 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 40 | 1746 | 120 | 584 | 0.067 | 0.190 | 11.8 | 101.1 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 59 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 37 | 1799 | 120 | 584 | 0.067 | 0.190 | 7.9 | 125.0 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 60 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 28 | 1647 | 120 | 584 | 0.067 | 0.190 | -3.6 | 56.5 | 9.7 | 66.1 |
| SU 6 | Systematic | | Static | M2 | Floor | 61 | 8/28/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 54 | 1666 | 120 | 584 | 0.067 | 0.190 | 29.6 | 65.1 | 9.7 | 66.1 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - STATIC ALPHA BETA MEASUREMENTS - BIAS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | Bias | | Static | M6 | Floor | 1 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 49 | 1999 | 120 | 584 | 0.067 | 0.196 | 10.7 | 20.6 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 2 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 60 | 2223 | 120 | 584 | 0.067 | 0.196 | 24.8 | 118.4 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 3 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 58 | 2119 | 120 | 584 | 0.067 | 0.196 | 22.2 | 73.0 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 4 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 55 | 2199 | 120 | 584 | 0.067 | 0.196 | 18.4 | 108.0 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 5 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 42 | 2106 | 120 | 584 | 0.067 | 0.196 | 1.8 | 67.3 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 6 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 50 | 2094 | 120 | 584 | 0.067 | 0.196 | 12.0 | 62.1 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 7 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 26 | 2289 | 120 | 584 | 0.067 | 0.196 | -18.7 | 147.3 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 8 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 43 | 2032 | 120 | 584 | 0.067 | 0.196 | 3.1 | 35.0 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 9 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 52 | 2044 | 120 | 584 | 0.067 | 0.196 | 14.6 | 40.3 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 10 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 43 | 2042 | 120 | 584 | 0.067 | 0.196 | 3.1 | 39.4 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 11 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 63 | 2130 | 120 | 584 | 0.067 | 0.196 | 28.6 | 77.8 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 12 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 43 | 2053 | 120 | 584 | 0.067 | 0.196 | 3.1 | 44.2 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 13 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 38 | 2014 | 120 | 584 | 0.067 | 0.196 | -3.3 | 27.1 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 14 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 38 | 2010 | 120 | 584 | 0.067 | 0.196 | -3.3 | 25.4 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 15 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 39 | 1987 | 120 | 584 | 0.067 | 0.196 | -2.0 | 15.4 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 16 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 36 | 1974 | 120 | 584 | 0.067 | 0.196 | -5.9 | 9.7 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 17 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 44 | 2068 | 120 | 584 | 0.067 | 0.196 | 4.3 | 50.7 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 18 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 42 | 2000 | 120 | 584 | 0.067 | 0.196 | 1.8 | 21.0 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 19 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 52 | 2052 | 120 | 584 | 0.067 | 0.196 | 14.6 | 43.7 | 11.1 | 74.8 |
| SU 6 | Bias | | Static | M6 | Floor | 20 | 9/17/2019 | Concrete | 2360 SN278604/ 43-37 PR190617 | 38.5 | 1954.5 | 120 | 41 | 2102 | 120 | 584 | 0.067 | 0.196 | 0.5 | 65.6 | 11.1 | 74.8 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - STATIC ALPHA BETA MEASUREMENTS - MANHOLES/GRATES

| SU | Survey Type | M/I | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Median Reference Alpha Counts | Median Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU6 | | GR-1 | Static | M2 | Floor | 162 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 1056 | 120 | 584 | 0.067 | 0.190 | 34.2 | -209.8 | 9.7 | 66.1 |
| SU6 | | GR-14 | Static | M2 | Floor | 163 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 4 | 3415 | 120 | 584 | 0.067 | 0.190 | 34.2 | 853.2 | 9.7 | 66.1 |
| SU6 | | GR-15 | Static | M2 | Floor | 164 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 2 | 3357 | 120 | 584 | 0.067 | 0.190 | 36.8 | 827.1 | 9.7 | 66.1 |
| SU6 | | GR-16 | Static | M2 | Floor | 165 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 6 | 3248 | 120 | 584 | 0.067 | 0.190 | 31.7 | 778.0 | 9.7 | 66.1 |
| SU6 | | GR-17 | Static | M2 | Floor | 166 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 3249 | 120 | 584 | 0.067 | 0.190 | 30.4 | 778.4 | 9.7 | 66.1 |
| SU6 | | GR-18 | Static | M2 | Floor | 167 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 3242 | 120 | 584 | 0.067 | 0.190 | 33.0 | 775.3 | 9.7 | 66.1 |
| SU6 | | GR-2 | Static | M2 | Floor | 168 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 7 | 1100 | 120 | 584 | 0.067 | 0.190 | 30.4 | -190.0 | 9.7 | 66.1 |
| SU6 | | GR-3 | Static | M2 | Floor | 169 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 1143 | 120 | 584 | 0.067 | 0.190 | 33.0 | -170.6 | 9.7 | 66.1 |
| SU6 | | GR-4 | Static | M2 | Floor | 170 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 5 | 1119 | 120 | 584 | 0.067 | 0.190 | 33.0 | -181.4 | 9.7 | 66.1 |
| SU6 | | GR-5 | Static | M2 | Floor | 171 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 3 | 1121 | 120 | 584 | 0.067 | 0.190 | 35.5 | 180.5 | 9.7 | 66.1 |
| SU6 | | GR-6 | Static | M2 | Floor | 172 | 9/9/2019 | Concrete | 2360 SN278586/ 43-37 PR178371 | 30 | 1511.5 | 120 | 10 | 1135 | 120 | 584 | 0.067 | 0.190 | 26.6 | 174.2 | 9.7 | 66.1 |
| SU6 | Top20 Scan Loc | GR-3 | Static | M8 | Floor | 173 | 11/19/2019 | Concrete | 2360 SN275739/ 43-37 PR302114 | 68 | 2104 | 120 | 24 | 1690 | 120 | 584 | 0.076 | 0.195 | 50.6 | -189.7 | 14.3 | 78.0 |
| SU6 | Top20 Scan Loc | GR-15 | Static | M8 | Floor | 174 | 11/19/2019 | Concrete | 2360 SN275739/ 43-37 PR302114 | 68 | 2104 | 120 | 41 | 1405 | 120 | 584 | 0.076 | 0.195 | 31.4 | -314.8 | 14.3 | 78.0 |

## Finger Piers Alpha Static Data Summary Statistics

General Statistics for Uncensored Data Sets

| Variable | NumObs | # Missing | Minimum | Maximum | Mean | Geo-Mean | SD | SEM | MAD/0.675 | Skewness | CV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Alpha Systematic | 54 | 0 | -32.68 | 10.12 | -15.49 | N/A | 11.99 | 1.632 | 12.01 | 0.633 | -0.774 |
| SU 5 Alpha Systematic | 54 | 0 | -23.43 | 71.44 | 18.69 | N/A | 17.27 | 2.351 | 14.58 | 0.283 | 0.924 |
| SU 6 Alpha Systematic | 61 | 0 | -32.97 | 52.65 | 5.304 | N/A | 20.2 | 2.587 | 22.73 | -0.0189 | 3.809 |
| SU 4 Alpha Bias | 20 | 0 | 8.967 | 48.3 | 26.44 | 23.99 | 10.81 | 2.417 | 11.15 | 0.0441 | 0.409 |
| SU 5 Alpha Bias | 20 | 0 | -5.643 | 60.52 | 25.62 | N/A | 16.62 | 3.717 | 14.42 | 0.0609 | 0.649 |
| SU 6 Alpha Bias | 20 | 0 | -18.66 | 28.62 | 6.517 | N/A | 11.62 | 2.598 | 10.42 | 0.104 | 1.783 |
| SU 4 Alpha Manhole | 20 | 0 | -48.45 | -9.444 | -34.48 | N/A | 10.41 | 2.328 | 6.871 | 1.099 | -0.302 |
| SU 5 Alpha Manhole | 18 | 0 | -34.25 | -4.856 | -23.24 | N/A | 7.427 | 1.751 | 8.525 | 0.754 | -0.32 |
| SU 6 Alpha Manhole | 13 | 0 | -50.58 | -26.58 | -33.91 | N/A | 5.635 | 1.563 | 2.281 | -2.286 | -0.166 |

Percentiles for Uncensored Data Sets

| Variable | NumObs | # Missing | 10%ile | 20%ile | 25%ile(Q1) | 50%ile(Q2) | 75%ile(Q3) | 80%ile | 90%ile | 95%ile | 99%ile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Alpha Systematic | 54 | 0 | -28.06 | -26.9 | -24.59 | -18.8 | -8.677 | -3.76 | 3.644 | 6.306 | 10.12 |
| SU 5 Alpha Systematic | 54 | 0 | -0.752 | 4.339 | 5.785 | 19.38 | 28.35 | 28.64 | 38.7 | 45.7 | 62.25 |
| SU 6 Alpha Systematic | 61 | 0 | -25.3 | -11.25 | -9.967 | 6.645 | 20.7 | 21.98 | 29.65 | 38.59 | 47.28 |
| SU 4 Alpha Bias | 20 | 0 | 11.05 | 18.22 | 19.09 | 26.32 | 33.55 | 34.88 | 39.05 | 39.51 | 46.55 |
| SU 5 Alpha Bias | 20 | 0 | 3.438 | 11.48 | 14.46 | 28.08 | 36.19 | 37.42 | 43.13 | 50.66 | 58.54 |
| SU 6 Alpha Bias | 20 | 0 | -3.578 | -2.3 | -0.128 | 3.067 | 14.57 | 15.33 | 22.49 | 24.98 | 27.9 |
| SU 4 Alpha Manhole | 20 | 0 | -45.86 | -41.97 | -40.99 | -36.68 | -32.91 | -27.54 | -19.39 | -14.46 | -10.45 |
| SU 5 Alpha Manhole | 18 | 0 | -31.69 | -29.39 | -27.54 | -25.3 | -17.63 | -16.87 | -15.97 | -13.55 | -6.594 |
| SU 6 Alpha Manhole | 13 | 0 | -36.55 | -35.01 | -34.25 | -32.97 | -31.43 | -30.82 | -30.41 | -28.88 | -27.04 |

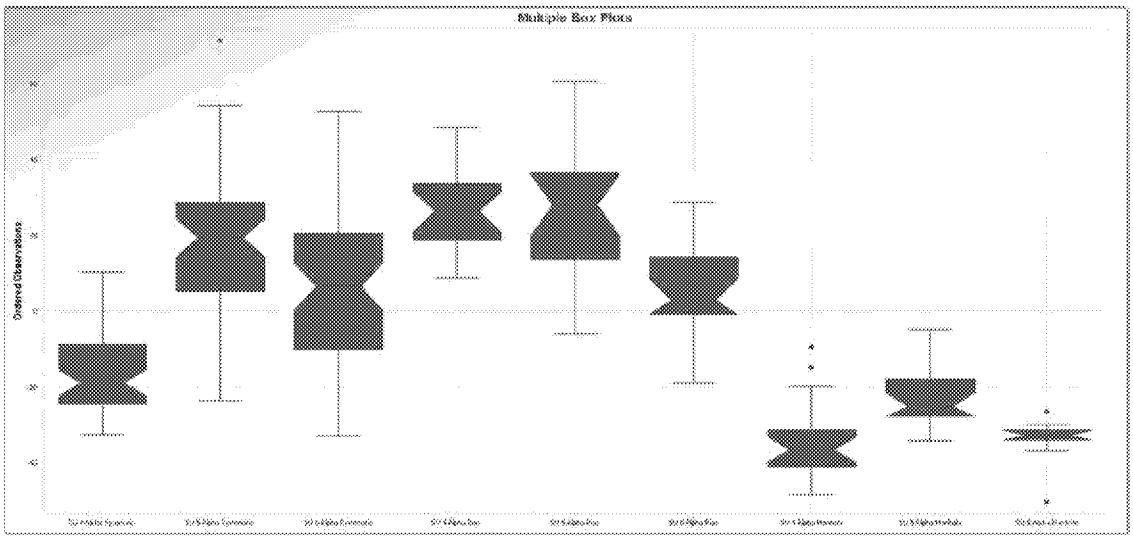
## Finger Piers Beta Static Data Summary Statistics

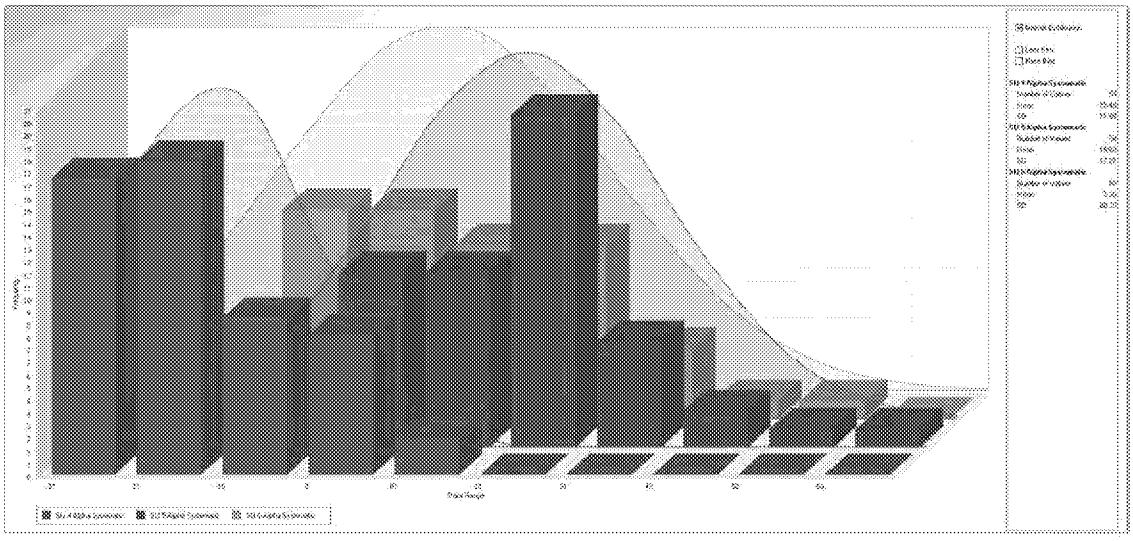
General Statistics for Uncensored Data Sets

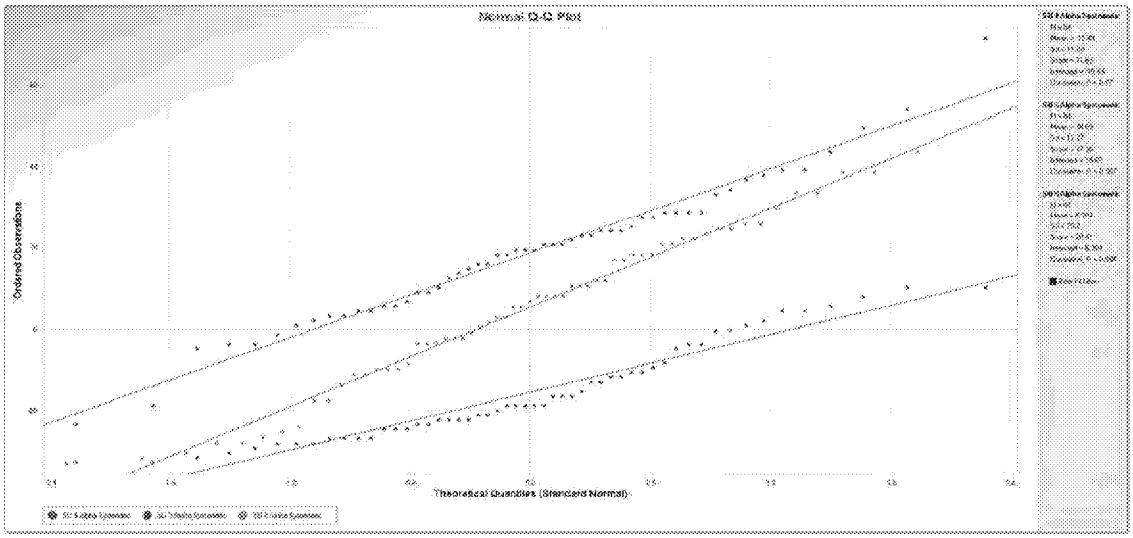
| Variable | NumObs | # Missing | Minimum | Maximum | Mean | Geo-Mean | SD | SEM | MAD/0.675 | Skewness | CV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Beta Systematic | 54 | 0 | 89.38 | 352.3 | 167 | 162.4 | 42.01 | 5.717 | 41.32 | 1.551 | 0.252 |
| SU 5 Beta Systematic | 54 | 0 | -153.2 | -12.73 | -74.57 | N/A | 32.67 | 4.446 | 37.02 | -0.348 | -0.438 |
| SU 6 Beta Systematic | 61 | 0 | 19.58 | 255.7 | 151.8 | 137.8 | 55.54 | 7.112 | 64.8 | -0.362 | 0.366 |
| SU 4 Beta Bias | 20 | 0 | -22.99 | 109.5 | 50.59 | N/A | 34.39 | 7.689 | 32.06 | -0.324 | 0.68 |
| SU 5 Beta Bias | 20 | 0 | -123.8 | 10.17 | -59.04 | N/A | 38.34 | 8.573 | 42.62 | -0.154 | -0.649 |
| SU 6 Beta Bias | 20 | 0 | 9.676 | 147.3 | 54.6 | 43.91 | 36.45 | 8.15 | 33.03 | 1.136 | 0.667 |
| SU 4 Beta Manhole | 20 | 0 | -247.5 | -26.99 | -171.2 | N/A | 62.23 | 13.92 | 48.14 | 0.917 | -0.363 |
| SU 5 Beta Manhole | 18 | 0 | -98.48 | 49.32 | -38.45 | N/A | 41.83 | 9.86 | 41.42 | 0.641 | -1.088 |
| SU 6 Beta Manhole | 13 | 0 | -314.8 | 853.2 | 184.7 | N/A | 510 | 141.4 | 52.78 | 0.526 | 2.761 |

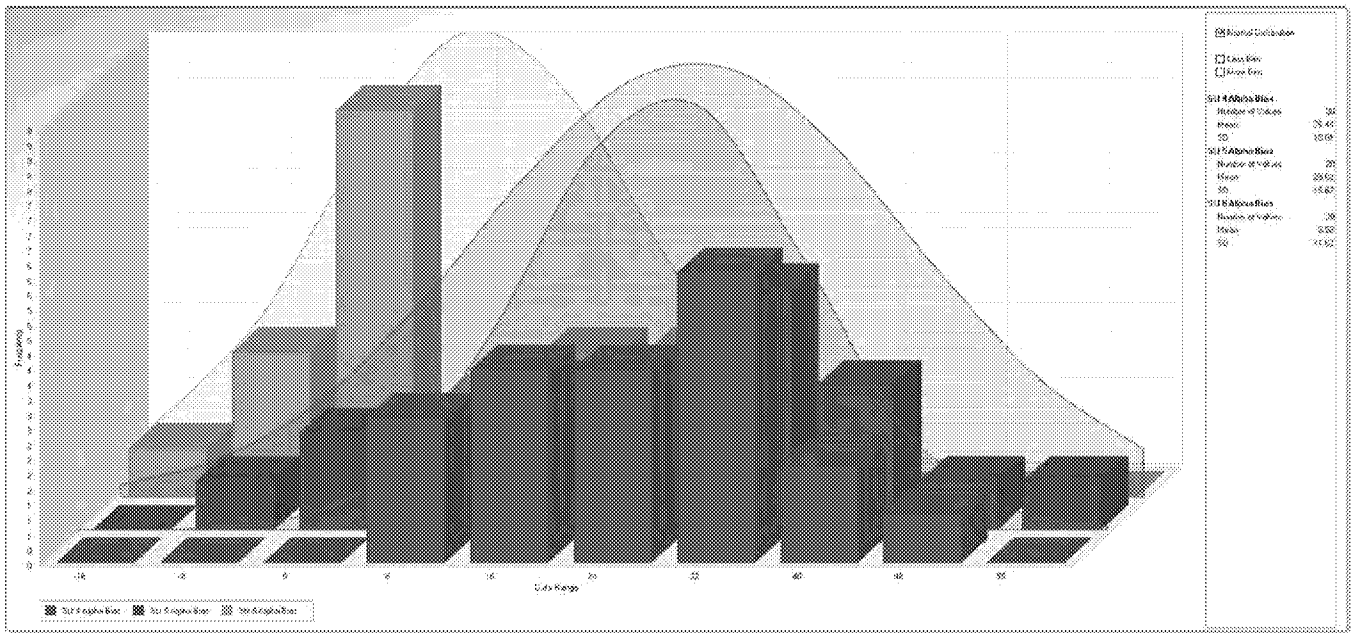
Percentiles for Uncensored Data Sets

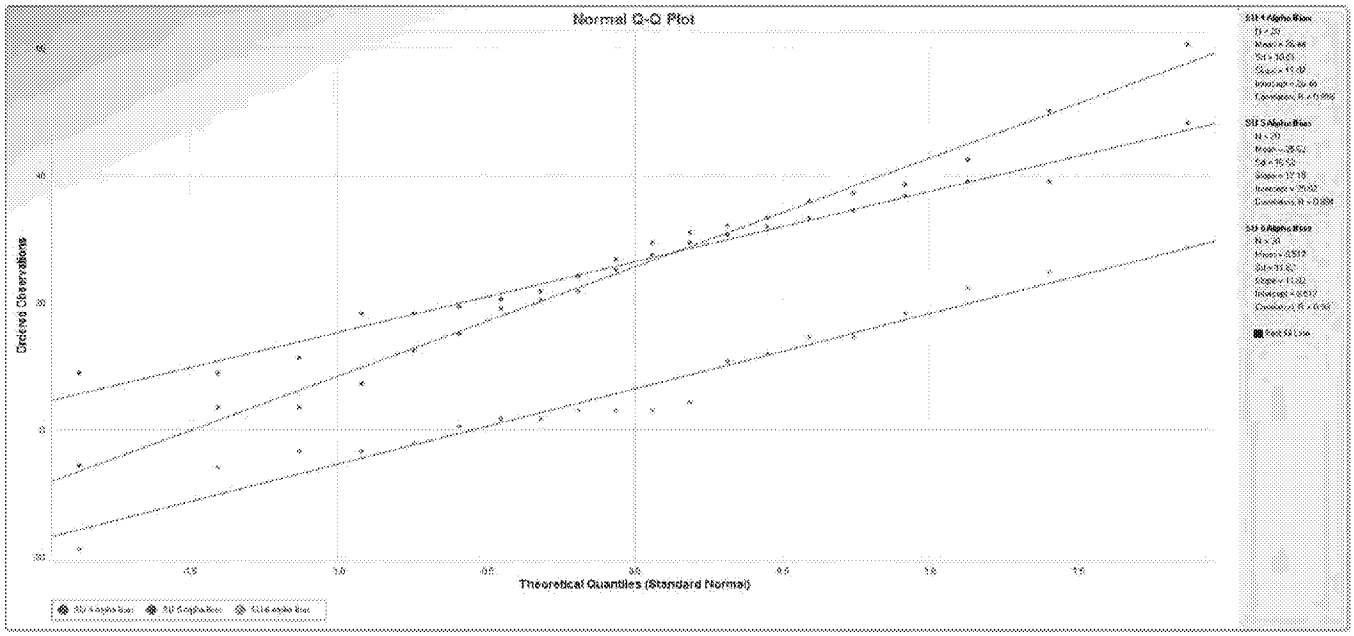
| Variable | NumObs | # Missing | 10%ile | 20%ile | 25%ile(Q1) | 50%ile(Q2) | 75%ile(Q3) | 80%ile | 90%ile | 95%ile | 99%ile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 Beta Systematic | 54 | 0 | 120.3 | 136.8 | 147.8 | 161 | 191.2 | 194.1 | 206.4 | 218.2 | 298.7 |
| SU 5 Beta Systematic | 54 | 0 | -111.7 | -102.4 | -98.46 | -72.71 | -49.3 | -40.2 | -36.05 | -32.57 | -20.77 |
| SU 6 Beta Systematic | 61 | 0 | 87.17 | 101.6 | 112.9 | 156.1 | 200.7 | 205.2 | 219.2 | 224.6 | 242.5 |
| SU 4 Beta Bias | 20 | 0 | 12.11 | 30.34 | 35.43 | 49.47 | 71.99 | 73.24 | 93.89 | 102.7 | 108.1 |
| SU 5 Beta Bias | 20 | 0 | -115.7 | -86.2 | -80.82 | -61.17 | -27.46 | -25.81 | -18.9 | -7.9 | 6.56 |
| SU 6 Beta Bias | 20 | 0 | 20.07 | 24.53 | 26.71 | 43.97 | 68.76 | 73.98 | 109 | 119.9 | 141.8 |
| SU 4 Beta Manhole | 20 | 0 | -231.9 | -223.3 | -218.9 | -192.3 | -134.8 | -111.1 | -79.25 | -75.88 | -36.77 |
| SU 5 Beta Manhole | 18 | 0 | -81.22 | -75.77 | -69.19 | -50.27 | -8.584 | 0.473 | 16.24 | 32.47 | 45.95 |
| SU 6 Beta Manhole | 13 | 0 | -205.8 | -189.9 | -189.7 | -174.2 | 778 | 778.2 | 817.3 | 837.5 | 850.1 |

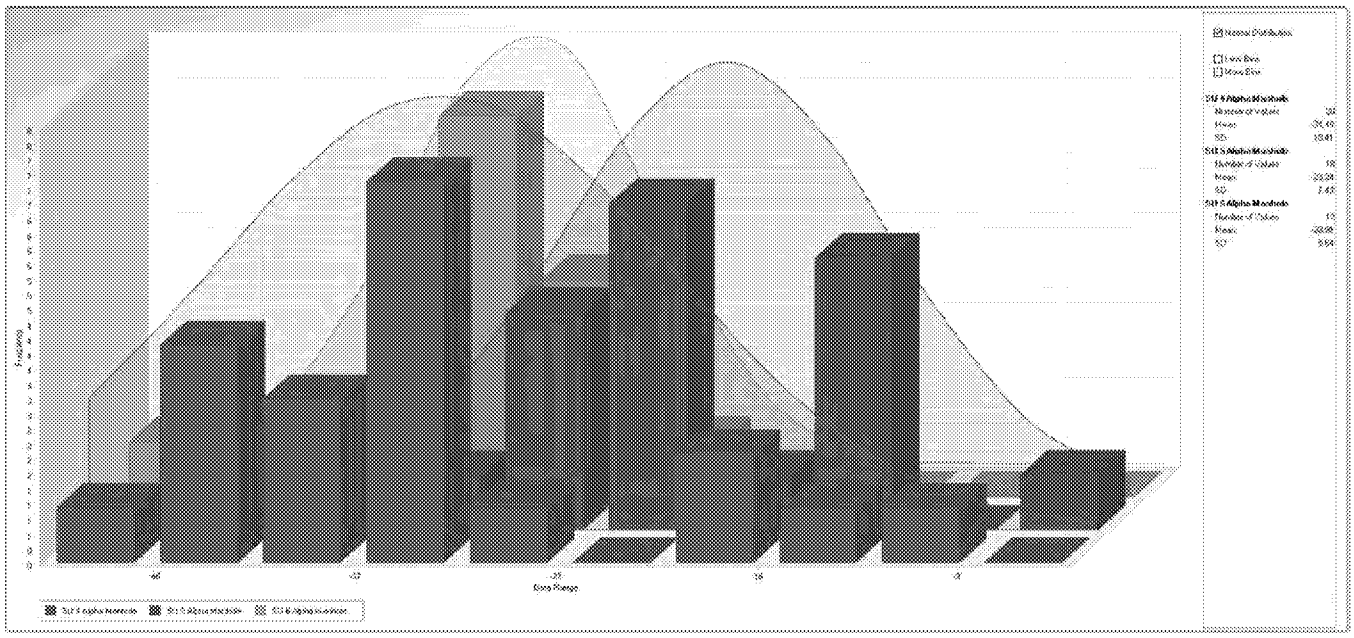

Multiple Box Plots
Ordered Observations

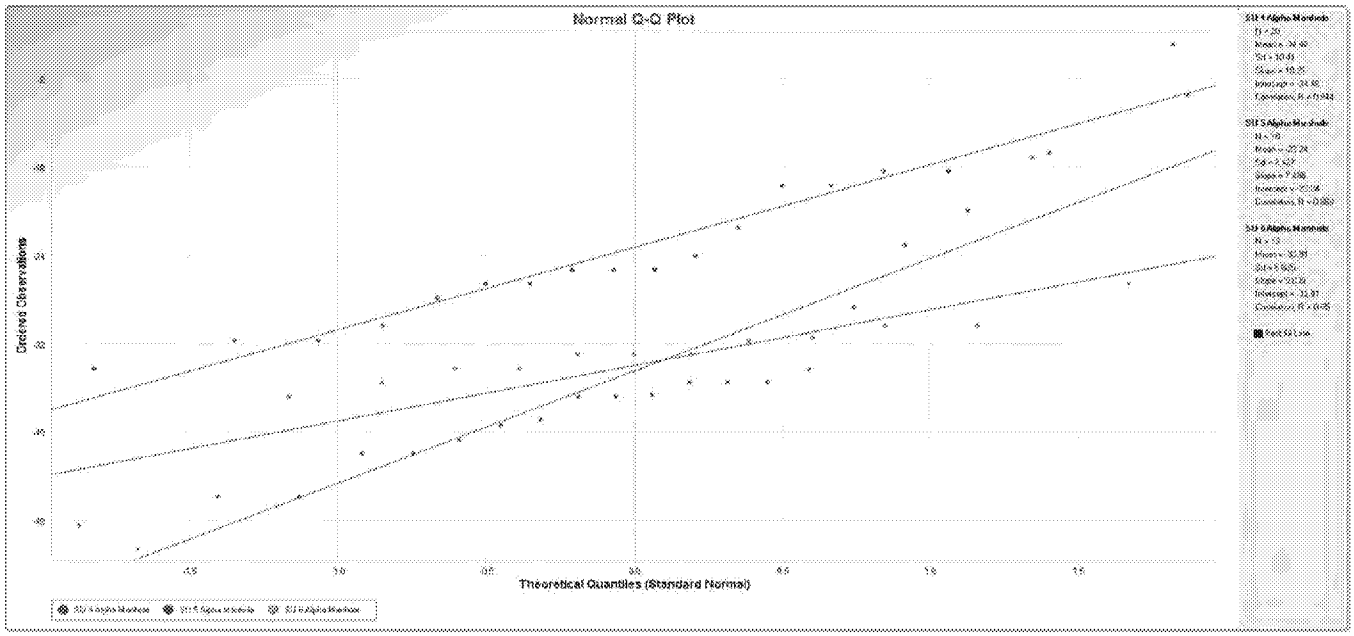


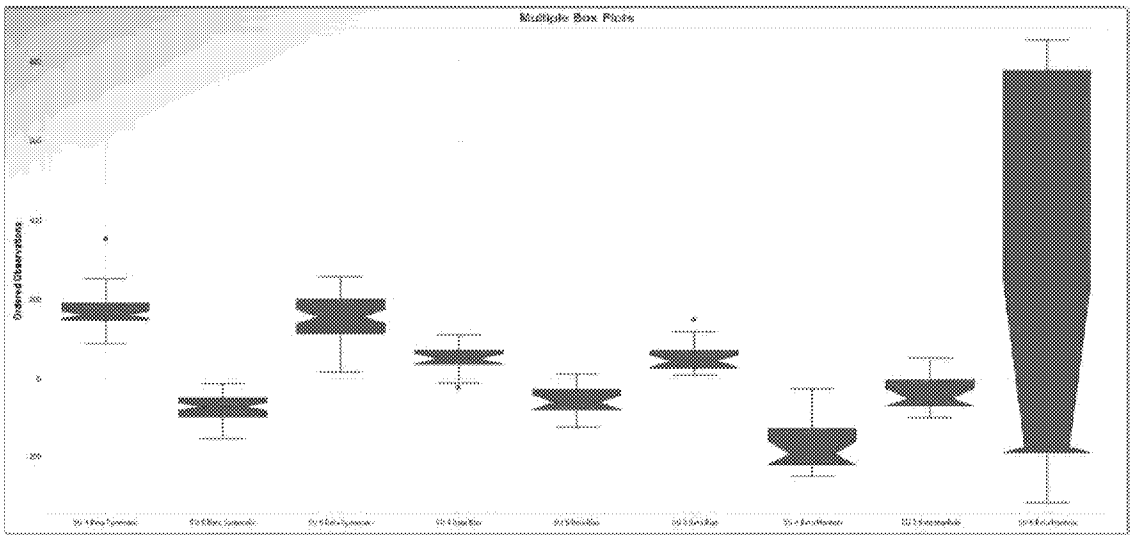

Normal Q-Q Plot
Ordered Observations
Theoretical Quantiles (Standard Normal)

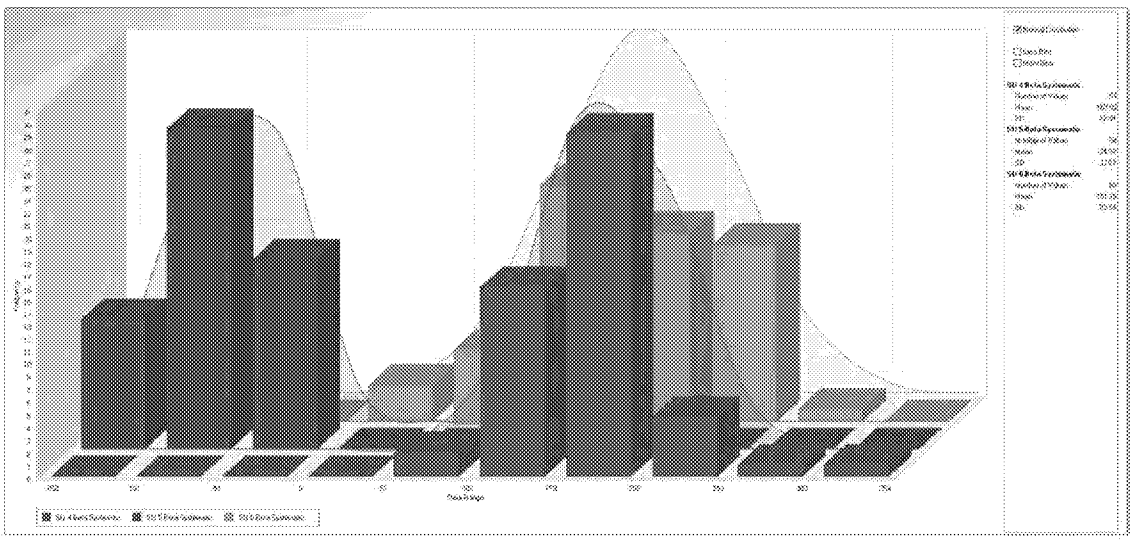


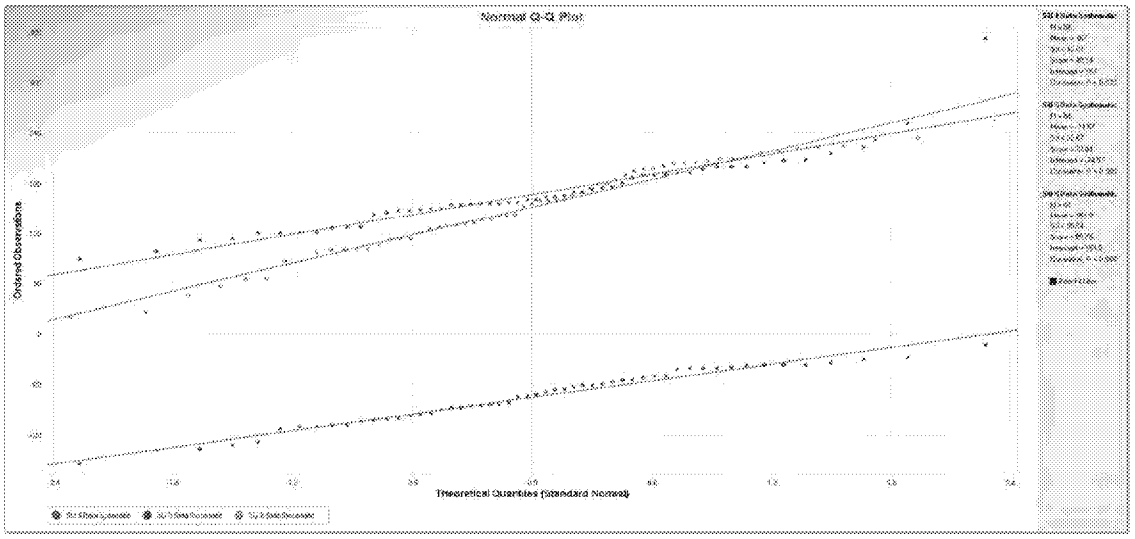

Normal Q-Q Plot
Theoretical Quantiles (Standard Normal)

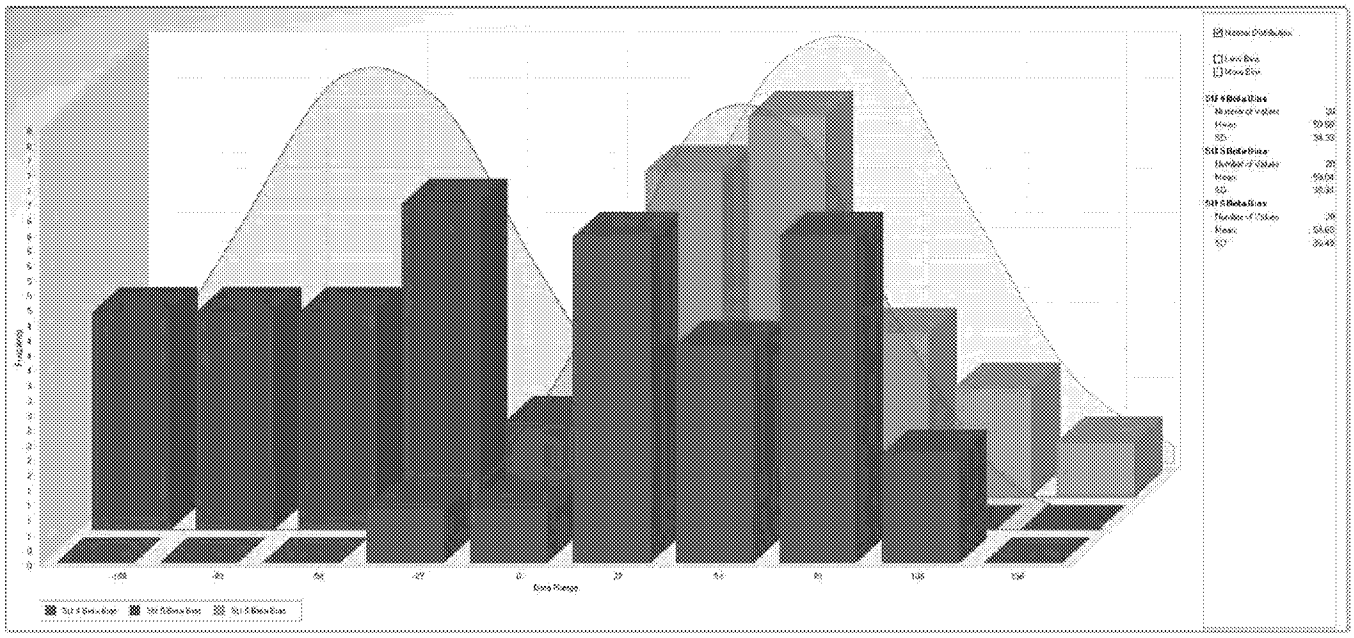


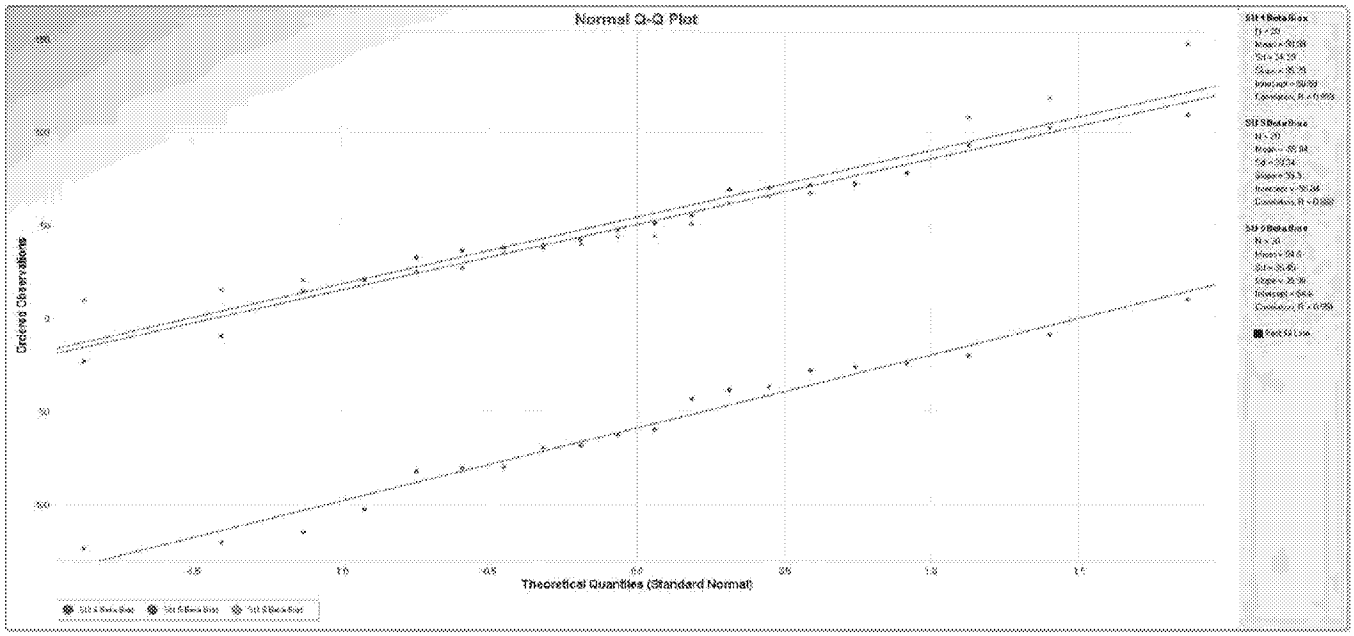

Normal Q-Q Plot
Theoretical Quantiles (Standard Normal)

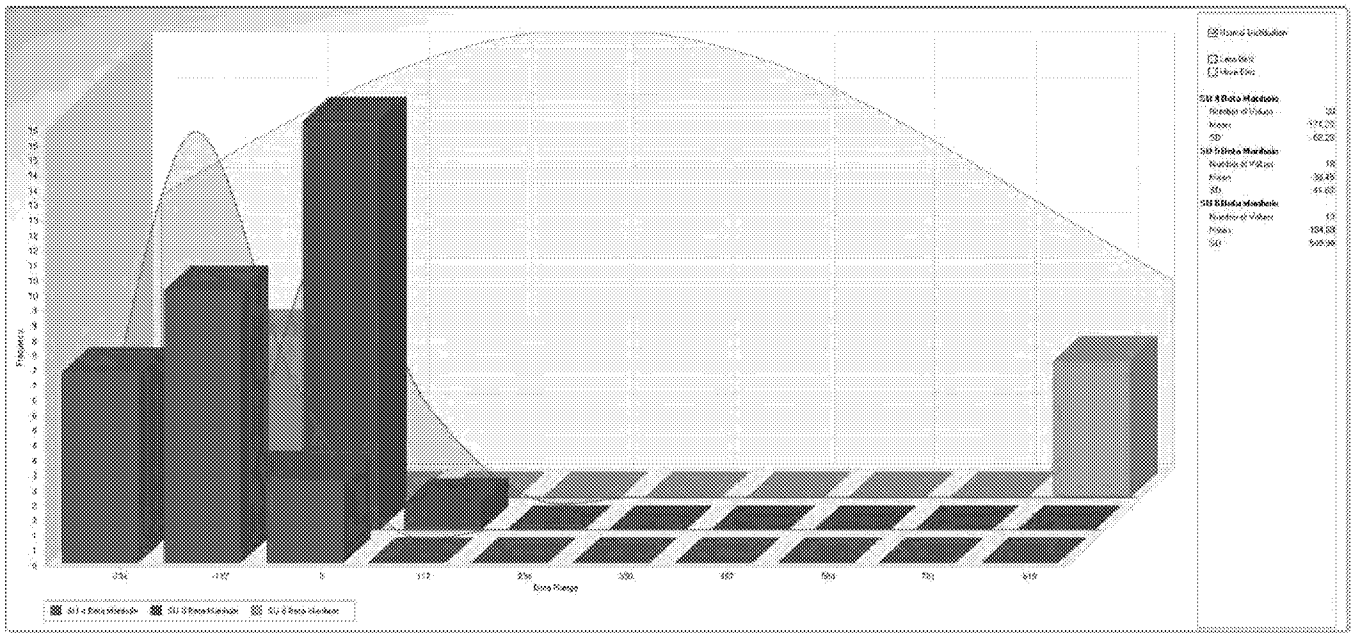

Multiple Box Plots
Ordered Observations

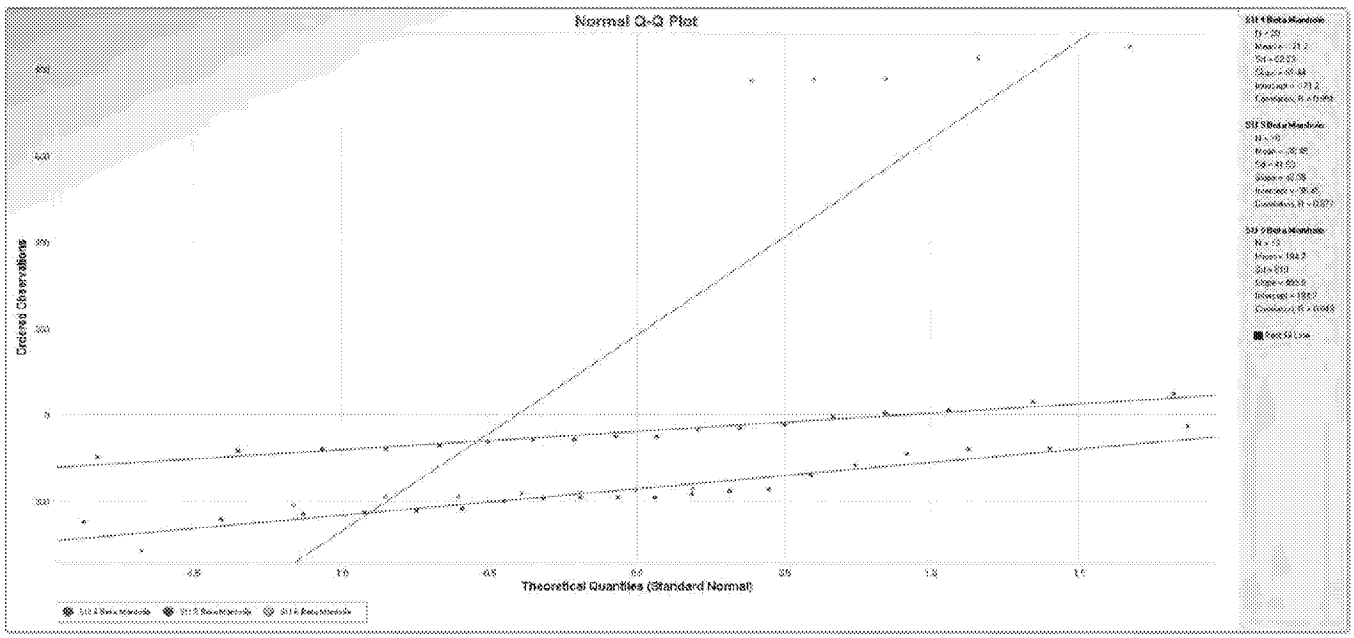



Normal Q-Q Plot
Ordered Observations
Theoretical Quantiles (Standard Normal)




Normal Q-Q Plot
Ordered Observations
Theoretical Quantiles (Standard Normal)




Normal Q-Q Plot
Ordered Observations
Theoretical Quantiles (Standard Normal)

## Finger Piers Alpha and Beta Static Distribution Analysis

| Survey Unit | Data Set | Normal? | BTV | Basis | Exceedances |
|---|---|---|---|---|---|
| 4 | Alpha Systematic | No | 10.12 | Maximum | 1 |
| | Alpha Bias | Yes | 54.07 | 95% USL | 0 |
| | Alpha Manhole | No | -9.44 | Maximum | 0 |
| 5 | Alpha Systematic | Yes | 70.28 | 95% USL | 0 |
| | Alpha Bias | Yes | 68.12 | 95% USL | 0 |
| | Alpha Manhole | Yes | -4.645 | 95% USL | 0 |
| 6 | Alpha Systematic | Yes | 66.58 | 95% USL | 0 |
| | Alpha Bias | Yes | 36.22 | 95% USL | 0 |
| | Alpha Manhole | No | -26.58 | Maximum | 0 |

| Survey Unit | Data Set | Normal? | BTV | Basis | Exceedances |
|---|---|---|---|---|---|
| 4 | Beta Systematic | Yes | 292.5 | 95% USL | 1 |
| | Beta Bias | Yes | 138.5 | 95% USL | 0 |
| | Beta Manhole | No | -26.99 | Maximum | 0 |
| 5 | Beta Systematic | Yes | 23 | 95% USL | 0 |
| | Beta Bias | Yes | 38.97 | 95% USL | 0 |
| | Beta Manhole | Yes | 66.3 | 95% USL | 0 |
| 6 | Beta Systematic | Yes | 320.2 | 95% USL | 0 |
| | Beta Bias | Yes | 147.8 | 95% USL | 0 |
| | Beta Manhole | No | 853.2 | Maximum | 0 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 4 - SMEAR MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 | FSS | | Smear | M1 | Floor | 28 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 29 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 2 | 45 | 60 | 100 | 0.331 | 0.382 | 6.0 | 10.5 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 30 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.9 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 31 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | 23.6 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 32 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | 21.0 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 33 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 34 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 5.2 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 35 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 53 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.5 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 36 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 0.0 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 37 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 1 | 36 | 60 | 100 | 0.331 | 0.382 | 3.0 | 34.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 38 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 1 | 45 | 60 | 100 | 0.331 | 0.382 | 3.0 | 10.5 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 39 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.5 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 40 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 48 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.6 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 41 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 42 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | 15.7 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 43 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 44 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | 26.2 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 45 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 46 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.9 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 47 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 55 | 60 | 100 | 0.331 | 0.382 | 0.0 | 15.7 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 48 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | 18.3 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 49 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 1 | 54 | 60 | 100 | 0.331 | 0.382 | 3.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 50 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 51 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | 26.2 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 52 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 56 | 60 | 100 | 0.331 | 0.382 | 0.0 | 18.3 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 53 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 53 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.5 | 0.7 | 12.5 |
| SU 4 | FSS | | Smear | M1 | Floor | 54 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.1 | 0.7 | 12.5 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 4 - SMEAR MEASUREMENTS - BIAS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 | Bias | | Smear | M1 | Floor | 1 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 45 | 60 | 100 | 0.331 | 0.382 | 3.0 | 5.8 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 2 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | -4.7 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 3 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 8.4 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 4 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 34 | 60 | 100 | 0.331 | 0.382 | 3.0 | 23.1 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 5 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 36 | 60 | 100 | 0.331 | 0.382 | 0.0 | 17.8 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 6 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 5.8 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 7 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 16.3 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 8 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 50 | 60 | 100 | 0.331 | 0.382 | 0.0 | 18.9 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 9 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -7.3 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 10 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.0 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 11 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 3.1 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 12 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 36 | 60 | 100 | 0.331 | 0.382 | 3.0 | 17.8 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 13 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 37 | 60 | 100 | 0.331 | 0.382 | 3.0 | 15.2 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 14 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 5.8 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 15 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 37 | 60 | 100 | 0.331 | 0.382 | 3.0 | 15.2 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 16 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 11.0 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 17 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 55 | 60 | 100 | 0.331 | 0.382 | 0.0 | 32.0 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 18 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 1 | 44 | 60 | 100 | 0.331 | 0.382 | 3.0 | 3.1 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 19 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 37 | 60 | 100 | 0.331 | 0.382 | 0.0 | 15.2 | 0.7 | 11.7 |
| SU 4 | Bias | | Smear | M1 | Floor | 20 | 10/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 428 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | 0.5 | 0.7 | 11.7 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 4 - SMEAR MEASUREMENTS - MANHOLES AND GRATES

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 4 | SU4-MH1 | | Smear | M1 | Floor | 1 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 31 | 60 | 100 | 0.331 | 0.382 | 0.0 | -37.0 | 0.7 | 12.0 |
| SU 4 | SU4-MH2 | | Smear | M1 | Floor | 2 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.2 | 0.7 | 12.0 |
| SU 4 | SU4-MH3 | | Smear | M1 | Floor | 3 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.6 | 0.7 | 12.0 |
| SU 4 | SU4-MH4 | | Smear | M1 | Floor | 4 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.5 | 0.7 | 12.0 |
| SU 4 | SU4-MH5 | | Smear | M1 | Floor | 5 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.4 | 0.7 | 12.0 |
| SU 4 | SU4-MH6 | | Smear | M1 | Floor | 6 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 48 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.6 | 0.7 | 12.0 |
| SU 4 | SU4-MH7 | | Smear | M1 | Floor | 7 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.5 | 0.7 | 12.0 |
| SU 4 | SU4-MH8 | | Smear | M1 | Floor | 8 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.6 | 0.7 | 12.0 |
| SU 4 | SU4-MH9 | | Smear | M1 | Floor | 9 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.4 | 0.7 | 12.0 |
| SU 4 | SU4-MH10 | | Smear | M1 | Floor | 10 | 9/24/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 5.0 | 0.7 | 12.0 |
| SU 4 | SU4-MH11 | | Smear | M1 | Floor | 11 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | 16.3 | 0.7 | 11.9 |
| SU 4 | SU4-MH12 | | Smear | M1 | Floor | 12 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.1 | 0.7 | 11.9 |
| SU 4 | SU4-MH13 | | Smear | M1 | Floor | 13 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.1 | 0.7 | 11.9 |
| SU 4 | SU4-MH16 | | Smear | M1 | Floor | 14 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 20.4 | 0.7 | 11.9 |
| SU 4 | SU4-MH17 | | Smear | M1 | Floor | 15 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 1 | 36 | 60 | 100 | 0.331 | 0.382 | 3.0 | -21.5 | 0.7 | 11.9 |
| SU 4 | SU4-MH18 | | Smear | M1 | Floor | 16 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 1 | 54 | 60 | 100 | 0.331 | 0.382 | 3.0 | 25.7 | 0.7 | 11.9 |
| SU 4 | SU4-MH19 | | Smear | M1 | Floor | 17 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.1 | 0.7 | 11.9 |
| SU 4 | SU4-MH20 | | Smear | M1 | Floor | 18 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.3 | 0.7 | 11.9 |
| SU 4 | SU4-MH23 | | Smear | M1 | Floor | 19 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.5 | 0.7 | 11.9 |
| SU 4 | SU4-MH24 | | Smear | M1 | Floor | 20 | 9/26/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 442 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.1 | 0.7 | 11.9 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 5 - SMEAR MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 5 | FSS | | Smear | M1 | Floor | 1 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.9 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 2 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 34 | 60 | 100 | 0.331 | 0.382 | 0.0 | -34.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 3 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 43 | 60 | 100 | 0.331 | 0.382 | 3.0 | -11.0 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 4 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 5 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 6 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 7 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 32 | 60 | 100 | 0.331 | 0.382 | 0.0 | -39.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 8 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 31 | 60 | 100 | 0.331 | 0.382 | 3.0 | -42.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 9 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 10 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 50 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.3 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 11 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | 13.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 12 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 13 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -21.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 14 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -11.0 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 15 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 16 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -24.1 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 17 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 47 | 60 | 100 | 0.331 | 0.382 | 3.0 | -0.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 18 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 45 | 60 | 100 | 0.331 | 0.382 | 3.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 19 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 20 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 21 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.3 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 22 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 23 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 36 | 60 | 100 | 0.331 | 0.382 | 0.0 | -29.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 24 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 25 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 26 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 45 | 60 | 100 | 0.331 | 0.382 | 3.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 27 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 28 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -24.1 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 29 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 30 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 36 | 60 | 100 | 0.331 | 0.382 | 3.0 | -29.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 31 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.1 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 32 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 33 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 34 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 37 | 60 | 100 | 0.331 | 0.382 | 0.0 | -26.7 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 35 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.3 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 36 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.9 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 37 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 39 | 60 | 100 | 0.331 | 0.382 | 3.0 | -21.5 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 38 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 39 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 36 | 60 | 100 | 0.331 | 0.382 | 0.0 | -29.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 40 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 1 | 42 | 60 | 100 | 0.331 | 0.382 | 3.0 | -13.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 41 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.3 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 42 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 35 | 60 | 100 | 0.331 | 0.382 | 0.0 | -32.0 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 43 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 44 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -11.0 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 45 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 4.7 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 46 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 36 | 60 | 100 | 0.331 | 0.382 | 0.0 | -29.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 47 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 34 | 60 | 100 | 0.331 | 0.382 | 0.0 | -34.6 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 48 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -11.0 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 49 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.9 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 50 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.4 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 51 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.1 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 52 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -24.1 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 53 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.8 | 0.7 | 12.2 |
| SU 5 | FSS | | Smear | M1 | Floor | 54 | 8/23/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 472 | 600 | 0 | 35 | 60 | 100 | 0.331 | 0.382 | 0.0 | -32.0 | 0.7 | 12.2 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 5 - SMEAR MEASUREMENTS - BIAS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 5 | Bias | | Smear | M1 | Floor | 1 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.4 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 2 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.7 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 3 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.1 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 4 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | 0.0 | 15.5 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 5 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 1 | 42 | 60 | 100 | 0.331 | 0.382 | 3.0 | -8.1 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 6 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 48 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.6 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 7 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.5 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 8 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 2.4 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 9 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.0 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 10 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 1 | 50 | 60 | 100 | 0.331 | 0.382 | 3.0 | 12.8 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 11 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 57 | 60 | 100 | 0.331 | 0.382 | 0.0 | 31.2 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 12 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.2 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 13 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.0 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 14 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 36 | 60 | 100 | 0.331 | 0.382 | 0.0 | -23.9 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 15 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 1 | 51 | 60 | 100 | 0.331 | 0.382 | 3.0 | 15.5 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 16 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | -2.9 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 17 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.3 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 18 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.5 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 19 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.1 | 0.7 | 12.0 |
| SU 5 | Bias | | Smear | M1 | Floor | 20 | 10/1/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 451 | 600 | 0 | 35 | 60 | 100 | 0.331 | 0.382 | 0.0 | -26.5 | 0.7 | 12.0 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 5 - SMEAR MEASUREMENTS - MANHOLES AND GRATES

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 5 | SU5-MH1 | | Smear | M1 | Floor | 1 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 61 | 60 | 100 | 0.331 | 0.382 | 0.0 | 31.5 | 0.7 | 12.5 |
| SU 5 | SU5-MH2 | | Smear | M1 | Floor | 2 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | 28.8 | 0.7 | 12.5 |
| SU 5 | SU5-MH3 | | Smear | M1 | Floor | 3 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.9 | 0.7 | 12.5 |
| SU 5 | SU5-MH4 | | Smear | M1 | Floor | 4 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.5 | 0.7 | 12.5 |
| SU 5 | SU5-MH5 | | Smear | M1 | Floor | 5 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 1 | 38 | 60 | 100 | 0.331 | 0.382 | 3.0 | 28.8 | 0.7 | 12.5 |
| SU 5 | SU5-MH6 | | Smear | M1 | Floor | 6 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 62 | 60 | 100 | 0.331 | 0.382 | 0.0 | 34.1 | 0.7 | 12.5 |
| SU 5 | SU5-MH7 | | Smear | M1 | Floor | 7 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.3 | 0.7 | 12.5 |
| SU 5 | SU5-MH8 | | Smear | M1 | Floor | 8 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -23.6 | 0.7 | 12.5 |
| SU 5 | SU5-MH9 | | Smear | M1 | Floor | 9 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -18.3 | 0.7 | 12.5 |
| SU 5 | SU5-MH10 | | Smear | M1 | Floor | 10 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 55 | 60 | 100 | 0.331 | 0.382 | 0.0 | 15.7 | 0.7 | 12.5 |
| SU 5 | SU5-MH12 | | Smear | M1 | Floor | 11 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 41 | 60 | 100 | 0.331 | 0.382 | 0.0 | 21.0 | 0.7 | 12.5 |
| SU 5 | SU5-MH13 | | Smear | M1 | Floor | 12 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | 28.8 | 0.7 | 12.5 |
| SU 5 | SU5-MH14 | | Smear | M1 | Floor | 13 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | 26.2 | 0.7 | 12.5 |
| SU 5 | SU5-MH15 | | Smear | M1 | Floor | 14 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 53 | 60 | 100 | 0.331 | 0.382 | 0.0 | 10.5 | 0.7 | 12.5 |
| SU 5 | SU5-MH17 | | Smear | M1 | Floor | 15 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | 0.0 | 5.2 | 0.7 | 12.5 |
| SU 5 | SU5-MH18 | | Smear | M1 | Floor | 16 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 0.0 | 0.7 | 12.5 |
| SU 5 | SU5-MH21 | | Smear | M1 | Floor | 17 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | -5.2 | 0.7 | 12.5 |
| SU 5 | SU5-MH23 | | Smear | M1 | Floor | 18 | 9/10/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 490 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -26.2 | 0.7 | 12.5 |

Appendix G

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SMEAR MEASUREMENTS - SYSTEMATIC

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | Systematic | | Smear | M1 | Floor | 1 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 50 | 60 | 100 | 0.331 | 0.382 | 3.0 | 17.6 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 2 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 3 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 1.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 4 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 5 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | 0.0 | 20.2 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 6 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 38 | 60 | 100 | 0.331 | 0.382 | 3.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 7 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 9.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 8 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 1.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 9 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 34 | 60 | 100 | 0.331 | 0.382 | 0.0 | -24.4 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 10 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 44 | 60 | 100 | 0.331 | 0.382 | 3.0 | 1.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 11 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 35 | 60 | 100 | 0.331 | 0.382 | 3.0 | 21.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 12 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 56 | 60 | 100 | 0.331 | 0.382 | 0.0 | 33.3 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 13 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 4.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 14 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 35 | 60 | 100 | 0.331 | 0.382 | 0.0 | -21.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 15 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 16 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 34 | 60 | 100 | 0.331 | 0.382 | 0.0 | -24.4 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 17 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 55 | 60 | 100 | 0.331 | 0.382 | 0.0 | 30.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 18 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 19 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 9.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 20 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 21 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 22 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 31 | 60 | 100 | 0.331 | 0.382 | 0.0 | -32.2 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 23 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 24 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -8.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 25 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 25 | 60 | 100 | 0.331 | 0.382 | 0.0 | -48.0 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 26 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -11.3 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 27 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -11.3 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 28 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 4.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 29 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 30 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 9.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 31 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 32 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | 0.0 | 28.0 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 33 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 49 | 60 | 100 | 0.331 | 0.382 | 3.0 | 14.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 34 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.1 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 35 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 48 | 60 | 100 | 0.331 | 0.382 | 0.0 | 12.3 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 36 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 1.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 37 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | 0.0 | 28.0 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 38 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 39 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 44 | 60 | 100 | 0.331 | 0.382 | 0.0 | 1.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 40 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | 0.0 | -0.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 41 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 60 | 60 | 100 | 0.331 | 0.382 | 0.0 | 43.8 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 42 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 14.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 43 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.4 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 44 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | 0.0 | 7.1 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 45 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 37 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 46 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.4 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 47 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 4.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 48 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 29 | 60 | 100 | 0.331 | 0.382 | 0.0 | -37.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 49 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 47 | 60 | 100 | 0.331 | 0.382 | 0.0 | 9.7 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 50 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 4.5 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 51 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 1 | 38 | 60 | 100 | 0.331 | 0.382 | 3.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 52 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 42 | 60 | 100 | 0.331 | 0.382 | 0.0 | -3.4 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 53 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 38 | 60 | 100 | 0.331 | 0.382 | 0.0 | -13.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 54 | 8/21/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 433 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | 0.0 | 14.9 | 0.7 | 11.7 |
| SU 6 | Systematic | | Smear | M1 | Floor | 55 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | 16.8 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 56 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | 1.0 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 57 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | 0.0 | 17.3 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 58 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | 0.0 | 14.7 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 59 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 39 | 60 | 100 | 0.331 | 0.382 | 0.0 | -16.8 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 60 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 40 | 60 | 100 | 0.331 | 0.382 | 0.0 | -14.2 | 0.7 | 12.0 |
| SU 6 | Systematic | | Smear | M1 | Floor | 61 | 8/28/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 0 | 454 | 600 | 0 | 45 | 60 | 100 | 0.331 | 0.382 | 0.0 | -1.0 | 0.7 | 12.0 |

## HUNTERS POINT NAVAL STATION - PARCEL F

## SURVEY UNIT 6 - SMEAR MEASUREMENTS - BIAS

| SU | Survey Type | Room | Meas. Type | Meter | Floor/ Wall/ Ceiling | Seq. No. | Date | Material/ Surface | Instrument/ Serial Numbers | Reference Alpha Counts | Reference Beta Counts | Reference Count Time (seconds) | Survey Alpha Counts | Survey Beta Counts | Survey Count Time (seconds) | Detector Active Area ($cm^2$) | Alpha Efficiency | Beta Efficiency | Alpha (dpm/ 100 $cm^2$) | Beta (dpm/ 100 $cm^2$) | Alpha Critical Value (counts) | Beta Critical Value (counts) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU 6 | Bias | | Smear | M1 | Floor | 1 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | -0.3 | 8.1 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 2 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 62 | 60 | 100 | 0.331 | 0.382 | -0.3 | 37.0 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 3 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 56 | 60 | 100 | 0.331 | 0.382 | -0.3 | 21.2 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 4 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 60 | 60 | 100 | 0.331 | 0.382 | -0.3 | 31.7 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 5 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 2 | 69 | 60 | 100 | 0.331 | 0.382 | 5.7 | 55.3 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 6 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 73 | 60 | 100 | 0.331 | 0.382 | -0.3 | 65.8 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 7 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | -0.3 | 10.7 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 8 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 1 | 53 | 60 | 100 | 0.331 | 0.382 | 2.7 | 13.4 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 9 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | -0.3 | 16.0 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 10 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 48 | 60 | 100 | 0.331 | 0.382 | -0.3 | 0.3 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 11 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 46 | 60 | 100 | 0.331 | 0.382 | -0.3 | 5.0 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 12 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 51 | 60 | 100 | 0.331 | 0.382 | -0.3 | 8.1 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 13 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | -0.3 | 16.0 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 14 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | -0.3 | 10.7 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 15 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 43 | 60 | 100 | 0.331 | 0.382 | -0.3 | 12.8 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 16 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 49 | 60 | 100 | 0.331 | 0.382 | -0.3 | 2.9 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 17 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 62 | 60 | 100 | 0.331 | 0.382 | -0.3 | 37.0 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 18 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 52 | 60 | 100 | 0.331 | 0.382 | -0.3 | 10.7 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 19 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 65 | 60 | 100 | 0.331 | 0.382 | -0.3 | 44.8 | 1.0 | 12.3 |
| SU 6 | Bias | | Smear | M1 | Floor | 20 | 9/17/2019 | Concrete | 2929 SN155577/ 43-10-1 PR157789 | 1 | 479 | 600 | 0 | 54 | 60 | 100 | 0.331 | 0.382 | -0.3 | 16.0 | 1.0 | 12.3 |

# APPENDIX H
# LABORATORY DATA QUALITY ASSESSMENT SUMMARY REPORT

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Naval Facilities Engineering Command Southwest
BRAC PMO West
San Diego, CA

# Appendix H

# Draft, Laboratory Data Quality Assessment Summary Report

# Radiological Scoping Survey Report

Parcel F Structures–Finger Piers

Hunters Point Naval Shipyard, CA

August 2020



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Naval Facilities Engineering Command Southwest
BRAC PMO West
San Diego, CA

# Appendix H

# Draft, Laboratory Data Quality Assessment Summary Report

# Radiological Scoping Survey Report

Parcel F Structures–Finger Piers

Hunters Point Naval Shipyard, CA

August 2020

DCN: APTM-0006-4550-0108

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# Acronyms and Abbreviations

EPA ..... U.S. Environmental Protection Agency
Lc ..... critical level
LCS ..... laboratory control sample
DL ..... detection limit
DLC ..... decision level concentration
NIST ..... National Institute of Standards and Technology
QC ..... quality control
RPD ..... relative percent difference

## H.1 Laboratory Data Quality Assessment Report

This laboratory data quality assessment summary report presents the data review and validation process findings and is provided to document the quality of analytical data used for project decisions. Sampling procedures and overall quality control (QC) and quality assurance protocols for the project are presented in the project sampling and analysis plan (Appendix A to the *Final Revision 2, Radiological Scoping Surveys Work Plan, Parcel F Structures, Hunters Point Naval Shipyard, San Francisco, California* [Aptim Federal Services LLC, 2019]).

Five radiological soil samples were collected October 2, 2019 through October 24, 2020, and were sent to an off-site laboratory for analysis. The samples were analyzed for the following parameters:

- Gamma spectroscopy—U.S. Environmental Protection Agency (EPA) Method 901.1 MOD/DOE EML HASL 300 Method GA-01-R
- Strontium-90—Environmental Measurements Laboratory Test Method SR-03-RC Modified
- Alpha spectroscopy—DOE EML HASL 300 A-01-R

Sampling associated with the characterization activities include collecting surface concrete samples to meet the objectives established in the *Final Basewide Radiological Removal Action, Action Memorandum—Revision 2006, Hunters Point Shipyard, San Francisco, California* (U.S. Department of the Navy, 2006) and the *Final Revision 2, Radiological Scoping Surveys Work Plan, Parcel F Structures, Hunters Point Naval Shipyard, San Francisco, California* (Aptim Federal Services LLC, 2019).

Concrete samples collected for characterization were shipped to Eurofins Test America Labs, Inc., located in St. Louis, Missouri, for analysis. Eurofins Test America Labs, Inc. is a U.S. Department of Defense Environmental Laboratory Accreditation Program-accredited laboratory and State of California Environmental Laboratory Accreditation Program-accredited laboratory.

EPA Stages 2B/Stage 3 verification and validation were conducted by third party data validation company, E-Lab Consultants LLC., located in Magnolia, Texas. Table H-1 presents a summary of the samples collected for this project and includes sample delivery group numbers, sample identification numbers, sample locations, sample collection dates, analytical methods, and data review levels. The reviews were

performed in accordance with guidelines and control criteria specified in the following documents:

- Sampling and analysis plan (Appendix A to the *Final Revision 2, Radiological Scoping Surveys Work Plan, Parcel F Structures, Hunters Point Naval Shipyard, San Francisco, California* [Aptim Federal Services LLC, 2019])
- *Quality System Manual for Environmental Laboratories, Version 5.1* (U.S. Department of Defense, 2017)
- *Multi-Agency Radiological Laboratory Analytical Protocols Manual (MARLAP)* (EPA et al., 2004)

Additionally, guidance was provided by the following:

- *Radionuclide Data Quality Evaluation Guidance* (U.S. Army Corps of Engineers, 2009)

The following QC elements were included in the Stage 2B data verification and validation review:

- Holding times and preservation
- Laboratory method blanks
- Initial and continuing calibration
- Laboratory control sample (LCS)
- Matrix spike sample
- Relative percent difference (RPD)
- Blanks and background determinations
- Sample-specific chemical tracer recovery
- Theoretical (target) and observed peak energies
- Decision level concentration (DLC) and/or analyte/instrument method detection limit

EPA Stage 3 data verification and validation was performed on three project samples, which met the project requirement for 10 percent Stage 3 validation, and included the preceding and the following QC elements:

- Instrument performance
- Standards traceability logs
- Target compound quantitation (calculation check)

Data were reviewed in terms of precision, accuracy, representativeness, comparability, and completeness. The precision, accuracy, representativeness, comparability, and completeness parameters were evaluated for the analytical data as follows:

- **Accuracy** is important because it is a measure of the true concentration of a parameter for a given analytical procedure. For radiological parameters, the percent difference is used to assess the accuracy of LCS, or blank spike results, and the Z score (EPA et al., 2004) is used to assess the accuracy of matrix spike sample results. Tracers, which are known spikes of either an isotope of the same element as the isotope of interest, or an element that is chemically very similar to the isotope of interest, are added to field samples and batch QC samples and so provide a recovery value for each sample which is indicative of losses or method anomalies that might have affected the isotope of interest.
- **Precision** is expressed as the RPD between the results of replicate sample analyses; for radiological laboratory replicate the absolute difference, provides an indication of precision if the average value of the two replicates is less than the action level. If the average value of the two replicates is greater than the action level, the RPD, provides an indication of precision. Precision is important because it is the ability of the laboratory to produce consistent results.
- **Representativeness** of the samples submitted for analysis is ensured by adherence to standard sampling techniques and protocols.
- **Comparability** of sample results is ensured through the use of approved sampling techniques and analysis methods.
- **Completeness** refers to the amount of valid data obtainable (by the specific method the laboratory used with the instrument to be employed) from a measurement system compared to the expected amount of data and is usually expressed as a percentage.

- **Sensitivity** is the capability of a method or instrument to measure target analyte responses. Several parameters unique to radiochemical analyses are used to describe the sensitivity of the detection systems. They include the critical level (LC), detection limit (DL), and DLC. LC is the net response level (in counts) at which the detector output can be considered above background. DL is the net response level (in counts) that can be expected to be seen with a detector with a fixed level of certainty. The DLC is the a priori net activity level above the LC that an instrument can be expected to detect 95 percent of the time.

The following subsections provide a discussion of the EPA Stage 2B/Stage 3 data verification and validation findings. Table H-2 presents the definitions of data qualification flags and reason codes applied to the sample results. Table H-3 shows the qualified sample data and reason codes.

### *H.1.1 Sample Holding Times and Preservation (Reason Code H)*

Sample holding times were evaluated by comparing the sample collection dates to the sample analysis dates found in the laboratory raw data (digestion logs and instrument run logs). Radiochemistry analysis do not have EPA method specified holding times.

### *H.1.2 Laboratory Method Blanks (Reason Code B1)*

The field sample results were evaluated with respect to the laboratory method blanks prepared and analyzed for each analytical batch. A daily blank is analyzed on each detector on every day that samples are analyzed on that detector (gamma spectroscopy and gas flow proportional detectors only). A daily blank consists of a detector count of the same length as that of a regular sample, performed with a blank container in the shielding cave (gamma) or counting chamber (gas proportional counter). Daily blanks are not measured for alpha spectroscopy. At least one method blank is analyzed for every matrix, every batch, or for every 20 samples (5 percent of samples), whichever is more frequent. For solid samples (gamma spectroscopy only), the method blank consists of sand, or a material with equivalent physical and radiological properties, that has been dried, ground, and stirred to homogenize in the same or similar manner as field samples. Background counts (12 hours each for gamma and alpha detectors, and 1000 minutes for gas proportional detectors) are conducted weekly for gamma spectrometer and gas proportional detectors and monthly for alpha spectrometer detectors.

The results of blanks and backgrounds were within acceptable limits.

### *H.1.3 Gamma Spectroscopy Initial Calibration—Energies and Efficiencies (Reason Code C)*

A full energy and shape calibration, Peak-to-Compton ratio calibration, and efficiency calibration, the three of which are called an initial calibration is performed annually and after hardware replacement or significant repairs. The initial calibration was performed with a National Institute of Standards and Technology (NIST)-traceable mixed gamma standard, typically a radioactive source with 8 to 10 radionuclides having gamma-ray emissions at energies from approximately 60 kiloelectron volts to 2,000 kiloelectron volts.

The energy and efficiency determination, including calibration curves and instrument backgrounds were reviewed. The review indicated that initial instrument calibrations were within acceptable limits.

### *H.1.4 Gamma Spectroscopy Continuing Calibration—Energy and Activities (Reason Code C)*

Continuing calibrations are performed daily. The same NIST-traceable mixed gamma standard employed for the initial calibration, is used for continuing calibrations. The activity of each radioisotope in the calibration standard must be within 10 percent relative of the true, decay-corrected activity. The energy of each isotope must be within 1 percent of the true energy. The full width half maximum value will be monitored and must be less than 3 percent of the observed energy for one low energy, one mid-energy, and one high energy calibration radionuclide.

A calibration review indicated that the continuing standard was analyzed on each day for which field and batch QC samples were analyzed, and the calibration standard was analyzed before analysis of samples. Continuing calibration standard radionuclide activities were within acceptable limits for target analytes.

### *H.1.5 Gross Alpha/Gross Beta Initial Calibration—Gas Flow Proportional Counter (Reason Code C)*

Both initial and continuing calibrations, the alpha spectrometer system is calibrated with a NIST-traceable standard containing five isotopes: uranium-238, uranium-234, thorium-230, plutonium-239, and americium-241. The detector response created by three of these radioisotopes, uranium-238, plutonium-239, and americium-241, are used to calibrate the instrument. An initial energy and efficiency calibration is performed annually, or whenever significant equipment changes occurs, such as replacement of a

detector. A pulser check must be run before the calibration on the same day of calibration run.

The gross alpha and gross beta initial instrument calibrations consist of 20 or more analyses each of a single paper filter gross alpha standard containing thorium-230 and a single electroplated gross beta standard containing strontium-90/yttrium-90. Average activities and standard deviations are then calculated and used on control charts. These are "zero mass" standards, so that there is little or no attenuation of the alpha or beta energies. The control charts are constructed for each detector using the mean and the ±2 sigma (warning) and the ±3 sigma (control) limits. Subsequent continuing calibration standard checks are made on days of instrument operation and checked against the control chart to ensure acceptable instrument operability prior to measurement of samples. The charts are updated periodically to reflect the most recent calibration checks.

A calibration review indicated that initial calibration results were within the acceptance limits.

### *H.1.6 Tracer Compound Recoveries*

A tracer is either an isotope of the same element as the isotope of interest, or an isotope of an element different from the element of the isotope of interest, but one that behaves chemically very similar to the isotope of interest. Tracers are added to both field samples and batch QC samples prior to sample preparation. Because the tracer is chemically identical or very similar to the isotope of interest, it provides an indication for every batch QC or field sample of method anomalies such as sample losses due to absorption, reactivity, spillage, etc. or artifacts specific to the measurement step. Thus, the percent recovery of the tracer is used to normalize the measured activity of the isotope of interest.

The review indicated that tracer recoveries were within the established control limits for samples with the exception noted:

| SDG Number | Analyte | Sample | Tracer Recovery | Control Limit (% Recovery) | Qualifier |
|---|---|---|---|---|---|
| 160-36160 | Polonium-210 | F-SU5-B10-S001 | 27.5% | 30 to 110 | J-qualify as estimated |

Notes:
% percent
J estimated value

Sample-specific chemical recovery specifies that each sample chemical tracer percent recovery must be recorded and should be plotted on a QC chart for each radionuclide and method and fall within the prescribed limits of ±3σ of the mean recovery. There should be at least 30 points used to establish a control chart for each radionuclide and both the ±2σ warning limits and ±3σ control limits must be displayed.

Although the tracer recovery in sample F-SU5-B10-S001 was below the lower QC limit (30 percent) there are sufficient tracer counts to keep the count uncertainty of the tracer less than 10 percent (2 sigma). Tracer recovery validation specifies that for sample-specific recoveries that fall within ±2σ of the mean recovery, data is acceptable, and no qualifiers are necessary. Sample F-SU5-B10-S001 was J qualified due to low recovery based on professional judgement of the reviewer (reason code P).

### *H.1.7 Laboratory Control Sample (Reason Code L)*

The LCS serves as a monitor of the overall accuracy and performance of steps in the analysis, including the sample preparation. Please note that for the gamma spectroscopy soil LCS, there is no sample preparation. The LCS is a known radionuclide standard in an analysis geometry and containing isotopes of interest consistent with the samples undergoing analysis. For the following limits to apply, the LCS must contain greater than 10 times the radionuclide's DL activity. An LCS analysis was conducted for every analytical batch, and the LCS recoveries met the established accuracy and precision requirements for analyses.

### *H.1.8 Sample Duplicate (Reason Code D1)*

For gamma spectroscopy, a sample duplicate was analyzed with each analytical batch to evaluate analytical precision. The RPD between the original results and duplicate results is used to evaluate bias introduced to the method due to matrix heterogeneity. Sample duplicate RPDs were within the method specified control limits.

### *H.1.9 Sample Identification*

The objective is to ensure that the reported quantitation results are accurate and that the required DLs have been met. When DL requirements are not met, the data quality objectives may not have been met. Results will be evaluated relative to the uncertainty associated with the analysis and the sample reports will report the uncertainty. Results and uncertainties must be reported for required analyses regardless of the size or sign

of the result. The reported uncertainty must include uncertainties associated with the analysis.

### *H.1.10 Sample Quantitation*

Quantitation reports, chromatograms, and sample preparation/extraction logs were reviewed during Stage 3 data validation to confirm the reported values. Recalculations were performed on samples and QC samples to verify that the laboratory reported results were reproducible. Based on the Stage 3 data validation, no calculation errors or discrepancies were identified.

### *H.1.11 Sensitivity—Reporting Limits*

Gamma spectroscopic analysis of collected soil samples requires for removal of soil moisture by oven drying overnight at a temperature of 100 degrees Celsius. Oven drying not only minimizes the gamma-ray self-attenuation of soil samples due to the absence of water during the gamma-ray spectroscopic analysis, but also allows for a straightforward calculation of the specific activity of radionuclides in soil, historically based on the sample dry weight. Analytical results were reported on a dry weight basis with applicable corrections to the DL, limit of quantitation, and sample-specific DLC. An additional correction factor has been developed for radium-226 gamma spectrometry analyses (applicable to dried soil samples that have had insufficient time to allow for the in-growth of the photon emitting daughters in the radium-226 decay chain).

### *H.1.12 Completeness*

The following subsection presents a discussion of analytical and technical completeness for the sampling event. Table H-4 summarizes completeness calculations for each analytical method.

#### H.1.12.1 Analytical Completeness

Analytical completeness is a quantitative expression of how closely the results adhered to QC requirements based on the number of data points qualified. The analytical completeness goal is 90 percent. Analytical completeness is calculated as follows:

$$\% \text{ Analytical Completeness} = \left| \frac{\text{Number of Unqualified Results}}{\text{Total Number of Results}} \right| \times 100$$

Analytical completeness is based on samples qualified and includes target analytes. The analytical completeness goal was met for methods.

#### H.1.12.2 Technical Completeness

Technical completeness is a quantitative expression of the data usability based on the number of rejected data. The technical completeness calculation considers data that is not rejected to be usable for project decisions. The technical completeness goal for the project is 95 percent and is calculated as follows:

$$\% \text{ Technical Completeness} = \left| \frac{\text{Number of Usable Results}}{\text{Total Number of Results}} \right| \times 100$$

The technical completeness goal was met for methods; therefore, sufficient usable data were obtained to meet the project data quality objectives.

### *H.1.13 Summary*

Based on the above EPA Stages 2B/Stage 3 verification and validation, although one sample result was flagged as estimated, the data quality issue observed was minor and the data usability was not affected. Except where noted, no other data were qualified. Overall, the data are of good technical quality and meet project objectives. The data are usable and available for project decisions.

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## H.2 References

Aptim Federal Services, LLC, 2019, *Final Revision 2, Radiological Scoping Surveys Work Plan, Parcel F Structures, Hunters Point Naval Shipyard, San Francisco, California*, May.

U.S. Army Corps of Engineers, 2009, *Radionuclide Data Quality Evaluation Guidance*.

U.S. Department of Defense, 2017, *Quality Systems Manual for Environmental Laboratories, Version 5.1*, January 4.

U.S. Department of the Navy, 2006, *Final Basewide Radiological Removal Action, Action Memorandum—Revision 2006, Hunters Point Shipyard, San Francisco, California*.

U.S. Environmental Protection Agency, U.S. Department of Defense, U.S. Department of Energy, U.S. Department of Homeland Security, U.S. Nuclear Regulatory Commission, 2004, *Multi-Agency Radiological Laboratory Analytical Protocols Manual (MARLAP)*, NUREG-1576 / EPA 402-B-04-001A / NTIS PB2004-105421.

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# TABLES

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**Table 1: Summary of Samples Collected, Collection Dates, Analysis Methods, and Data Review Levels**

| Date Collected | SDG | Field ID | Sample Location | Lab | Analytical Method | Review Level |
|---|---|---|---|---|---|---|
| 10/02/19 | 160-35853 | F-B01-S001 | F-B01-S001 | TAMO | 901.1/HASL300 | 3 |
| 10/02/19 | 160-35853 | F-B01-S001 | F-B01-S001 | TAMO | 905 | 3 |
| 10/02/19 | 160-35853 | F-B01-S001 | F-B01-S001 | TAMO | A-01-R | 3 |
| 10/02/19 | 160-35853 | F-B01-S002 | F-B01-S002 | TAMO | 901.1/HASL300 | 3 |
| 10/02/19 | 160-35853 | F-B01-S002 | F-B01-S002 | TAMO | 905 | 3 |
| 10/02/19 | 160-35853 | F-B01-S002 | F-B01-S002 | TAMO | A-01-R | 3 |
| 10/24/19 | 160-36160 | F-SU4-B04-S001 | F-SU4-B04-S001 | TAMO | 901.1/HASL300 | 2B |
| 10/24/19 | 160-36160 | F-SU4-B04-S001 | F-SU4-B04-S001 | TAMO | 905 | 2B |
| 10/24/19 | 160-36160 | F-SU4-B04-S001 | F-SU4-B04-S001 | TAMO | A-01-R | 2B |
| 10/24/19 | 160-36160 | F-SU5-B05-S001 | F-SU5-B05-S001 | TAMO | 901.1/HASL300 | 2B |
| 10/24/19 | 160-36160 | F-SU5-B05-S001 | F-SU5-B05-S001 | TAMO | 905 | 2B |
| 10/24/19 | 160-36160 | F-SU5-B05-S001 | F-SU5-B05-S001 | TAMO | A-01-R | 2B |
| 10/24/19 | 160-36160 | F-SU5-B10-S001 | F-SU5-B10-S001 | TAMO | 901.1/HASL300 | 2B |
| 10/24/19 | 160-36160 | F-SU5-B10-S001 | F-SU5-B10-S001 | TAMO | 905 | 2B |
| 10/24/19 | 160-36160 | F-SU5-B10-S001 | F-SU5-B10-S001 | TAMO | A-01-R | 2B |

Notes:

SDG sample delivery group

TAMO TestAmerica Missouri

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## Table 2: Data Qualification Flags and Reason Codes

| Qualifier | Definition |
|---|---|
| | No qualifier indicates that the data are acceptable both qualitatively and quantitatively. |
| U | The analyte was analyzed for but was not detected above the reported sample quantitation limit. |
| J | The analyte was analyzed for and was positively identified, but the reported numerical value may not be consistent with the amount actually present in the environmental sample. Results are estimated although the data are considered usable and may be used as appropriate to meet project objectives. Results are qualitatively acceptable and quantitatively uncertain. |
| UJ | The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. |
| R | The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Qualifier denotes the data are unusable due to deficiencies in the ability to analyze the sample and meet quality control criteria. Results are rejected and data are unusable for project decisions. |

## Reason Codes for Data Review and Validation

| Reason Code | Description |
|---|---|
| A | Serial dilution outside criteria (Level IV) |
| B1 | Method blank contamination. |
| B2 | Calibration blank contamination |
| B2 (Bias flag –) | Calibration blank indicates negative interference, false negatives may be present |
| C | ICV or CCV percent D outside control limits |
| C1 | Initial calibration RSD outside control limit |
| C2 | Initial continuing calibration RRF outside control limit |
| C3 | Continuing calibration RRF outside control limit |
| D1 | Matrix Duplicate RPD outside control limit |
| D2 | Sample Duplicate RPD outside control limit |
| E | The sample results exceed the linear calibration range of the instrument |
| F | Hydrocarbon pattern does not match hydrocarbon pattern in the standard |
| H | Holding time exceeded |
| I | Internal standard recovery outside control limit |
| K1 | Equipment rinsate contamination |
| K2 | Ambient blank contamination |
| K3 | Trip blank contamination |
| L | LCS outside control limits |
| M | MS outside control limits |
| M1 | MS, MSD, or RPD outside of control limits |
| O | Interference check sample outside acceptance criteria |
| P | Analyte qualified based on the professional judgement of the reviewer |

| Reason Code | Description |
|---|---|
| S | Surrogate recovery outside control limit |
| T | Temperature outside acceptance criteria. |
| Tr | Value reported detected between the DL and LOQ |
| W | Pesticide breakdown outside criteria (Level IV) |
| X | Raised reporting limit due to matrix interference or high analyte concentration |
| Y | Analyte was not confirmed by a second column |
| Y1 | Primary and Confirmation Sample Duplicate RPD outside control limit |

Notes:

| | |
|---|---|
| CCV | continuing calibration verification |
| DL | detection limit |
| ICV | initial calibration verification |
| LOQ | limit of quantification |
| MS | matrix spike |
| MSD | matrix spike duplicate |
| RPD | relative percent difference |
| RRF | relative response factor |
| RSD | relative standard deviation |

## Table 3: Qualified Data Summary

| Sample | Sample Type | Sample Date | Method | Analyte | SDG | Result | DL | LOQ | Dilution | Units | VQ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Reason Code** | **P** | | | | | | | | | | |
| F-SU5-B10-S001 | N | 10/24/19 | A-01-R | Polonium-210 | 160-36160 | 0.730 | 0.0873 | 0.0873 | 1 | pCi/g | J |

Notes:

| | |
|---|---|
| DL | detection limit |
| J | estimated concentration |
| LOQ | limit of quantification |
| N | normal primary sample |
| P | professional Judgement |
| pCi/g | picocuries per gram |
| SDG | sample delivery group |
| VQ | validation qualifier |

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## Table 4: Analytical and Technical Completeness

| Analytical Method | Number of Analytes | Number of Samples | Number of Results | Number of Qualified Results | Number of Unqualified Results | Number of Useable Results | Analytical Completeness [Goal = 90%] | Technical Completeness [Goal = 95%] |
|---|---|---|---|---|---|---|---|---|
| 901.1/HASL300 | 18 | 5 | 90 | 0 | 90 | 90 | 100% | 100% |
| A-01-R | 3 | 5 | 15 | 1 | 14 | 15 | 93% | 100% |
| 905 | 1 | 5 | 5 | 0 | 5 | 5 | 100% | 100% |

Notes:
% percent

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# APPENDIX I
# DATA VALIDATION REPORTS

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# COVER LETTER

March 7, 2020

Ref; Eurofins (Test America) SDG 160-35853 (-1 AND -2)(11/04/2019)

Eddie K Kalombo
APTIM
Hunters Point Naval Shipyard
200 Fisher Avenue
San Francisco, CA. 94124

Dear Mr. Kalombo:

Enclosed is the data validation report for the Hunters Point Radiological Work Task, Remedial Action, and Maintenance of Remedies at Hunters Point Naval Shipyard, San Francisco, PA, project number 501008. This DVR encompasses the laboratory data produced by Eurofins (formerly TestAmerica Laboratories, Inc.) Table 1-1 describes the samples and analysis listed in this DVR.

The specific sample identifications are listed in the sample identification table(s). The data packages were reviewed per the data validation procedures referenced in the introduction of the report.

Sincerely,

Larry Duty
Data Validation Project Manager

**HUNTERS POINT RADIOLOGICAL WORK TASKS, REMEDIAL ACTION, AND MAINTENANCE OF REMEDIES**

**N62473-17-D-0006 / N62473-17-F-4550**

**Hunters Point, San Francisco, California**

**TestAmerica Laboratories**

**Subcontract Number 204878**

Prepared for Aptim (former CB&I Federal Services)
Hunters Point Naval Shipyard
200 Fisher Avenue
San Francisco, CA 94124

Prepared by:
E-Lab Consultants
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Magnolia, Texas 77355

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# Acronyms and Abbreviations

Following is a list of acronyms and abbreviations that may be used in data validation reports and/or data quality assessment reports.

| | | | |
|---|---|---|---|
| %D | percent difference | DFTPP | decafluorotriphenylphosphine |
| %R | percent recovery | DOD | Department Of Defense |
| µg/L | microgram per liter | DQAR | data quality assessment report |
| mg/L | milligram per liter | | |
| pg/L | picogram per liter | DUP | laboratory duplicate |
| µg/kg | microgram per kilogram | DVP | data validation procedure |
| mg/kg | milligram per kilogram | EDB | ethylene dibromide |
| ng/kg | nanogram per kilogram | EDL | estimated detection limit |
| pg/g | picogram per gram | EICP | extracted ion current profile |
| AA | atomic absorption | EPA | Environmental Protection Agency, United States |
| ARRF | average relative response factor | EB | equipment blank |
| BFB | bromofluorobenzene | FB | field blank |
| BNA | base/neutral/acid compounds | GC | gas chromatography |
| CCB | continuing calibration blank | GC/ECD | gas chromatography/electron capture detector |
| CCC | calibration check compound | GC/ELCD | gas chromatography/electrolytic conductivity detector (Hall detector) |
| CCV | continuing calibration verification | GC/FPD | gas chromatography/flame photometric detector |
| CF | calibration factor | GC/MS | gas chromatography/mass spectrometry |
| CLP | Contract Laboratory Program | GC/PID | gas chromatography/photoionization detector |
| COC | chain of custody record | GFAA | graphite furnace atomic |

| | | | |
|---|---|---|---|
| | | | absorption |
| COD | chemical oxygen demand | GPC | gel permeation chromatography |
| CTO | contract task order | Hg | mercury |
| CVAA | cold vapor atomic absorption | HPLC | high-performance liquid chromatography |
| DBCP | dibromochloropropane | HRGC/HR MS | high resolution gas chromatography/high resolution mass spectrometry |
| DCB | decachlorobiphenyl | RF r2 | response factor coefficient of determination |
| 4,4'-DDD | 4,4'-dichlorodiphenyldichloroethane | RICRF | reconstructed ion chromatogram response factor |
| 4,4'-DDE | 4,4'-dichlorodiphenyldichloroethylene | RLRIC | reporting limit reconstructed ion chromatogram |
| 4,4'-DDT | 4,4'-dichlorodiphenyltrichloroethane | RPDRL | relative percent difference reporting limit |
| ICV | initial calibration verification | RRFRPD | relative response factor relative percent difference |
| IDL | instrument detection limit | RRTRRF | relative retention time relative response factor |
| IR | infrared spectroscopy | RSDRRT | relative standard deviation relative retention time |
| IRP | installation restoration program | RTRSD | retention time relative standard deviation |
| IS | internal standards | RT | retention time |
| LCS | laboratory control sample | HT | holding time |
| MBAS | methyl blue active substance | ICB | initial calibration blank |
| MDL | method detection limit | ICP | inductively coupled plasma |
| MS | matrix spike | ICS | interference check sample |
| MSA | method of standard addition | SDG | sample delivery group |

| | | | |
|---|---|---|---|
| MSD | matrix spike duplicate | SICP | selected ion current profiles |
| m/z | mass to charge ratio | s/n | signal to noise ratio |
| NFESC | Naval Facilities Engineering Services Center | SOP | standard operating procedure |
| OP | organophosphorus | SOW | statement of work |
| PAH | polynuclear aromatic hydrocarbon | SPCC | system performance check compound |
| PARCC | precision, accuracy, representativeness, comparability, completeness | SRM | standard reference material |
| PCB | polychlorinated biphenyl | SVOC | semivolatile organic compound |
| PCDD | polychlorinated dibenzodioxin | TB | trip blank |
| PCDF | polychlorinated dibenzofuran | TCDD | tetrachlorodibenzodioxin |
| PE | performance evaluation | TCX | tetrachloro-m-xylene |
| PEM | performance evaluation mixture | TDS | total dissolved solids |
| PFK | perfluorokerosene | TIC | tentatively identified compound |
| PQO | project quality objective | TOC | total organic carbon |
| QAPFK | quality assurance perfluorokerosene | TOX | total organic halides |
| QACQA | quality assurance coordinator quality assurance | TPHE | total petroleum hydrocarbons as extractables |
| QAPPQAC | quality assurance project plan quality assurance coordinator | UV/VIS | ultraviolet/visible |
| QCQAPP | quality control quality assurance project plan | VOA | volatile organic analysis |
| QSM QC | quality system manual quality control | VOC | volatile organic compound |
| rQSM | correlation coefficient quality system manual | VTSR | validated time of sample receipt |

| | | | |
|---|---|---|---|
| r2r | coefficient of determination correlation coefficient | WDM | window defining mixture |

# 1.0 INTRODUCTION

This Data Validation Report (DVR) contains the results of the validation conducted for samples collected and analyzed as part of the Hunters Point Naval Weapons Station Radiological work task, remedial action, and maintenance of remedies. The project was conducted per contract number N62473-17-D-006/N62473-17-F-4550 under EMAC III TO 13 for the Base Realignment and Closure Program Management Office, West Naval Facilities Engineering Command, 1455 Frazee Road, #600, San Diego CA. 92108. This DVR was subcontracted to E-Lab Consultants from Aptim (former Chicago, Bridge, and Iron) to serve third party data assessment purposes and evaluates the laboratory data contained in Sample Delivery Groups (SDGs) list in **Table 1-1** produced by Eurofins (formerly TestAmerica Laboratories, Inc).

These samples were analyzed in accordance with the approved *United States Department of Defense* (DOD) *Quality Systems Manual (QSM) for Environmental Laboratories Version 5.0, July 2013* and the analytical methods specified for the analytes requested on the Chain of Custody (COC) documentation. **Table 1-1** provides a list of the samples collected, a laboratory sample number cross-reference, sample matrix, date collected, sample purpose, and analytical methods performed for each sample pertaining to this DVR. This DVR is conducted per the analysis requested on the COC in accordance with the; *Sampling and Analysis Plan (SAP) October 2013, American National Standard Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation (ANSI/ANS-41.5-2012), Environmental Protection Agency (EPA) National Functional Guidelines (NFG) for Organic (NFGO) Data Review (August 2014), NFG for Inorganic (NFGIO) Data Review (August 2014),* and the method specified for the analysis.

The data were evaluated against the quantitative acceptance limits given in the DOD QSM for the data quality parameters of sensitivity, accuracy, precision, and completeness. **Appendix A** contains the Laboratory Data Report Form 1s that has been annotated with qualifiers assigned during the validation process in accordance with the project procedures manual.

In accordance with SAP, a review of the data was conducted independent of the laboratory. This review consisted of an evaluation of laboratory performance criteria

from the case narrative, and an evaluation of the sample-specific criteria included in the laboratory data packages analyzed in accordance with the DOD QSM.

The validation consists of an evaluation of the case narrative, chain of custody and associated laboratory sample receipt forms, proper sample preservations, holding times, initial calibration and continuing calibration procedures and results, laboratory control sample (LCS) (and duplicate [LCSD] if reported) accuracy and precision and matrix spike (MS) and matrix spike duplicate (MSD) sample analyses, method blanks, field blanks, and field duplicate precision.

(if required) Additional Stage 2B review included;

- Organic Analysis; internal standards, continuing calibration verification, internal standards, degradation summary, retention times, second column or second detector confirmations, retention time windows,
- Inorganic Analysis; laboratory duplicate precision, instrument tuning, initial calibration, low-level calibration check standards, initial and continuing calibration verification, initial and continuing calibration blanks, interference check sample, internal standards, serial dilution results, post digestion spike recoveries, and interelement correction factors

The results of the independent data review are presented in **Section 2.0**.

**Table 1-1**
**Sample Field and Laboratory ID Numbers**

| Field ID | Sample Date | Matrix | Purpose | Lab ID | Method | Level |
|---|---|---|---|---|---|---|
| F-B01-S001 | 10/2/2019 9:10:00 AM | SC | N | 160358531 | EPA191.1M<br>EPA905M<br>A-Spec A-01R | 3 |
| F-B01-S002 | 10/2/2019 12:30:00 PM | SC | N | 160358532 | EPA191.1M<br>EPA905M<br>DoD A-01R | 3 |

Following the specifications in the SAP related to the data validation process, the data were annotated with data validation qualifiers and codes on the analytical data sheets that are required qualifier flags as described in the SAP. **Table 1-2** provides definitions of the data qualifiers references, and **Table 1-3** lists and defines the data review qualifier codes.

**Table 1-2**
**Data Qualifier References**

| Qualifier | Organics | Inorganics |
|---|---|---|
| U | The analyte was analyzed for but was not detected above the method detection limit. | The analyte was analyzed for but was not detected above the method detection limit. |
| J | The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. | The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| N | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." | Not applicable. |
| NJ | The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. | Not applicable. |

| | | |
|---|---|---|
| UJ | The analyte was not detected above the method detection limit. However, the associated value is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. | The analyte was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified. | The data are unusable. The sample results are rejected due to serious deficiencies in meeting the Quality Control (QC) criteria. The analyte may or may not be present in the sample. |

**Table 1-3**
**Data Review Qualifier Codes**

| Reason Code | Description |
|---|---|
| A | Serial dilution outside criteria (Level IV). |
| B1 | Method blank contaminants above reporting limit. |
| B2 | Calibration blank contaminants above reporting limit. |
| B2 (Bias flag –) | Calibration blank indicates negative interference, false negatives may be present |
| B3 | Trip blank contamination |
| B4 | Equipment rinsate contamination. |
| B5 | Ambient blank contamination |
| C | ICV or CCV % D outside control limits. |
| C1 | Initial calibration RSD outside control limit. |
| C2 | Initial calibration RRF outside control limit. |
| C3 | Continuing calibration RRF outside control limit. |
| D1 | Sample Duplicate RPD outside control limit. |
| D2 | Matrix Duplicate RPD outside control limit |
| E | The sample results exceed the linear calibration range of the instrument. |
| F | Hydrocarbon pattern does not match hydrocarbon pattern in the standard. |
| H | Holding time exceeded. |
| I | Internal standard recovery outside control limit. |

| | |
|---|---|
| L | LCS outside control limits. |
| M | MS outside control limits. |
| M1 | MS, MSD or RPD outside of control limits |
| O | Interference check sample outside acceptance criteria |
| P | Analyte qualified based on the professional judgement of the reviewer. |
| S | Surrogate recovery outside control limit. |
| T | Temperature outside acceptance criteria. |
| Tr | Value reported detected between the DL and LOQ |
| W | Pesticide breakdown outside criteria (Level IV). |
| X | Raised reporting limit due to matrix interference or high analyte concentration. |
| Y | Analyte was not confirmed by a second column. |
| Y1 | Primary and Confirmation Sample Duplicate RPD outside control limit. |

# 2.0 DATA VALIDATION RESULTS

## Laboratory Data Package Review

The samples reported, QC designations, and validation level is listed in **Table 1-1**. The data packages were reviewed in accordance with the project procedures manual.

## Sample Documentation, Preservation, Handling, and Transport

All samples arrived at the laboratory on time, intact and within preservation requirements. A cross reference of the COC and analytical reports has concluded all extractions and analysis were performed within the required holding times. The validation met all QC requirements listed in the method and data validation requirements of the SAP. None of the data is qualified based on sample documentation, preservation, handing, or transport.

The data is not qualified.

## 2.1 Total Beta Strontium, EPA 905

### 2.1.1 Instrument Parameters

Verification included the review of the laboratories most recent efficiency calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Counting uncertainty was ≤ 1/5 the quantitation limits. Efficiency performance checks were verified for each use.

### 2.1.2 Energy Calibrations

Energy calibrations (Energy Calibration Performance Checks, ECPC) were verified to be at the frequency specified. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.1.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.1.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (<20%). Continuing calibrations were performed on a 12-hour basis. Detection goals for cesium137 were not met in all analysis due to elevated Compton background levels. Natural activity is suspect. None of the data were qualified based on continuing calibrations.

### 2.1.5 Blanks

Each analytical batch was represented with a method blank. The laboratory reports none of the target compounds were detected in any of the method blanks that would results in sample data qualification (e.g. sample detections were >5X the blank). None of the results are qualified based on data verifications.

### 2.1.6 Laboratory Control Sample Recovery (Blank Spikes)

The LCS values were validated by recalculating two compounds per LCS. None of the data are qualified based on LCS recoveries.

### 2.1.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD samples were not submitted for this analysis.

### 2.1.8 Laboratory Duplicate Recoveries

All laboratory generated duplicate recoveries are within QC limits.

### 2.1.9 Field QC Samples

**Trip, Equipment and Field Blanks**

Field blank samples were not submitted for this analysis.

### 2.1.10 Target Compound Identification

None of the identified target compounds were qualified based compound identification.

### 2.1.11 Compound Quantitation and Reporting Limits

Reporting limits were verified to be equal to the Level of Detection (LOD). The LODs have been verified to meet or exceed the project required performance standards. Sample dilutions, cleanup concentrations, and moisture correction have been applied to all reportable results. The results are reported on a dry weight basis where applicable. The harmonization of the SDG samples could not be thoroughly completed due to rocks within the sample..

## 2.2 Radium-226 by GAMMA SPEC (21 DAY INGROWTH)

### 2.2.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.2.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.2.3 Background Determination

Background control logs were verified to insure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.2.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.2.1 Blanks

Each analytical batch was represented with a method blank. The laboratory reports none of the target compounds were detected in any of the method blanks that would results in sample data qualification (e.g. sample detections were >5X the blank or MB was below the 1.65X its CSU). None of the results are qualified based on data verifications.

### 2.2.2 Laboratory Control Sample Recovery (Blank Spikes)

The LCS values were validated by recalculating two compounds per LCS. None of the data are qualified based on LCS recoveries.

### 2.2.3 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD samples were not submitted for this analysis.

### 2.2.4 Laboratory Duplicate Recoveries

All laboratory generated duplicate recoveries are within QC limits.

### 2.2.5 Field QC Samples

**Trip, Equipment and Field Blanks**

Field blank samples were not submitted for this analysis.

### 2.2.6 Target Compound Identification

None of the identified target compounds were qualified based compound identification.

### 2.2.7 Compound Quantitation and Reporting Limits

Reporting limits were verified to be equal to the Level of Detection (LOD). The LODs have been verified to meet or exceed the project required performance standards. Sample dilutions, cleanup concentrations, and moisture correction have been applied to all reportable results. The results are reported on a dry weight basis where applicable.

## 2.3 A-01R Plutonium

### 2.3.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.3.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.3.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.3.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.3.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.3.6 Laboratory Control Sample Recovery (Blank Spikes)

LCS/D analyses provided adequate confirmation of accuracy and precision.

### 2.3.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD analyses were not performed for these analyses. No qualifications were applied.

### 2.3.8 Tracers

The tracers yielded fully satisfactory recoveries

Overall Assessment of Data Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

## 2.4 A-01R Polonium

### 2.4.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.4.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.4.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.4.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.4.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.4.6 Laboratory Control Sample Recovery (Blank Spikes)

LCS/D analyses provided adequate confirmation of accuracy and precision.

### 2.4.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD analyses were not performed for these analyses. No qualifications were applied.

### 2.4.8 Tracers

The tracers yielded fully satisfactory recoveries

Overall Assessment of Data Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

## 2.5 GAMMA SPECTROSCOPY ANALYSES

#### 2.5.1.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.5.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.5.3 Background Determination

Background control logs were verified to insure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.5.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.5.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.5.6 Laboratory Control Sample Recovery (Blank Spikes)

All percent recoveries from the LCS analyses were within established control limits. No qualifications were applied.

### 2.5.7 Duplicate Recoveries

Duplicate recoveries were within QC limits.

# COVER LETTER

March 7, 2020 (Rev 06092020)

Ref; Eurofins (Test America) SDG 160-36160 (12/04/2019)

Eddie K Kalombo
APTIM
Hunters Point Naval Shipyard
200 Fisher Avenue
San Francisco, CA. 94124

Dear Mr. Kalombo:

Enclosed is the data validation report for the Hunters Point Radiological Work Task, Remedial Action, and Maintenance of Remedies at Hunters Point Naval Shipyard, San Francisco, PA, project number 501008. This DVR encompasses the laboratory data produced by Eurofins (formerly TestAmerica Laboratories, Inc.) Table 1-1 describes the samples and analysis listed in this DVR.

The specific sample identifications are listed in the sample identification table(s). The data packages were reviewed per the data validation procedures referenced in the introduction of the report.

Sincerely,

Larry Duty
Data Validation Project Manager

**HUNTERS POINT RADIOLOGICAL WORK TASKS, REMEDIAL ACTION, AND MAINTENANCE OF REMEDIES**

**N62473-17-D-0006 / N62473-17-F-4550**

**Hunters Point, San Francisco, California**

**TestAmerica Laboratories**

**Subcontract Number 204878**

Prepared for Aptim (former CB&I Federal Services)
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# Acronyms and Abbreviations

Following is a list of acronyms and abbreviations that may be used in data validation reports and/or data quality assessment reports.

| | | | |
|---|---|---|---|
| %D | percent difference | DFTPP | decafluorotriphenylphosphine |
| %R | percent recovery | DOD | Department Of Defense |
| µg/L | microgram per liter | DQAR | data quality assessment report |
| mg/L | milligram per liter | | |
| pg/L | picogram per liter | DUP | laboratory duplicate |
| µg/kg | microgram per kilogram | DVP | data validation procedure |
| mg/kg | milligram per kilogram | EDB | ethylene dibromide |
| ng/kg | nanogram per kilogram | EDL | estimated detection limit |
| pg/g | picogram per gram | EICP | extracted ion current profile |
| AA | atomic absorption | EPA | Environmental Protection Agency, United States |
| ARRF | average relative response factor | EB | equipment blank |
| BFB | bromofluorobenzene | FB | field blank |
| BNA | base/neutral/acid compounds | GC | gas chromatography |
| CCB | continuing calibration blank | GC/ECD | gas chromatography/electron capture detector |
| CCC | calibration check compound | GC/ELCD | gas chromatography/electrolytic conductivity detector (Hall detector) |
| CCV | continuing calibration verification | GC/FPD | gas chromatography/flame photometric detector |
| CF | calibration factor | GC/MS | gas chromatography/mass spectrometry |
| CLP | Contract Laboratory Program | GC/PID | gas chromatography/photoionization detector |
| COC | chain of custody record | GFAA | graphite furnace atomic |

| | | | |
|---|---|---|---|
| | | | absorption |
| COD | chemical oxygen demand | GPC | gel permeation chromatography |
| CTO | contract task order | Hg | mercury |
| CVAA | cold vapor atomic absorption | HPLC | high-performance liquid chromatography |
| DBCP | dibromochloropropane | HRGC/HR MS | high resolution gas chromatography/high resolution mass spectrometry |
| DCB | decachlorobiphenyl | RF r2 | response factor coefficient of determination |
| 4,4'-DDD | 4,4'-dichlorodiphenyldichloroethane | RICRF | reconstructed ion chromatogram response factor |
| 4,4'-DDE | 4,4'-dichlorodiphenyldichloroethylene | RLRIC | reporting limit reconstructed ion chromatogram |
| 4,4'-DDT | 4,4'-dichlorodiphenyltrichloroethane | RPDRL | relative percent difference reporting limit |
| ICV | initial calibration verification | RRFRPD | relative response factor relative percent difference |
| IDL | instrument detection limit | RRTRRF | relative retention time relative response factor |
| IR | infrared spectroscopy | RSDRRT | relative standard deviation relative retention time |
| IRP | installation restoration program | RTRSD | retention time relative standard deviation |
| IS | internal standards | RT | retention time |
| LCS | laboratory control sample | HT | holding time |
| MBAS | methyl blue active substance | ICB | initial calibration blank |
| MDL | method detection limit | ICP | inductively coupled plasma |
| MS | matrix spike | ICS | interference check sample |
| MSA | method of standard addition | SDG | sample delivery group |

| | | | |
|---|---|---|---|
| MSD | matrix spike duplicate | SICP | selected ion current profiles |
| m/z | mass to charge ratio | s/n | signal to noise ratio |
| NFESC | Naval Facilities Engineering Services Center | SOP | standard operating procedure |
| OP | organophosphorus | SOW | statement of work |
| PAH | polynuclear aromatic hydrocarbon | SPCC | system performance check compound |
| PARCC | precision, accuracy, representativeness, comparability, completeness | SRM | standard reference material |
| PCB | polychlorinated biphenyl | SVOC | semivolatile organic compound |
| PCDD | polychlorinated dibenzodioxin | TB | trip blank |
| PCDF | polychlorinated dibenzofuran | TCDD | tetrachlorodibenzodioxin |
| PE | performance evaluation | TCX | tetrachloro-m-xylene |
| PEM | performance evaluation mixture | TDS | total dissolved solids |
| PFK | perfluorokerosene | TIC | tentatively identified compound |
| PQO | project quality objective | TOC | total organic carbon |
| QAPFK | quality assurance perfluorokerosene | TOX | total organic halides |
| QACQA | quality assurance coordinator quality assurance | TPHE | total petroleum hydrocarbons as extractables |
| QAPPQAC | quality assurance project plan quality assurance coordinator | UV/VIS | ultraviolet/visible |
| QCQAPP | quality control quality assurance project plan | VOA | volatile organic analysis |
| QSM QC | quality system manual quality control | VOC | volatile organic compound |
| rQSM | correlation coefficient quality system manual | VTSR | validated time of sample receipt |

| | | | |
|---|---|---|---|
| r2r | coefficient of determination correlation coefficient | WDM | window defining mixture |

# 1.0 INTRODUCTION

This Data Validation Report (DVR) contains the results of the validation conducted for samples collected and analyzed as part of the Hunters Point Naval Weapons Station Radiological work task, remedial action, and maintenance of remedies. The project was conducted per contract number N62473-17-D-006/N62473-17-F-4550 under EMAC III TO 13 for the Base Realignment and Closure Program Management Office, West Naval Facilities Engineering Command, 1455 Frazee Road, #600, San Diego CA. 92108. This DVR was subcontracted to E-Lab Consultants from Aptim (former Chicago, Bridge, and Iron) to serve third party data assessment purposes and evaluates the laboratory data contained in Sample Delivery Groups (SDGs) list in **Table 1-1** produced by Eurofins (formerly TestAmerica Laboratories, Inc).

These samples were analyzed in accordance with the approved *United States Department of Defense* (DOD) *Quality Systems Manual (QSM) for Environmental Laboratories Version 5.0, July 2013* and the analytical methods specified for the analytes requested on the Chain of Custody (COC) documentation. **Table 1-1** provides a list of the samples collected, a laboratory sample number cross-reference, sample matrix, date collected, sample purpose, and analytical methods performed for each sample pertaining to this DVR. This DVR is conducted per the analysis requested on the COC in accordance with the; *Sampling and Analysis Plan (SAP) October 2013, American National Standard Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation (ANSI/ANS-41.5-2012), Environmental Protection Agency (EPA) National Functional Guidelines (NFG) for Organic (NFGO) Data Review (August 2014), NFG for Inorganic (NFGIO) Data Review (August 2014),* and the method specified for the analysis.

The data were evaluated against the quantitative acceptance limits given in the DOD QSM for the data quality parameters of sensitivity, accuracy, precision, and completeness. **Appendix A** contains the Laboratory Data Report Form 1s that has been annotated with qualifiers assigned during the validation process in accordance with the project procedures manual.

In accordance with SAP, a review of the data was conducted independent of the laboratory. This review consisted of an evaluation of laboratory performance criteria

from the case narrative, and an evaluation of the sample-specific criteria included in the laboratory data packages analyzed in accordance with the DOD QSM.

The validation consists of an evaluation of the case narrative, chain of custody and associated laboratory sample receipt forms, proper sample preservations, holding times, initial calibration and continuing calibration procedures and results, laboratory control sample (LCS) (and duplicate [LCSD] if reported) accuracy and precision and matrix spike (MS) and matrix spike duplicate (MSD) sample analyses, method blanks, field blanks, and field duplicate precision.

(if required) Additional Stage 2B review included;

- Organic Analysis; internal standards, continuing calibration verification, internal standards, degradation summary, retention times, second column or second detector confirmations, retention time windows,
- Inorganic Analysis; laboratory duplicate precision, instrument tuning, initial calibration, low-level calibration check standards, initial and continuing calibration verification, initial and continuing calibration blanks, interference check sample, internal standards, serial dilution results, post digestion spike recoveries, and interelement correction factors

The results of the independent data review are presented in **Section 2.0**.

**Table 1-1**
**Sample Field and Laboratory ID Numbers**

| Field ID | Sample Date | Matrix | Purpose | Lab ID | Method | Level |
|---|---|---|---|---|---|---|
| F-SU3-B01-S001 | 10/24/2019 11:50:00 AM | SC | N | 160361601 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B04-S001 | 10/24/2019 10:41:00 AM | SC | N | 160361602 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B05-S001 | 10/24/2019 10:08:00 AM | SC | N | 160361603 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B07-S001 | 10/24/2019 9:40:00 AM | SC | N | 160361604 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B09-S001 | 10/24/2019 9:17:00 AM | SC | N | 160361605 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B11-S001 | 10/24/2019 11:32:00 AM | SC | N | 160361606 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B12-S001 | 10/24/2019 11:00:00 AM | SC | N | 160361607 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B14-S001 | 10/24/2019 10:23:00 AM | SC | N | 160361608 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B15-S001 | 10/24/2019 9:52:00 AM | SC | N | 160361609 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B23-S001 | 10/24/2019 1:46:00 PM | SC | N | 1603616010 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B29-S001 | 10/24/2019 2:21:00 PM | SC | N | 1603616011 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU3-B30-S001 | 10/24/2019 2:04:00 PM | SC | N | 1603616012 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU4-B04-S001 | 10/24/2019 3:04:00 PM | SC | N | 1603616013 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU5-B05-S001 | 10/24/2019 3:58:00 PM | SC | N | 1603616014 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |
| F-SU5-B10-S001 | 10/24/2019 3:38:00 PM | SC | N | 1603616015 | EPA191.1M EPA905.0M A-Spec A-01R | 2B |

Following the specifications in the SAP related to the data validation process, the data were annotated with data validation qualifiers and codes on the analytical data

sheets that are required qualifier flags as described in the SAP. **Table 1-2** provides definitions of the data qualifiers references, and **Table 1-3** lists and defines the data review qualifier codes.

**Table 1-2**
**Data Qualifier References**

| Qualifier | Organics | Inorganics |
|---|---|---|
| U | The analyte was analyzed for but was not detected above the method detection limit. | The analyte was analyzed for but was not detected above the method detection limit. |
| J | The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. | The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| N | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." | Not applicable. |
| NJ | The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. | Not applicable. |
| UJ | The analyte was not detected above the method detection limit. However, the associated value is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. | The analyte was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified. | The data are unusable. The sample results are rejected due to serious deficiencies in meeting the Quality Control (QC) criteria. The analyte may or may not be present in the sample. |

**Table 1-3**
**Data Review Qualifier Codes**

| Reason Code | Description |
|---|---|
| A | Serial dilution outside criteria (Level IV). |
| B1 | Method blank contaminants above reporting limit. |
| B2 | Calibration blank contaminants above reporting limit. |
| B2 (Bias flag –) | Calibration blank indicates negative interference, false negatives may be present |
| B3 | Trip blank contamination |
| B4 | Equipment rinsate contamination. |
| B5 | Ambient blank contamination |
| C | ICV or CCV % D outside control limits. |
| C1 | Initial calibration RSD outside control limit. |
| C2 | Initial calibration RRF outside control limit. |
| C3 | Continuing calibration RRF outside control limit. |
| D1 | Sample Duplicate RPD outside control limit. |
| D2 | Matrix Duplicate RPD outside control limit |
| E | The sample results exceed the linear calibration range of the instrument. |
| F | Hydrocarbon pattern does not match hydrocarbon pattern in the standard. |
| H | Holding time exceeded. |
| I | Internal standard recovery outside control limit. |
| L | LCS outside control limits. |
| M | MS outside control limits. |
| M1 | MS, MSD or RPD outside of control limits |
| O | Interference check sample outside acceptance criteria |
| P | Analyte qualified based on the professional judgement of the reviewer. |
| S | Surrogate recovery outside control limit. |
| T | Temperature outside acceptance criteria. |
| Tr | Value reported detected between the DL and LOQ |
| W | Pesticide breakdown outside criteria (Level IV). |
| X | Raised reporting limit due to matrix interference or high analyte concentration. |
| Y | Analyte was not confirmed by a second column. |
| Y1 | Primary and Confirmation Sample Duplicate RPD outside control limit. |

# 2.0 DATA VALIDATION RESULTS

## Laboratory Data Package Review

The samples reported, QC designations, and validation level is listed in **Table 1-1**. The data packages were reviewed in accordance with the project procedures manual.

## Sample Documentation, Preservation, Handling, and Transport

All samples arrived at the laboratory on time, intact and within preservation requirements. A cross reference of the COC and analytical reports has concluded all extractions and analysis were performed within the required holding times. The validation met all QC requirements listed in the method and data validation requirements of the SAP. None of the data is qualified based on sample documentation, preservation, handing, or transport.

The data is not qualified.

## 2.1 Total Beta Strontium, EPA 905

### 2.1.1 Instrument Parameters

Verification included the review of the laboratories most recent efficiency calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Counting uncertainty was ≤ 1/5 the quantitation limits. Efficiency performance checks were verified for each use.

### 2.1.2 Energy Calibrations

Energy calibrations (Energy Calibration Performance Checks, ECPC) were verified to be at the frequency specified. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.1.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.1.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (<20%). Continuing calibrations were performed on a 12-hour basis. Detection goals for cesium137 were not met in all analysis due to elevated Compton background levels. Natural activity is suspect. None of the data were qualified based on continuing calibrations.

### 2.1.5 Blanks

Each analytical batch was represented with a method blank. The laboratory reports none of the target compounds were detected in any of the method blanks that would results in sample data qualification (e.g. sample detections were >5X the blank). None of the results are qualified based on data verifications.

### 2.1.6 Laboratory Control Sample Recovery (Blank Spikes)

The LCS values were validated by recalculating two compounds per LCS. None of the data are qualified based on LCS recoveries.

### 2.1.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD samples were not submitted for this analysis.

### 2.1.8 Laboratory Duplicate Recoveries

All laboratory generated duplicate recoveries are within QC limits.

### 2.1.9 Field QC Samples

**Trip, Equipment and Field Blanks**

Field blank samples were not submitted for this analysis.

### 2.1.10 Target Compound Identification

None of the identified target compounds were qualified based compound identification.

### 2.1.11 Compound Quantitation and Reporting Limits

Reporting limits were verified to be equal to the Level of Detection (LOD). The LODs have been verified to meet or exceed the project required performance standards. Sample dilutions, cleanup concentrations, and moisture correction have been applied to all reportable results. The results are reported on a dry weight basis where applicable.

## 2.1 Radium-226 by GAMMA SPEC (21 DAY INGROWTH)

### 2.1.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.1.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.1.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.1.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.1.5 Blanks

Each analytical batch was represented with a method blank. The laboratory reports none of the target compounds were detected in any of the method blanks that would results in sample data qualification (e.g. sample detections were >5X the blank or MB was below the 1.65X its CSU). None of the results are qualified based on data verifications.

### 2.1.6 Laboratory Control Sample Recovery (Blank Spikes)

The LCS values were validated by recalculating two compounds per LCS. None of the data are qualified based on LCS recoveries.

### 2.1.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD samples were not submitted for this analysis.

### 2.1.8 Laboratory Duplicate Recoveries

All laboratory generated duplicate recoveries are within QC limits.

### 2.1.9 Field QC Samples

**Trip, Equipment and Field Blanks**

Field blank samples were not submitted for this analysis.

### 2.1.10 Target Compound Identification

None of the identified target compounds were qualified based compound identification.

### 2.1.11 Compound Quantitation and Reporting Limits

Reporting limits were verified to be equal to the Level of Detection (LOD). The LODs have been verified to meet or exceed the project required performance standards. Sample dilutions, cleanup concentrations, and moisture correction have been applied to all reportable results. The results are reported on a dry weight basis where applicable.

## 2.2 A-01R Polonium

### 2.2.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.2.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.2.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.2.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.2.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.2.6 Laboratory Control Sample Recovery (Blank Spikes)

LCS/D analyses provided adequate confirmation of accuracy and precision.

### 2.2.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD analyses were not performed for these analyses. No qualifications were applied.

### 2.2.8 Tracers

The tracers yielded fully satisfactory recoveries for all samples with the exception of F-SU3-B14-S001 and F-SU5-B10-S001 samples. The tracer recovery is below the lower QC limit (30%). There are sufficient tracer counts to keep the count uncertainty of the tracer <10% (2 sigma), the resolution is within limit, and the client RL was met. However due to low tracer recovery, the samples were qualified:

- The samples are qualified J-P.

Overall Assessment of Data Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

## 2.3 A-01R Plutonium

### 2.3.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.3.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.3.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.3.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.3.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.3.6 Laboratory Control Sample Recovery (Blank Spikes)

LCS/D analyses provided adequate confirmation of accuracy and precision.

### 2.3.7 Matrix Spike/Matrix Spike Duplicate Recoveries

MS/MSD analyses were not performed for these analyses. No qualifications were applied.

### 2.3.8 Tracers

The tracers yielded fully satisfactory recoveries

Overall Assessment of Data Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

## 2.4 GAMMA SPECTROSCOPY ANALYSES

### 2.4.1 Instrument Parameters

Verification included the review of the laboratories most recent voltage plateau calibration was performed at the required frequency. As required by the QAPP. The daily efficiency performance check count-rate and/or tolerance charts were verified within established limits. Operating voltages were within set parameters (<5%).

### 2.4.2 Efficiency Calibrations

Energy calibrations (Efficiency Calibration Performance Checks, ECPC) were verified to be <1%. Daily QC peak centroid or calculated energy performance checks were within limits. ECPC were verified to be analyzed daily.

### 2.4.3 Background Determination

Background control logs were verified to ensure measurement frequency was performed as required. Count-rates were within tolerance limits, counting rate was analogous to samples, and frequency requirements.

### 2.4.4 Continuing Calibrations

Continuing calibration average relative response factors were within the DoD QSM requirements (+- 3%). Continuing calibrations were performed on a 12-hour basis.

### 2.4.5 Blanks

Blanks The laboratory (method) blanks yielded no detectable activities, so no qualifications were applied.

### 2.4.6 Laboratory Control Sample Recovery (Blank Spikes)

All percent recoveries from the LCS analyses were within established control limits. No qualifications were applied.

### 2.4.7 Duplicate Recoveries

Duplicate recoveries were within QC limits.

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B01-S001

Lab Sample ID: 160-36160-1
Matrix: Solid

Date Collected: 10/24/19 11:50
Date Received: 10/29/19 09:00

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0455 | U | 0.0769 | 0.0799 | 0.331 | 0.0622 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| Carrier | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Sr Carrier | 74.0 | | 40 - 110 | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00581 | U | 0.0230 | 0.0230 | 1.00 | 0.0159 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | -0.00776 | U | 0.00776 | 0.00779 | 1.00 | 0.0143 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| Tracer | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Pu-242 (7) | 93.3 | | 30 - 110 | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.643 | | 0.104 | 0.117 | 1.00 | 0.0866 | pCi/g | 11/02/19 13:15 | 11/16/19 13:38 | 1 |

| Tracer | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Polonium-209 | 54.8 | | 30 - 110 | 11/02/19 13:15 | 11/16/19 13:38 | 1 |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.312 | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Actinium-227 | -0.365 | U | 0.980 | 0.981 | | 0.591 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Bismuth-212 | 0.0846 | U | 1.16 | 1.16 | | 0.845 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Bismuth-214 | 0.555 | | 0.209 | 0.217 | | 0.0814 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Cesium-137 | -0.0264 | U | 0.100 | 0.109 | 0.0700 | 0.0924 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Lead-210 | -0.569 | U | 2.06 | 2.06 | | 1.48 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Lead-212 | 0.0323 | U | 0.172 | 0.172 | | 0.139 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Lead-214 | 0.412 | | 0.156 | 0.161 | | 0.0631 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Potassium-40 | 8.14 | | 2.27 | 2.42 | | 0.765 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Protactinium-231 | 1.02 | U | 3.22 | 3.22 | | 2.59 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Radium-226 | 0.555 | | 0.209 | 0.217 | 0.500 | 0.0814 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Radium-228 | 0.312 | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Thallium-208 | 0.149 | | 0.0630 | 0.0649 | | 0.0146 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Thorium-228 | 0.0323 | U | 0.172 | 0.172 | | 0.139 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Thorium-232 | 0.312 | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Thorium-234 | 0.865 | | 0.810 | 0.816 | | 0.515 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Uranium-235 | -0.0630 | U | 0.444 | 0.444 | | 0.372 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Uranium-238 | 0.865 | | 0.810 | 0.816 | | 0.815 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B04-S001

**Date Collected: 10/24/19 10:41**
**Date Received: 10/29/19 09:00**

## Lab Sample ID: 160-36160-2

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.109 | | 0.0725 | 0.0729 | 0.331 | 0.0613 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *88.4* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0159 | U U | 0.0113 | 0.0114 | 1.00 | 0.0207 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | -0.00798 | U U | 0.00798 | 0.00801 | 1.00 | 0.0147 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *83.6* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.499 | | 0.0806 | 0.0811 | 1.00 | 0.0438 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *57.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.427 | | 0.207 | 0.211 | | 0.159 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Actinium-227 | 0.197 | U U | 0.403 | 0.404 | | 0.381 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Bismuth-212 | -0.403 | U U | 0.929 | 0.930 | | 0.723 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Bismuth-214 | 0.823 | | 0.175 | 0.186 | | 0.0547 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Cesium-137 | 0.0241 | U U | 0.0550 | 0.0551 | 0.0700 | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Lead-210 | 0.843 | U U | 1.66 | 1.66 | | 1.22 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Lead-212 | 0.360 | | 0.110 | 0.116 | | 0.0613 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Lead-214 | 0.461 | | 0.147 | 0.154 | | 0.0562 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Potassium-40 | 0.79 | | 1.84 | 1.91 | | 0.160 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Protactinium-231 | 0.000 | U U | 0.626 | 0.620 | | 2.63 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Radium-226 | 0.623 | | 0.175 | 0.186 | 0.500 | 0.0547 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Radium-228 | 0.427 | | 0.207 | 0.211 | | 0.159 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Thallium-208 | 0.0522 | U U | 0.125 | 0.125 | | 0.0636 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Thorium-228 | 0.360 | | 0.110 | 0.116 | | 0.0613 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Thorium-232 | 0.427 | | 0.207 | 0.211 | | 0.160 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Thorium-234 | 0.767 | | 0.729 | 0.734 | | 0.565 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Uranium-235 | -0.0572 | U U | 0.383 | 0.383 | | 0.583 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Uranium-238 | 0.767 | | 0.729 | 0.734 | | 0.565 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B05-S001

**Date Collected: 10/24/19 10:08**
**Date Received: 10/29/19 09:00**

## Lab Sample ID: 160-36160-3

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0136 | U | 0.0797 | 0.0797 | 0.331 | 0.0645 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *71.9* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | U | 0.0185 | 0.0185 | 1.00 | 0.0152 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | 0.00620 | U | 0.0170 | 0.0170 | 1.00 | 0.00790 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (7)* | *81.9* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.647 | | 0.0867 | 0.0981 | 1.00 | 0.0595 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *56.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Actinium-227 | 0.114 | U | 0.213 | 0.214 | | 0.388 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Bismuth-212 | 0.275 | U | 0.627 | 0.628 | | 0.486 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Bismuth-214 | 0.413 | | 0.146 | 0.153 | | 0.0608 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Cesium-137 | -0.0264 | U | 0.0364 | 0.0365 | 0.0700 | 0.0488 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Lead-210 | 0.837 | U | 1.24 | 1.24 | | 0.967 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Lead-212 | 0.379 | | 0.0906 | 0.103 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Lead-214 | 0.489 | | 0.117 | 0.127 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Potassium-40 | 7.87 | | 1.31 | 1.54 | | 0.325 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Protactinium-231 | 0.000 | U | 0.716 | 0.716 | | 2.20 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Radium-226 | 0.413 | | 0.146 | 0.153 | 0.500 | 0.0608 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Radium-228 | 0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thallium-208 | 0.183 | | 0.0529 | 0.0566 | | 0.0148 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thorium-228 | 0.379 | | 0.0906 | 0.103 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thorium-232 | -0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thorium-234 | 0.00459 | U | 0.0105 | 0.0105 | | 1.19 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Uranium-235 | -0.0323 | U | 0.0552 | 0.0553 | | 0.397 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Uranium-238 | 0.00459 | U | 0.0105 | 0.0105 | | 1.19 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B07-S001

**Lab Sample ID: 160-36160-4**

**Date Collected: 10/24/19 09:40**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0772 | | 0.0722 | 0.0724 | 0.331 | 0.0529 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *80.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00201 | U | 0.0251 | 0.0251 | 1.00 | 0.0196 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00604 | U | 0.0186 | 0.0186 | 1.00 | 0.00741 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *88.2* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.386 | | 0.0783 | 0.0847 | 1.00 | 0.0614 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *50.2* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.513 | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Actinium-227 | 0.234 | U | 0.452 | 0.453 | | 0.384 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Bismuth-212 | 0.390 | U | 0.945 | 0.946 | | 0.736 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Bismuth-214 | 0.617 | | 0.171 | 0.182 | | 0.0430 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Cesium-137 | 0.0146 | U | 0.0783 | 0.0783 | 0.0700 | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Lead-210 | 1.91 | | 2.22 | 2.23 | | 1.44 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Lead-212 | 0.235 | | 0.102 | 0.105 | | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Lead-214 | 0.495 | | 0.170 | 0.177 | | 0.0767 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Potassium-40 | 8.26 | | 1.55 | 1.76 | | 0.170 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Protactinium-231 | -0.0000000388 | U | 3.42 | 3.42 | | 2.82 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Radium-226 | 0.617 | | 0.171 | 0.182 | 0.500 | 0.0430 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Radium-228 | 0.513 | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Thallium-208 | 0.215 | | 0.0935 | 0.0971 | | 0.0100 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Thorium-228 | 0.235 | | 0.102 | 0.105 | | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Thorium-232 | 0.513 | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Thorium-234 | -0.532 | U | 0.761 | 0.763 | | 0.652 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Uranium-235 | 0.233 | U | 0.421 | 0.421 | | 0.278 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Uranium-238 | -0.532 | U | 0.761 | 0.763 | | 0.652 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B09-S001

**Lab Sample ID: 160-36160-5**

**Date Collected: 10/24/19 09:17**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0185 | U | 0.0775 | 0.0775 | 0.331 | 0.0653 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| Carrier | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Sr Carrier | 65.8 | | 40 - 110 | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00887 | U | 0.00794 | 0.00797 | 1.00 | 0.0146 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00711 | U | 0.00711 | 0.00713 | 1.00 | 0.0131 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| Tracer | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Pu-242 (T) | 96.8 | | 30 - 110 | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.461 | | 0.0782 | 0.0873 | 1.00 | 0.0551 | pCi/g | 11/03/19 13:15 | 11/18/19 13:38 | 1 |

| Tracer | % Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Polonium-209 | 58.6 | | 30 - 110 | 11/03/19 13:15 | 11/18/19 13:38 | 1 |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.469 | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Actinium-227 | 0.0526 | U | 0.645 | 0.645 | | 0.398 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Bismuth-212 | -0.430 | U | 1.09 | 1.09 | | 0.848 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Bismuth-214 | 0.111 | U | 0.236 | 0.236 | | 0.224 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Cesium-137 | -0.0644 | U | 0.156 | 0.156 | 0.0700 | 0.0845 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Lead-210 | 0.802 | | 1.17 | 1.17 | | 0.775 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Lead-212 | 0.338 | | 0.101 | 0.110 | | 0.0499 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Lead-214 | 0.470 | | 0.128 | 0.137 | | 0.0408 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Potassium-40 | 7.99 | | 1.76 | 1.94 | | 0.413 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Protactinium-231 | -0.504 | U | 3.21 | 3.21 | | 2.02 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Radium-226 | 0.111 | U | 0.236 | 0.236 | 0.500 | 0.224 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Radium-228 | 0.469 | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Thallium-208 | 0.155 | | 0.0571 | 0.0593 | | 0.0121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Thorium-228 | 0.338 | | 0.101 | 0.110 | | 0.0499 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Thorium-232 | 0.469 | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Thorium-234 | -0.213 | U | 0.923 | 0.923 | | 0.768 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Uranium-235 | 0.0656 | U | 0.363 | 0.363 | | 0.294 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Uranium-238 | -0.213 | U | 0.923 | 0.923 | | 0.768 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B11-S001

**Lab Sample ID: 160-36160-6**

**Date Collected: 10/24/19 11:32**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0487 | U | 0.0795 | 0.0796 | 0.331 | 0.0692 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *69.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00602 | U | 0.0244 | 0.0244 | 1.00 | 0.0166 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00602 | U | 0.00696 | 0.00697 | 1.00 | 0.0128 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *86.9* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.508 | | 0.0802 | 0.0809 | 1.00 | 0.0549 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *81.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.437 | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Actinium-227 | -0.0286 | U | 0.141 | 0.141 | | 0.374 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Bismuth-212 | -0.346 | U | 0.697 | 0.698 | | 0.628 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Bismuth-214 | 0.551 | | 0.144 | 0.166 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Cesium-137 | 0.0342 | U | 0.0673 | 0.0674 | 0.0700 | 0.0524 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Lead-210 | 0.655 | U | 1.46 | 1.46 | | 1.16 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Lead-212 | 0.346 | | 0.0855 | 0.0865 | | 0.0431 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Lead-214 | 0.499 | | 0.103 | 0.115 | | 0.0566 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Potassium-40 | 8.43 | | 1.38 | 1.63 | | 0.335 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Protactinium-231 | 0.061 | U | 1.98 | 1.98 | | 2.11 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Radium-226 | 0.551 | | 0.144 | 0.166 | 0.500 | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Radium-228 | 0.437 | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Thallium-208 | 0.0977 | | 0.0646 | 0.0654 | | 0.0316 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Thorium-228 | 0.346 | | 0.0855 | 0.0865 | | 0.0431 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Thorium-232 | 0.437 | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Thorium-234 | 0.312 | U | 0.432 | 0.433 | | 0.333 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Uranium-235 | 0.0717 | U | 0.199 | 0.200 | | 0.369 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Uranium-238 | 0.312 | U | 0.432 | 0.433 | | 0.333 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B12-S001

**Date Collected: 10/24/19 11:00**
**Date Received: 10/29/19 09:00**

## Lab Sample ID: 160-36160-7

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0586 | U | 0.0619 | 0.0621 | 0.331 | 0.0585 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *76.1* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00207 | U | 0.0180 | 0.0180 | 1.00 | 0.0132 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00621 | U | 0.00717 | 0.00719 | 1.00 | 0.0132 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *96.0* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.487 | | 0.0876 | 0.0967 | 1.00 | 0.0701 | pCi/g | 11/03/19 13:15 | 11/18/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *52.0* | | *30 - 110* | *11/03/19 13:15* | *11/18/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.287 | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Actinium-227 | 0.540 | | 0.544 | 0.547 | | 0.286 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-212 | -0.469 | U | 1.18 | 1.18 | | 0.923 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-214 | 0.598 | | 0.175 | 0.185 | | 0.0449 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Cesium-137 | 0.0627 | U | 0.109 | 0.109 | 0.0700 | 0.0840 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-210 | 2.53 | | 2.11 | 2.13 | | 1.37 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-212 | 0.304 | | 0.109 | 0.114 | | 0.0617 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-214 | 0.492 | | 0.163 | 0.161 | | 0.0657 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Potassium-40 | 9.63 | | 1.75 | 2.00 | | 0.185 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Protactinium-231 | 0.000 | U | 0.727 | 0.727 | | 3.15 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Radium-226 | 0.598 | | 0.175 | 0.185 | 0.500 | 0.0449 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Radium-228 | 0.287 | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thallium-208 | 0.173 | | 0.0594 | 0.0619 | | 0.0119 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-228 | 0.304 | | 0.109 | 0.114 | | 0.0617 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-232 | 0.287 | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-234 | 1.24 | | 1.02 | 1.03 | | 0.624 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-235 | 0.136 | U | 0.675 | 0.675 | | 0.561 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-238 | 1.24 | | 1.02 | 1.03 | | 0.624 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501006

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B14-S001

**Lab Sample ID: 160-36160-8**

**Date Collected: 10/24/19 10:23**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0281 | U | 0.0734 | 0.0734 | 0.331 | 0.0625 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *74.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0101 | U | 0.0202 | 0.0202 | 1.00 | 0.0223 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00405 | U | 0.0250 | 0.0250 | 1.00 | 0.0182 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *106* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.699 | J-T | 0.161 | 0.171 | 1.00 | 0.127 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *26.4* | Q J-T | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.352 | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Actinium-227 | 0.147 | U | 0.328 | 0.328 | | 0.570 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-212 | 0.000 | U | 0.384 | 0.384 | | 0.448 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-214 | 0.396 | | 0.151 | 0.156 | | 0.0550 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Cesium-137 | -0.00197 | U | 0.102 | 0.102 | 0.0700 | 0.0836 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-210 | 1.51 | | 1.74 | 1.74 | | 1.08 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-212 | 0.0268 | U | 0.149 | 0.149 | | 0.121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-214 | 0.0487 | U | 0.151 | 0.152 | | 0.195 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Potassium-40 | 5.68 | | 1.61 | 1.71 | | 0.463 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Protactinium-231 | 0.000 | U | 0.927 | 0.927 | | 2.84 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Radium-226 | 0.396 | | 0.151 | 0.156 | 0.500 | 0.0550 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Radium-228 | 0.352 | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thallium-208 | 0.160 | | 0.117 | 0.118 | | 0.0472 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-228 | 0.0268 | U | 0.149 | 0.149 | | 0.121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-232 | 0.352 | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-234 | -0.301 | U | 1.17 | 1.17 | | 0.975 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-235 | -0.0563 | U | 0.343 | 0.343 | | 0.335 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-238 | -0.301 | U | 1.17 | 1.17 | | 0.975 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B15-S001

**Lab Sample ID: 160-36160-9**

**Date Collected: 10/24/19 09:52**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0931 | U | 0.0744 | 0.0747 | 0.331 | 0.0681 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *78.7* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00566 | U | 0.0240 | 0.0240 | 1.00 | 0.0231 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |
| Plutonium-239/240 | 0.0266 | | 0.0308 | 0.0309 | 1.00 | 0.00987 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *104* | | *30 - 110* | *11/05/19 18:12* | *11/15/19 09:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.488 | | 0.0846 | 0.0942 | 1.00 | 0.0609 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *62.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.465 | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Actinium-227 | 0.101 | U | 0.180 | 0.181 | | 0.388 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-212 | -0.0311 | U | 0.676 | 0.676 | | 0.634 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-214 | 0.388 | | 0.120 | 0.127 | | 0.0504 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Cesium-137 | -0.0174 | U | 0.0492 | 0.0493 | 0.0700 | 0.0665 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-210 | -0.375 | U | 1.87 | 1.88 | | 1.16 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-212 | 0.312 | | 0.0796 | 0.0892 | | 0.0386 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-214 | 0.431 | | 0.106 | 0.114 | | 0.0541 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Potassium-40 | 7.48 | | 1.31 | 1.52 | | 0.336 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Protactinium-231 | -0.836 | U | 2.71 | 2.72 | | 2.21 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Radium-226 | 0.388 | | 0.120 | 0.127 | 0.500 | 0.0504 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Radium-228 | 0.465 | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thallium-208 | 0.125 | | 0.0556 | 0.0571 | | 0.0249 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-228 | 0.312 | | 0.0796 | 0.0892 | | 0.0386 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-232 | 0.465 | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-234 | -0.363 | U | 1.09 | 1.09 | | 0.884 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-235 | -0.195 | U | 0.572 | 0.573 | | 0.466 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-238 | -0.363 | U | 1.09 | 1.09 | | 0.884 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B23-S001

**Lab Sample ID: 160-36160-10**

**Date Collected: 10/24/19 13:46**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0214 | U | 0.0760 | 0.0760 | 0.331 | 0.0642 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *75.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0359 | | 0.0506 | 0.0506 | 1.00 | 0.0301 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |
| Plutonium-239/240 | -0.00212 | U | 0.00423 | 0.00424 | 1.00 | 0.00778 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *97.8* | | *30 - 110* | *11/05/19 18:12* | *11/15/19 09:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.378 | | 0.0883 | 0.0936 | 1.00 | 0.0860 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *94.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.188 | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Actinium-227 | -0.104 | U | 0.754 | 0.754 | | 0.464 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-212 | 0.473 | U | 0.939 | 0.939 | | 0.718 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-214 | 0.503 | | 0.162 | 0.170 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Cesium-137 | -0.0341 | U | 0.0913 | 0.0913 | 0.0700 | 0.0719 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-210 | 0.705 | U | 1.80 | 1.81 | | 1.34 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-212 | 0.0291 | U | 0.183 | 0.183 | | 0.149 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-214 | 0.617 | | 0.187 | 0.197 | | 0.0834 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Potassium-40 | 10.6 | | 1.79 | 2.09 | | 0.179 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Protactinium-231 | 0.000 | U | 0.244 | 0.244 | | 3.17 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Radium-226 | 0.503 | | 0.162 | 0.170 | 0.500 | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Radium-228 | 0.188 | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thallium-208 | 0.305 | | 0.101 | 0.106 | | 0.0337 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-228 | 0.0291 | U | 0.183 | 0.183 | | 0.149 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-232 | 0.188 | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-234 | 0.249 | U | 0.809 | 0.809 | | 0.646 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-235 | -0.283 | U | 0.427 | 0.428 | | 0.587 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-238 | 0.249 | U | 0.809 | 0.809 | | 0.646 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B29-S001

**Date Collected: 10/24/19 14:21**
**Date Received: 10/29/19 09:00**

## Lab Sample ID: 160-36160-11

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0448 | U | 0.0784 | 0.0794 | 0.331 | 0.0679 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *70.7* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0562 | U | 0.0520 | 0.0523 | 1.00 | 0.0553 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.0703 | U | 0.0431 | 0.0435 | 1.00 | 0.0528 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *105* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.371 | | 0.0715 | 0.0780 | 1.00 | 0.0554 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *63.4* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Actinium-227 | -0.426 | U | 0.994 | 0.996 | | 0.598 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Bismuth-212 | -0.423 | U | 1.36 | 1.36 | | 1.08 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Bismuth-214 | 0.223 | | 0.166 | 0.168 | | 0.171 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Cesium-137 | -0.0526 | U | 0.131 | 0.131 | 0.0700 | 0.123 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Lead-210 | -0.342 | U | 2.09 | 2.09 | | 1.50 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Lead-212 | 0.308 | | 0.121 | 0.128 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Lead-214 | 0.478 | | 0.163 | 0.171 | | 0.0758 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Potassium-40 | 6.98 | | 1.86 | 1.98 | | 0.506 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Protactinium-231 | 0.727 | U | 1.64 | 1.64 | | 1.83 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Radium-226 | 0.223 | | 0.166 | 0.168 | 0.500 | 0.171 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Radium-228 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thallium-208 | 0.0585 | U | 0.110 | 0.111 | | 0.0595 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thorium-228 | 0.308 | | 0.121 | 0.128 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thorium-232 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thorium-234 | -0.318 | U | 1.12 | 1.12 | | 0.934 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Uranium-235 | 0.412 | | 0.317 | 0.319 | | 0.166 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Uranium-238 | -0.318 | U | 1.12 | 1.12 | | 0.934 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B30-S001

**Lab Sample ID: 160-36160-12**

**Date Collected: 10/24/19 14:04**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0593 | U | 0.0724 | 0.0729 | 0.331 | 0.0640 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *78.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0197 | U | 0.0449 | 0.0449 | 1.00 | 0.0307 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00788 | U | 0.0236 | 0.0236 | 1.00 | 0.0145 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *88.1* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.415 | | 0.0953 | 0.102 | 1.00 | 0.0835 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *% Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *39.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.505 | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Actinium-227 | -0.0710 | U | 0.620 | 0.620 | | 0.368 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Bismuth-212 | -0.320 | U | 0.909 | 0.909 | | 0.704 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Bismuth-214 | 0.459 | | 0.148 | 0.155 | | 0.0596 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Cesium-137 | 0.0247 | U | 0.0793 | 0.0793 | 0.0700 | 0.0533 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Lead-210 | -0.00897 | U | 1.36 | 1.36 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Lead-212 | 0.335 | | 0.0863 | 0.0866 | | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Lead-214 | 0.484 | | 0.116 | 0.126 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Potassium-40 | 9.24 | | 1.79 | 2.02 | | 0.588 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Protactinium-231 | 0.000 | U | 0.258 | 0.258 | | 2.44 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Radium-226 | 0.459 | | 0.148 | 0.155 | 0.500 | 0.0596 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Radium-228 | 0.505 | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Thallium-208 | 0.152 | | 0.0576 | 0.0597 | | 0.0225 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Thorium-228 | 0.335 | | 0.0863 | 0.0866 | | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Thorium-232 | 0.505 | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Thorium-234 | 0.376 | U | 1.36 | 1.36 | | 1.12 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Uranium-235 | 0.208 | U | 0.416 | 0.417 | | 0.347 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Uranium-238 | 0.376 | U | 1.36 | 1.36 | | 1.12 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU4-B04-S001

**Lab Sample ID: 160-36160-13**

**Date Collected: 10/24/19 15:04**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0379 | U | 0.0720 | 0.0720 | 0.331 | 0.0563 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *83.4* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0164 | U | 0.0434 | 0.0435 | 1.00 | 0.0302 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00411 | U | 0.00581 | 0.00582 | 1.00 | 0.0107 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *87.1* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.810 | | 0.0852 | 0.0894 | 1.00 | 0.0428 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *60.1* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.477 | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Actinium-227 | -0.187 | U | 0.807 | 0.807 | | 0.484 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-212 | -0.439 | U | 1.12 | 1.12 | | 0.856 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-214 | 0.903 | | 0.188 | 0.210 | | 0.0367 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Cesium-137 | -0.0235 | U | 0.0877 | 0.0877 | 0.0700 | 0.0700 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-210 | 2.17 | | 1.92 | 1.94 | | 1.25 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-212 | 0.370 | | 0.112 | 0.119 | | 0.0624 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-214 | 0.822 | | 0.170 | 0.190 | | 0.0603 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Potassium-40 | 4.91 | | 1.45 | 1.53 | | 0.406 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Protactinium-231 | -1.04 | U | 3.96 | 3.96 | | 3.22 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Radium-226 | 0.903 | | 0.188 | 0.210 | 0.500 | 0.0367 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Radium-228 | 0.477 | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thallium-208 | 0.261 | | 0.0952 | 0.0975 | | 0.0306 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-228 | 0.370 | | 0.112 | 0.119 | | 0.0624 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-232 | 0.477 | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-234 | 0.566 | U | 0.357 | 0.363 | | 1.07 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-235 | 0.0780 | U | 0.164 | 0.165 | | 0.529 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-238 | 0.566 | U | 0.357 | 0.363 | | 1.07 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU5-B05-S001

**Lab Sample ID: 160-36160-14**

**Date Collected: 10/24/19 15:58**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0530 | U | 0.0700 | 0.0701 | 0.331 | 0.0521 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *70.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0127 | U | 0.0512 | 0.0512 | 1.00 | 0.0455 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.0233 | | 0.0353 | 0.0353 | 1.00 | 0.0175 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *62.4* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.639 | | 0.123 | 0.135 | 1.00 | 0.0980 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *38.7* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.250 | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Actinium-227 | 0.197 | U | 0.468 | 0.469 | | 0.362 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-212 | 0.473 | U | 0.964 | 0.966 | | 0.738 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-214 | 0.746 | | 0.205 | 0.219 | | 0.0677 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Cesium-137 | -0.0925 | U | 0.0534 | 0.0542 | 0.0700 | 0.101 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-210 | 1.09 | | 1.42 | 1.43 | | 0.936 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-212 | 0.0332 | U | 0.156 | 0.156 | | 0.126 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-214 | 0.604 | | 0.146 | 0.159 | | 0.0846 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Potassium-40 | 6.31 | | 1.70 | 1.79 | | 0.613 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Protactinium-231 | 0.000 | U | 0.541 | 0.541 | | 2.52 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Radium-226 | 0.746 | | 0.205 | 0.219 | 0.500 | 0.0677 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Radium-228 | 0.250 | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thallium-208 | 0.154 | | 0.0567 | 0.0579 | | 0.0117 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-228 | 0.0332 | U | 0.156 | 0.156 | | 0.126 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-232 | 0.250 | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-234 | -0.600 | U | 0.707 | 0.713 | | 0.944 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-235 | 0.169 | U | 0.359 | 0.360 | | 0.273 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-238 | -0.600 | U | 0.707 | 0.713 | | 0.944 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU5-B10-S001

**Date Collected: 10/24/19 15:38**
**Date Received: 10/29/19 09:00**

## Lab Sample ID: 160-36160-15

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0503 | U | 0.0678 | 0.0679 | 0.331 | 0.0590 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *78.1* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0157 | U | 0.0333 | 0.0334 | 1.00 | 0.0204 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00197 | U | 0.0180 | 0.0180 | 1.00 | 0.0162 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (7)* | *90.8* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.730 | | 0.144 | 0.156 | 1.00 | 0.0873 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *27.5* | *Q* | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium-228 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Actinium-227 | 0.169 | U | 0.597 | 0.598 | | 0.346 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Bismuth-212 | -0.0164 | U | 0.946 | 0.946 | | 0.780 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Bismuth-214 | 0.310 | | 0.126 | 0.129 | | 0.306 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Cesium-137 | -0.0539 | U | 0.114 | 0.114 | 0.0700 | 0.0641 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Lead-210 | -0.785 | U | 1.74 | 1.74 | | 1.39 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Lead-212 | 0.417 | | 0.0880 | 0.103 | | 0.0405 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Lead-214 | 0.841 | | 0.117 | 0.130 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Potassium-40 | 6.52 | | 1.12 | 1.25 | | 0.324 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Protactinium-231 | 0.000 | U | 0.714 | 0.714 | | 2.15 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Radium-226 | 0.310 | | 0.126 | 0.129 | 0.500 | 0.306 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Radium-228 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thallium-208 | 0.179 | | 0.0707 | 0.0731 | | 0.0293 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thorium-228 | 0.417 | | 0.0880 | 0.103 | | 0.0405 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thorium-232 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thorium-234 | 0.0591 | U | 0.141 | 0.141 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Uranium-235 | 0.125 | U | 0.261 | 0.262 | | 0.476 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Uranium-238 | 0.0591 | U | 0.141 | 0.141 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |

# Tracer/Carrier Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Method: 905.0 - Total Beta Strontium (GFPC)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | Sr Carrier (40-110) |
| 160-36160-1 | F-SU3-B01-S001 | 74.0 |
| 160-36160-2 | F-SU3-B04-S001 | 88.4 |
| 160-36160-3 | F-SU3-B05-S001 | 71.9 |
| 160-36160-4 | F-SU3-B07-S001 | 80.2 |
| 160-36160-5 | F-SU3-B09-S001 | 65.6 |
| 160-36160-6 | F-SU3-B11-S001 | 80.8 |
| 160-36160-7 | F-SU3-B12-S001 | 76.1 |
| 160-36160-8 | F-SU3-B14-S001 | 74.2 |
| 160-36160-9 | F-SU3-B15-S001 | 76.7 |
| 160-36160-10 | F-SU3-B23-S001 | 75.6 |
| 160-36160-11 | F-SU3-B29-S001 | 70.7 |
| 160-36160-12 | F-SU3-B30-S001 | 78.2 |
| 160-36160-13 | F-SU4-B04-S001 | 83.4 |
| 160-36160-14 | F-SU5-B05-S001 | 70.8 |
| 160-36160-15 | F-SU5-B10-S001 | 78.1 |
| LCS 160-448669/1-A | Lab Control Sample | 85.5 |
| MB 160-448669/19-A | Method Blank | 84.5 |

**Tracer/Carrier Legend**
Sr Carrier = Sr Carrier

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | Pu-242 (T) (30-110) |
| 160-36160-1 | F-SU3-B01-S001 | 93.3 |
| 160-36160-2 | F-SU3-B04-S001 | 83.5 |
| 160-36160-3 | F-SU3-B05-S001 | 81.9 |
| 160-36160-4 | F-SU3-B07-S001 | 88.2 |
| 160-36160-5 | F-SU3-B09-S001 | 96.8 |
| 160-36160-6 | F-SU3-B11-S001 | 86.9 |
| 160-36160-7 | F-SU3-B12-S001 | 96.0 |
| 160-36160-8 | F-SU3-B14-S001 | 105 |
| 160-36160-9 | F-SU3-B15-S001 | 104 |
| 160-36160-10 | F-SU3-B23-S001 | 97.8 |
| 160-36160-11 | F-SU3-B29-S001 | 105 |
| 160-36160-12 | F-SU3-B30-S001 | 88.1 |
| 160-36160-13 | F-SU4-B04-S001 | 87.1 |
| 160-36160-14 | F-SU5-B05-S001 | 82.4 |
| 160-36160-15 | F-SU5-B10-S001 | 90.8 |
| LCS 160-449075/2-A | Lab Control Sample | 100 |
| MB 160-449075/1-A | Method Blank | 88.9 |

**Tracer/Carrier Legend**
Pu-242 (T) = Pu-242 (T)

# Tracer/Carrier Summary

Client: Aptim Federal Services LLC
Job ID: 160-36160-2
Project/Site: Hunters Point Parcel F/ 601008

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

Matrix: Solid
Prep Type: Total/NA

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | Polonium-209 (30-110) |
| 160-36160-1 | F-SU3-B01-S001 | 54.8 |
| 160-36160-1 DU | F-SU3-B01-S001 | 46.2 |
| 160-36160-2 | F-SU3-B04-S001 | 57.8 |
| 160-36160-3 | F-SU3-B05-S001 | 56.5 |
| 160-36160-4 | F-SU3-B07-S001 | 50.2 |
| 160-36160-5 | F-SU3-B09-S001 | 58.6 |
| 160-36160-6 | F-SU3-B11-S001 | 61.5 |
| 160-36160-7 | F-SU3-B12-S001 | 52.0 |
| 160-36160-8 | F-SU3-B14-S001 | 26.4 Q |
| 160-36160-9 | F-SU3-B15-S001 | 62.5 |
| 160-36160-10 | F-SU3-B23-S001 | 54.8 |
| 160-36160-11 | F-SU3-B29-S001 | 63.4 |
| 160-36160-12 | F-SU3-B30-S001 | 39.8 |
| 160-36160-13 | F-SU4-B04-S001 | 60.1 |
| 160-36160-14 | F-SU5-B05-S001 | 33.7 |
| 160-36160-15 | F-SU5-B10-S001 | 27.5 Q |
| LCS 160-448621/2-A | Lab Control Sample | 65.7 |
| MB 160-448621/1-A | Method Blank | 69.9 |

Tracer/Carrier Legend
Polonium-209 = Polonium-209

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# APPENDIX J
# ANALYTICAL LABORATORY DATA PACKAGES

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## Table 1: SDG INDEX

| SDG | Date Collected | Lab |
|---|---|---|
| 160-35853 | 10/02/19 | TAMO |
| 160-36160 | 10/24/19 | TAMO |

Notes:

SDG sample delivery group

TAMO TestAmerica Missouri

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Job Number: 160-35853-3

Job Description: Hunters Point Parcel- F 501008

For:
Aptim Federal Services LLC
4005 Port Chicago Hwy, Suite 200
Concord, CA 94520

Attention: Eddie Kalombo

Rhonda Ridenhower

Approved for release.
Rhonda E Ridenhower
Manager of Project Management
11/21/2019 3:34 PM

Rhonda E Ridenhower, Manager of Project Management
13715 Rider Trail North, Earth City, MO, 63045
rhonda.ridenhower@testamericainc.com
11/21/2019

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. Pursuant to NELAP, this report shall not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager.

Louisiana Lab Certification ID (Non-Potable, Solid/Haz. Material): 106151
Florida Lab Certification ID (Drinking Water): E87689.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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# Definitions/Glossary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Qualifiers

### Rad

| Qualifier | Qualifier Description |
|---|---|
| U | Undetected at the Limit of Detection. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# CASE NARRATIVE

## Client: Aptim Federal Services LLC

## Project: Hunters Point Parcel- F 501008

## Report Number: 160-35853-3

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, St. Louis attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Manual Integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure. Detailed information can be found in the raw data section of the level IV report.

The following clean-up methods for Organic analyses may have been used on the samples in this data set. Specific methods employed are documented on the batch extraction logs:

Method 3600C: Cleanup
Method 3620C: Florisil Cleanup
Method 3630C: Silica Gel Cleanup
Method 3640A: Gel-Permeation Cleanup
Method 3650B: Acid-Base Partition Cleanup
Method 3660B: Sulfur Cleanup
Method 3665A: Sulfuric Acid/Permanganate Cleanup

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

**RECEIPT**
The samples were received on 10/03/2019; the samples arrived in good condition, properly preserved. The temperature of the coolers at receipt was 21.0 C. Additional methods requested by the client and not listed on the COC.

**ISOTOPIC POLONIUM (ALPHA SPECTROMETRY)**
Samples F-B01-S001 (160-35853-1) and F-B01-S002 (160-35853-2) were analyzed for Isotopic Polonium (Alpha Spectrometry) in accordance with A01-R_Polonium. The samples were dried on 10/29/2019, prepared on 11/03/2019 and analyzed on 11/16/2019.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**ISOTOPIC PLUTONIUM (ALPHA SPECTROMETRY)**

Samples F-B01-S001 (160-35853-1) and F-B01-S002 (160-35853-2) were analyzed for Isotopic Plutonium (Alpha Spectrometry) in accordance with A-01-R. The samples were dried on 10/22/2019, prepared on 10/24/2019 and analyzed on 10/29/2019.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Client Sample ID: F-B01-S001

Lab Sample ID: 160-35853-1
Matrix: Solid

Date Collected: 10/02/19 09:10
Date Received: 10/03/19 08:40

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | U | 0.0186 | 0.0186 | 1.00 | 0.0153 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |
| Plutonium-239/240 | -0.00624 | U | 0.00720 | 0.00722 | 1.00 | 0.0132 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *99.1* | | *30 - 110* | *10/24/19 15:18* | *10/29/19 13:45* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **1.64** | | 0.149 | 0.203 | 1.00 | 0.0533 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *50.0* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

## Client Sample ID: F-B01-S002

Lab Sample ID: 160-35853-2
Matrix: Solid

Date Collected: 10/02/19 12:30
Date Received: 10/03/19 08:40

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00193 | U | 0.0177 | 0.0177 | 1.00 | 0.0159 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |
| Plutonium-239/240 | -0.00387 | U | 0.00548 | 0.00549 | 1.00 | 0.0101 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *106* | | *30 - 110* | *10/24/19 15:18* | *10/29/19 13:45* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.327** | | 0.0685 | 0.0738 | 1.00 | 0.0536 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *63.2* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

# Tracer/Carrier Summary

Client: Aptim Federal Services LLC
Job ID: 160-35853-3
Project/Site: Hunters Point Parcel- F 501008

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| **Lab Sample ID** | **Client Sample ID** | **Pu-242 (T) (30-110)** |
| 160-35853-1 | F-B01-S001 | 99.1 |
| 160-35853-1 DU | F-B01-S001 | 105 |
| 160-35853-2 | F-B01-S002 | 106 |
| LCS 160-447606/2-A | Lab Control Sample | 101 |
| MB 160-447606/1-A | Method Blank | 100 |

**Tracer/Carrier Legend**

Pu-242 (T) = Pu-242 (T)

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| **Lab Sample ID** | **Client Sample ID** | **Polonium-209 (30-110)** |
| 160-35853-1 | F-B01-S001 | 50.0 |
| 160-35853-2 | F-B01-S002 | 63.2 |
| LCS 160-448621/2-A | Lab Control Sample | 65.7 |
| MB 160-448621/1-A | Method Blank | 69.9 |

**Tracer/Carrier Legend**

Polonium-209 = Polonium-209

# QC Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

**Lab Sample ID: MB 160-448621/1-A**
**Matrix: Solid**
**Analysis Batch: 450755**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 448621**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.03012 | U | 0.0318 | 0.0319 | 1.00 | 0.0512 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *69.9* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

**Lab Sample ID: LCS 160-448621/2-A**
**Matrix: Solid**
**Analysis Batch: 450753**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 448621**

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 8.44 | 8.187 | | 0.747 | 1.00 | 0.0399 | pCi/g | 97 | 75 - 113 |

| *Tracer* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Polonium-209* | *65.7* | | *30 - 110* |

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

**Lab Sample ID: MB 160-447606/1-A**
**Matrix: Solid**
**Analysis Batch: 448310**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 447606**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.01734 | | 0.0275 | 0.0275 | 1.00 | 0.0123 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |
| Plutonium-239/240 | -0.005784 | U | 0.00668 | 0.00670 | 1.00 | 0.0123 | pCi/g | 10/24/19 15:18 | 10/29/19 13:45 | 1 |

| *Tracer* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *100* | | *30 - 110* | *10/24/19 15:18* | *10/29/19 13:45* | *1* |

**Lab Sample ID: LCS 160-447606/2-A**
**Matrix: Solid**
**Analysis Batch: 448320**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 447606**

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 5.27 | 5.060 | | 0.578 | 1.00 | 0.0121 | pCi/g | 96 | 80 - 125 |
| Plutonium-239/240 | 5.28 | 5.196 | | 0.590 | 1.00 | 0.00986 | pCi/g | 98 | 81 - 125 |

| *Tracer* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Pu-242 (T)* | *101* | | *30 - 110* |

# QC Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry) (Continued)

**Lab Sample ID: 160-35853-1 DU**
**Matrix: Solid**
**Analysis Batch: 448322**

**Client Sample ID: F-B01-S001**
**Prep Type: Total/NA**
**Prep Batch: 447606**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | U | | 0.03560 | | 0.0446 | 1.00 | 0.0249 | pCi/g | | | 0.56 | 1 |
| Plutonium-239/240 | -0.00624 | U | | -0.001876 | U | 0.0293 | 1.00 | 0.0249 | pCi/g | | | 0.12 | 1 |

| *Tracer* | *DU %Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Pu-242 (T)* | *105* | | *30 - 110* |

# QC Association Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Rad

### Leach Batch: 445005

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-35853-1 | F-B01-S001 | Total/NA | Solid | Dry and Grind | |
| 160-35853-1 | F-B01-S001 | Total/NA | Solid | Dry and Grind | |
| 160-35853-2 | F-B01-S002 | Total/NA | Solid | Dry and Grind | |
| 160-35853-2 | F-B01-S002 | Total/NA | Solid | Dry and Grind | |
| 160-35853-1 DU | F-B01-S001 | Total/NA | Solid | Dry and Grind | |

### Prep Batch: 447606

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-35853-1 | F-B01-S001 | Total/NA | Solid | ExtChrom | 445005 |
| 160-35853-2 | F-B01-S002 | Total/NA | Solid | ExtChrom | 445005 |
| MB 160-447606/1-A | Method Blank | Total/NA | Solid | ExtChrom | |
| LCS 160-447606/2-A | Lab Control Sample | Total/NA | Solid | ExtChrom | |
| 160-35853-1 DU | F-B01-S001 | Total/NA | Solid | ExtChrom | 445005 |

### Prep Batch: 448621

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-35853-1 | F-B01-S001 | Total/NA | Solid | Digest/Cu Plate | 445005 |
| 160-35853-2 | F-B01-S002 | Total/NA | Solid | Digest/Cu Plate | 445005 |
| MB 160-448621/1-A | Method Blank | Total/NA | Solid | Digest/Cu Plate | |
| LCS 160-448621/2-A | Lab Control Sample | Total/NA | Solid | Digest/Cu Plate | |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Client Sample ID: F-B01-S001

**Lab Sample ID: 160-35853-1**
**Date Collected: 10/02/19 09:10**
**Matrix: Solid**
**Date Received: 10/03/19 08:40**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 445005 | 10/22/19 15:06 | DRO | TAL SL |
| Total/NA | Prep | ExtChrom | | | 447606 | 10/24/19 15:18 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 448321 | 10/29/19 13:45 | JS | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 445005 | 10/29/19 13:08 | DRO | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450752 | 11/16/19 13:38 | KRR | TAL SL |

## Client Sample ID: F-B01-S002

**Lab Sample ID: 160-35853-2**
**Date Collected: 10/02/19 12:30**
**Matrix: Solid**
**Date Received: 10/03/19 08:40**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 445005 | 10/22/19 15:06 | DRO | TAL SL |
| Total/NA | Prep | ExtChrom | | | 447606 | 10/24/19 15:18 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 448323 | 10/29/19 13:45 | JS | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 445005 | 10/29/19 13:08 | DRO | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450751 | 11/16/19 13:38 | KRR | TAL SL |

**Laboratory References:**
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Accreditation/Certification Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

## Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| ANAB | DoD | L2305 | 04-06-22 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|

# Method Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| A-01-R | Isotopic Plutonium (Alpha Spectrometry) | DOE | TAL SL |
| A-01-R | Isotopic Polonium (Alpha Spectrometry) | DOE | TAL SL |
| Digest/Cu Plate | Preparation, Digestion & Copper Plating | TAL-STL | TAL SL |
| Dry and Grind | Preparation, Dry and Grind | None | TAL SL |
| ExtChrom | Preparation, Extraction Chromatography Resin Actinide Separation | None | TAL SL |

**Protocol References:**

DOE = U.S. Department of Energy

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

**Laboratory References:**

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Sample Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel- F 501008

Job ID: 160-35853-3

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 160-35853-1 | F-B01-S001 | Solid | 10/02/19 09:10 | 10/03/19 08:40 | |
| 160-35853-2 | F-B01-S002 | Solid | 10/02/19 12:30 | 10/03/19 08:40 | |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-35853-3

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **108001_00001** | 12/06/67 | Eckert and Ziegler, Lot 108001 | | | (Purchased Reagent) | | Am-241 | 7.286 Bq |
| | | | | | | | Plutonium-239/240 | 6.646 Bq |
| | | | | | | | Th-230 | 6.01 Bq |
| **108002_00001** | 12/07/67 | Eckert and Ziegler, Lot 108002 | | | (Purchased Reagent) | | Am-241 | 8.089 Bq |
| | | | | | | | Plutonium-239/240 | 8.515 Bq |
| | | | | | | | Th-230 | 9.349 Bq |
| **108345_00001** | 01/22/68 | Eckert & Ziegler, Lot 108345 | | | (Purchased Reagent) | | Am-241 | 7.916 Bq |
| | | | | | | | Plutonium-239/240 | 7.695 Bq |
| | | | | | | | Th-230 | 7.314 Bq |
| **108346_00001** | 01/22/68 | Eckert & Ziegler, Lot 108346 | | | (Purchased Reagent) | | Am-241 | 8.008 Bq |
| | | | | | | | Plutonium-239/240 | 7.835 Bq |
| | | | | | | | Th-230 | 7.57 Bq |
| **82232-334_00001** | 06/03/60 | Eckert & Ziegler, Lot 82232-334 | | | (Purchased Reagent) | | Am-241 | 7.281 Bq |
| | | | | | | | Plutonium-239/240 | 7.137 Bq |
| | | | | | | | Pulser | |
| | | | | | | | Th-230 | 7.63 Bq |
| | | | | | | | U | |
| **82236-334_00001** | 06/02/60 | Eckert & Ziegler, Lot 82236-334 | | | (Purchased Reagent) | | Am-241 | 6.891 Bq |
| | | | | | | | Plutonium-239/240 | 6.664 Bq |
| | | | | | | | Pulser | |
| | | | | | | | Th-230 | 7.107 Bq |
| | | | | | | | U | |
| **82237-334_00003** | 06/01/60 | Eckert & Ziegler, Lot 82237-334 | | | (Purchased Reagent) | | Am-241 | 5.608 Bq |
| | | | | | | | Plutonium-239/240 | 6.424 Bq |
| | | | | | | | Th-230 | 5.856 Bq |
| **82240-334_00001** | 06/08/60 | Eckert & Ziegler, Lot 82240-334 | | | (Purchased Reagent) | | Am-241 | 8.298 Bq |
| | | | | | | | Plutonium-239/240 | 7.163 Bq |
| | | | | | | | Th-230 | 6.304 Bq |
| **82241-334_00001** | 06/08/60 | Eckert & Ziegler, Lot 82241-334 | | | (Purchased Reagent) | | Am-241 | 6.638 Bq |
| | | | | | | | Plutonium-239/240 | 6.797 Bq |
| | | | | | | | Th-230 | 6.629 Bq |
| **82244-334_00001** | 06/09/60 | Eckert & Zigler, Lot 82244-334 | | | (Purchased Reagent) | | Am-241 | 6.897 Bq |
| | | | | | | | Plutonium-239/240 | 6.717 Bq |
| | | | | | | | Th-230 | 7.352 Bq |
| **82246-334_00001** | 06/09/60 | Eckert & Ziegler, Lot 82246-334 | | | (Purchased Reagent) | | Am-241 | 6.002 Bq |
| | | | | | | | Plutonium-239/240 | 5.353 Bq |
| | | | | | | | Th-230 | 5.57 Bq |
| **Pb-210_00025** | 10/02/20 | 10/01/19 | 1M HNO3, Lot n/a | 250 mL | Pb-210_00017 | 10 mL | Pb-210 | 90.4903 dpm/mL |
| | | | | | | | Polonium-210 | 90.4903 dpm/mL |
| .Pb-210_00017 | 10/02/20 | 07/23/14 | 1M HNO3, Lot n/a | 100 mL | Pb-210_00016 | 5.1868 mL | Pb-210 | 2262.26 dpm/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-35853-3

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Polonium-210 | 2262.26 dpm/mL |
| ..Pb-210_00016 | 11/01/63 | Analytics, Lot 95149 | | | (Purchased Reagent) | | Pb-210 | 726.928 Bq/g |
| | | | | | | | Polonium-210 | 726.928 Bq/g |
| **Po-209_00008** | 11/29/19 | 11/27/18 | 2M HCl, Lot n/a | 200 mL | Po-209_00007 | 5.12 g | Polonium-209 | 107.77 dpm/mL |
| .Po-209_00007 | 11/13/68 | Eckert & Ziegler, Lot 111092 | | | (Purchased Reagent) | | Polonium-209 | 70.1626 Bq/g |
| **Pu-238_00016** | 06/20/20 | 11/19/18 | 3M HNO3, Lot n/a | 250 mL | Pu-238_00009 | 5.4151 mL | Plutonium-238 | 60.3549 dpm/mL |
| .Pu-238_00009 | 12/02/65 | Eckert & Ziegler- Analytics, Lot 101995 | | | (Purchased Reagent) | | Plutonium-238 | 46.4403 Bq/g |
| **Pu-239_00015** | 06/20/20 | 11/19/18 | 3M HNO3, Lot n/a | 250 mL | Pu-239_00003 | 10 mL | Plutonium-239/240 | 58.6749 dpm/mL |
| .Pu-239_00003 | 07/30/20 | 08/11/08 | 3M HNO3, Lot 0 | 100 mL | Pu-239_00001 | 5.5996 g | Plutonium-239/240 | 1466.87 dpm/mL |
| ..Pu-239_00001 | 12/13/40 | US EPA NRAD-LV, Lot 2510-1 | | | (Purchased Reagent) | | Plutonium-239/240 | 11800 pCi/g |
| **Pu-242_00036** | 06/20/20 | 06/06/19 | 3M HNO3, Lot N/A | 250 mL | Pu-242_00034 | 5.4506 g | Pu-242 | 68.2253 dpm/mL |
| | | | | | | | Pu-242 (T) | 68.2253 dpm/mL |
| | | | | | Pu-242_00035 | 5.4494 g | Pu-242 | 68.2253 dpm/mL |
| | | | | | | | Pu-242 (T) | 68.2253 dpm/mL |
| .Pu-242_00034 | 06/20/20 | NIST, Lot 4334j | | | (Purchased Reagent) | | Pu-242 | 26.08 Bq/g |
| | | | | | | | Pu-242 (T) | 26.08 Bq/g |
| .Pu-242_00035 | 06/20/20 | NIST, Lot 4334j | | | (Purchased Reagent) | | Pu-242 | 26.08 Bq/g |
| | | | | | | | Pu-242 (T) | 26.08 Bq/g |

# Reagent

# 108001_00001

Eckert & Ziegler
Analytics

1368446
ID: 108001_00001
Alpha Calibration source

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108001
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2698841, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 06-December-2017 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 6.646E+00 | 4950-5240 | 8.806E+06 | 1.2 | 1.5 | 3.9 |
| Am-241 | 7.286E+00 | 5280-5600 | 1.580E+05 | 1.1 | 1.5 | 3.8 |
| Th-230 | 6.010E+00 | 4470-4760 | 2.753E+07 | 1.2 | 1.5 | 3.9 |
| Total Activity | 1.997E+01 | 3000-8000 | | 0.7 | 1.5 | 3.4 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

**SRS Number:** 108001

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 19-DEC-17
J. Lahr, Spectroscopist

# Reagent

# 108002_00001

Eckert & Ziegler
Analytics

1368447
ID 108002_00001
Exp 13/07/17 Prod 8.W Opnd 07/06/0
Alpha Calibration source

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108002
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2698841, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 07-December-2017 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 8.515E+00 | 4960-5240 | 8.806E+06 | 1.0 | 1.5 | 3.7 |
| Am-241 | 8.089E+00 | 5280-5600 | 1.580E+05 | 1.0 | 1.5 | 3.7 |
| Th-230 | 9.349E+00 | 4470-4760 | 2.753E+07 | 1.0 | 1.5 | 3.6 |
| Total Activity | 2.599E+01 | 3000-8000 | | 0.6 | 1.5 | 3.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

**SRS Number:** 108002

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 19-DEC-17
J. Lahr, Spectroscopist

# Reagent

# 108345_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108345
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2695542, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 22-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 7.695E+00 | 4950-5240 | 8.806E+06 | 1.1 | 1.5 | 3.7 |
| Am-241 | 7.916E+00 | 5280-5600 | 1.580E+05 | 1.1 | 1.5 | 3.7 |
| Th-230 | 7.314E+00 | 4470-4760 | 2.753E+07 | 1.1 | 1.5 | 3.7 |
| Total Activity | 2.294E+01 | 3000-8000 | | 0.7 | 1.5 | 3.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-CR-S2, Rev. 0, 01 Nov 14



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

**SRS Number:** 108345

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: .....

A. Chen, Spectroscopist

QC Approved by: ..... Date: 29-JAN-18

J. Lazu, Spectroscopist

Reagent

108346_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108346
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2695542, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 22-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 7.835E+00 | 4950-5240 | 8.806E+06 | 1.2 | 1.5 | 3.8 |
| Am-241 | 8.008E+00 | 5280-5600 | 1.580E+05 | 1.2 | 1.5 | 3.8 |
| Th-230 | 7.570E+00 | 4470-4760 | 2.753E+07 | 1.2 | 1.5 | 3.8 |
| Total Activity | 2.343E+01 | 3000-8000 | | 0.9 | 1.5 | 3.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-CR-32 Rev. 0 01 Nov 13

**SRS Number:** 108346

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 29-Jul-19
J. Dahr, Spectroscopist

# Reagent

# 82232-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82232-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 3-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.630E+00 | 4420-4800 | 7.540E+04 | 0.7 | 1.1 | 2.6 |
| Pu-239 | 7.137E+00 | 4950-5240 | 2.410E+04 | 0.7 | 1.1 | 2.6 |
| Am-241 | 7.281E+00 | 5280-5600 | 4.326E+02 | 0.7 | 1.1 | 2.6 |
| Total Activity | 2.210E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82236-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82236-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 2-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.107E+00 | 4420-4800 | 7.540E+04 | 0.7 | 1.1 | 2.6 |
| Pu-239 | 6.664E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 6.891E+00 | 5280-5600 | 4.326E+02 | 0.7 | 1.1 | 2.6 |
| Total Activity | 2.071E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form006 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.46 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82237-334_00003

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82237-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 1-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 5.856E+00 | 4420-4800 | 7.540E+04 | 1.0 | 1.1 | 3.0 |
| Pu-239 | 6.424E+00 | 4960-5240 | 2.410E+04 | 0.9 | 1.1 | 2.8 |
| Am-241 | 5.608E+00 | 5280-5600 | 4.326E+02 | 1.0 | 1.1 | 3.0 |
| Total Activity | 1.793E+01 | 3000-8000 | | 0.6 | 1.1 | 2.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form005 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1960



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355



Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82240-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82240-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 8-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 6.304E+00 | 4420-4800 | 7.540E+04 | 0.9 | 1.1 | 2.8 |
| Pu-239 | 7.163E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 8.298E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 2.182E+01 | 3000-8000 | | 0.5 | 1.1 | 2.4 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958

ANA Form005 Rev. —

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82241-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82241-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 8-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 6.629E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 6.797E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 6.638E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 2.011E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1966

ANA Form005 Rev. —

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82244-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82244-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 9-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.352E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 6.717E+00 | 4950-5240 | 2.410E+04 | 0.9 | 1.1 | 2.8 |
| Am-241 | 6.897E+00 | 5280-5600 | 4.326E+02 | 0.9 | 1.1 | 2.8 |
| Total Activity | 2.101E+01 | 3000-8000 | | 0.6 | 1.1 | 2.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82246-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82246-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 9-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 5.570E+00 | 4420-4800 | 7.540E+04 | 1.0 | 1.1 | 3.0 |
| Pu-239 | 5.353E+00 | 4950-5240 | 2.410E+04 | 1.0 | 1.1 | 3.0 |
| Am-241 | 6.002E+00 | 5280-5600 | 4.326E+02 | 1.0 | 1.1 | 3.0 |
| Total Activity | 1.696E+01 | 3000-8000 | | 0.7 | 1.1 | 2.6 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

ANA Form005 Rev. ---

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.46 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06·24·2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# Pb-210_00016

Eckert & Ziegler
Analytics

410059
ID: Pb-210_00016
Exp:11/01/63 Prod.SCB Opn:07/23/14
Pb-210 Ampoule

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

95149

Pb-210 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica - St. Louis
**P.O. No.:** 2842087, Item 1 Product Code: 8210

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Pb-210 | 8.109E+03 | 3.795E+03 | 0.1 | 0.5 | 1.1 | 11/01/2013 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: γ-impurities<0.1%.
5.22060 g 1M HNO3 solution. Carrier free.

Source Prepared by: A. Herron
A. Herron, Radiochemist

QC Approved: J.D. McCorvey, Counting Room Manager Date: 1 NOV 13

ANA Form005 Rev. —

Single Isotope Certificate Rev 5, 1 October 2013

Page 1 of 1

# Reagent

# Pb-210_00025

TestAmerica

St. Louis Radiological Standard Verification

Printed: 10/7/2019 11:27 PM

Standard ID Number: Pb-210_00025
True Value = 33886 pCi/L or g
Date Analyzed: 10/2/2019

Radionuclide: Pb-210

| | Replicates | |
|---|---|---|
| #1 | 33900 | pCi/L or g |
| #2 | 33300 | pCi/L or g |
| #3 | 34900 | pCi/L or g |

Mean = 34033.333

1 sigma = 808.29038 1.96 sigma = 1584.249

True Value minus 5% = 32191.7 (True Value - 5%)
True Value plus 5% = 35580.3 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: TJR 10/7/2019

2nd Reviewed By/Date: 10-9-19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Pb-210 Standard Verification

Std #: Pb-210_00025 (1806832)
Amount: 1.0mL
Activity: 90.49 dpm/mL
Reference Date: 11/1/2013

| Vial # | Cleaned Standard (mL) | Ultima Gold AB ( mL) | Nitromethane (µL) |
|---|---|---|---|
| *Reagent ID* | *N/A* | *1792154* | *1699190* |
| 1 | 5 | 15 | 0 |
| 2 | 5 | 15 | 25 |
| 3 | 5 | 15 | 50 |

Due to the presence of Bi-210 and Po-210 found in equilibrium with the Pb-210 in the calibration standard, the following clean up procedure was used to selectively remove the Pb-210 from the contaminants:

- 4 mL of the Pb-210_00024 standard and 1.5 mL of lead carrier (10mg/mL) were diluted up to 20mL with 1M nitric acid in a single digi-tube.
- The lead solution was then isolated using Eichrom lead resin and the ST-RC-0211 procedure (one cartridge).
- 5 mL of the eluted solution was used for each quench curve point.

Reagents:
Lead carrier (1742396)
1 M nitric (1804256)
0.1 M Nitric (1786919)
Lead Eichrom Cartidge (PBSR17A)

*Background Vial is prepared with 1 mL of lead carrier, 4mL of DI water, and 15mL of Ultima Gold AB cocktail

Prepared by: Molly Olson
Date: 10/01/19

*Pipette ID: RAD118*

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 11/1/2013 0:00 | | |
| **Decayto Date/Time (t):** | 10/2/19 0:00 | | |
| **Initial Activity ($A_0$):** | 90.49 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 90.49 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pb-210 | | |
| **Half-Life (days):** | 8108.55 | decay days | fraction |
| ****Decay Factor:** | 0.8313 | 2161.00 | 0.26651 |
| **Decay Corr Activity:** | 7.5227E+01 dpm | | |
| **Decay Corr Conc:** | 7.5227E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | L |
| **Volume Unit Factor:** | 0.001 |
| **Final Concentration:** | 3.3886E+04 pCi/L |
| **Aliquot Volume:** | 1.0000E+00 L |
| **Final Activity (A):** | 3.3886E+04 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

eurofins | Environment Testing TestAmerica

Pb-210_00025

## Reagent ID: Pb-210_00025

| | | | |
|---|---|---|---|
| | | Expiration Date: | 09/30/2020 |
| Description: | Pb-210 / Po-210 Spike | Laboratory: | Eurofins TestAmerica, St. Louis |
| No. of Bottles: | 1 | Prepared By: | Olson, Molly M |
| Storage Location: | RAD Separations Reagents - Rm 131 | Solvent: | 1M HNO3 |
| Reagent Volume: | 250.000 mL | Solvent Lot: | n/a |
| Creation Date: | 10/01/2019 | | |
| Open Date: | | | |
| Container(s): | 1806832 | | |
| Comment: | Re-certified from Pb-210_00021 | | |

Ref Date: 11/1/2013

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pb-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |
| Po-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pb-210_00017 | Pb-210 / Po-210 Parent | | 10/26/19 | | | | 10.00000 | mL |

10/2/2019 4:54:08 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 1
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default
Pb210_2018 Protocol 20

**Assay Definition**

Assay Description:
Pb-210 Protocol 20 TEAL Ocotober, 2018
Assay Type: DPM (Single)
Report Name: Pb210 Protocol 20
Output Data Path: W:\
Raw Results Path: C:\Packard\Tricarb\Results\Default\Pb210_2018 Protocol 20\20191002_0156\20191002_0156.results
Assay File Name: C:\Packard\TriCarb\Assays\Pb210_2018 Protocol 20.lsa

Additional Data Files Generated with this Protocol:
20Pb210
[Auto] 20Pb210.001

**Count Conditions**

Nuclide: Pb210_2018
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 15 sec
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: Pb210_2018
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

**Background Subtract**

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

| Regions | LL | UL | 2Sigma % Terminator |
|---|---|---|---|
| A | 20.0 | 63.0 | 1.50 |
| B | 2.0 | 63.0 | 0.00 |
| C | 63.1 | 150.0 | 0.00 |

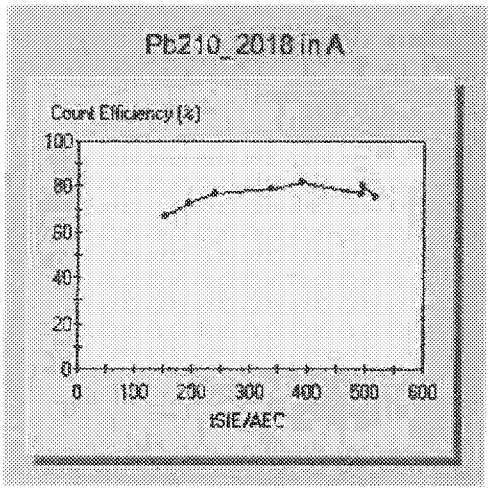
**Count Corrections**

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Cycle 1 Results
**Quench Curve Block Data**

10/2/2019 4:54:09 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 2
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default

Pb210_2018 Protocol 20

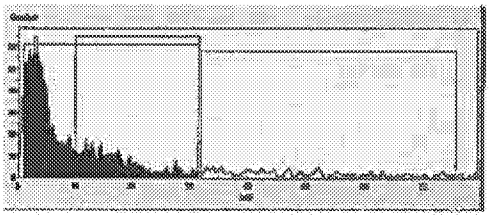



Date Acquired: 10/22/2018
Date Modified:
Pb210_2018 in A

| tSIE/AEC | Count Efficiency (%) |
|---|---|
| 517.63 | 75.17 |
| 493.96 | 79.97 |
| 491.56 | 76.77 |
| 389.68 | 81.61 |
| 338.27 | 78.99 |
| 239.36 | 76.57 |
| 194.54 | 72.55 |
| 152.63 | 66.72 |

| S# | SMPL ID | Count Time | CPMA | MESSAGES | tSIE | DATE | TIME | Eff | DPM1 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BKG | 90.00 | 3.36e+000 | | 452.31 | 10/2/2019 | 1:57:02 AM | 0.786 | 4.27e+000 |

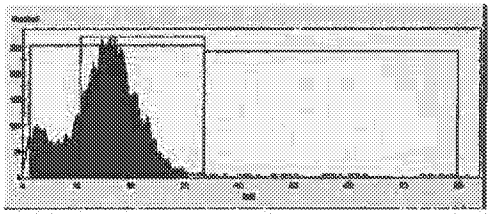
SpectraView Block Data



| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 160-35668-A-6-A | 90.00 | 6.11e+001 | | 483.72 | 10/2/2019 | 3:35:51 AM | 0.771 | 7.92e+001 |

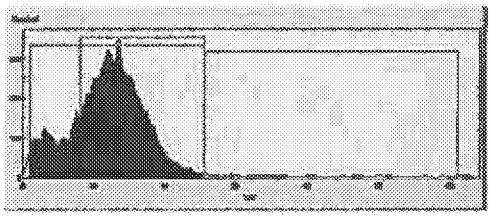
SpectraView Block Data

10/2/2019 4:54:09 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 3
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default
Pb210_2018 Protocol 20



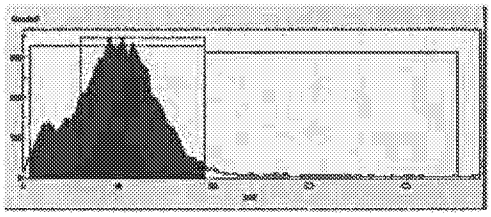
3 160-35668-A-6-B 90.00 6.18e+001 345.80 10/2/2019
5:14:40 AM 0.794 7.79e+001

SpectraView Block Data



4 160-35668-A-6-C 90.00 6.19e+001 231.63 10/2/2019
6:53:30 AM 0.759 8.15e+001

SpectraView Block Data



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## Analysis Report for Lead 210 by LSC

Batch: 444696 Operator:

| Sample ID / Analyte | Work Order # / Cs | Cb | Aliquot / Effs | Adjusted Aliquot / Effb | CPMs | Dilution / CPMb | Sample Date/Time / DPMs | DPMb | Instrument / Activity | RunDateTime | UncCount | Ts / UncTotal | Tb | Sigma / MDA | Yield / DLC | TruncYield | Decay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-35668-A-6-A | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 3:35 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,499.00 | 302.40 | 0.7710 | 0.7860 | 61.10 | 3.36 | 79.25 | 4.273.390E+00 | pCi/L | 4.969E+00 | 1.605E+00 | 5.474E+00 | | 2.639E+00 | | 1604.5506 | |
| 160-35668-A-6-B | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 5:14 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,562.00 | 302.40 | 0.7940 | 0.7860 | 61.80 | 3.36 | 77.83 | 4.273.332E+00 | pCi/L | 4.851E+00 | 1.576E+00 | 5.316E+00 | | 2.563E+00 | | 1575.9606 | |
| 160-35668-A-6-C | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 6:53 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,571.00 | 302.40 | 0.7560 | 0.7860 | 61.90 | 3.36 | 81.55 | 4.273.492E+00 | pCi/L | 5.079E+00 | 1.651E+00 | 5.561E+00 | | 2.681E+00 | | 1651.3070 | |

### Laboratory Control Sample Information

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Duplicate Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

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## *Radiochemistry Data Review Checklist*

**Batch:** 444696 **Analysis:** Lead-210 by LSC

| Lot Number | Analytical Due Date |
|---|---|
| 160-35668-A-6-A | |
| 160-35668-A-6-B | |
| 160-35668-A-6-C | |

| Review Item | Yes | No | N/A | 2 Rvw |
|---|---|---|---|---|
| ***Rad Prep*** | | | | |
| 1 Are all samples on batch sheet present or removed from batch? | ☑ | ☐ | ☐ | ☑ |
| 2 Are all samples, QC and methods in compliance with client requirements? | ☑ | ☐ | ☐ | ☑ |
| 3 Were forms checked for transcription errors? | ☑ | ☐ | ☐ | ☑ |
| 4 Are all TALS entries complete? (End Dates and appropriate worksheet fields completed) | ☑ | ☐ | ☐ | ☑ |
| 5 Are all problems and deviations documented? (NCM printed and attached with paperwork) | ☐ | ☐ | ☑ | ☑ |
| 6 Does this batch contain re-extracts? | ☐ | ☒ | ☐ | ☑ |
| ***Sample Analysis*** | | | | |
| 1 Are carrier/tracer yields within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 2 Were all sample holding times met? | ☐ | ☐ | ☑ | ☑ |
| 3 If alpha or LSC, were samples analyzed using normal ROI's, and were spectra evaluated for interferences? | ☑ | ☐ | ☐ | ☑ |
| ***QC Samples*** | | | | |
| 1 Is the blank activity <= MDA | ☐ | ☐ | ☑ | ☑ |
| 2 Is the blank activity <= client CRDL? | ☐ | ☐ | ☑ | ☑ |
| 3 If blank activity exceeds limit, is sample activity >= 5X blank activity? | ☐ | ☐ | ☑ | ☑ |
| 4 Is LCS recovery within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 5 Is duplicate precision (e.g. RPD/RER/DER/z-score) within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 6 Is MS/MSD recovery within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 7 Do samples meet CRDL? | ☐ | ☐ | ☑ | ☑ |
| 8 Is the absolute value of any negative result < 3sigma uncert.? | ☐ | ☐ | ☑ | ☑ |
| ***Other*** | | | | |
| 1 Are all nonconformances documented and noted? | ☐ | ☐ | ☑ | ☑ |
| 2 Were manual data entries and/or calculations checked? | ☐ | ☐ | ☑ | ☑ |
| ***Data Packaging*** 445005 10/7/19 | | | | |
| 1 Run logs included? 445006 445007 | ☐ | ☐ | ☐ | ☐ |
| 2 Daily checks included? | ☐ | ☐ | ☐ | ☐ |
| 3 Backgrounds included? 10/1/19 10/2/19 | ☐ | ☐ | ☐ | ☐ |
| 4 Calibrations included? Seal | ☐ | ☐ | ☐ | ☐ |

Page 1 of 2

Batch: 444696 Analysis: Lead-210 by LSC

Comments:

Prep Analyst: MMO Date: 10/1/19

Analyst: [illegible] Date: 10/7/19

Second Level Reviewer [illegible] Date: 10/8/19

Date Uploaded: 10/8/19

Date Verified: 10/8/19

Date Review Released: 10/8/19

10-1-19
Teal
Prot 20
90 min

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696

Analyst: Olson, Molly M

Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Preparation, Extraction Chromatography

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | BKG = 1 | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 2 | |
| 2 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 3 | |
| 3 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 4 | |

TA
90 min
Pb-210: 5.00 pCi/L

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM
Batch End: 10/1/2019 12:38:00PM

## Lead-210 (LSC)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |
| 2 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |
| 3 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyte used for Carrier | Pb |
| Analyst ID - Reagent Drop | MMO |
| Analyst ID - Reagent Drop Witness | HET per MMO |
| Pipette ID | RAD118 |
| SOP Number | ST-RC-0211 |
| Batch Comment | Pb-210_00025 Reverification |

## Comments

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

# Rad Worksheet

Batch Number: 160-444696
Method: Ext_Chrom_LSC
Analyst: Olson, Molly M

Date Open: Oct 01 2019 12:27PM
Batch End: Oct 01 2019 12:58PM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Elution Volume | Volume of Final Tracer Split | Tracer Concentration Final | Pb-210_00025 |
|---|---|---|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |

Balance ID: N/A
Analyst ID - Reagent Drop: MMO
Analyst ID - Reagent Drop Witness: HET per MMO
Pipette ID: RAD118
SOP Number: ST-RC-0211

# Rad Worksheet

Batch Number: 160-444696
Method: Ext_Chrom_LSC
Analyst: Olson, Molly M

Date Open: Oct 01 2019 12:27PM
Batch End: Oct 01 2019 12:38PM

| Lab ID | Client ID | Method Chain | Basis | Analysis comment | Comments |
|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |

Batch Comment: Pb-210_00025 Reverification

# Reagent

# Po-209_00007

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 111092
**Source Description:** 5 mL Liquid in Flame Sealed Ampoule
**Product Code:** 8209
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 3008779, Item 1

This standard radionuclide source was prepared gravimetrically from a master solution calibrated by Eckert & Ziegler Analytics (EZA). The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. EZA maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 13-November-2018 12:00 PM EST

| Isotope | Half-Life, d | Activity, Bq | Uncertainty $u_A$, % | $u_B$, % | $U$, %* | Calibration Method** |
|---|---|---|---|---|---|---|
| Po-208 | 3.726E+04 | 3.814E+02 | 0.3 | 1.0 | 2.0 | 4π LS |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results." ****Calibration Methods:** 4π LS - 4π Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber.

(Certificate continued on reverse side)

**ERS Number:** 111092

**Comments:**
5.15089 g of 2 M HCl solution, carrier free.

**Impurities:**
γ-impurities < 0.1%
α-impurities < 0.2%

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Prepared by: _____
K. Bardley, Radiochemist

QC Approved by: _____ Date: 31-OCT-19
J. Kalx, Spectroscopist

# Reagent

# Po-209_00008

TestAmerica

St. Louis Radiological Standard Verification

Printed: 11/30/2018 10:21 PM

Standard ID Number: Po-209_00008
True Value = 104.12 dpm/mL
Date Analyzed: 11/29/2018

Radionuclide: Po-209

| | Replicates | |
|---|---|---|
| #1 | 111.8 | dpm/mL |
| #2 | 107.85 | dpm/mL |
| #3 | 107.7 | dpm/mL |

Mean = 109.116667

1 sigma = 2.3250448 1.96 sigma = 4.557088

True Value minus 5% = 98.914 (True Value - 5%)
True Value plus 5% = 109.326 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: MS 11/30/18

2nd Reviewed By/Date: RM 12-6-18

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| Initial Date/Time ($t_0$): | 11/1/2013 12:00 | | |
| Decayto Date/Time (t): | 11/29/18 12:00 | | |
| Initial Activity ($A_0$): | 90.49 dpm | | |
| Initial Aliquot: | 1 mL | | |
| Initial Conc: | 90.49031 dpm/mL | | |
| *Soln. Density: | 1 g/mL | | |
| Nuclide: | Pb-210 | | |
| Half-Life (days): | 8108.55 | decay days | fraction |
| **Decay Factor: | 0.8534 | 1854.00 | 0.22865 |
| Decay Corr Activity: | 7.7228E+01 dpm | | |
| Decay Corr Conc: | 7.7228E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| Final Activity Unit: | dpm |
| Activity Unit Factor: | 1.00000 |
| Final Volume Unit: | mL |
| Volume Unit Factor: | 1.000 |
| Final Concentration: | 7.7228E+01 dpm/mL |
| Aliquot Volume: | 1.0000E+00 mL |
| Final Activity (A): | 7.7228E+01 dpm |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pb - 210 - 00023

Ref. 11/1/2013

## Reagent ID: Pb-210_00023

| | | | |
|---|---|---|---|
| | | Expiration Date: | 07/11/2019 |
| Description: | Pb-210 / Po-210 Spike | Laboratory: | TestAmerica St. Louis |
| No. of Bottles: | 1 | Prepared By: | Bernsen, Sarah C |
| Storage Location: | RAD Separations Reagents - Rm 131 | Solvent: | 1M HNO3 |
| Reagent Volume: | 250.000 mL | Solvent Lot: | n/a |
| Creation Date: | 07/12/2018 | | |
| Open Date: | | | |
| Container(s): | 1507235 | | |
| Comment: | Re-certified from Pb-210_00021 | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pb-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |
| Po-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pb-210_00017 | Pb-210 / Po-210 Parent | | 10/26/19 | | | | 10.00000 | mL |

11/30/2018 21:32

Page 1 of 1

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| Initial Date/Time ($t_0$): | 11/1/2013 12:00 | | |
| Decayto Date/Time (t): | 11/29/18 12:00 | | |
| Initial Activity ($A_0$): | 107.77 dpm | | |
| Initial Aliquot: | 1 mL | | |
| Initial Conc: | 107.7698 dpm/mL | | |
| *Soln. Density: | 1 g/mL | | |
| Nuclide: | Po-209 | | |
| Half-Life (days): | 37255.5 | decay days | fraction |
| **Decay Factor: | 0.9661 | 1854.00 | 0.04976 |
| Decay Corr Activity: | 1.0412E+02 dpm | | |
| Decay Corr Conc: | 1.0412E+02 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| Final Activity Unit: | dpm |
| Activity Unit Factor: | 1.00000 |
| Final Volume Unit: | mL |
| Volume Unit Factor: | 1.000 |
| Final Concentration: | 1.0412E+02 dpm/mL |
| Aliquot Volume: | 1.0000E+00 mL |
| Final Activity (A): | 1.0412E+02 dpm |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Po-209_00008

Ref. 11/13/18 11:00

## Reagent ID: Po-209_00008

| | | | |
|---|---|---|---|
| Description: | Po-209 Tracer | Expiration Date: | 11/27/2019 |
| No. of Bottles: | 1 | Laboratory: | TestAmerica St. Louis |
| Storage Location: | RAD Actinide STDs | Prepared By: | Bernsen, Sarah C |
| Reagent Volume: | 200.000 mL | Solvent: | 2M HCl |
| Creation Date: | 11/27/2018 | Solvent Lot: | n/a |
| Open Date: | | | |
| Container(s): | 1626809 | | |
| Comment: | parent standard used as tracer. Verified annually since used as a working standard. | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Po-209 | Po-209_00007 | 11/13/2068 | 70.16300 | Bq/g | 107.76980 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Po-209_00007 | Po-209 Ampoule | ASTD | 11/13/68 | Eckert & Ziegler | 111092 | 8209 | 5.12000 | g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:48:54PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-A
SampleType: Sample
: 160-32037-A-1-A
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749751

Analyst: 60040

### Tracer

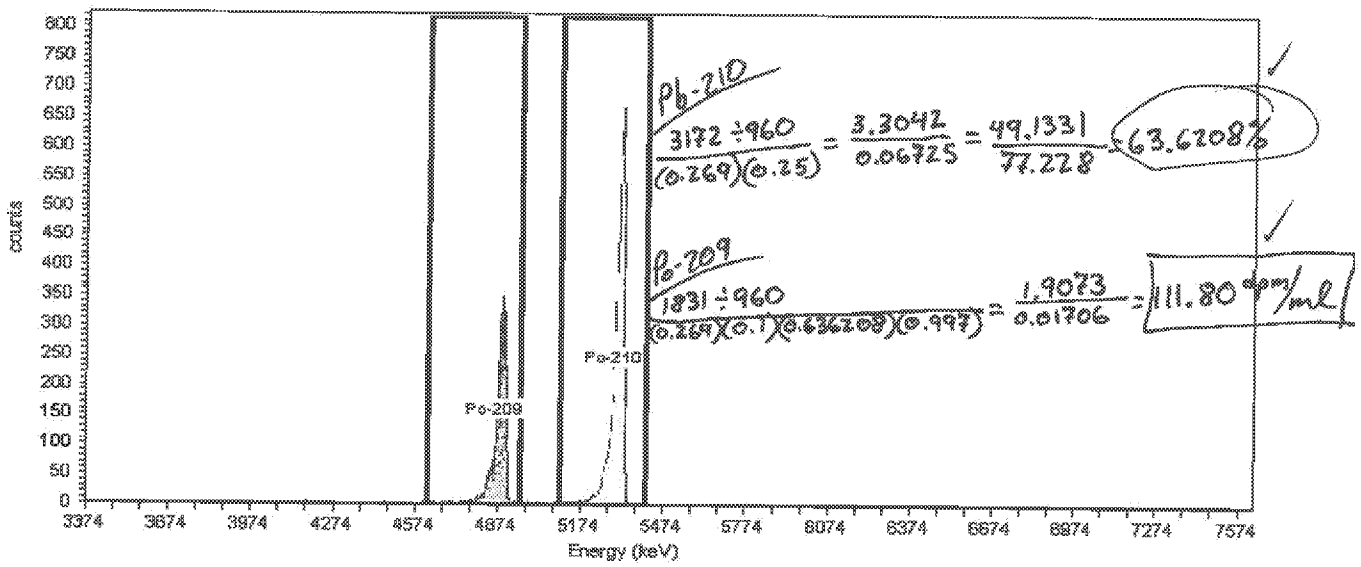
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 585,637.30%

### Acquisition

Detector: AV119
Serial Number: 49-037G6
Acquisition Start Date: 11/29/2018 11:47:26PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:42PM
Background Info: Sample: ICB;AV119; Det: AV119; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370621;AV119-05172018
Calibration Date: 5/17/2018 8:56:46AM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.90% +/- 0.24% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.2 | 99.7 | 1831 | 0.0000 | 1831.00 | 5.468 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.6 | 100.0 | 3172 | 1.0000 | 3171.00 | 6,786,000.0 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:47:12PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-B
SampleType: Sample
: 160-32037-A-1-B
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749752

Analyst: 60040

### Tracer

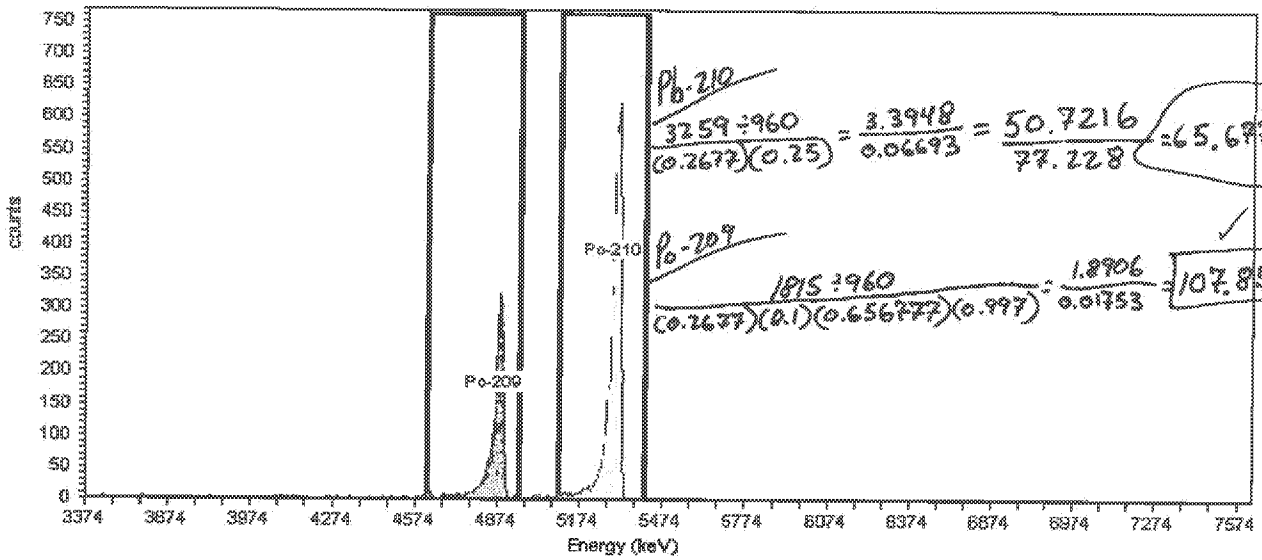
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 604,137.30%

### Acquisition

Detector: AV120
Serial Number: 49-037W3
Acquisition Start Date: 11/29/2018 11:46:29PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:43PM
Background Info: Sample: ICB;AV120; Det: AV120; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370622;AV120-05172018
Calibration Date: 5/17/2018 8:56:57AM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.77% +/- 0.23% TPU(2 sigma)




Pb-210
$\frac{3259 \div 960}{(0.2677)(0.25)} = \frac{3.3948}{0.06693} = \frac{50.7216}{77.228} = 65.6777\%$

Po-209
$\frac{1815 \div 960}{(0.2677)(0.1)(0.656777)(0.997)} = \frac{1.8906}{0.01753} = 107.85$ dpm/mL

### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.2 | 99.7 | 1815 | 3.0000 | 1812.00 | 5,270 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.1 | 100.0 | 3259 | 3.0000 | 3256.00 | 5,638,300.0 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:47:21PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-C
SampleType: Sample
: 160-32037-A-1-C
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749753

Analyst: 60040

### Tracer

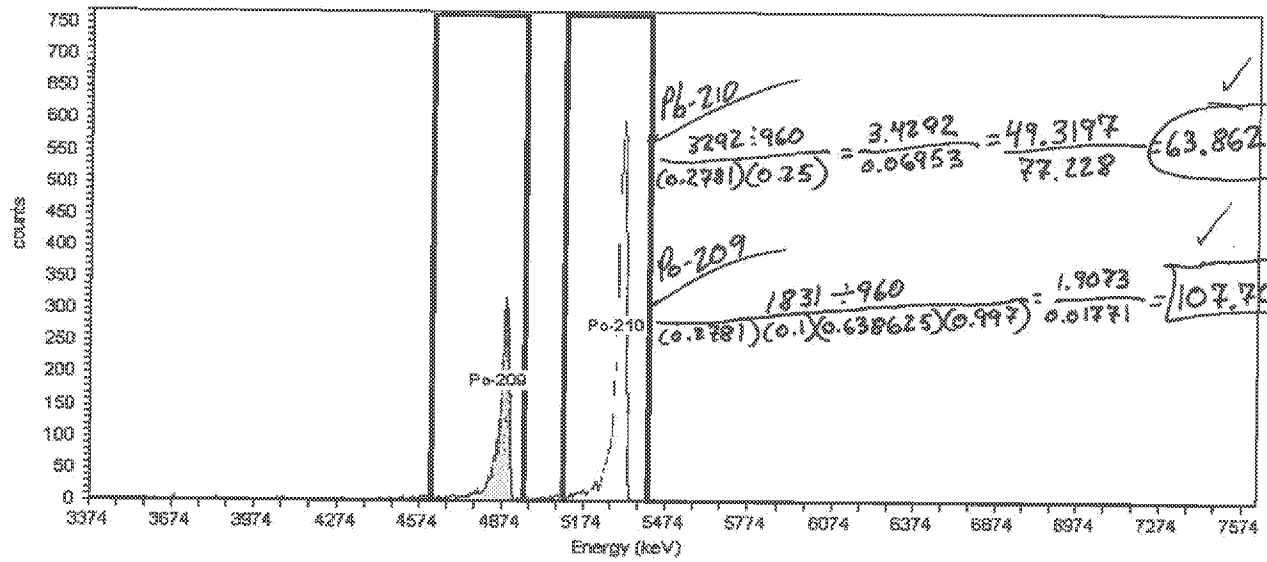
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 587,996.30%

### Acquisition

Detector: AV121
Serial Number: 49-037W2
Acquisition Start Date: 11/29/2018 11:46:32PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:45PM
Background Info: Sample: ICB;AV121; Det: AV121; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370619;AV121-05172018
Calibration Date: 5/17/2018 8:57:08AM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.81% +/- 0.23% TPU(2 sigma)




Pb-210
$\frac{3292 \div 960}{(0.2781)(0.25)} = \frac{3.4292}{0.06953} = \frac{49.3197}{77.228} = 63.8625\%$

Po-209
$\frac{1831 \div 960}{(0.2781)(0.1)(0.638625)(0.997)} = \frac{1.9073}{0.01771} = 107.70$ dpm/mL

### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 48.3 | 99.7 | 1831 | 0.0000 | 1831.00 | 5.267 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.0 | 100.0 | 3292 | 0.0000 | 3292.00 | 9,190,100.0 | pCi/L |

# Dig_CuPlate Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-403266 Analyst: Cooper, Sarah J Batch Open: 11/29/2018 10:53:00AM

Batch End: 11/29/2018 3:01:00PM

## Preparation, Digestion & Copper Plating

| | Input Sample Lab ID | Input Sample Lab ID (Analytical Method) | SDG | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 119 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 1 |
| 2 | 120 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 2 |
| 3 | 121 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 3 |

### Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop Witness | MMO per SJC |
| Analyst ID - Reagent Drop | SJC |
| Pipette ID | RAD097, RAD116 |
| Batch Comment | Po-209_00008 Tracer Verification |
| SOP Number | ST-RC-0210 |

### Comments

# Dig_CuPlate Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-403266 Analyst: Cooper, Sarah J Batch Open: 11/29/2018 10:53:00AM
Batch End: 11/29/2018 3:01:00PM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

**Printed:** 11/29/2018 12:09 PM
**Form:** QA-0093 Blank Form (Rev 1-30-2014)

**Batch number:** 403266

**Date:** 11-29-2018

**Analyst:** SSC

Reagent IDs used:

| | |
|---|---|
| 01 | 0.2% HCl 1608230 |
| 02 | 30% $H_2NOHCl$ 1604646 |
| 03 | |
| 04 | |
| 05 | |
| 06 | |
| 07 | |
| 08 | |
| 09 | |
| 10 | |
| 11 | PM 11/29/18 |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |

# Reagent

# Pu-238_00009

Eckert & Ziegler
Analytics

rcvd. 12/4/15

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

101995

Pu-238 5 mL Liquid in Flame Sealed Vial

**Customer:** Test America
**P.O. No.:** 2628937, Item 1 Product Code: 8238

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Pu-238 | 3.203E+04 | 2.531E+02 | 0.4 | 1.0 | 2.1 | 12/02/2015 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: α-impurities 0.23%, γ-impurities <0.1%
5.45001 g 3M HNO3 solution, carrier free.

Source Prepared by: A. Herron
A. Herron, Radiochemist

QC Approved: J. S. Luby, Spectroscopist Date: 24 NOV 15

913519
ID: Pu-238_00009
Exp: 12/02/65 Prpd: SCB
Pu-238 Ampoule

F-CR-32, Rev. 0, 01 Nov 14

# Reagent

# Pu-238_00016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 12/10/2018 11:38 AM

Standard ID Number: Pu-238_00016
True Value = 26546 pCi/L
Date Analyzed: 12/8/2018

Radionuclide: Pu-238

| | Replicates | |
|---|---|---|
| #1 | 27117.63 | pCi/L |
| #2 | 26961.68 | pCi/L |
| #3 | 28709.96 | pCi/L |

Mean = 27596.4233

1 sigma = 967.498337 1.96 sigma = 1896.297

True Value minus 5% = 25218.7 (True Value - 5%)
True Value plus 5% = 27873.3 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: AB 12/10/18

2nd Reviewed By/Date: Rm 12·10·18

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 11:00 | | |
| **Decayto Date/Time (t):** | 12/8/16 23:50 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9764 | 1102.53 | 0.03442 |
| **Decay Corr Activity:** | 5.8932E+01 dpm | | |
| **Decay Corr Conc:** | 5.8932E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | L |
| **Volume Unit Factor:** | 0.001 |
| **Final Concentration:** | 2.6546E+04 pCi/L |
| **Aliquot Volume:** | 1.0000E+00 L |
| **Final Activity (A):** | 2.6546E+04 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pu-238_00016

Ref. 12/2/2015 11:00

## Reagent ID: Pu-238_00016

| | | | |
|---|---|---|---|
| Description: | Pu-238 spike | Expiration Date: | 12/31/2018 |
| No. of Bottles: | 1 | Laboratory: | TestAmerica St. Louis |
| Storage Location: | RAD Actinide STDs | Prepared By: | Bernsen, Sarah C |
| Reagent Volume: | 250.000 mL | Solvent: | 3M HNO3 |
| Creation Date: | 11/19/2018 | Solvent Lot: | n/a |
| Open Date: | | | |
| Container(s): | 1622546 | | |
| Comment: | re-certified from Pu-238_00012 | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pu-238 | Pu-238_00009 | 12/02/2065 | 46.44000 | Bq/g | 60.35490 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pu-238_00009 | Pu-238 Ampoule | ASTD | 12/02/65 | Eckert & Ziegler- Analyt | 101995 | | 5.41510 | mL |

12/10/2018 11:01

Page 1 of 1

# ExtChrom_Actin Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-404669 | Analyst: Mazariegos, Chelsea M | Batch Open: 12/7/2018 3:21:00PM
Batch End: 12/8/2018 9:47:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID | Input Sample Lab ID (Analytical Method) | SDG | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-31716-A-3 227 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |
| 2 | 160-31716-A-3 228 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |
| 3 | 160-31716-A-3 229 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |

### Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CMM |
| Analyst ID - Reagent Drop Witness | pms per nmn |
| Pipette ID | RAD116 |
| Analyst ID - Column | nmn |
| Column Date | 12/8/18 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 12/8/18 |
| SOP Number | ST-RC-0100, ST-RC-0242 |
| Batch Comment | Pu-238/Pu-239 Verification |

Printed : 12/10/2018 | Page 1 of 4 | TestAmerica St. Louis

# Rad Worksheet

Batch Number: 160-404669
Method: ExtChrom
Analyst: Mazariegos, Chelsea M

Date Open: Dec 07 2018 3:21PM
Batch End: Dec 08 2018 9:47AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-236_00015 | Pu-238_00016 | Pu-239_00015 |
|---|---|---|---|---|---|---|---|
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CMM |
| Analyst ID - Reagent Drop Witness: | pms per nmn |
| Pipette ID: | RAD116 |
| Analyst ID - Column: | nmn |
| Column Date: | 12/8/18 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 12/8/18 |
| SOP Number: | ST-RC-0100, ST-RC-0242 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Alpha Spectroscopy

**Batch:** 404669 **Operator:**

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-J | 160-31716-A-3-J | 0.1000 mL | 1.00 | 1.00 | AV227 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 88.79% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 4.15077E+004 | pCi/L | 8.471E+002 | 1.938E+003 | 3.157E+002 | 1.322E+002 | 1,938.2202 |
| Pu-238 | 2.71178E+004 | pCi/L | 7.269E+002 | 1.351E+003 | 2.775E+002 | 1.098E+002 | 1,350.6632 |
| Pu-239 | 2.60985E+004 | pCi/L | 7.099E+002 | 1.303E+003 | 2.134E+002 | 7.774E+001 | 1,302.7006 |
| Pu-242 | 3.08374E+002 | pCi/L | 9.828E+001 | 9.913E+001 | 2.583E+002 | 1.003E+002 | 99.1251 |

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-K | 160-31716-A-3-K | 0.1000 mL | 1.00 | 1.00 | AV228 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 86.11% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 4.02548E+004 | pCi/L | 8.325E+002 | 1.885E+003 | 3.472E+002 | 1.481E+002 | 1,884.5348 |
| Pu-238 | 2.69817E+004 | pCi/L | 7.343E+002 | 1.350E+003 | 3.347E+002 | 1.378E+002 | 1,349.8230 |
| Pu-239 | 2.81544E+004 | pCi/L | 7.479E+002 | 1.399E+003 | 2.431E+002 | 9.193E+001 | 1,399.1596 |
| Pu-242 | 3.15803E+002 | pCi/L | 1.008E+002 | 1.015E+002 | 2.548E+002 | 1.027E+002 | 101.5131 |

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-L | 160-31716-A-3-L | 0.1000 mL | 1.00 | 1.00 | AV229 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 82.74% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 3.86790E+004 | pCi/L | 8.118E+002 | 1.816E+003 | 3.535E+002 | 1.515E+002 | 1,816.0396 |
| Pu-238 | 2.87100E+004 | pCi/L | 7.705E+002 | 1.431E+003 | 4.015E+002 | 1.703E+002 | 1,430.9598 |
| Pu-239 | 2.81493E+004 | pCi/L | 7.569E+002 | 1.404E+003 | 1.565E+002 | 4.728E+001 | 1,403.8185 |
| Pu-242 | 2.84257E+002 | pCi/L | 7.597E+001 | 7.690E+001 | 6.091E+001 | 4.724E+001 | 76.9033 |

### Laboratory Control Sample Information

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Analyte | Sample Activity | Dup Sample ID | Dup Activity | RPD | RER | DER | Qualifier | ZFactor |
|---|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery |
|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

12/10/2018 11:08:25AM Page 1 of 1 RadCapture, version 6.2.5, released 6/27/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:30PM 12/9/2018

### Sample

Sample Name: 160-31716-A-3-J Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-J
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

### Batch

Batch Name: 404669
AnalysisResultsID: 234640
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

### Tracer

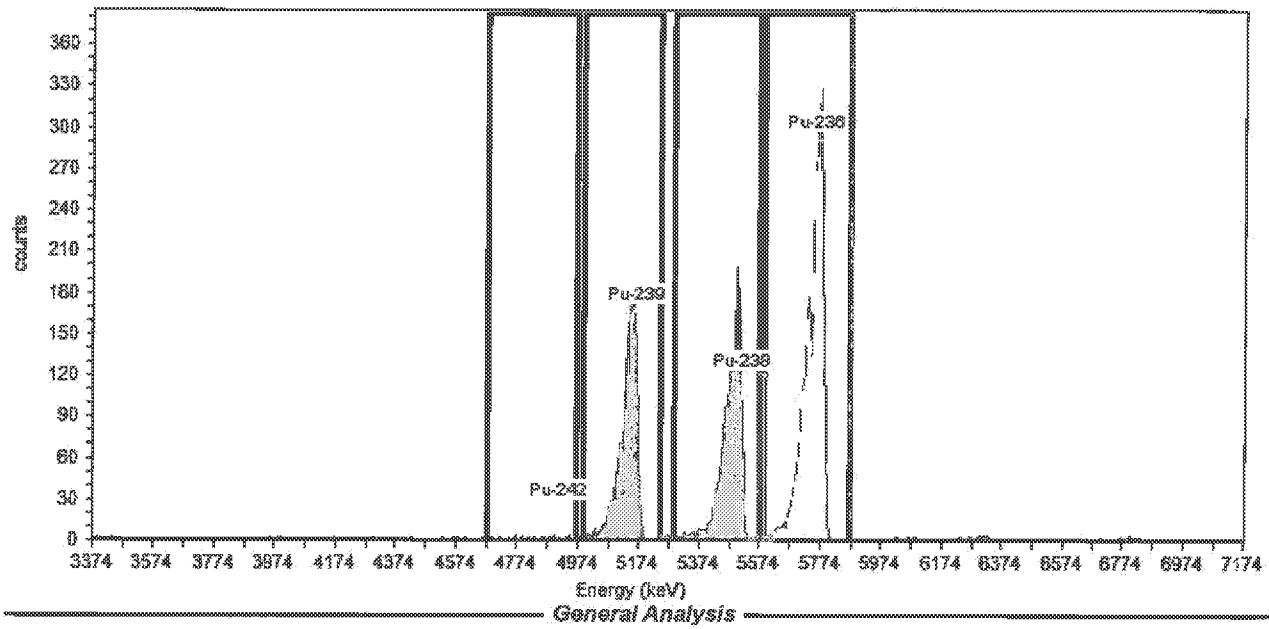
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 88.79%

### Acquisition

Detector: AV227 SN: 50-120DD5
Acquisition Start Date: 12/8/2018 11:50:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV227; Det: AV227; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370621;AV227-11152018
Efficiency Calibration:IC-1370621;AV227-11152018
Calibration Date: 11/15/2018 6:58:05PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.42% +/- 0.24% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:07PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity Units |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 10.0 | 100.0 | 21 | 5.0000 | 16.00 | 3.084E+002 pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.5 | 99.9 | 1351 | 3.0000 | 1348.00 | 2.601E+004 pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5281.0 | 5574.4 | 62.4 | 100.0 | 1413 | 6.0000 | 1407.00 | 2.712E+004 pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 61.9 | 99.9 | 2434 | 11.0000 | 2423.00 | 5.009E+004 pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:39PM 12/9/2018

### Sample

Sample Name: 160-31716-A-3-K Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-K
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

### Batch

Batch Name: 404669
AnalysisResultsID: 234641
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

### Tracer

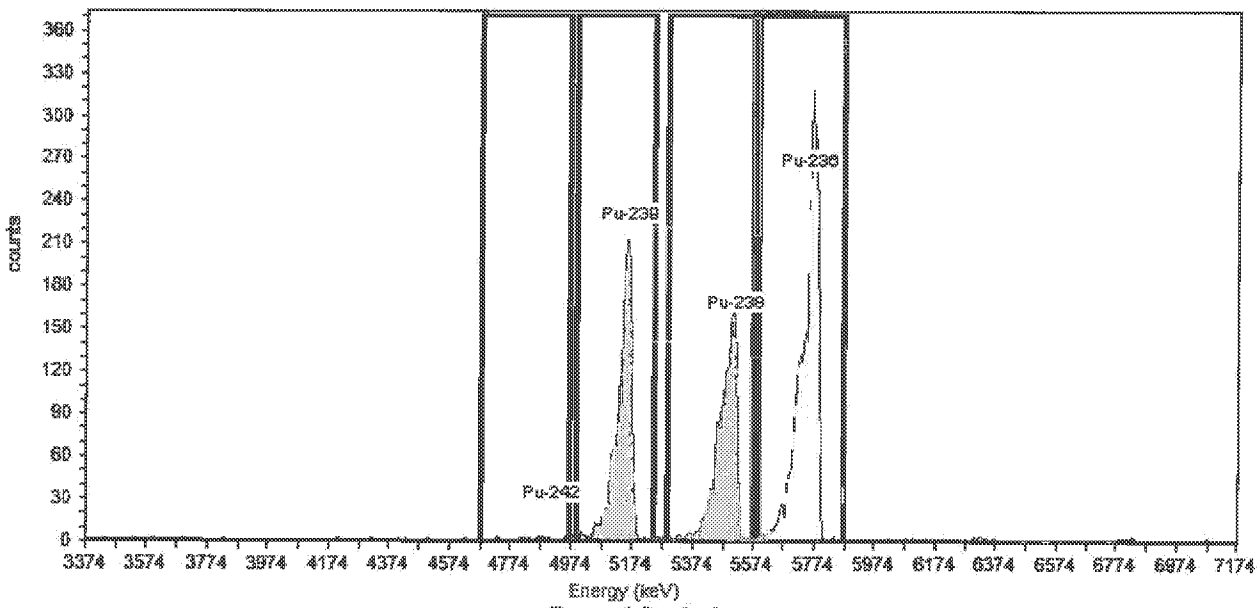
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 86.11%

### Acquisition

Detector: AV228 SN: 51-005Q6
Acquisition Start Date: 12/8/2018 11:50:14PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV228; Det: AV228; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370622;AV228-11152018
Efficiency Calibration:IC-1370622;AV228-11152018
Calibration Date: 11/15/2018 6:58:08PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.61% +/- 0.24% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:08PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 6.3 | 100.0 | 21 | 5.0000 | 16.00 | 3.158E+002 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 52.3 | 99.9 | 1429 | 4.0000 | 1425.00 | 2.815E+004 | pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 67.6 | 100.0 | 1375 | 9.0000 | 1366.00 | 2.696E+004 | pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 58.9 | 99.9 | 2380 | 14.0000 | 2366.00 | 5.828E+004 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:19PM 12/9/2018

### Sample

Sample Name: 160-31716-A-3-L Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-L
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

### Batch

Batch Name: 404669
AnalysisResultsID: 234639
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

### Tracer

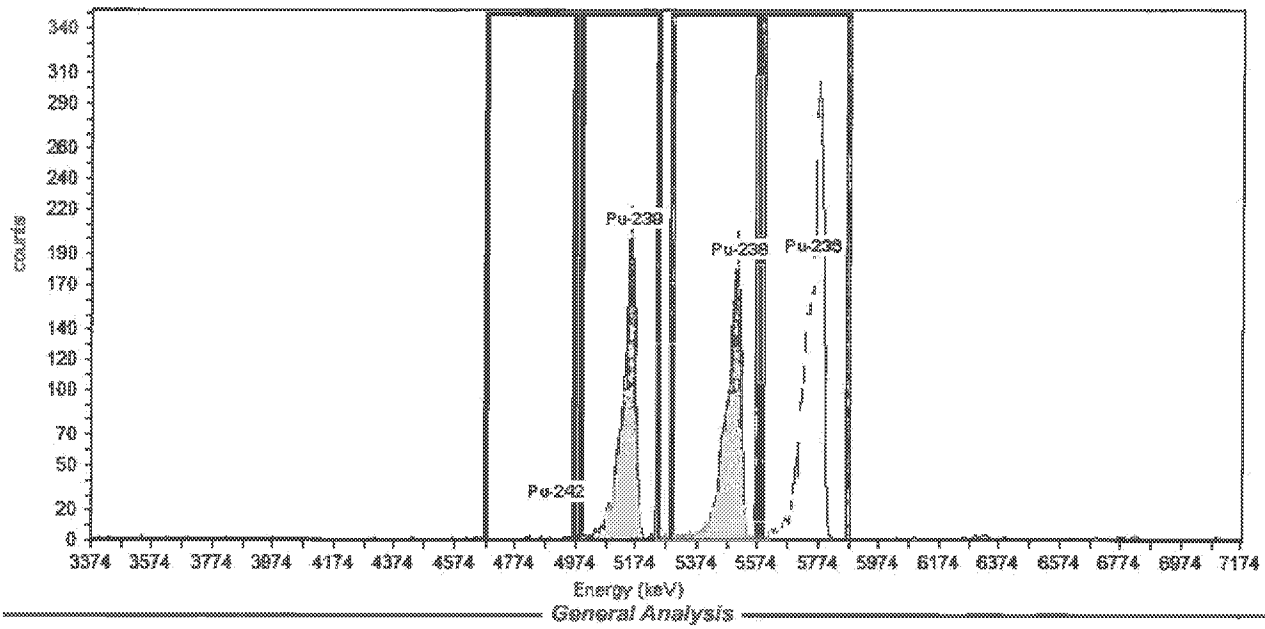
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 82.74%

### Acquisition

Detector: AV229 SN: 51-005EE4
Acquisition Start Date: 12/8/2018 11:50:15PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV229; Det: AV229; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370619;AV229-11152018
Efficiency Calibration:IC-1370619;AV229-11152018
Calibration Date: 11/15/2018 6:58:12PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.93% +/- 0.23% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:08PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 12.8 | 100.0 | 14 | 0.0000 | 14.00 | 2.843E+002 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 52.8 | 99.9 | 1386 | 1.0000 | 1385.00 | 2.815E+004 | pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 57.8 | 100.0 | 1427 | 13.0000 | 1414.00 | 2.871E+004 | pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5569.3 | 5872.7 | 60.7 | 99.9 | 2315 | 15.0000 | 2300.00 | 5.599E+004 | pCi/L |

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6435E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6435E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

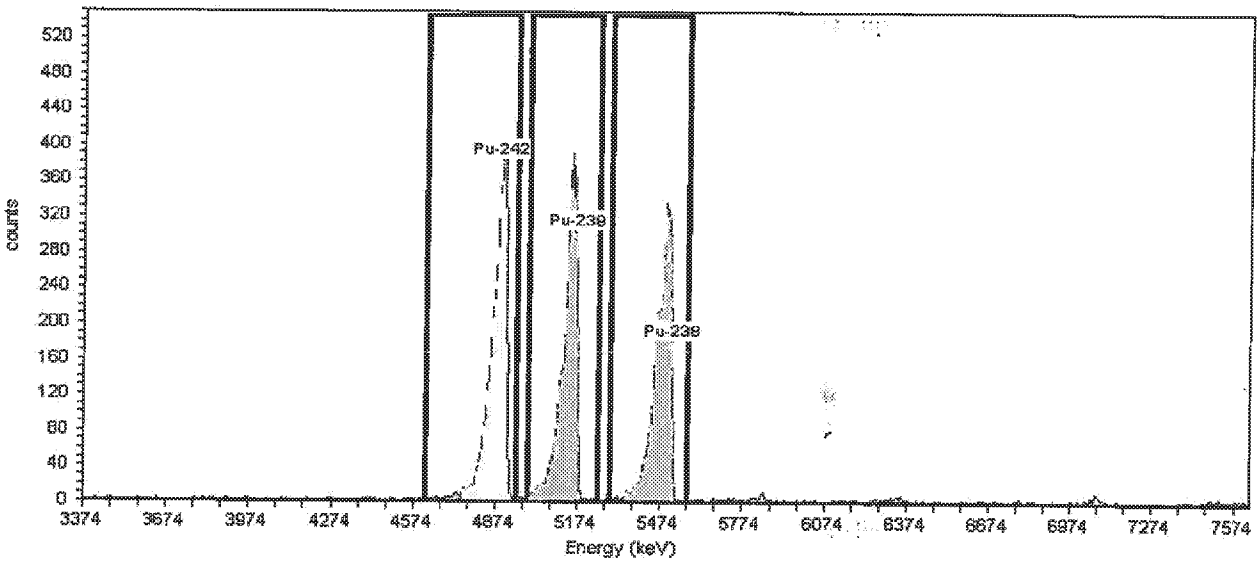
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name =
Detector Correction: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

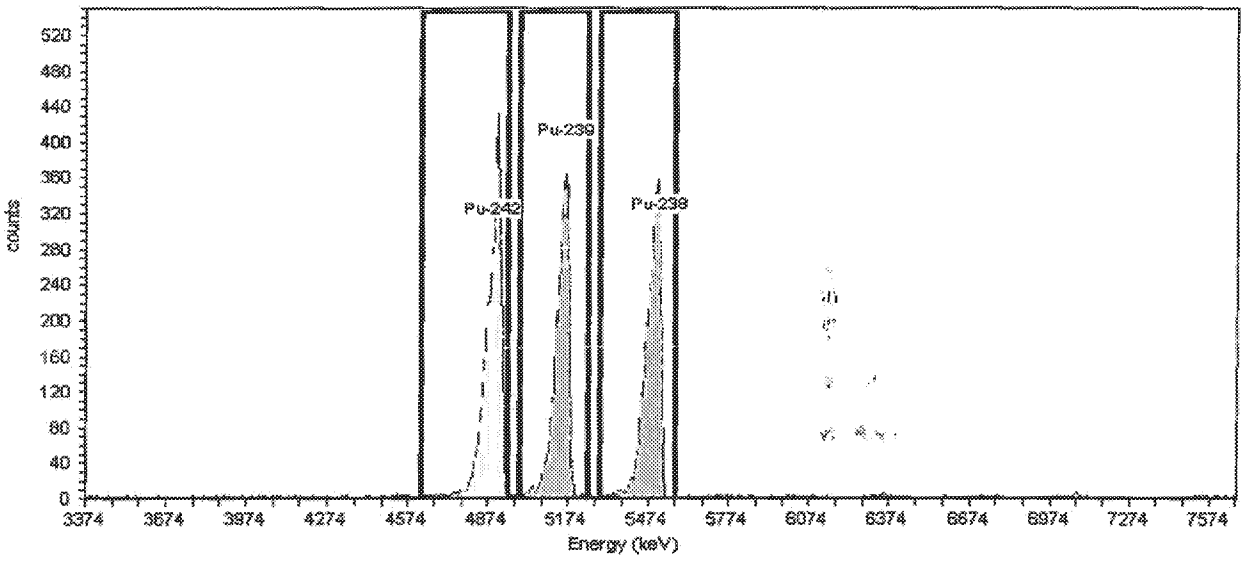
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible]/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

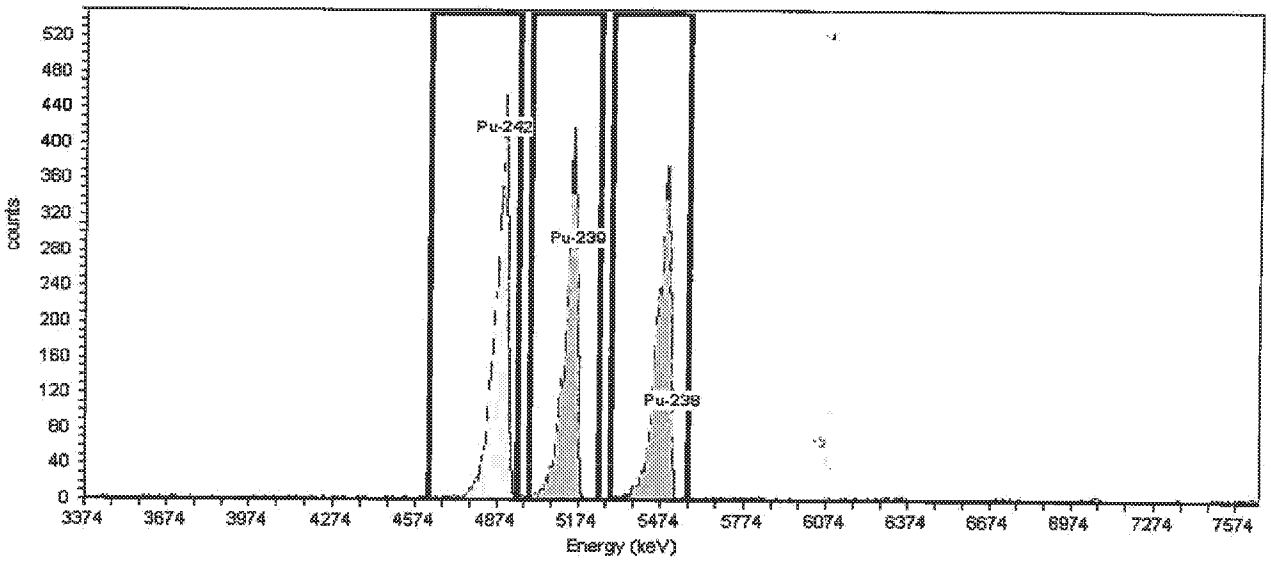
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Pu-242 Pu-239 Pu-238
Analyzed: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

U.S. Environmental Protection Agency
Environmental Monitoring Systems Laboratory-Las Vegas
Nuclear Radiation Assessment Division

Calibration Certificate

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %

(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mm

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622

Analyst: Park, Cassandra L

Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 431022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Pipette ID: | RAD117 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

V:MMo 6/13/19

# Reagent

# Pu-239_00001

**U.S. Environmental Protection Agency**
**Environmental Monitoring Systems Laboratory-Las Vegas**
**Nuclear Radiation Assessment Division**

**Calibration Certificate**

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

curies Per gram

of the daughter nuclide

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %
(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( $+\delta - \delta'$ ). These have been estimated not to exceed

+2.7 % or -2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( $+\delta, -\delta'$ )
The overall uncertainty is therefore calculated on the basis of + [t(sm) $+\delta$], - [t(sm) $+\delta'$]
and is + 3.1 %, - 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Hahn



Revised 1/84

# Reagent

# Pu-239_00015

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6435E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6435E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

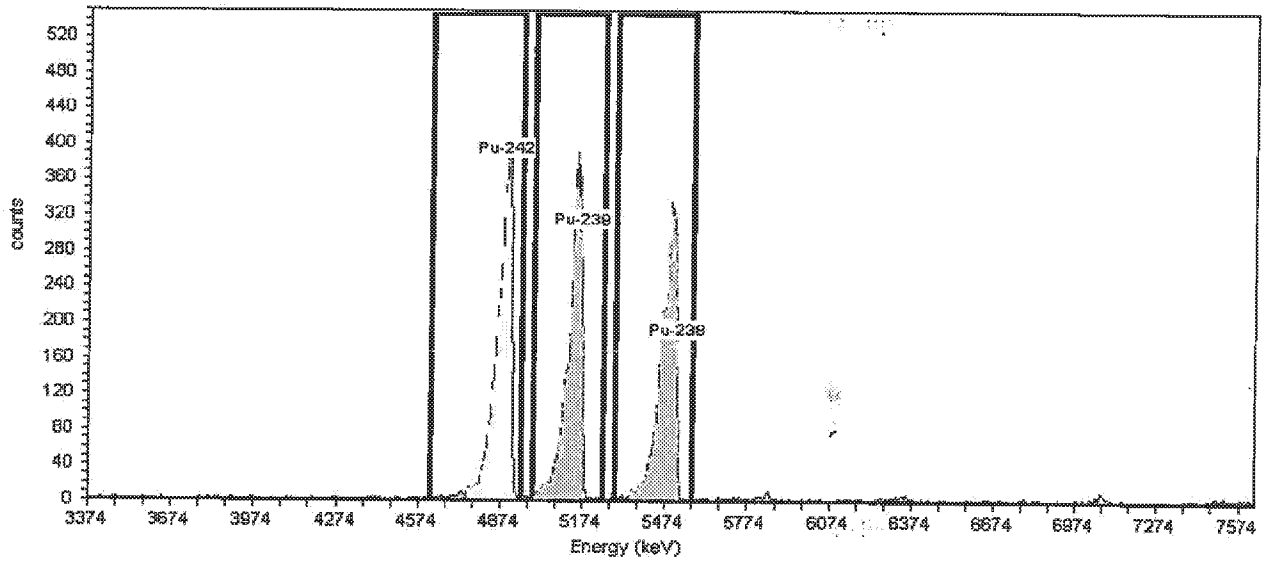
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1;
May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name =
Detector Correction: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

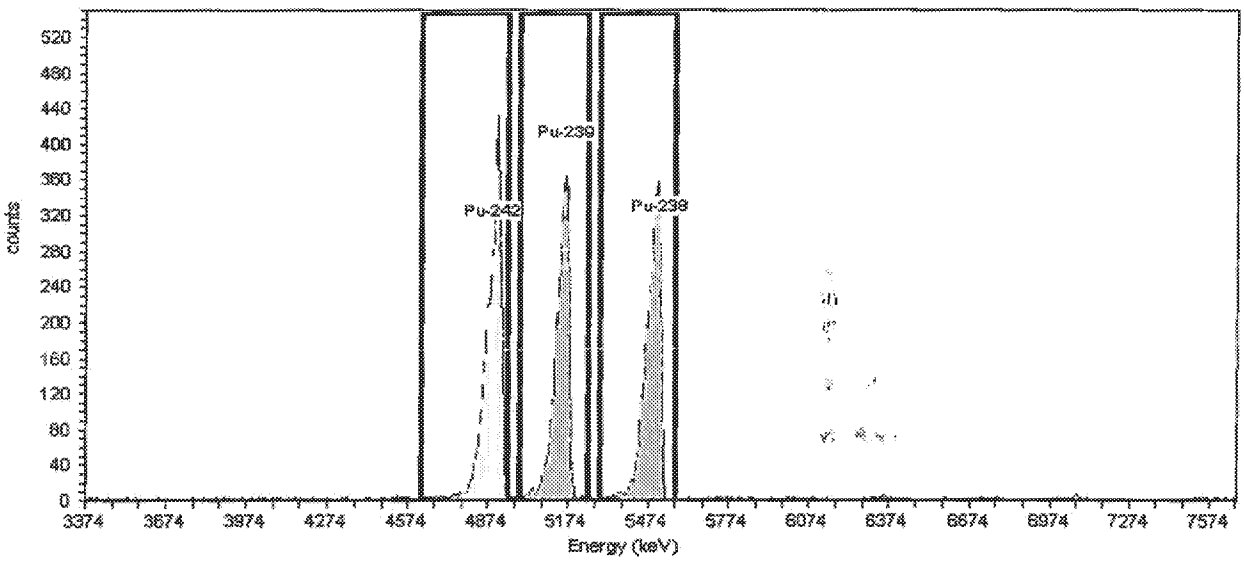
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible]/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

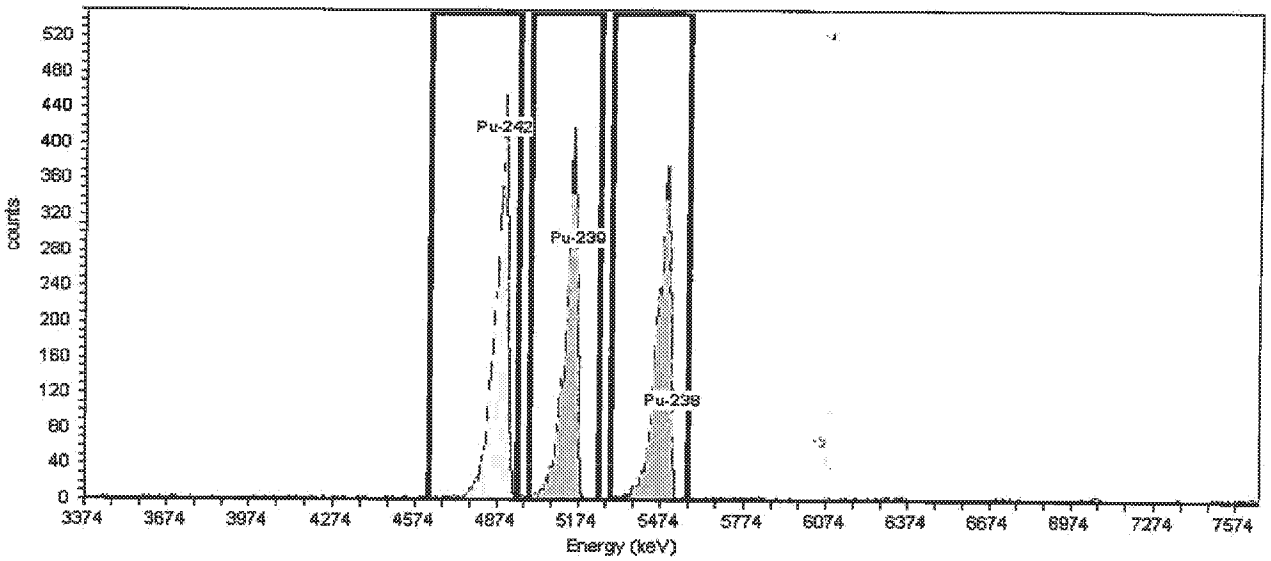
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1;
May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name =
Detection Period: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

**U.S. Environmental Protection Agency**
**Environmental Monitoring Systems Laboratory-Las Vegas**
**Nuclear Radiation Assessment Division**

**Calibration Certificate**

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** **Activity of principal radionuclide**

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

**Activity of daughter radionuclide**

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

**Total mass of this solution**

APPROX. 5.0 grams

**Method of measurement**

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %
(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mm

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622

Analyst: Park, Cassandra L

Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 4311022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Pipette ID: | RAD117 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

V:MMo 6/13/19

# Reagent

# Pu-242_00034

National Institute of Standards & Technology #1

# Certificate

## Standard Reference Material® 4334j

### Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of a solution of a standardized and certified quantity of radioactive plutonium-242 in a suitably stable and homogeneous matrix. It is intended primarily for the calibration of instruments that are used to measure radioactivity and for the monitoring of radiochemical procedures. A unit of SRM 4334j consists of approximately 5 mL of a solution, whose composition is specified in Tables 1 and 2, contained in a flame-sealed borosilicate-glass ampoule [1].

The certified **Plutonium-242** massic activity, at a **Reference Time of 1200 EST, 9 August 2017**, is:

$$(26.08 \pm 0.13)\ \mathrm{Bq \cdot g^{-1}}.$$

A NIST certified value, as used within the context of this certificate, is a value for which NIST has the highest confidence in its uncertainty assessment. It is a "measurement result" [2] obtained directly or indirectly from a "primary reference measurement procedure" [3]. The certified value is traceable to the derived SI unit, becquerel (Bq).

Additional physical, chemical, and radiological properties for this SRM, as well as details on the standardization method, are given in Tables 1 and 2. Uncertainties for the certified quantities are expanded ($k = 2$). The uncertainties are calculated according to the ISO/JCGM and NIST Guides [4,5]. Table 3 contains a specification of the components that comprise the uncertainty analysis.

**Expiration of Certification:** The certification of **SRM 4334j** is valid indefinitely, within the measurement uncertainty specified, provided that the SRM is handled and stored properly and that no evaporation or change in composition has occurred. The solution matrix, in an unopened ampoule, is homogeneous and stable within its half-life-dependent useful lifetime provided the SRM is handled in accordance with instructions given in this certificate (see "Instructions for Handling and Storage"). Periodic recertification of this SRM is not required. The certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:** NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

**Radiological and chemical hazard:** Consult the Safety Data Sheet (SDS), enclosed with the SRM shipment, for radiological and chemical hazard information.

This SRM was prepared in the NIST Physical Measurement Laboratory, Radiation Physics Division, under the direction of M.P. Unterweger, Group Leader of the Radioactivity Group. Overall technical direction and physical measurement leading to certification were provided by R. Collé and L. Laureano-Perez of the NIST Radiation Physics Division, Radioactivity Group. Photon-emitting-impurity analyses were provided by L. Pibida.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

Michael G. Mitch, Acting Chief
Radiation Physics Division

Gaithersburg, Maryland 20899
Certificate Issue Date: 30 May 2018

Steven J. Choquette, Director
Office of Reference Materials

Table 1. Certified Massic Activity of SRM 4334j

| | |
|---|---|
| Radionuclide | Plutonium-242 |
| Reference time | 1200 EST, 09 August 2017 |
| Massic activity of the solution | 26.08 Bq•g$^{-1}$ [(a)] |
| Relative expanded uncertainty ($k$ = 2) | 0.51 % [(b)] |

[(a)] Both SRM 4334j and SRM 4334i (a previous issue of $^{242}$Pu) were derived from two independent gravimetric dilutions of the identical standard master solution. The massic activity of SRM 4334j is in agreement with the decay corrected massic activity of SRM 4334i to ± 0.12 %.

[(b)] The uncertainties on certified values are expanded uncertainties, $U = ku_c$. The quantity $u_c$ is the combined standard uncertainty calculated according to the ISO/JCGM and NIST Guides [4-5]. The combined standard uncertainty is multiplied by a coverage factor of $k$ = 2 and was chosen to obtain an approximate 95 % level of confidence.

Table 2. Uncertified Information of SRM 4334j

| | |
|---|---|
| Source description | Liquid in a flame-sealed 5 mL borosilicate-glass ampoule [1] |
| Solution composition | 3.1 mol•L$^{-1}$ $HNO_3$ |
| Solution density | (1.099 ± 0.002) g•mL$^{-1}$ at 24.4 °C[a] |
| Solution mass | (5.499 ± 0.003) g[a] |
| Alpha-particle- emitting impurities | $^{241}$Am: (0.0021 ± 0.0003) Bq•g$^{-1}$[a,b,c,d] |
| Beta-particle- emitting impurities | $^{241}$Pu: (0.039 ± 0.009) Bq•g$^{-1}$[a,d] |
| Photon-emitting impurities | None detected [e], excepting $^{241}$Am |
| Half-lifes used [6] | $^{242}$Pu: (3.73 ± 0.03) × 10$^5$ a[f]<br>$^{241}$Pu: (14.33 ± 0.04) a<br>$^{240}$Pu: (6 561 ± 7) a<br>$^{239}$Pu: (24 100 ± 11) a<br>$^{238}$Pu: (87.74 ± 0.03) a<br>$^{241}$Am: (432.6 ± 0.6) a |
| Calibration methods (and instruments) | The certified massic activity for $^{242}$Pu was obtained by 4πα liquid scintillation (LS) spectrometry with two commercial LS counters. Four separate measurement trials using nine LS cocktails prepared directly from the SRM solution and six cocktails prepared from a master stock solution with known gravimetric dilution factor. |

[a] The stated uncertainty is two times the standard uncertainty [5].

[b] The $^{242}$Pu was chemically purified 07 June 1994 at the Lawrence Livermore National Laboratory (LLNL). Americium-241, the daughter of $^{241}$Pu, was removed but has been growing in since that time. Photonic emission measurements of the $^{241}$Am ingrowth were made at NIST in 1998-1999 and 2017.

[c] The estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (number of alpha-particles emission rates per second per gram), are:

0.003 s$^{-1}$•g$^{-1}$ for energies less than 3.1 MeV,
0.03 s$^{-1}$•g$^{-1}$ for energies between 3.1 MeV and 4.4 MeV, and
0.003 s$^{-1}$•g$^{-1}$ for energies greater than 5.0 MeV

[d] The $^{242}$Pu was chemically purified 07 June 1994. The relative massic activities of radionuclidic impurities follow;

| Radionuclide | Relative Activity at Purification Time (07 June 1994) As Measured By | | |
|---|---|---|---|
| | LLNL in 1994 | NIST in 1998-1999 | NIST in 2017 |
| $^{242}$Pu | 1 | 1 | 1 |
| $^{241}$Pu | -- | (3.5 ± 0.4) × 10$^{-3}$[1,2] | (3.6 ± 1.1) × 10$^{-3}$[1,5] |
| $^{240}$Pu + $^{239}$Pu | < 10$^{-6}$ [3] | (2.0 ± 2.1) × 10$^{-5}$[1,4] | -- |
| $^{238}$Pu + $^{241}$Am | < 1.6 × 10$^{-5}$ [3] | (9 ± 16) × 10$^{-6}$[1,4] | -- |
| $^{241}$Am | -- | assumed 0[2] | assumed 0 [5] |

1) The stated uncertainty is the standard uncertainty.
2) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 25 November 1998, assuming that $^{241}$Am was completely removed at the time of chemical purification.
3) Using alpha-particle spectrometry. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at LLNL in July of 1994.
4) Alpha-particle spectrometry measurements were made at the National Institute of Standards and Technology (NIST) in June and July 1999.
5) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 01 September 2017, assuming that $^{241}$Am was completely removed at the time of chemical purification.

[e] The estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:

1 × 10$^{-3}$ s$^{-1}$•g$^{-1}$ for energies between 20 keV and 35 keV,
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 40 keV and 50 keV,
5 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 55 keV and 95 keV,
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 100 keV and 600 keV
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 610 keV and 1440 keV
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1450 keV and 1480 keV, and
3 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1490 keV and 2000 keV,

provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of $^{242}$Pu, $^{241}$Pu, or $^{241}$Am.

[f] The stated uncertainty is the standard uncertainty. See reference 6.

Table 2. Uncertainty evaluation for the massic activity of SRM 4334j

| Uncertainty component | | Assessment Type[a] | Relative standard uncertainty contribution on massic activity of $^{242}Pu$ (%) |
|---|---|---|---|
| 1 | LS measurement precision: Relative standard deviation of the mean on the great-grand mean for 4 LS measurement trials, considering all of the within-trial and between-trial components of variance. Each of the 4 grand mean values was based on 5 replicate measurements on each of either 6 or 9 LS counting sources. The typical within-trial relative standard deviation of the mean (considering the variations for the between 5 measurements and the between 6 to 9 sources) for each trial was 0.08 %. The between-trial relative standard deviation across the 4 trials was 0.18 %. | A | 0.22 |
| 2 | Background; LS measurement variability and cocktail composition stability effects; wholly embodied in component 1. | A | -- |
| 3 | LS counters dependencies; wholly embodied in components 1 & 2 | A | -- |
| 4 | Live time determinations for LS counting time intervals, includes uncorrected dead time effects | B | 0.07 |
| 5 | Aliquant mass determinations by gravimetric measurements for preparation of counting sources; includes mass measurement precision partially embodied in component 1. | B | 0.05 |
| 6 | LS detection inefficiency, includes wall effect; partially embodied in component 1. | B | 0.01 |
| 7 | $^{242}Pu$ decay corrections for half-life uncertainty of 0.22 %. | B | $< 10^{-10}$ |
| 8 | Potential alpha- and photon-emitting impurities | B | 0.1 |
| **Relative combined standard uncertainty** | | | **0.26** |
| **Relative expanded uncertainty ($k = 2$)** | | | **0.51** |

[a] Letter A denotes evaluation by statistical methods; B denotes evaluation by other methods.

## INSTRUCTIONS FOR USE AND HANDLING

**Storage:** SRM 4334j should be stored and used at a temperature between 5 °C and 65 °C. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material.

**Handling:** If the ampoule is transported, it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of both the radioactivity and the strong acid. The ampoule should be opened only by persons qualified to handle both radioactive material and alkaline and/or acidic solutions. Appropriate shielding and/or distance should be used to minimize personnel exposure. Refer to SDS for further information.

## REFERENCES

[1] NIST Physical Measurement Laboratory; *Storage and Handling of Radioactive Standard Reference Materials, Ampoule Specifications and Opening Procedure*; available at https://www.nist.gov/pml/radiation-physics/ampoule-specifications-and-opening-procedure (accessed May 2018). Note: This SRM is contained in a generic borosilicate-glass ampoule and not in the standard NIST ampoule.

[2] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; Joint Committee for Guides in Metrology (JCGM): BIPM, Sevres Cedex, France; p. 19 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[3] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; JCGM: BIPM, Sevres Cedex, France; p. 18 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[4] JCGM 100:2008; *Guide to the Expression of Uncertainty in Measurement*; (GUM 1995 with Minor Corrections), JCGM: BIPM, Sevres Cedex, France (2008); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed May 2018).

[5] Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297, U.S. Government Printing Office: Washington, DC (1994); available at https://www.nist.gov/pml/nist-technical-note-1297 (accessed Apr 2018).

[6] Chechev, V.P.; *LNE-LNHB/CEA Table of Radionuclides, $^{242}Pu$*; (June 2009); available at http://www.nucleide.org/DDEP_WG/Nuclides/Pu-242_tables.pdf (accessed May 2018).



*Users of this SRM should ensure that the Certificate in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail* srmmsds@nist.gov; *or via the Internet at https://www.nist.gov/srm.*

# Reagent

# Pu-242_00035

National Institute of Standards & Technology #2

# Certificate

## Standard Reference Material® 4334j

### Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of a solution of a standardized and certified quantity of radioactive plutonium-242 in a suitably stable and homogeneous matrix. It is intended primarily for the calibration of instruments that are used to measure radioactivity and for the monitoring of radiochemical procedures. A unit of SRM 4334j consists of approximately 5 mL of a solution, whose composition is specified in Tables 1 and 2, contained in a flame-sealed borosilicate-glass ampoule [1].

The certified **Plutonium-242** massic activity, at a **Reference Time of 1200 EST, 9 August 2017**, is:

$$(26.08 \pm 0.13)\ \mathrm{Bq \cdot g^{-1}}.$$

A NIST certified value, as used within the context of this certificate, is a value for which NIST has the highest confidence in its uncertainty assessment. It is a "measurement result" [2] obtained directly or indirectly from a "primary reference measurement procedure" [3]. The certified value is traceable to the derived SI unit, becquerel (Bq).

Additional physical, chemical, and radiological properties for this SRM, as well as details on the standardization method, are given in Tables 1 and 2. Uncertainties for the certified quantities are expanded ($k = 2$). The uncertainties are calculated according to the ISO/JCGM and NIST Guides [4,5]. Table 3 contains a specification of the components that comprise the uncertainty analysis.

**Expiration of Certification:** The certification of **SRM 4334j** is valid indefinitely, within the measurement uncertainty specified, provided that the SRM is handled and stored properly and that no evaporation or change in composition has occurred. The solution matrix, in an unopened ampoule, is homogeneous and stable within its half-life-dependent useful lifetime provided the SRM is handled in accordance with instructions given in this certificate (see "Instructions for Handling and Storage"). Periodic recertification of this SRM is not required. The certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:** NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

**Radiological and chemical hazard:** Consult the Safety Data Sheet (SDS), enclosed with the SRM shipment, for radiological and chemical hazard information.

This SRM was prepared in the NIST Physical Measurement Laboratory, Radiation Physics Division, under the direction of M.P. Unterweger, Group Leader of the Radioactivity Group. Overall technical direction and physical measurement leading to certification were provided by R. Collé and L. Laureano-Perez of the NIST Radiation Physics Division, Radioactivity Group. Photon-emitting-impurity analyses were provided by L. Pibida.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

Michael G. Mitch, Acting Chief
Radiation Physics Division

Gaithersburg, Maryland 20899
Certificate Issue Date: 30 May 2018

Steven J. Choquette, Director
Office of Reference Materials

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|---|---|
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| Relative expanded uncertainty ($k$ = 2) | 0.51 % [(b)] |

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Table 2. Uncertified Information of SRM 4334j

| | |
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| Solution density | (1.099 ± 0.002) g•mL$^{-1}$ at 24.4 °C[a] |
| Solution mass | (5.499 ± 0.003) g[a] |
| Alpha-particle- emitting impurities | $^{241}$Am: (0.0021 ± 0.0003) Bq•g$^{-1}$[a,b,c,d] |
| Beta-particle- emitting impurities | $^{241}$Pu: (0.039 ± 0.009) Bq•g$^{-1}$[a,d] |
| Photon-emitting impurities | None detected [e], excepting $^{241}$Am |
| Half-lifes used [6] | $^{242}$Pu: (3.73 ± 0.03) × 10$^5$ a[f]<br>$^{241}$Pu: (14.33 ± 0.04) a<br>$^{240}$Pu: (6 561 ± 7) a<br>$^{239}$Pu: (24 100 ± 11) a<br>$^{238}$Pu: (87.74 ± 0.03) a<br>$^{241}$Am: (432.6 ± 0.6) a |
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| 8 | Potential alpha- and photon-emitting impurities | B | 0.1 |
| **Relative combined standard uncertainty** | | | **0.26** |
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[a] Letter A denotes evaluation by statistical methods; B denotes evaluation by other methods.

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## REFERENCES

[1] NIST Physical Measurement Laboratory; *Storage and Handling of Radioactive Standard Reference Materials, Ampoule Specifications and Opening Procedure*; available at https://www.nist.gov/pml/radiation-physics/ampoule-specifications-and-opening-procedure (accessed May 2018). Note: This SRM is contained in a generic borosilicate-glass ampoule and not in the standard NIST ampoule.

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[5] Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297, U.S. Government Printing Office: Washington, DC (1994); available at https://www.nist.gov/pml/nist-technical-note-1297 (accessed Apr 2018).

[6] Chechev, V.P.; *LNE-LNHB/CEA Table of Radionuclides, $^{242}Pu$*; (June 2009); available at http://www.nucleide.org/DDEP_WG/Nuclides/Pu-242_tables.pdf (accessed May 2018).



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# Reagent

# Pu-242_00036

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0.00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0.00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
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* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

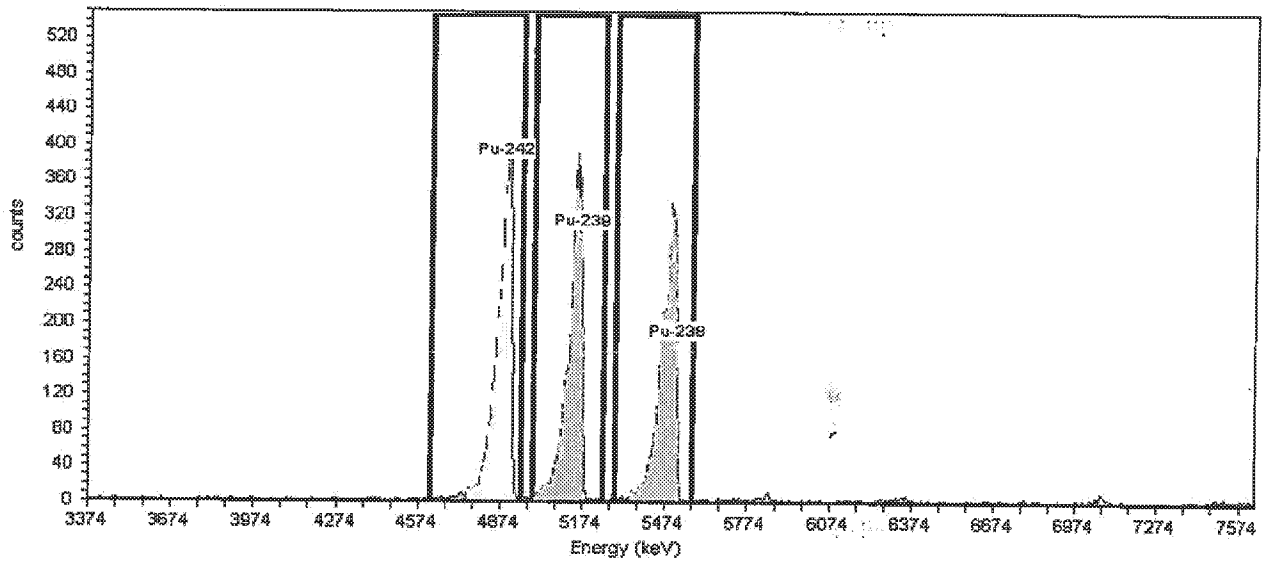
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Detail Pu-Rev2
Detail Correlation 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

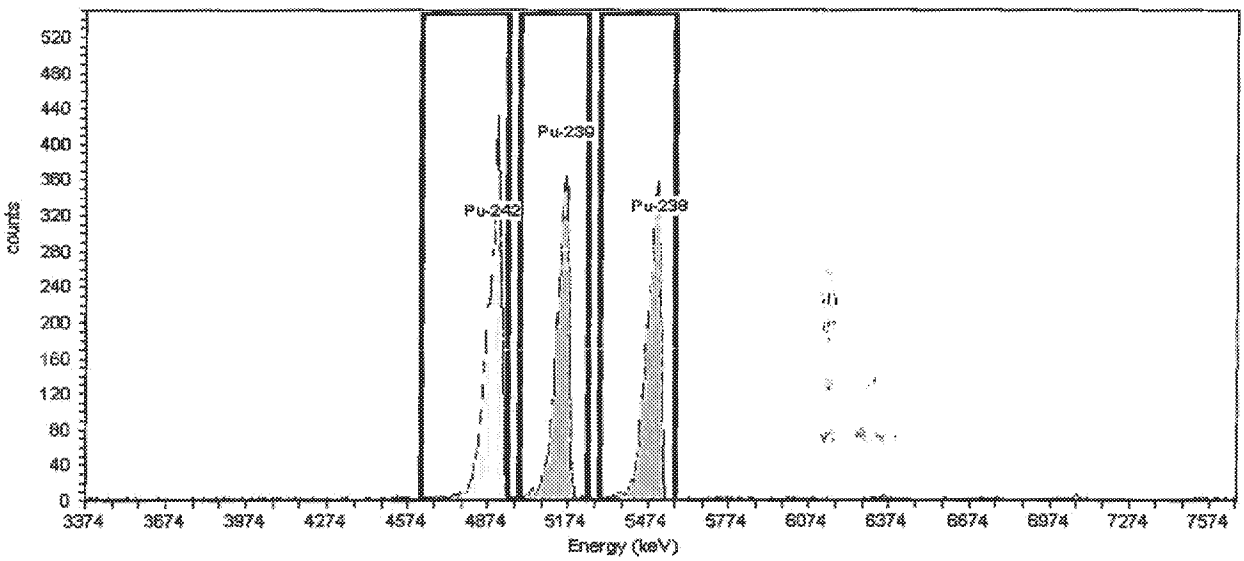
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible]/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

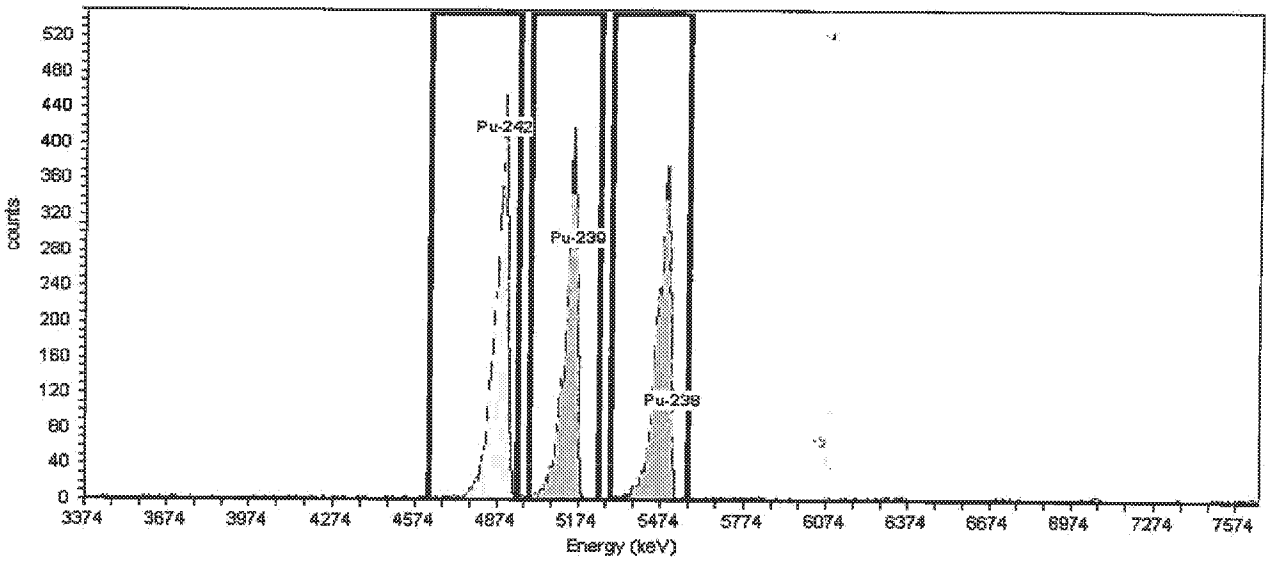
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Pu-242 (7)
Detection Date: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

U.S. Environmental Protection Agency
Environmental Monitoring Systems Laboratory-Las Vegas
Nuclear Radiation Assessment Division

Calibration Certificate

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %

(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mh

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622

Analyst: Park, Cassandra L

Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 4311022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Pipette ID: | RAD117 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

V:MMO 6/13/19

# ALPHA SPECTROSCOPY

# Method A-01-R Po

## Isotopic Polonium (Alpha Spectrometry) by Method A-01-R

# Prep Batch: 448621

## Preparation, Digestion & Copper Plating

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 448621

Lab Id: MB 160-448621/1-A | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: | Detector: AV243 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | MB Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.03012 | 0.0318 | 0.0319 | U | pCi/g | 1.00 | 0.0512 | 26 | 14 | | 1 | 0.26758 | 1 | 1 | 450755 |

| Tracer | MB Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.368 | 0.154 | 0.322 | | pCi/g | 0.00530 | 4.82 | 69.9 | 30 - 110 |

Lab Id: LCS 160-448621/2-A | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: | Detector: AV241 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | LCS Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 8.187 | 0.293 | 0.747 | | pCi/g | 1.00 | 0.0399 | 3147 | 7 | | 1 | 0.27373 | 1 | 1 | 450753 |

| Tracer | LCS Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.170 | 0.148 | 0.305 | | pCi/g | 0.0166 | 4.82 | 65.7 | 30 - 110 |

Lab Id: 160-35853-1 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-B01-S001 | Detector: AV240 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 1.64 | 0.149 | 0.203 | | pCi/g | 1.00 | 0.0533 | 505 | 8 | | 1 | 0.28285 | 1 | 1 | 450752 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.39 | 0.127 | 0.238 | | pCi/g | 0.0269 | 4.79 | 50.0 | 30 - 110 |

Lab Id: 160-35853-2 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-B01-S002 | Detector: AV239 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.327 | 0.0685 | 0.0738 | | pCi/g | 1.00 | 0.0536 | 118 | 10 | | 1 | 0.24337 | 1 | 1 | 450751 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.02 | 0.153 | 0.297 | | pCi/g | 0.0295 | 4.78 | 63.2 | 30 - 110 |

## Quality Control Summary

| Method Blank ID: | Analyte | Parent Result | Spike Added | MB Result | Qualifier | Unit | % Rec | % Rec Limits | RPD | RER | DER | RER Limit | Z Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MB 160-448621/1-A | Polonium-210 | | | 0.03012 | U | pCi/g | | | | | | | 1.8914 |
| **Lab Control Sample ID:** | **Analyte** | **Parent Result** | **Spike Added** | **LCS Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| LCS 160-448621/2-A | Polonium-210 | | 8.44 | 8.187 | | pCi/g | 97 | 75 - 113 | | | | | -.6476 |

# Alpha Spectroscopy Analysis Detail Report
# Prep Batch: 448621

Glossary:

- Ts = Count Duration, Sample
- Tb = Count Duration, Background
- Cs = Total Counts, Sample
- Cb = Total Counts, Background
- X Talk = Crosstalk
- Decay = Decay Factor
- Eff = Efficiency
- I = Ingrowth Factor
- A = Abundance

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-35853-3

SDG No.:

Batch Number: 448621  Batch Start Date: 11/03/19 13:15  Batch Analyst: Geer, Matthew L

Batch Method: Digest/Cu Plate  Batch End Date: 11/12/19 17:38

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | Pb-210 00025 | Po-209 00008 | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 160-448621/1 | | Digest/Cu Plate, A-01-R | | 1 g | | 0.1 mL | | | |
| LCS 160-448621/2 | | Digest/Cu Plate, A-01-R | | 1 g | 0.25 mL | 0.1 mL | | | |
| 160-35853-A-1-M | F-B01-S001 | Digest/Cu Plate, A-01-R | T | 1.0067 g | | 0.1 mL | | | |
| 160-35853-A-2-H | F-B01-S002 | Digest/Cu Plate, A-01-R | T | 1.0083 g | | 0.1 mL | | | |

| Batch Notes | |
|---|---|
| Balance ID | 1123433897 |
| Pipette ID | RAD125, RAD116 |
| Analyst ID - Reagent Drop Witness | MMO per HET |
| Analyst ID - Reagent Drop | MLG per HET |
| SOP Number | ST-RC-0210 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:14:39PM 11/17/2019

## Sample

Sample Name: MB 160-448621/1-A Type: Sample
Spectrum #1 Analysis #1
: MB 160-448621/1-A
Sample Collection Date: 11/12/2019 5:43:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246209
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

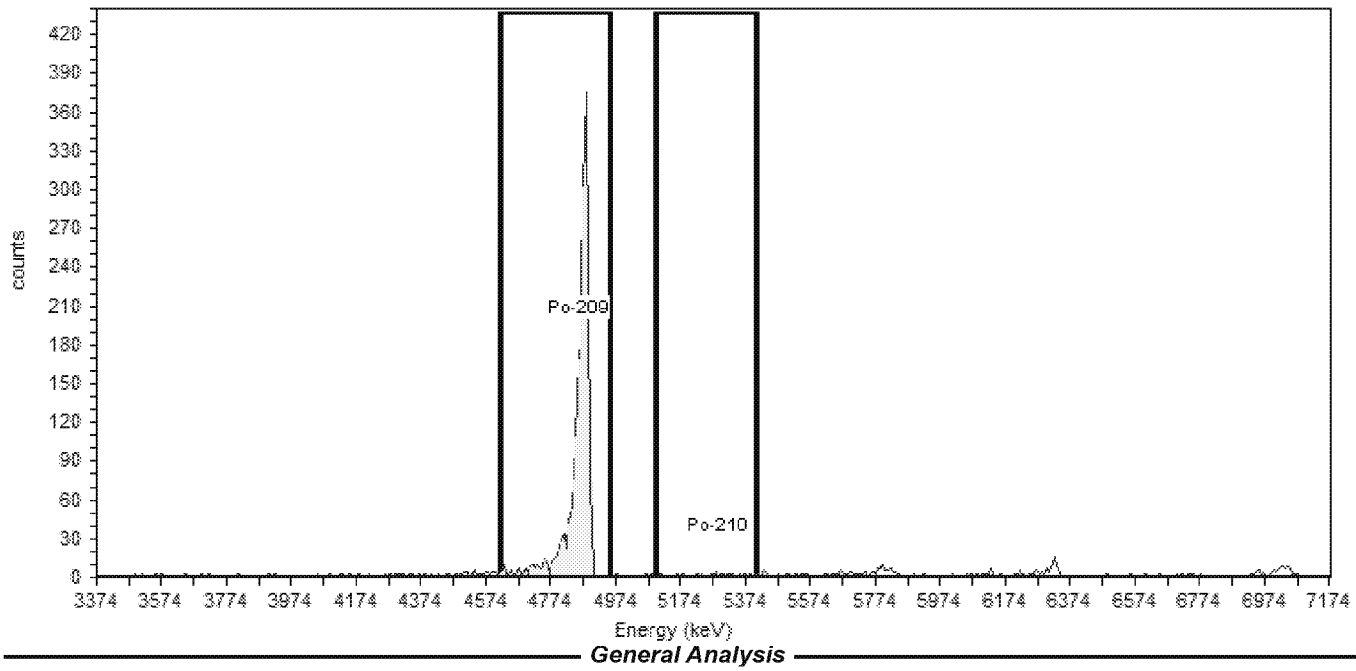
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 69.86%

## Acquisition

Detector: AV243 SN: 51-005P6
Acquisition Start Date: 11/16/2019 1:38:15PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:27PM
Bkgd Info: Sample: ICB;AV243; Det: AV243; Spectrum #1; 11/9/2019 2:31:27 PM

Energy Calibration: IC-1370622;AV243-11152018
Efficiency Calibration:IC-1370622;AV243-11152018
Calibration Date: 11/15/2018 10:58:43PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$
Efficiency: 26.76% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:23PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.9 | 99.2 | 1905 | 0.0000 | 1905.00 | 3.391E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 17.6 | 100.0 | 26 | 14.0000 | 12.00 | 3.012E-002 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:14:02PM 11/17/2019

## Sample

Sample Name: LCS 160-448621/2-A Type: Sample
Spectrum #1 Analysis #1
: LCS 160-448621/2-A
Sample Collection Date: 11/12/2019 5:43:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246210
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

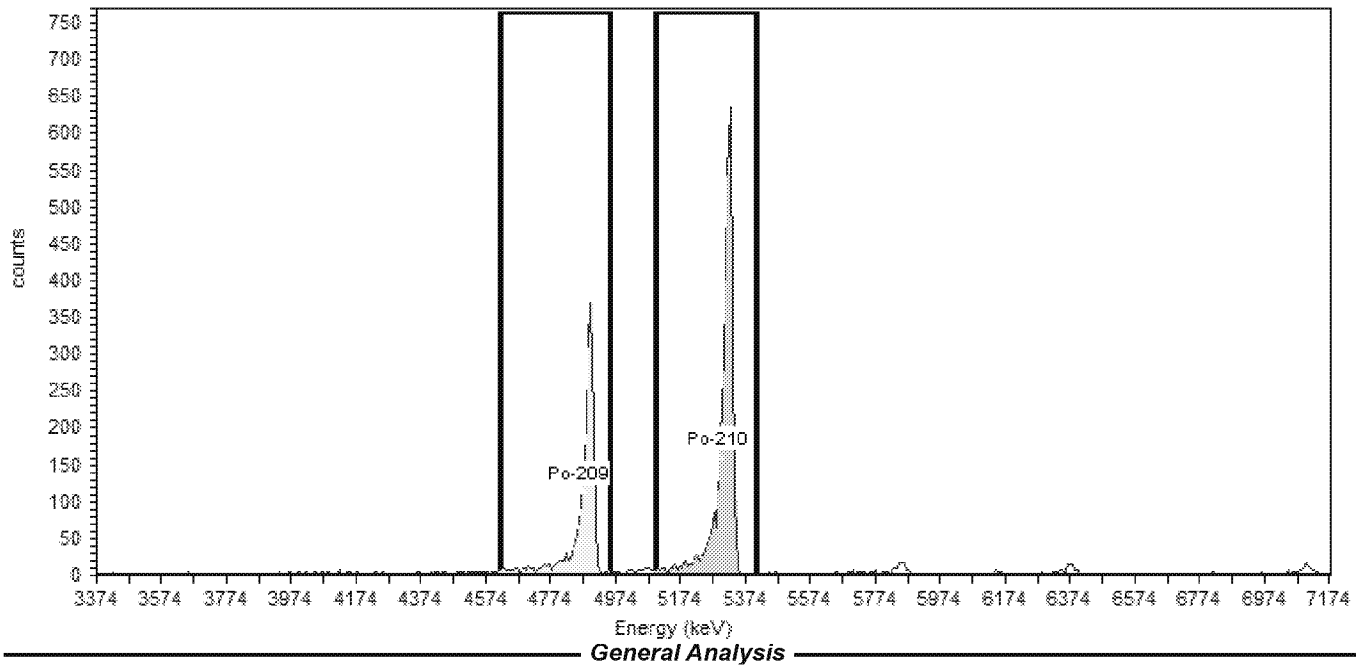
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 65.75%

## Acquisition

Detector: AV241 SN: 52-059DD3
Acquisition Start Date: 11/16/2019 1:38:15PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV241; Det: AV241; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-1368447;AV241-11152018
Efficiency Calibration:IC-1368447;AV241-11152018
Calibration Date: 11/15/2018 10:58:36PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$
Efficiency: 27.37% +/- 0.22% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.7 | 99.2 | 1836 | 2.0000 | 1834.00 | 3.192E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.5 | 100.0 | 3147 | 7.0000 | 3140.00 | 3.187E+000 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:03:59PM 11/17/2019

## Sample

Sample Name: 160-35853-A-1-O Type: Sample
Spectrum #1 Analysis #1
: 160-35853-A-1-O
Sample Collection Date: 10/2/2019 9:10:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246205
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

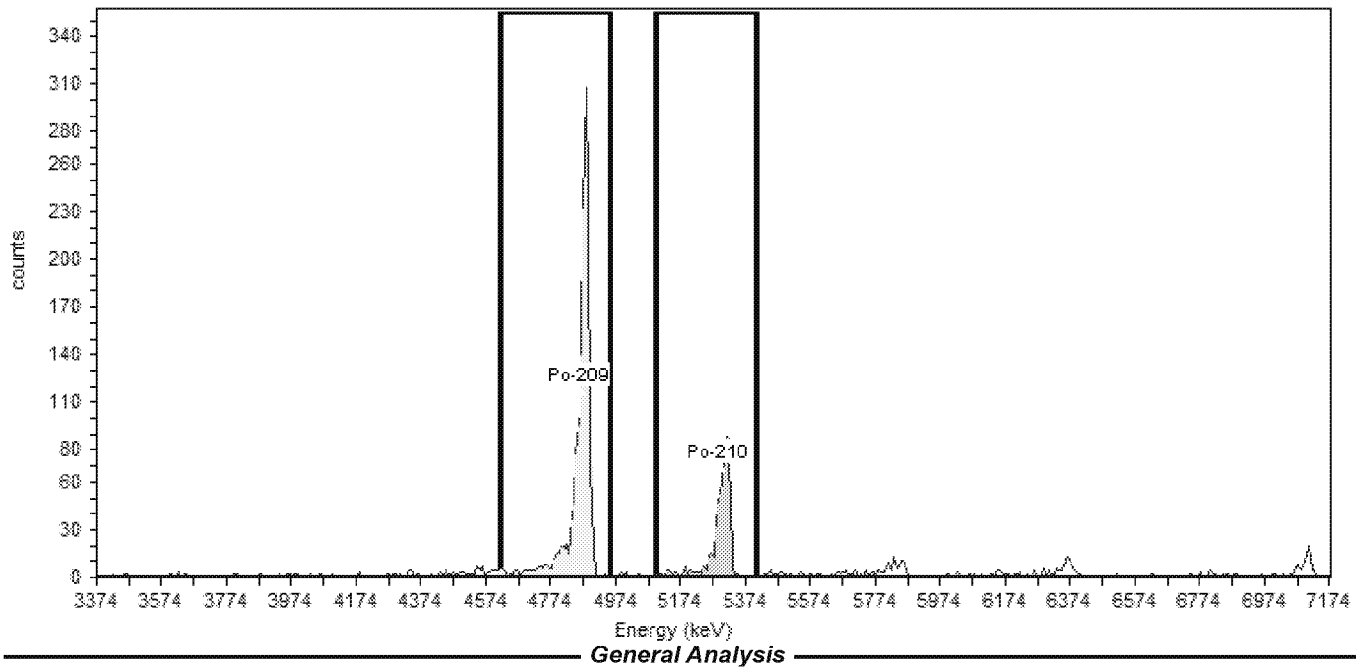
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 49.99%

## Acquisition

Detector: AV240 SN: 51-005Q1
Acquisition Start Date: 11/16/2019 1:38:15PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV240; Det: AV240; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-1368446;AV240-11152018
Efficiency Calibration:IC-1368446;AV240-11152018
Calibration Date: 11/15/2018 6:58:48PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 28.28% +/- 0.26% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.6 | 99.2 | 1449 | 8.0000 | 1441.00 | 2.411E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.7 | 100.0 | 505 | 8.0000 | 497.00 | 1.638E+000 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:04:27PM 11/17/2019

## Sample

Sample Name: 160-35853-A-2-J Type: Sample
Spectrum #1 Analysis #1
: 160-35853-A-2-J
Sample Collection Date: 10/2/2019 12:30:00PM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246207
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

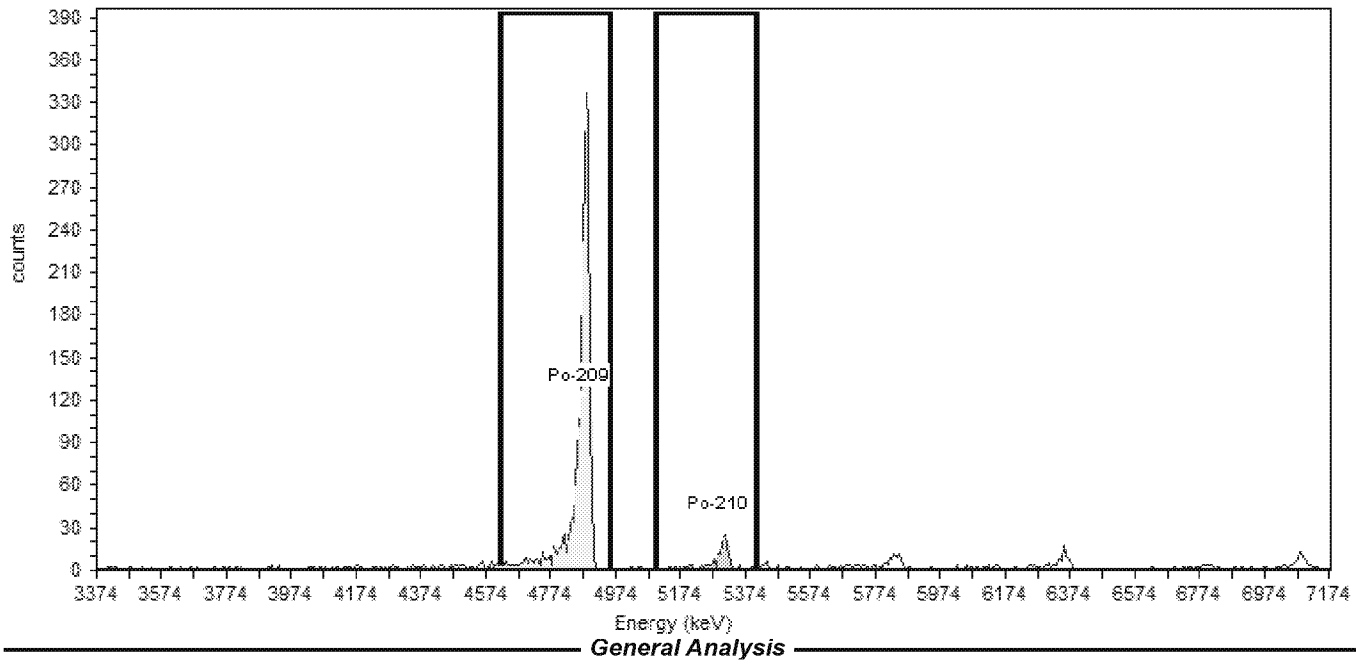
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 63.18%

## Acquisition

Detector: AV239 SN: 51-005EE1
Acquisition Start Date: 11/16/2019 1:38:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV239; Det: AV239; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-9885;AV239-11152018
Efficiency Calibration:IC-9885;AV239-11152018
Calibration Date: 11/15/2018 6:58:44PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.34% +/- 0.36% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 45.8 | 99.2 | 1574 | 7.0000 | 1567.00 | 3.042E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 45.6 | 100.0 | 118 | 10.0000 | 108.00 | 3.269E-001 | pCi/g |

# Method A-01-R Pu

## Isotopic Plutonium (Alpha Spectrometry) by Method A-01-R

# Prep Batch: 447606

## Preparation, Extraction Chromatography Resin Actinide Separation

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 447606

Lab Id: MB 160-447606/1-A | Analyzed: 10/29/19 13:45 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: | Detector: AV1 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | MB Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.01734 | 0.0275 | 0.0275 | | pCi/g | 1.00 | 0.0123 | 3 | 3 | | 1 | 0.24358 | 1 | 1 | 448310 |
| Plutonium-239/240 | -0.005784 | 0.00668 | 0.00670 | U | pCi/g | 1.00 | 0.0123 | 0 | 3 | | 1 | 0.24358 | 1 | 0.99900 001287 4603 | 448310 |

| Tracer | MB Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.147 | 0.436 | 0.676 | | pCi/g | 0.0213 | 6.15 | 100 | 30 - 110 |

Lab Id: LCS 160-447606/2-A | Analyzed: 10/29/19 13:45 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: | Detector: AV3 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | LCS Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 5.060 | 0.392 | 0.578 | | pCi/g | 1.00 | 0.0121 | 669 | 3 | | 1 | 0.24435 | 1 | 1 | 448320 |
| Plutonium-239/240 | 5.196 | 0.397 | 0.590 | | pCi/g | 1.00 | 0.00986 | 686 | 2 | | 1 | 0.24435 | 1 | 0.99900 001287 4603 | 448320 |

| Tracer | LCS Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.235 | 0.439 | 0.683 | | pCi/g | 0.0255 | 6.15 | 101 | 30 - 110 |

Lab Id: 160-35853-1 | Analyzed: 10/29/19 13:45 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-B01-S001 | Detector: AV4 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | 0.0186 | 0.0186 | U | pCi/g | 1.00 | 0.0153 | 1 | 4 | | 1 | 0.22789 | 1 | 1 | 448321 |
| Plutonium-239/240 | -0.00624 | 0.00720 | 0.00722 | U | pCi/g | 1.00 | 0.0132 | 0 | 3 | | 1 | 0.22789 | 1 | 0.99900 001287 4603 | 448321 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.09 | 0.449 | 0.680 | | pCi/g | 0.0227 | 6.14 | 99.1 | 30 - 110 |

Lab Id: 160-35853-1 DU | Analyzed: 10/29/19 13:45 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-B01-S001 | Detector: AV6 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | DU Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.03560 | 0.0445 | 0.0446 | | pCi/g | 1.00 | 0.0249 | 8 | 13 | | 1 | 0.23866 | 1 | 1 | 448322 |
| Plutonium-239/240 | -0.001876 | 0.0293 | 0.0293 | U | pCi/g | 1.00 | 0.0249 | 3 | 13 | | 1 | 0.23866 | 1 | 0.99900 001287 4603 | 448322 |

| Tracer | DU Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.444 | 0.452 | 0.705 | | pCi/g | 0.0331 | 6.14 | 105 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
# Prep Batch: 447606

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lab Id: | 160-35853-2 | Analyzed: | 10/29/19 13:45 | Sigma: | 2 | Decay Corrected: | No | Ts: 240 |
| Client ID: | F-B01-S002 | Detector: | AV7 | Dil Fac: | 1 | Yield Truncated: | No | Tb: 960 |

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00193 | 0.0177 | 0.0177 | U | pCi/g | 1.00 | 0.0159 | 1 | 5 | | 1 | 0.22978 | 1 | 1 | 448323 |
| Plutonium-239/240 | -0.00387 | 0.00548 | 0.00549 | U | pCi/g | 1.00 | 0.0101 | 0 | 2 | | 1 | 0.22978 | 1 | 0.99900 001287 4603 | 448323 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.49 | 0.461 | 0.714 | | pCi/g | 0.0184 | 6.15 | 106 | 30 - 110 |

## Quality Control Summary

| Method Blank ID: | Analyte | Parent Result | Spike Added | MB Result | Qualifier | Unit | % Rec | % Rec Limits | RPD | RER | DER | RER Limit | Z Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MB 160-447606/1-A | Plutonium-238 | | | 0.01734 | | pCi/g | | | | | | | 1.2585 |
| MB 160-447606/1-A | Plutonium-239/240 | | | -0.005784 | U | pCi/g | | | | | | | -1.7275 |
| **Lab Control Sample ID:** | **Analyte** | **Parent Result** | **Spike Added** | **LCS Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| LCS 160-447606/2-A | Plutonium-238 | | 5.27 | 5.060 | | pCi/g | 96 | 80 - 125 | | | | | -.7067 |
| LCS 160-447606/2-A | Plutonium-239/240 | | 5.28 | 5.196 | | pCi/g | 98 | 81 - 125 | | | | | -.2811 |
| **Duplicate ID:** | **Analyte** | **Parent Result** | **Spike Added** | **DU Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| 160-35853-1 | Plutonium-238 | 0.000 | | 0.03560 | | pCi/g | | | 200 | 0.56 | 1.47 | 1 | 1.4738 |
| 160-35853-1 | Plutonium-239/240 | -0.00624 | | -0.001876 | U | pCi/g | | | 108 | 0.12 | 0.29 | 1 | .289 |

Glossary:

- Ts = Count Duration, Sample
- Tb = Count Duration, Background
- Cs = Total Counts, Sample
- Cb = Total Counts, Background
- X Talk = Crosstalk
- Decay = Decay Factor
- Eff = Efficiency
- I = Ingrowth Factor
- A = Abundance

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-35853-3

SDG No.:

Batch Number: 447606  Batch Start Date: 10/24/19 15:18  Batch Analyst: Harris, Kayla L

Batch Method: ExtChrom  Batch End Date: 10/29/19 12:24

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | Pu-238 00016 | Pu-239 00015 | Pu-242 00036 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 160-447606/1 | | ExtChrom, A-01-R | | 1.0 g | | | 0.2 mL | | |
| LCS 160-447606/2 | | ExtChrom, A-01-R | | 1.0 g | 0.2 mL | 0.2 mL | 0.2 mL | | |
| 160-35853-A-1-H | F-B01-S001 | ExtChrom, A-01-R | T | 1.0004 g | | | 0.2 mL | | |
| 160-35853-A-1-H DU | F-B01-S001 | ExtChrom, A-01-R | T | 1.0004 g | | | 0.2 mL | | |
| 160-35853-A-2-E | F-B01-S002 | ExtChrom, A-01-R | T | 1.0000 g | | | 0.2 mL | | |

| Batch Notes | |
|---|---|
| Balance ID | 1123433897 |
| Analyst ID - Column | nmn |
| Column Date | 10/29/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 10/29/19 |
| Pipette ID | RAD117 |
| Analyst ID - Reagent Drop Witness | CLP PER KLH |
| Analyst ID - Reagent Drop | KLH |
| SOP Number | ST-RC-0100, ST-RC-0004, ST-RC-0242 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:46:38PM 10/29/2019

## Sample

Sample Name: MB 160-447606/1-A
SampleType: Sample
: MB 160-447606/1-A
Sample Collection Date: 10/29/2019 9:46:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 447606
AnalysisID: 774121

Analyst: 60040

## Tracer

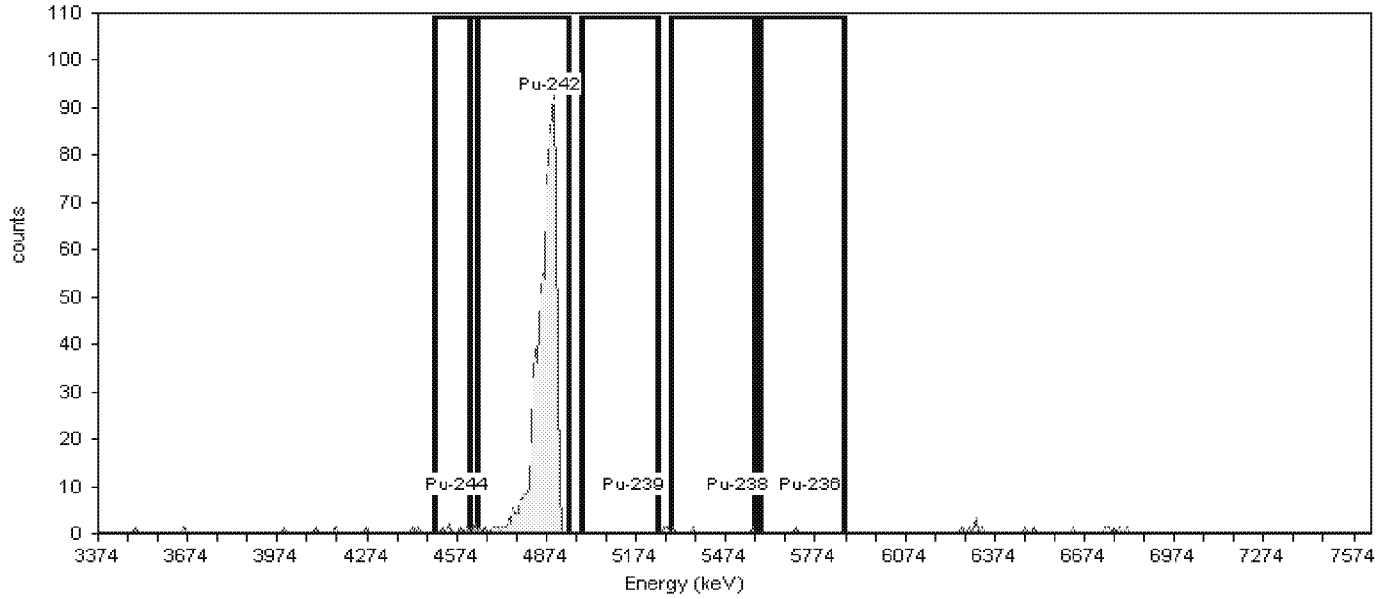
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 100.01%

## Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 10/29/2019 1:45:14PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 10/5/2019 2:26:00PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1; Oct-05-2019 14:26

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 10/29/2019 1:43:33PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 13.0 | 100.2 | 9 | 0.5000 | 8.50 | 0.065 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 73.6 | 100.0 | 800 | 2.2500 | 797.75 | 6.147 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 10.3 | 100.0 | 3 | 0.7500 | 2.25 | 0.017 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 44.5 | 99.9 | 1 | 3.2500 | -2.25 | -0.017 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:46:11PM 10/29/2019

## Sample

Sample Name: LCS 160-447606/2-A
SampleType: Sample
: LCS 160-447606/2-A
Sample Collection Date: 10/29/2019 9:46:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 447606
AnalysisID: 774118

Analyst: 60040

## Tracer

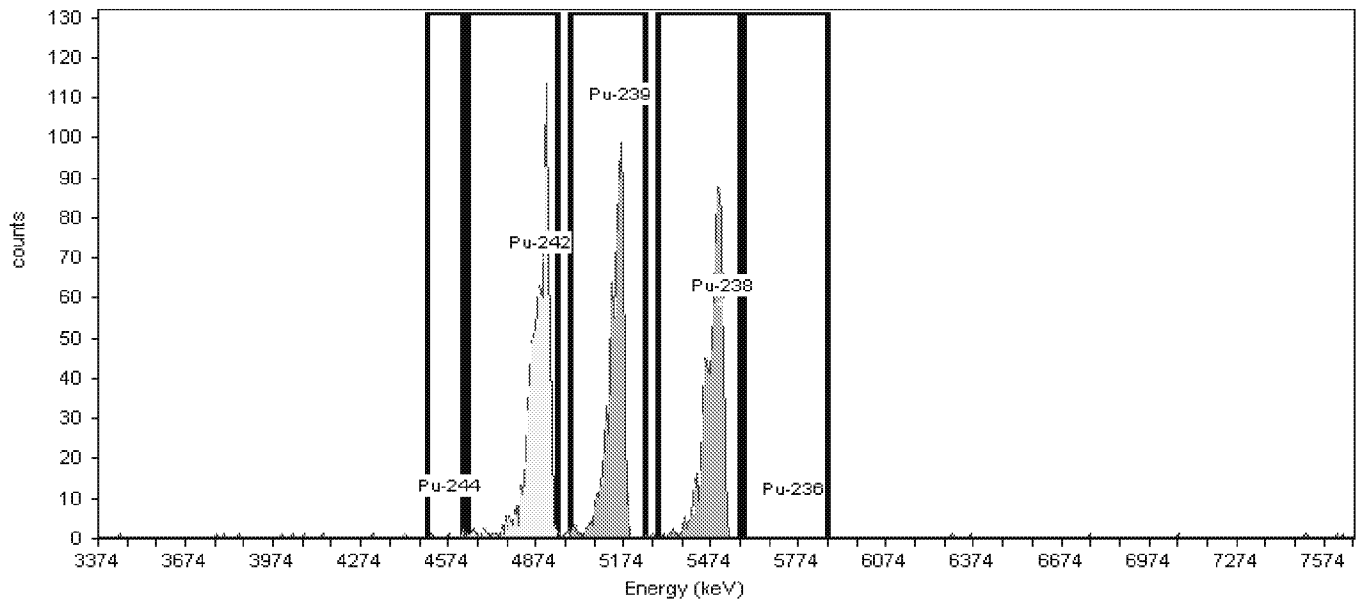
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 101.44%

## Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 10/29/2019 1:45:17PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 10/5/2019 2:26:03PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; Oct-05-2019 14:26

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.44% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 10/29/2019 1:43:31PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 13.3 | 100.2 | 6 | 1.7500 | 4.25 | 0.032 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 17.9 | 100.0 | 815 | 3.2500 | 811.75 | 6.235 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.4 | 99.9 | 686 | 0.5000 | 685.50 | 5.196 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 62.0 | 100.0 | 669 | 0.7500 | 668.25 | 5.060 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | .0 | 99.9 | 0 | 1.7500 | -1.75 | -0.013 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:46:20PM 10/29/2019

## Sample

Sample Name: 160-35853-A-1-K
SampleType: Sample
: 160-35853-A-1-K
Sample Collection Date: 10/2/2019 9:10:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0004g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 447606
AnalysisID: 774119

Analyst: 60040

## Tracer

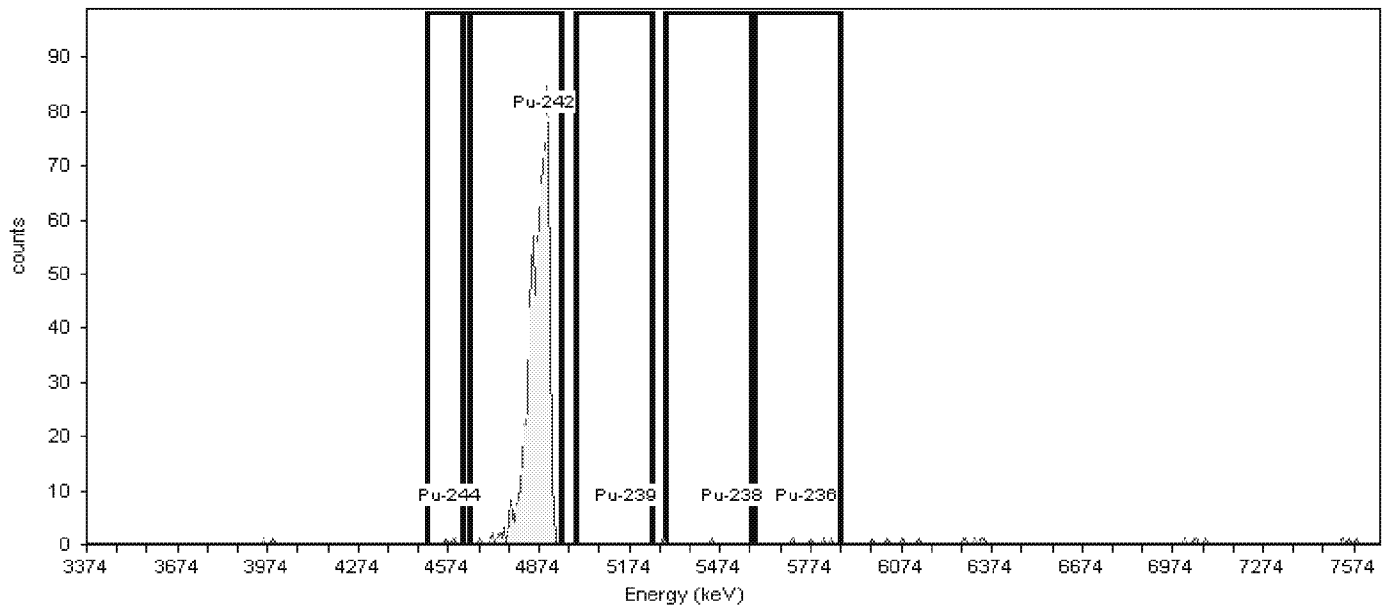
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 99.12%

## Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 10/29/2019 1:45:15PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 10/5/2019 2:23:48PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; Oct-05-2019 14:23

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 10/29/2019 1:43:31PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 48.0 | 100.2 | 2 | 0.2500 | 1.75 | 0.015 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 67.9 | 100.0 | 742 | 2.2500 | 739.75 | 6.090 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 44.5 | 100.0 | 1 | 1.0000 | 0.00 | 0.000 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 10.1 | 99.9 | 4 | 1.2500 | 2.75 | 0.023 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:46:29PM 10/29/2019

## Sample

Sample Name: 160-35853-A-1-L DU
SampleType: Sample
: 160-35853-A-1-L DU
Sample Collection Date: 10/2/2019 9:10:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0004g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 447606
AnalysisID: 774120

Analyst: 60040

## Tracer

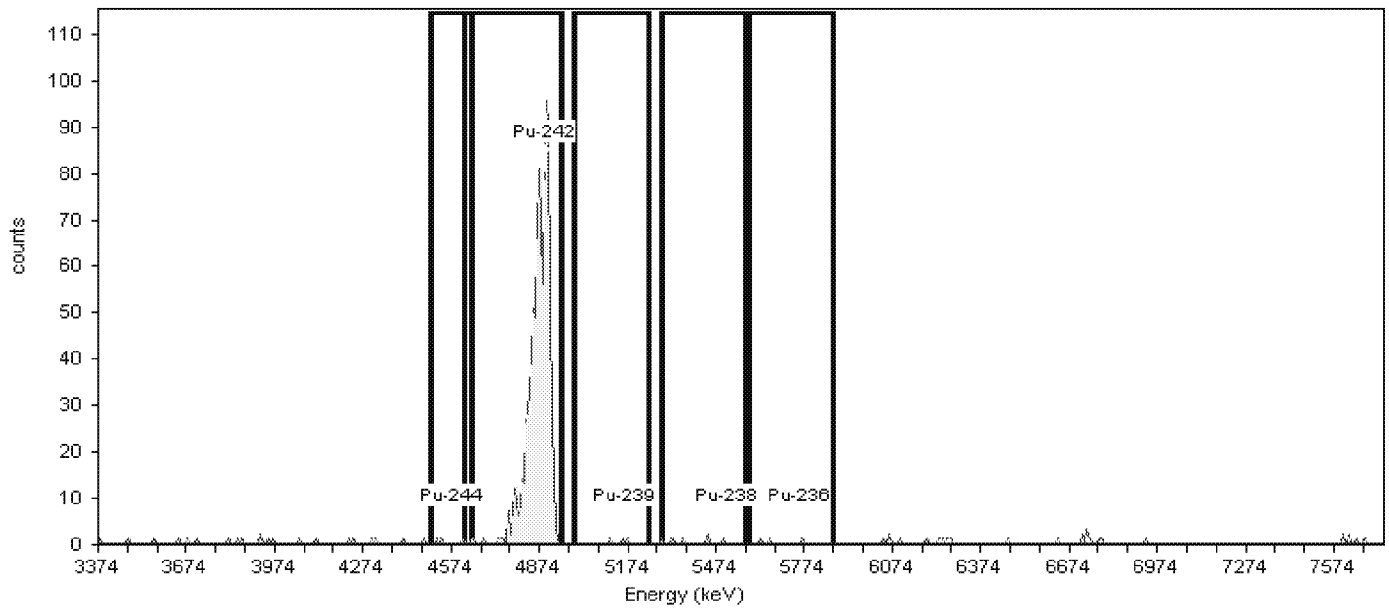
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 104.88%

## Acquisition

Detector: AV6
Serial Number: 47-27FF2
Acquisition Start Date: 10/29/2019 1:45:16PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 10/5/2019 2:23:48PM
Background Info: Sample: ICB;AV6; Det: AV6; Spectrum #1; Oct-05-2019 14:23

Calibration Name: IC-9792;AV6-05142018
Calibration Date: 5/14/2018 6:25:47PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 23.87% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 10/29/2019 1:43:31PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .3 | 100.2 | 4 | 2.0000 | 2.00 | 0.015 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 62.9 | 100.0 | 825 | 5.2500 | 819.75 | 6.444 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 80.8 | 99.9 | 3 | 3.2500 | -0.25 | -0.002 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | .0 | 100.0 | 8 | 3.2500 | 4.75 | 0.036 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 39.4 | 99.9 | 3 | 2.7500 | 0.25 | 0.002 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:45:53PM 10/29/2019

## Sample

Sample Name: 160-35853-A-2-G
SampleType: Sample
: 160-35853-A-2-G
Sample Collection Date: 10/2/2019 12:30:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 447606
AnalysisID: 774117

Analyst: 60040

## Tracer

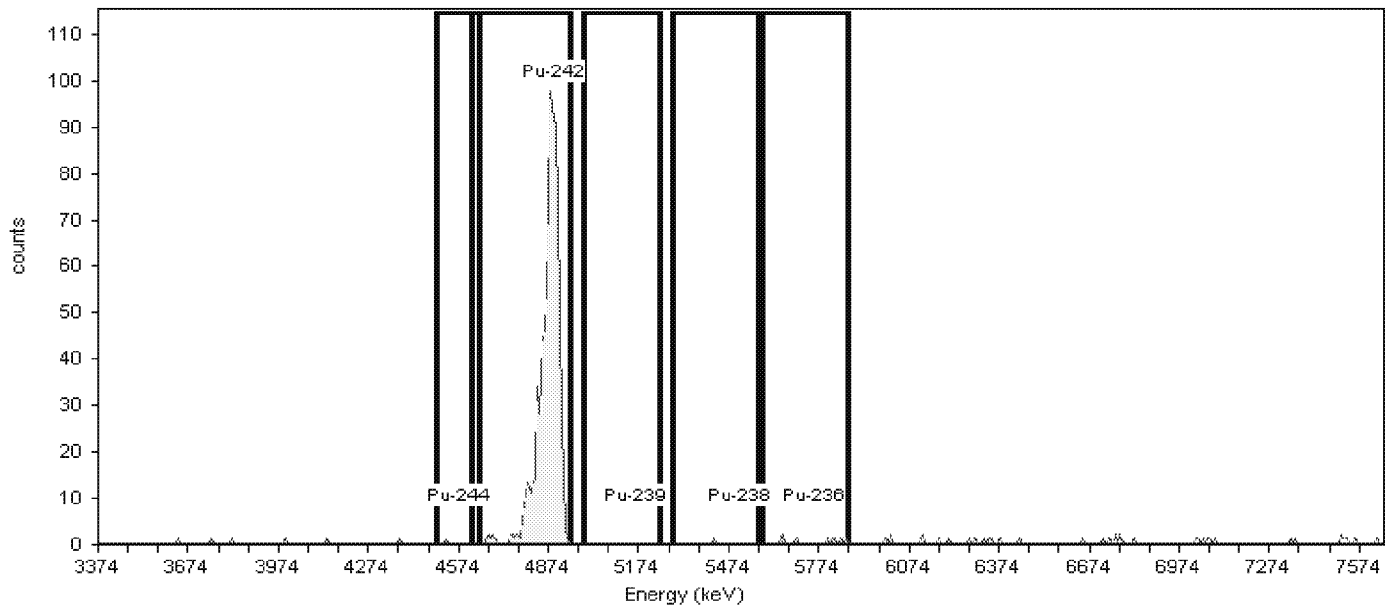
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 105.59%

## Acquisition

Detector: AV7
Serial Number: 48-158EE5
Acquisition Start Date: 10/29/2019 1:45:18PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 10/5/2019 2:23:49PM
Background Info: Sample: ICB;AV7; Det: AV7; Spectrum #1; Oct-05-2019 14:23

Calibration Name: IC-9793;AV7-05142018
Calibration Date: 5/14/2018 6:26:13PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.98% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 10/29/2019 1:43:31PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 18.3 | 100.2 | 1 | 0.7500 | 0.25 | 0.002 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 60.7 | 100.0 | 796 | 1.5000 | 794.50 | 6.490 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.5000 | -0.50 | -0.004 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 44.5 | 100.0 | 1 | 1.2500 | -0.25 | -0.002 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 25.1 | 99.9 | 9 | 0.0000 | 9.00 | 0.070 | pCi/g |

# Daily Checks

# Alpha Spectroscopy Daily Pulser Check

## Analysis Date: 10/29/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV1 | 10/29/19 13:02 | 7283 | 6961-7694 | Pass | 11.6 | 10.0-20.0 | Pass | 223.0 | 218.5-228.5 | Pass | 5030 | 4994-5074 | Pass |
| AV3 | 10/29/19 13:02 | 7126 | 6900-7627 | Pass | 12.6 | 10.0-20.0 | Pass | 226.1 | 220.0-230.0 | Pass | 5053 | 5005-5085 | Pass |
| AV4 | 10/29/19 13:02 | 7366 | 7014-7752 | Pass | 13.4 | 10.0-20.0 | Pass | 224.0 | 220.0-230.0 | Pass | 5037 | 5005-5085 | Pass |
| AV6 | 10/29/19 13:02 | 7159 | 7008-7746 | Pass | 12.9 | 10.0-20.0 | Pass | 218.0 | 213.0-223.0 | Pass | 4993 | 4952-5032 | Pass |
| AV7 | 10/29/19 13:02 | 7293 | 6979-7714 | Pass | 16.5 | 10.0-20.0 | Pass | 226.9 | 226.3-236.3 | Pass | 5059 | 5052-5132 | Pass |

## Analysis Date: 11/16/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV233 | 11/16/19 06:18 | 6001 | 5703-6304 | Pass | 16.0 | 10.0-20.0 | Pass | 224.0 | 218.0-228.0 | Pass | 5038 | 4990-5070 | Pass |
| AV239 | 11/16/19 06:18 | 5828 | 5546-6129 | Pass | 12.6 | 10.0-20.0 | Pass | 223.1 | 218.0-228.0 | Pass | 5030 | 4990-5070 | Pass |
| AV240 | 11/16/19 06:18 | 5886 | 5597-6186 | Pass | 13.1 | 10.0-20.0 | Pass | 224.0 | 218.9-228.9 | Pass | 5038 | 4996-5076 | Pass |
| AV241 | 11/16/19 06:18 | 6004 | 5707-6308 | Pass | 15.3 | 10.0-20.0 | Pass | 223.1 | 217.9-227.9 | Pass | 5030 | 4990-5070 | Pass |
| AV243 | 11/16/19 06:18 | 5863 | 5628-6220 | Pass | 12.9 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5023 | 4983-5063 | Pass |

TestAmerica
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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:32PM 10/29/2019

## Sample

Sample Name: Pulser;AV1
Comment:

Spectrum #16 Analysis #1

## Batch

Batch Name: October2019a
Description:

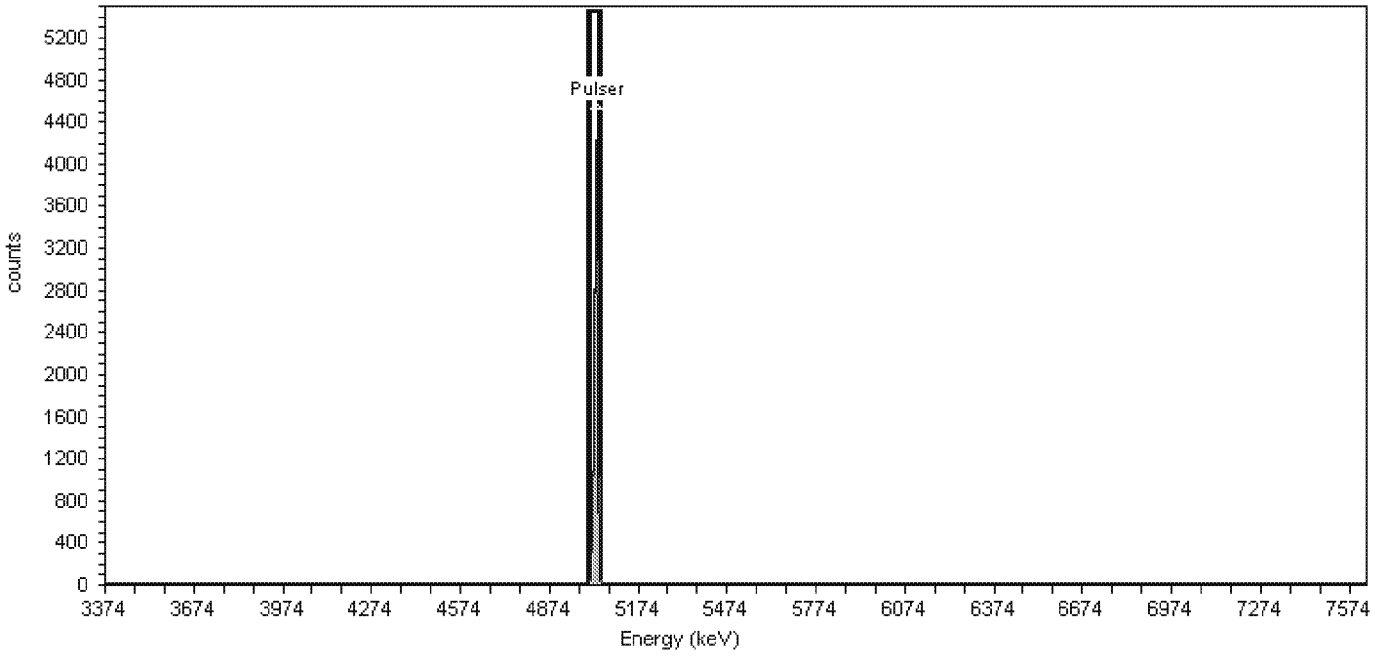
Analyst: 60040

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 10/29/2019 1:02:51PM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5029.875 | 5010.067 | 5049.683 | 11.64 | 7,057.83 | 7,283.10 |

TestAmerica
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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:41PM 10/29/2019

## Sample

Sample Name: Pulser;AV3
Comment:

Spectrum #16 Analysis #1

## Batch

Batch Name: October2019a
Description:

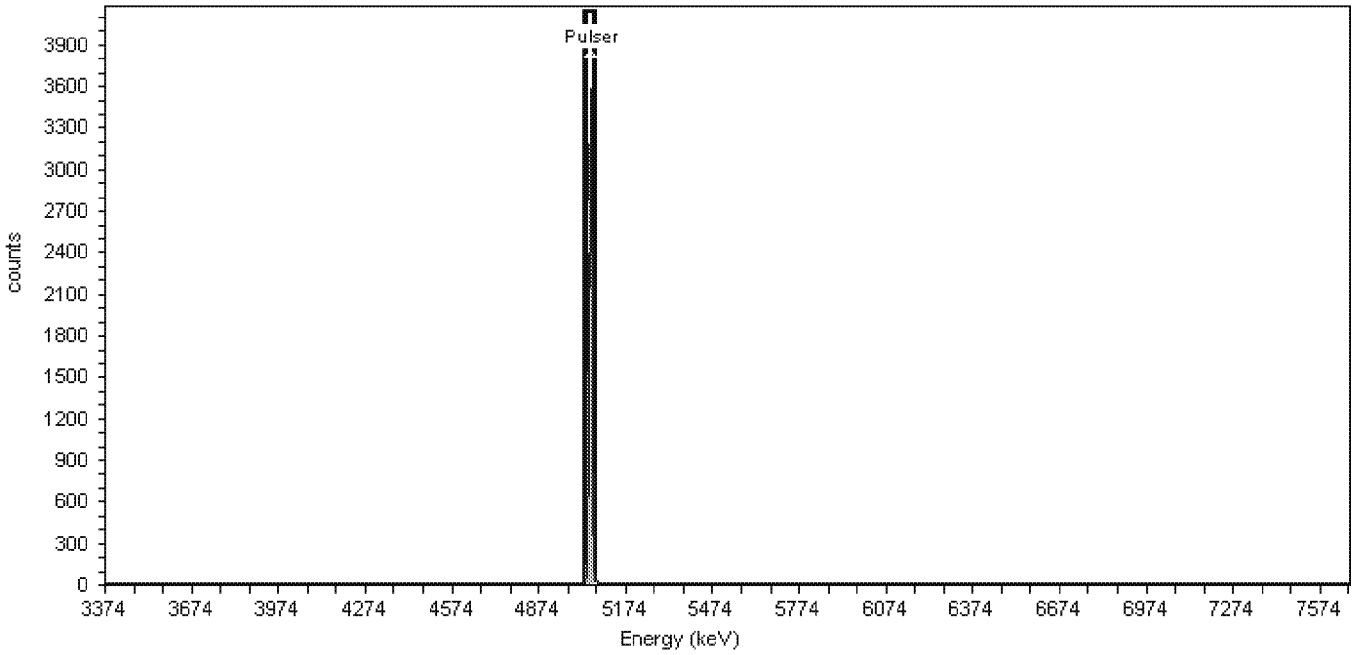
Analyst: 60040

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 10/29/2019 1:02:52PM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.44% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5052.814 | 5031.392 | 5074.237 | 12.59 | 6,470.42 | 7,125.83 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:50PM 10/29/2019

## Sample

Sample Name: Pulser;AV4
Comment:

Spectrum #16 Analysis #1

## Batch

Batch Name: October2019a
Description:

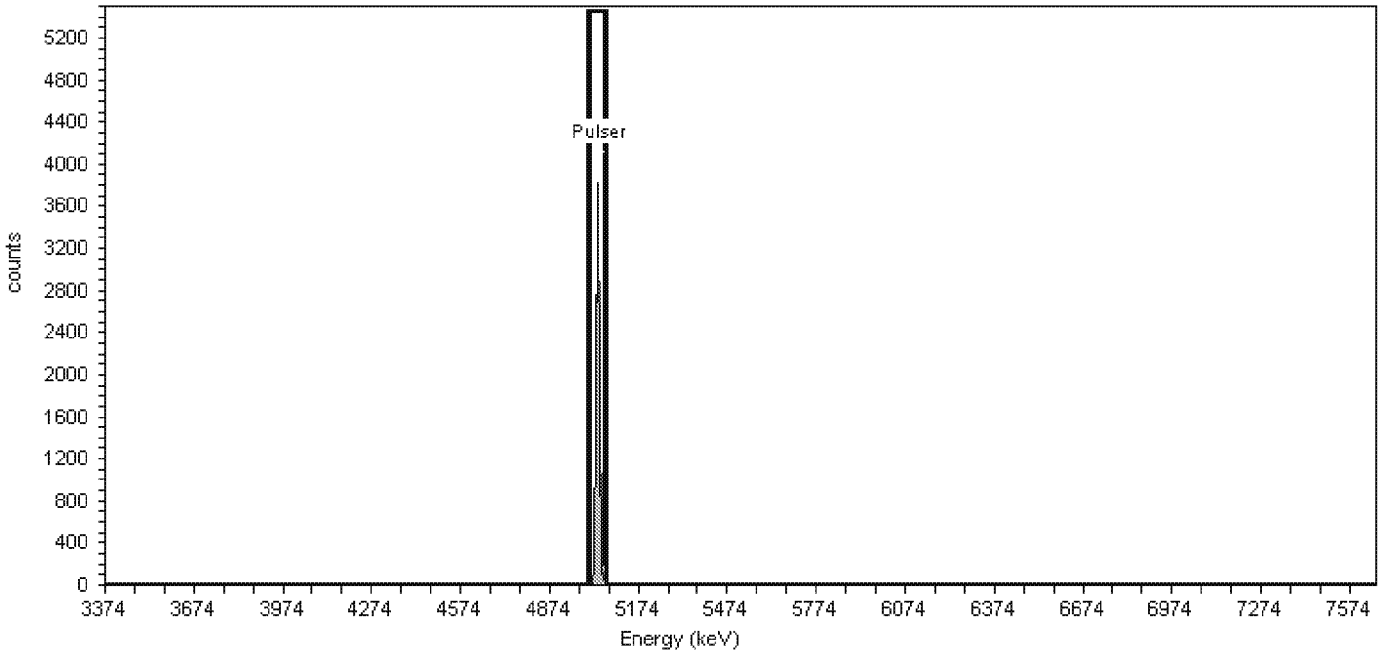
Analyst: 60040

## Acquisition

Detector: AV4 , SN: 46-033Q4
Acquisition Start Date: 10/29/2019 1:02:25PM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.259 | 5014.501 | 5060.016 | 13.37 | 7,311.44 | 7,365.95 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:59PM 10/29/2019

## Sample

Sample Name: Pulser;AV6
Comment:

Spectrum #16 Analysis #1

## Batch

Batch Name: October2019a
Description:

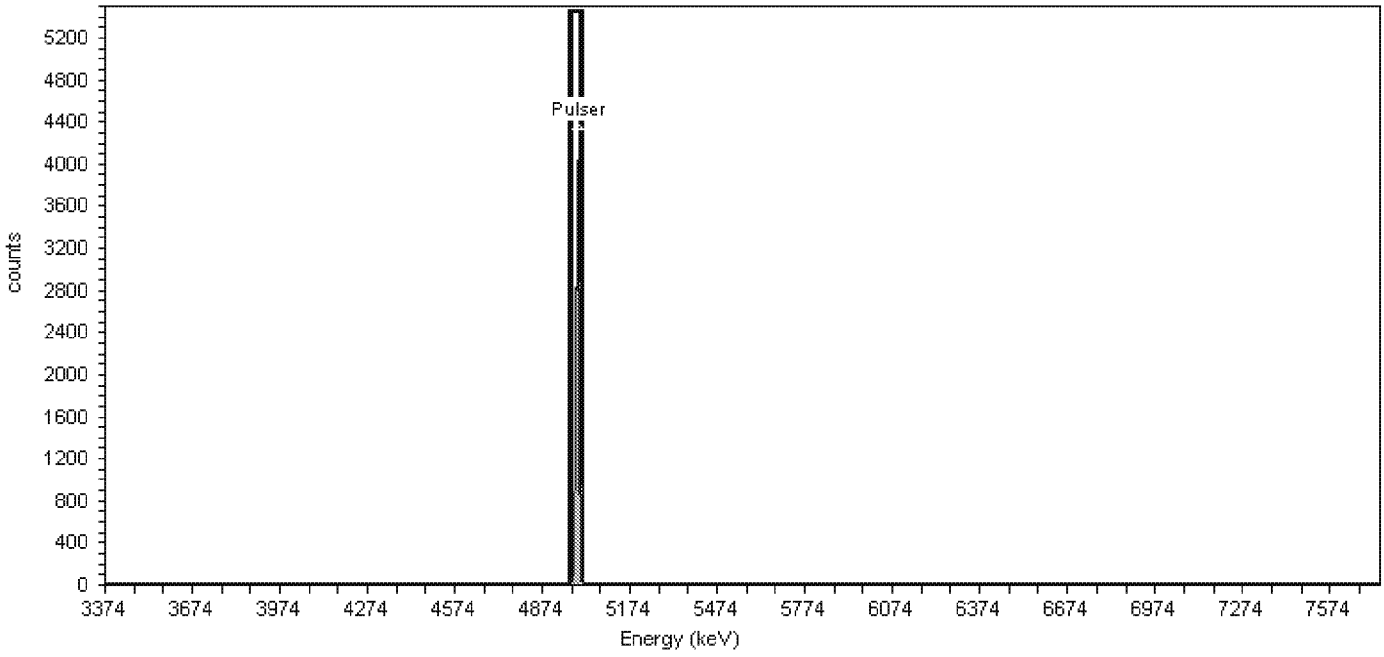
Analyst: 60040

## Acquisition

Detector: AV6 , SN: 47-27FF2
Acquisition Start Date: 10/29/2019 1:02:28PM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9792;AV6-05142018
Calibration Date: 5/14/2018 6:25:47PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.87% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 4992.627 | 4970.611 | 5014.644 | 12.93 | 7,460.06 | 7,159.49 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:08PM 10/29/2019

## Sample

Sample Name: Pulser;AV7
Comment:

Spectrum #16 Analysis #1

## Batch

Batch Name: October2019a
Description:

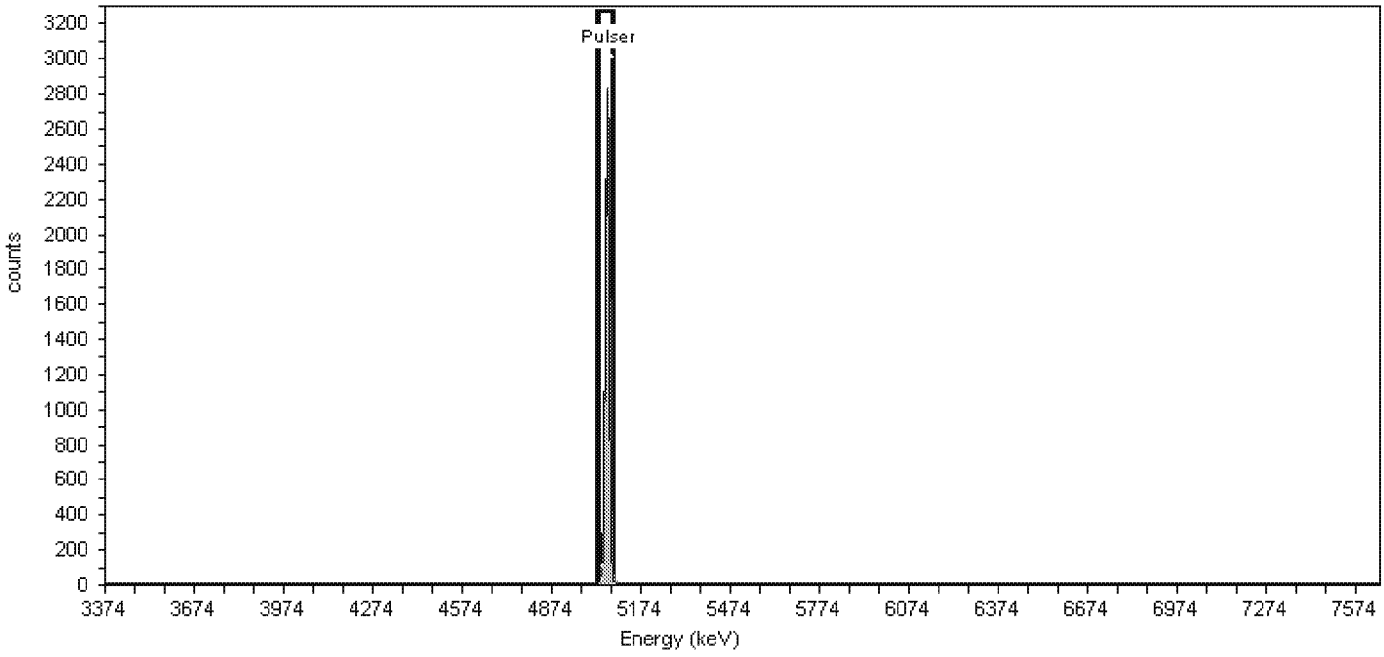
Analyst: 60040

## Acquisition

Detector: AV7 , SN: 48-158EE5
Acquisition Start Date: 10/29/2019 1:02:32PM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9793;AV7-05142018
Calibration Date: 5/14/2018 6:26:13PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.98% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5058.961 | 5030.844 | 5087.078 | 16.52 | 6,708.85 | 7,293.45 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:31:13AM 11/16/2019

## Sample

Sample Name: Pulser;AV233 Spectrum #8 Analysis #1
Comment:

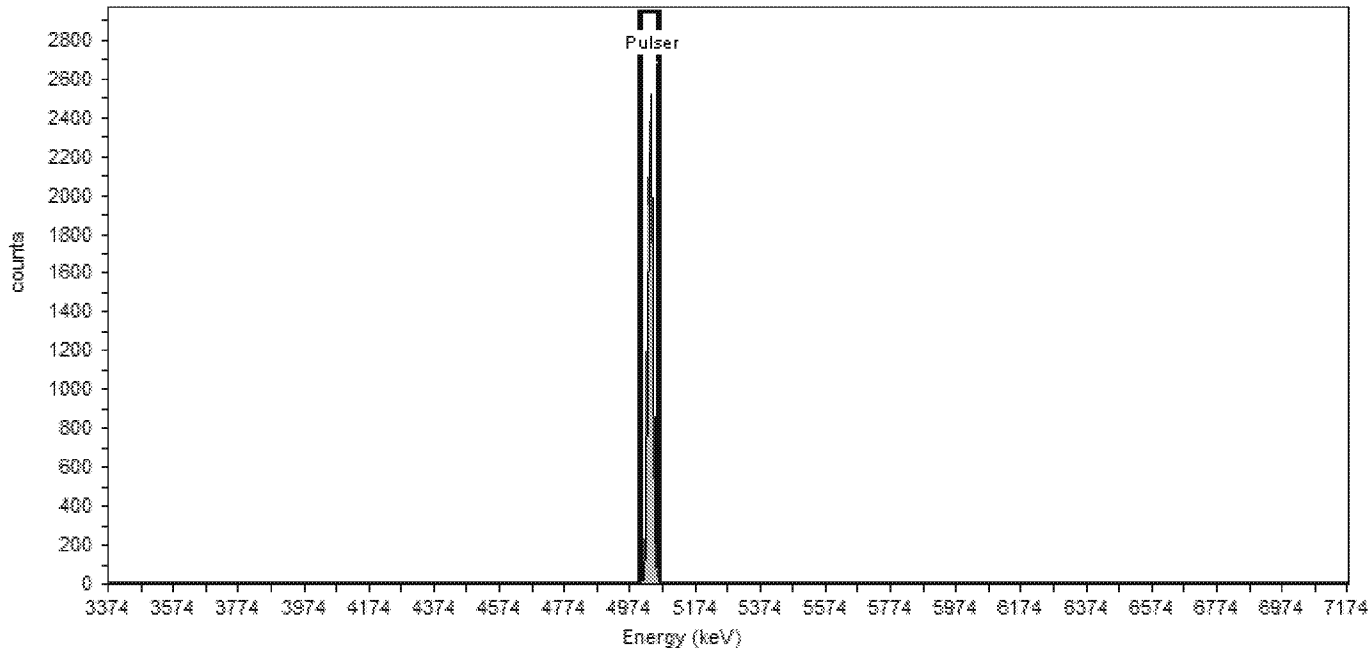
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV233 , SN: 51-005Q7
Acquisition Start Date: 11/16/2019 6:18:53AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-8877;AV233-11152018
Calibration Date: 11/15/2018 6:58:23PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.813 | 5010.621 | 5065.004 | 15.97 | 5,784.46 | 6,000.59 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:31:59AM 11/16/2019

## Sample

Sample Name: Pulser;AV239 Spectrum #8 Analysis #1
Comment:

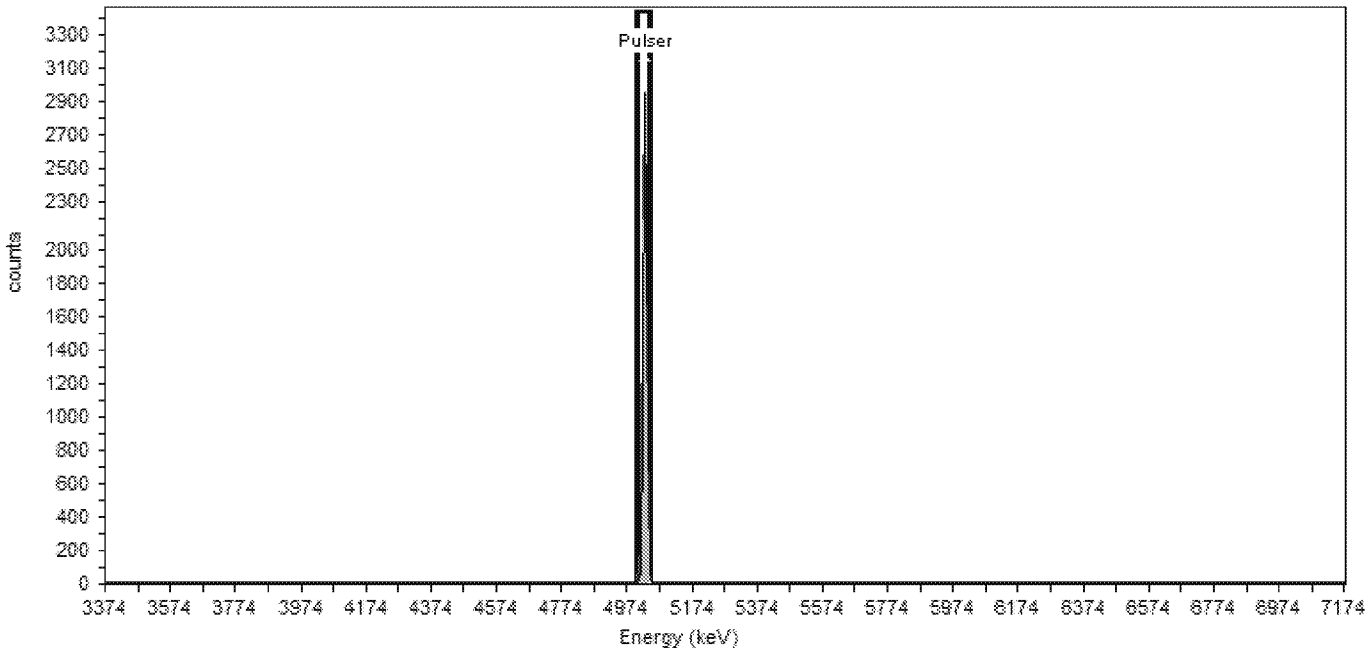
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV239 , SN: 51-005EE1
Acquisition Start Date: 11/16/2019 6:18:54AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9885;AV239-11152018
Calibration Date: 11/15/2018 6:58:44PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5030.391 | 5008.873 | 5051.908 | 12.64 | 5,352.98 | 5,827.58 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:32:11AM 11/16/2019

## Sample

Sample Name: Pulser;AV240 Spectrum #8 Analysis #1
Comment:

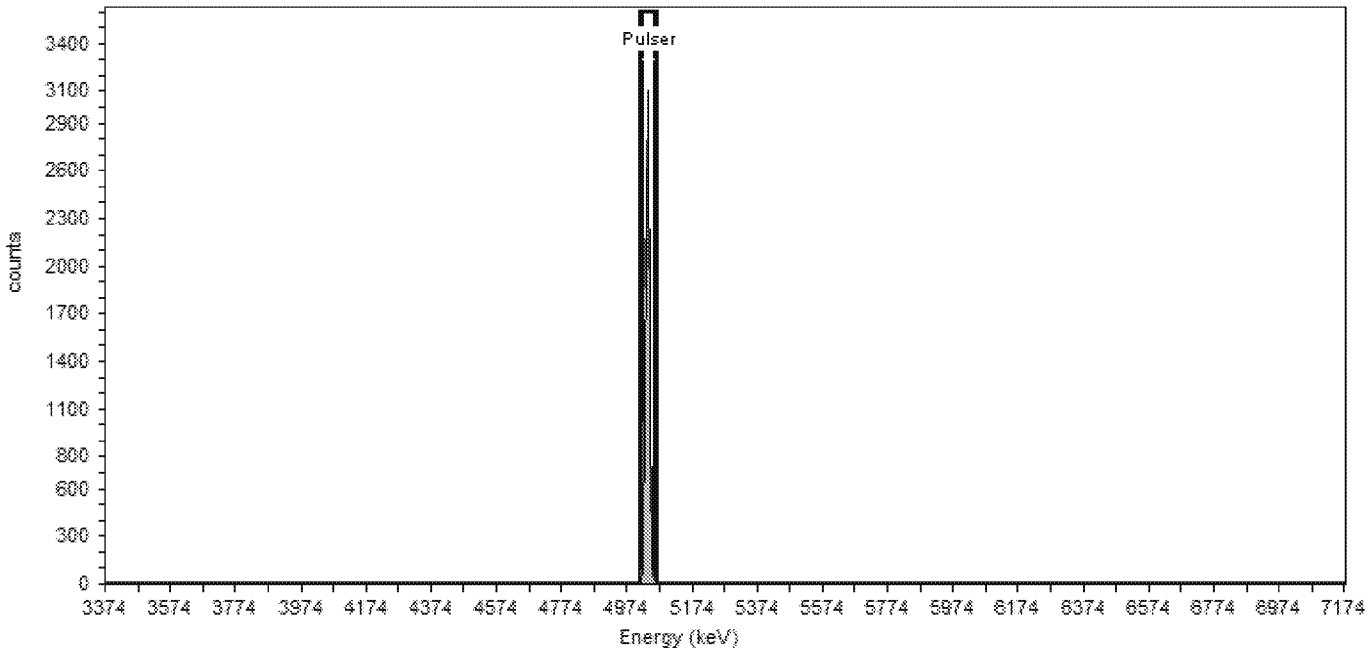
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV240 , SN: 51-005Q1
Acquisition Start Date: 11/16/2019 6:18:54AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1368446;AV240-11152018
Calibration Date: 11/15/2018 6:58:48PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.761 | 5015.465 | 5060.057 | 13.10 | 5,838.78 | 5,886.30 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:24:48AM 11/16/2019

## Sample

Sample Name: Pulser;AV241 Spectrum #8 Analysis #1
Comment:

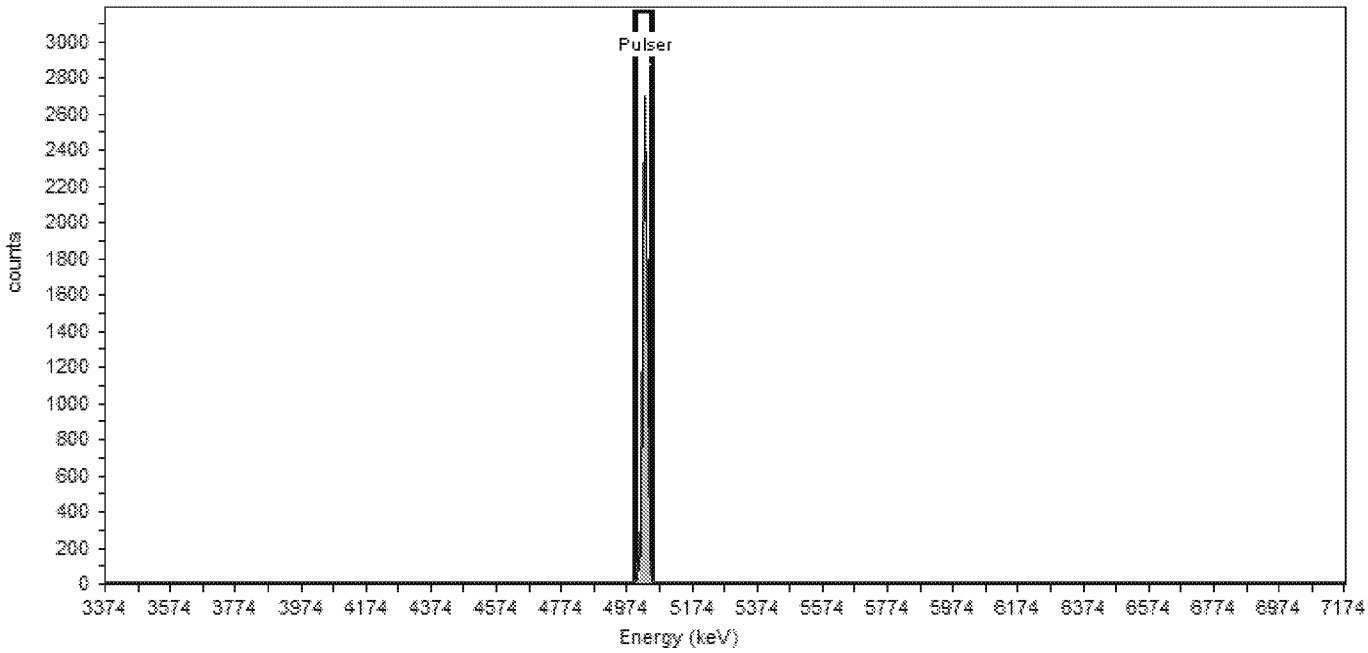
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/16/2019 6:18:54AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1368447;AV241-11152018
Calibration Date: 11/15/2018 10:58:36PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5030.367 | 5004.352 | 5056.383 | 15.28 | 5,921.18 | 6,004.46 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:35AM 11/16/2019

## Sample

Sample Name: Pulser;AV243 Spectrum #8 Analysis #1
Comment:

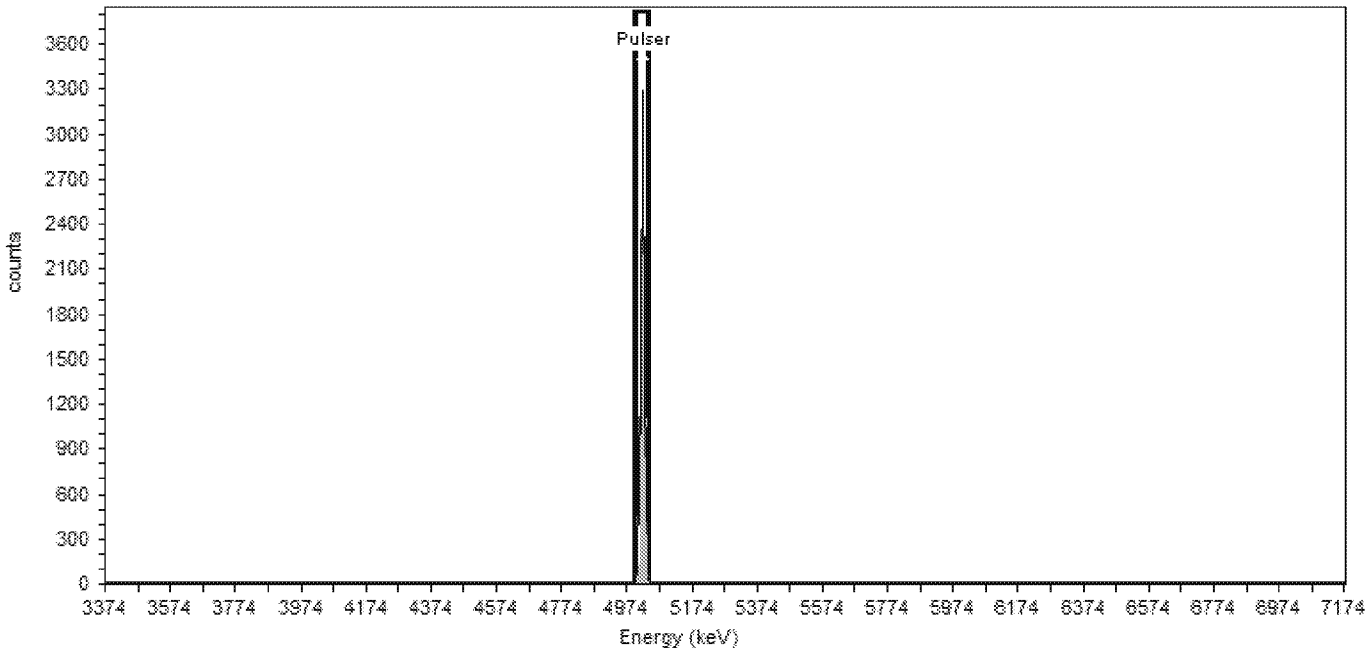
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/16/2019 6:18:55AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370622;AV243-11152018
Calibration Date: 11/15/2018 10:58:43PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.626 | 5000.594 | 5044.658 | 12.94 | 6,121.40 | 5,863.29 |

# Initial Calibrations

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:23:49PM 5/14/2018

## Calibration

Sample Name: IC-7107;AV1-05142018
Description:
Detector: AV1

Calibration Date: 5/14/2018 6:23:45PM
Analyst: 60040

## Source Info

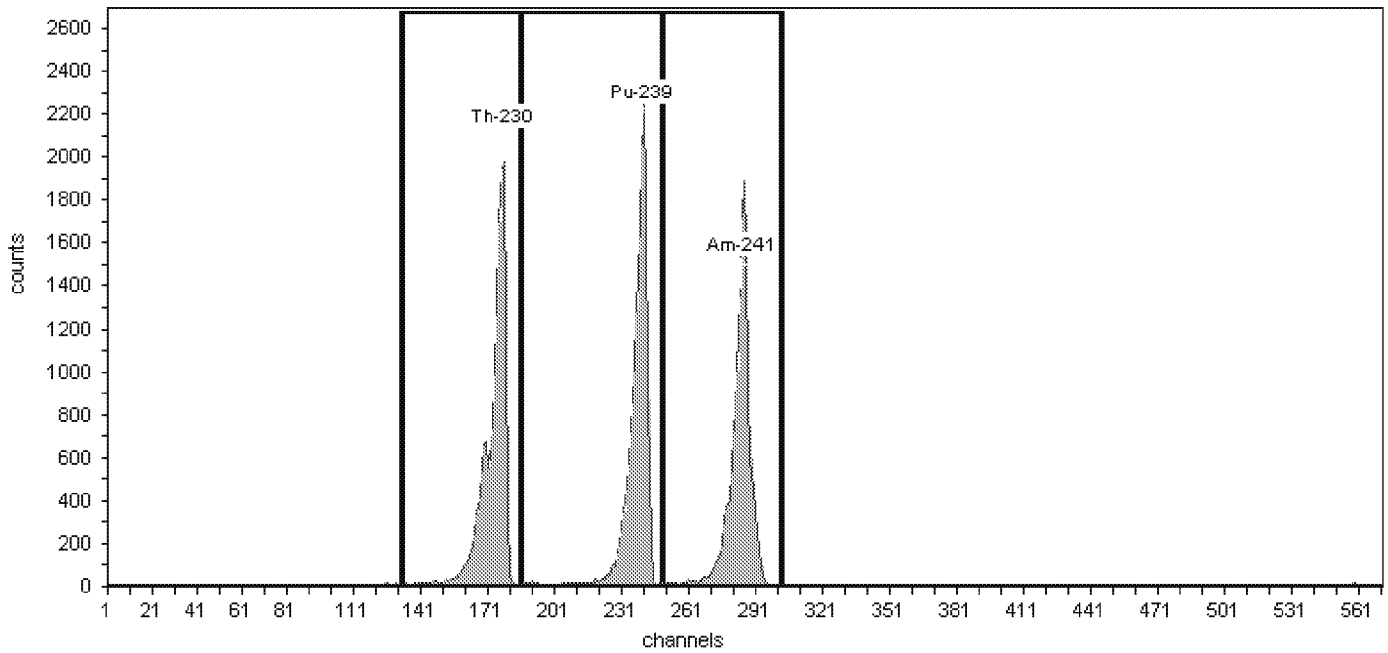
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 5/14/2018 3:44:27PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 15,240.00 | 108.86 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 15,352.00 | 109.66 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 14,427.00 | 103.05 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:19PM 5/14/2018

## Calibration

Sample Name: IC-8877;AV3-05142018
Description:
Detector: AV3

Calibration Date: 5/14/2018 6:25:15PM
Analyst: 60040

## Source Info

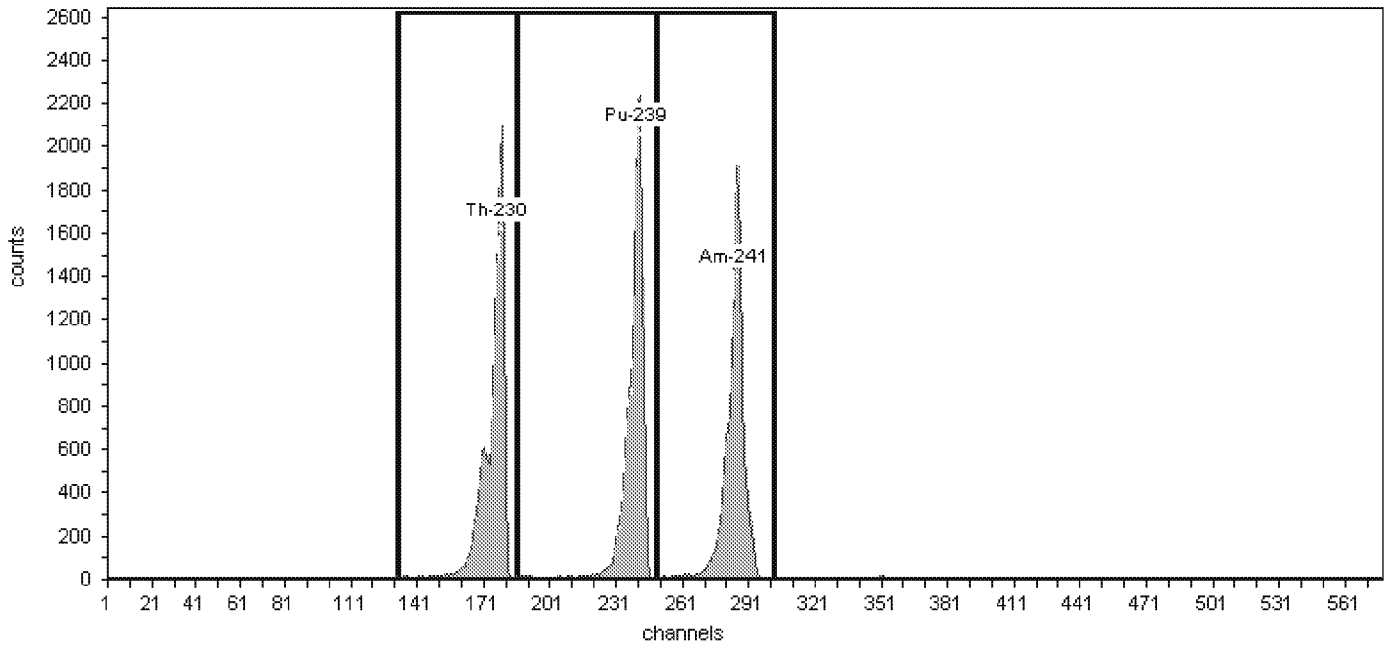
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 5/14/2018 3:46:06PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 24.44% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 14,252.00 | 101.80 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 14,532.00 | 103.80 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 13,591.00 | 97.08 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:38PM 5/14/2018

## Calibration

Sample Name: IC-9520;AV4-05142018
Description:
Detector: AV4

Calibration Date: 5/14/2018 6:25:34PM
Analyst: 60040

## Source Info

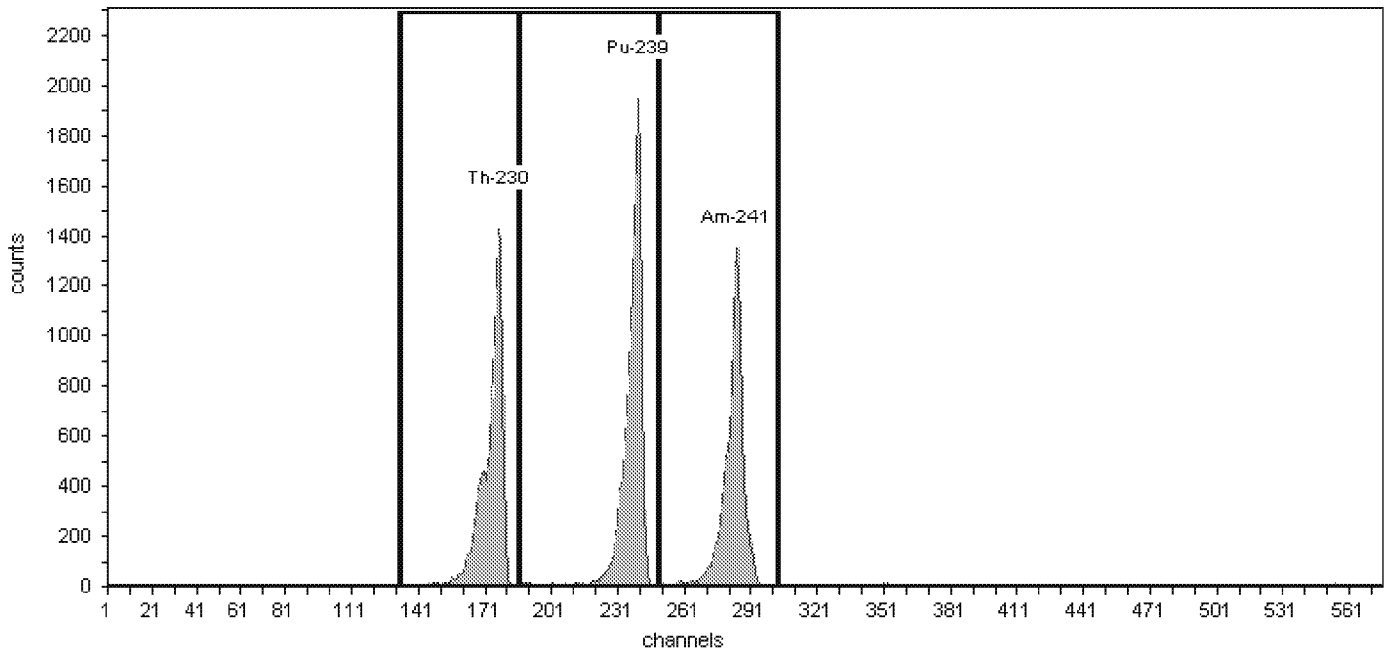
Certificate ID: 82237-334
Prepared by: Analytics

Certification Date: 6/1/2010 12:00:00PM
Description:

## Acquisition

Detector: AV4 , SN: 46-033Q4
Acquisition Start Date: 5/14/2018 3:46:19PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 10,751.00 | 76.79 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 13,005.00 | 92.89 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 10,380.00 | 74.14 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:51PM 5/14/2018

## Calibration

Sample Name: IC-9792;AV6-05142018
Description:
Detector: AV6

Calibration Date: 5/14/2018 6:25:47PM
Analyst: 60040

## Source Info

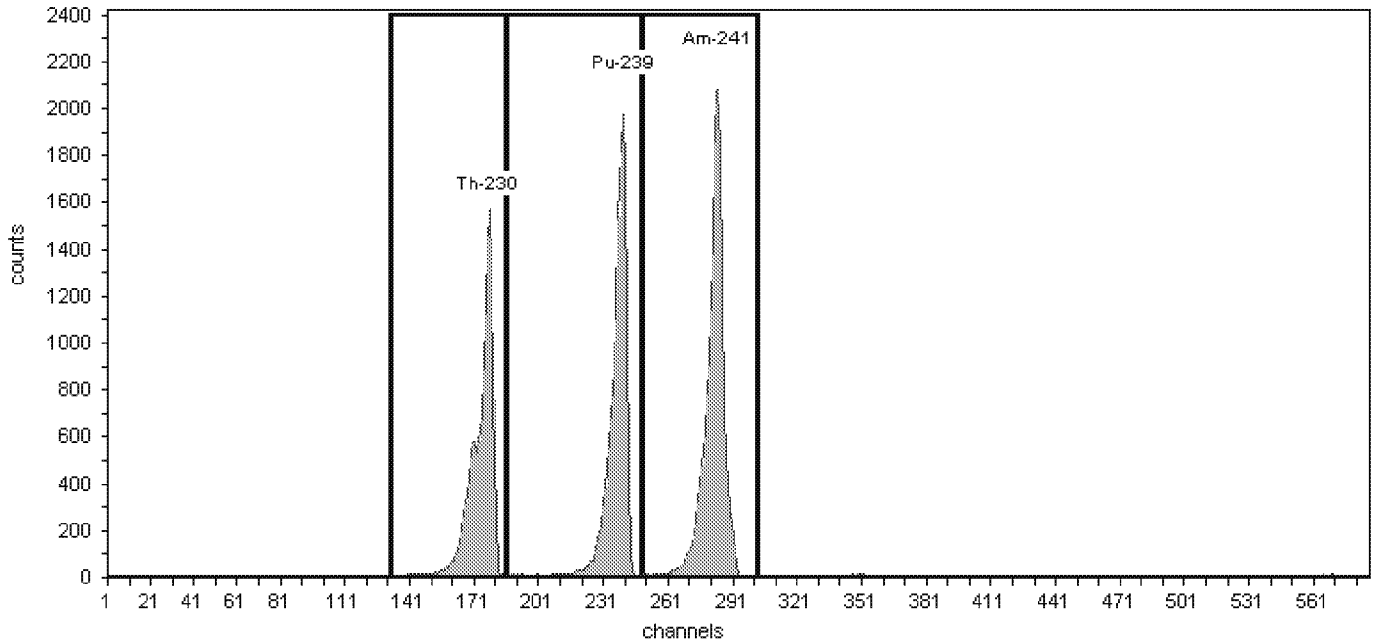
Certificate ID: 82240-334
Prepared by: Analytics

Certification Date: 6/8/2010 12:00:00PM
Description:

## Acquisition

Detector: AV6 , SN: 47-27FF2
Acquisition Start Date: 5/14/2018 3:46:36PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 23.87% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 12,718.00 | 90.84 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 14,492.00 | 103.51 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 16,243.00 | 116.02 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:26:17PM 5/14/2018

## Calibration

Sample Name: IC-9793;AV7-05142018
Description:
Detector: AV7

Calibration Date: 5/14/2018 6:26:13PM
Analyst: 60040

## Source Info

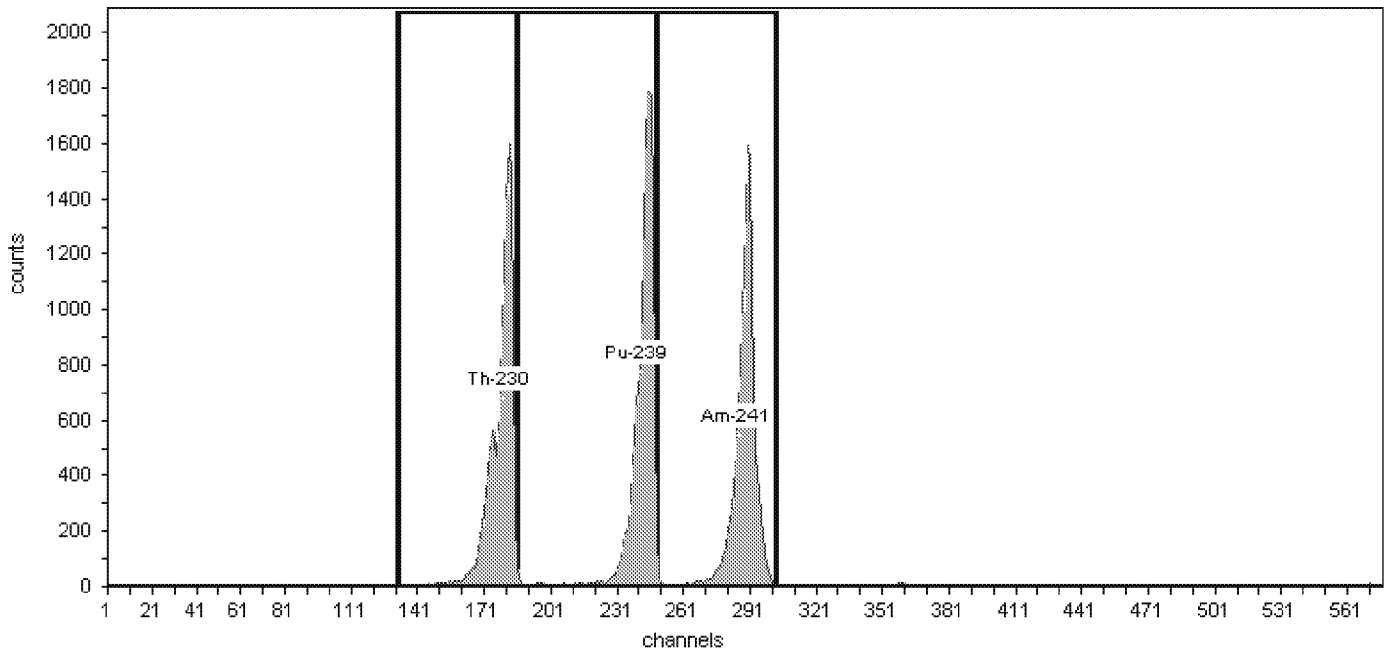
Certificate ID: 82241-334
Prepared by: Analytics

Certification Date: 6/8/2010 12:00:00PM
Description:

## Acquisition

Detector: AV7 , SN: 48-158EE5
Acquisition Start Date: 5/14/2018 3:47:01PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 22.98% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 12,677.00 | 90.55 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 13,298.00 | 94.99 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 12,604.00 | 90.03 |

FWHM > 100keV
RTM 6/22/2018

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:43:24PM 11/16/2018

## Calibration

Sample Name: IC-9885;AV239-11152018
Description:
Detector: AV239

Analyst: 60040
Analysis Date: 11/15/2018 6:58:44PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82246-334
Prepared by: Analytics
Description:

Certification Date: 6/9/2010 12:00:00PM

## Acquisition

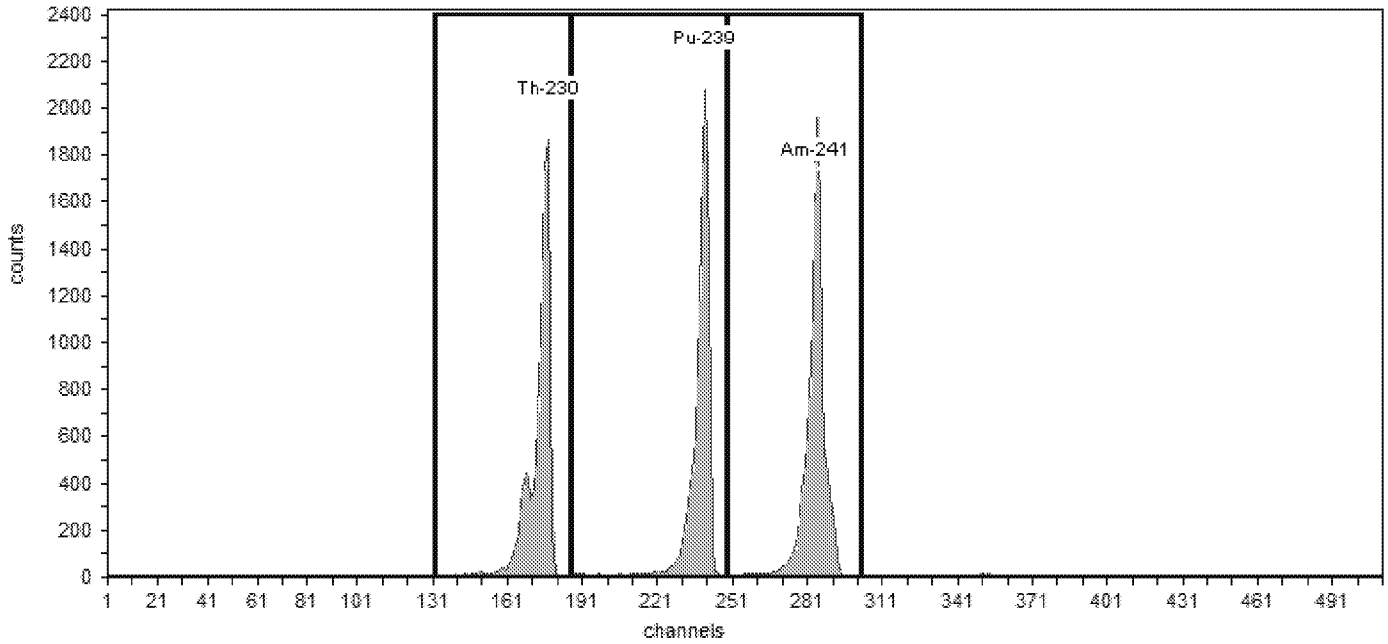
Detector: AV239 , SN: 51-005EE1
Acquisition Start Date: 11/15/2018 4:17:17PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9885;AV239-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.34% +/- 0.36% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | ~~1,761.24~~* | 11,184.00 | 79.89 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 30.72 | 11,067.00 | 79.05 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 31.24 | 12,201.00 | 87.15 |

*ALS 11/18/2018
FWHM<100

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THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Calibration Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:58:49PM 11/15/2018

### Calibration

Sample Name: IC-1368446;AV240-11152018
Description:
Detector: AV240

Analyst: 60040
Analysis Date: 11/15/2018 6:58:48PM
Calibration Type: Energy And Efficiency

### Source Info

Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/6/2017 12:00:00PM

### Acquisition

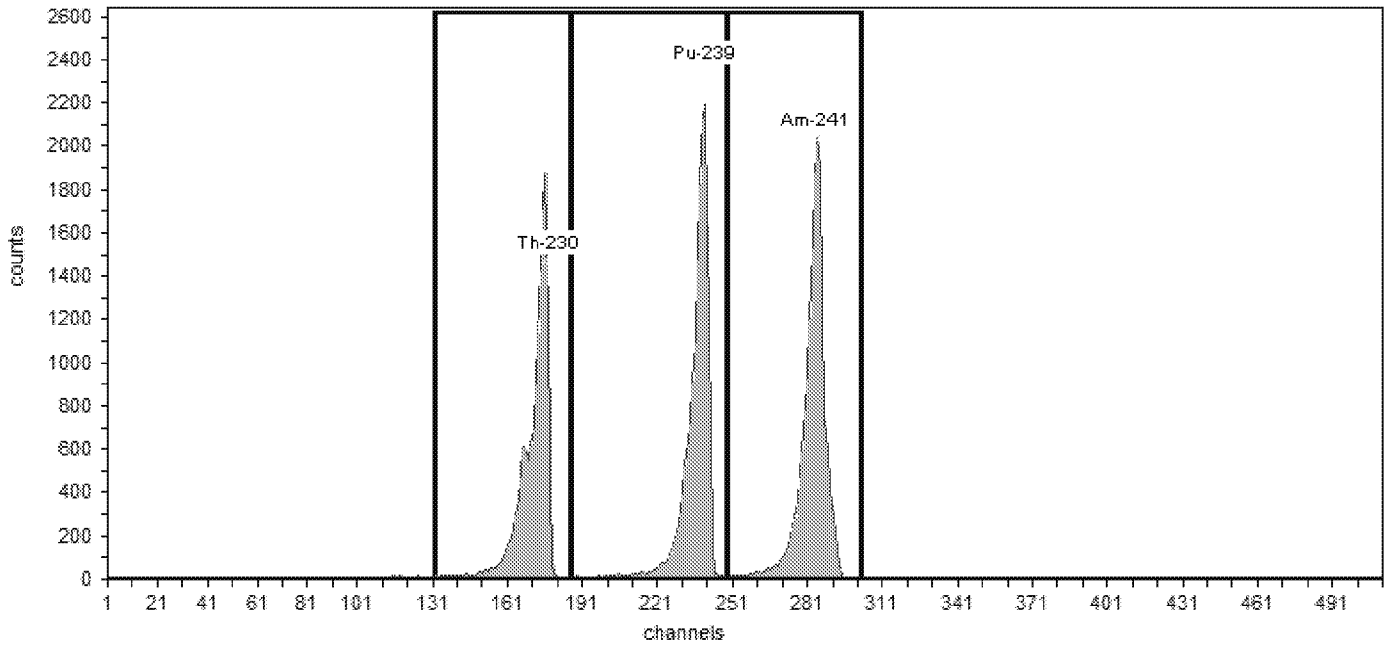
Detector: AV240 , SN: 51-005Q1
Acquisition Start Date: 11/15/2018 4:17:27PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1368446;AV240-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 28.28% +/- 0.26% TPU(2 sigma)




### General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

### Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 39.41 | 14,356.00 | 102.54 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 41.34 | 16,022.00 | 114.44 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 45.55 | 17,000.00 | 121.43 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:58:37PM 11/15/2018

## Calibration

Sample Name: IC-1368447;AV241-11152018
Description:
Detector: AV241

Analyst: 60040
Analysis Date: 11/15/2018 10:58:36PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/1/2017 12:00:00PM

## Acquisition

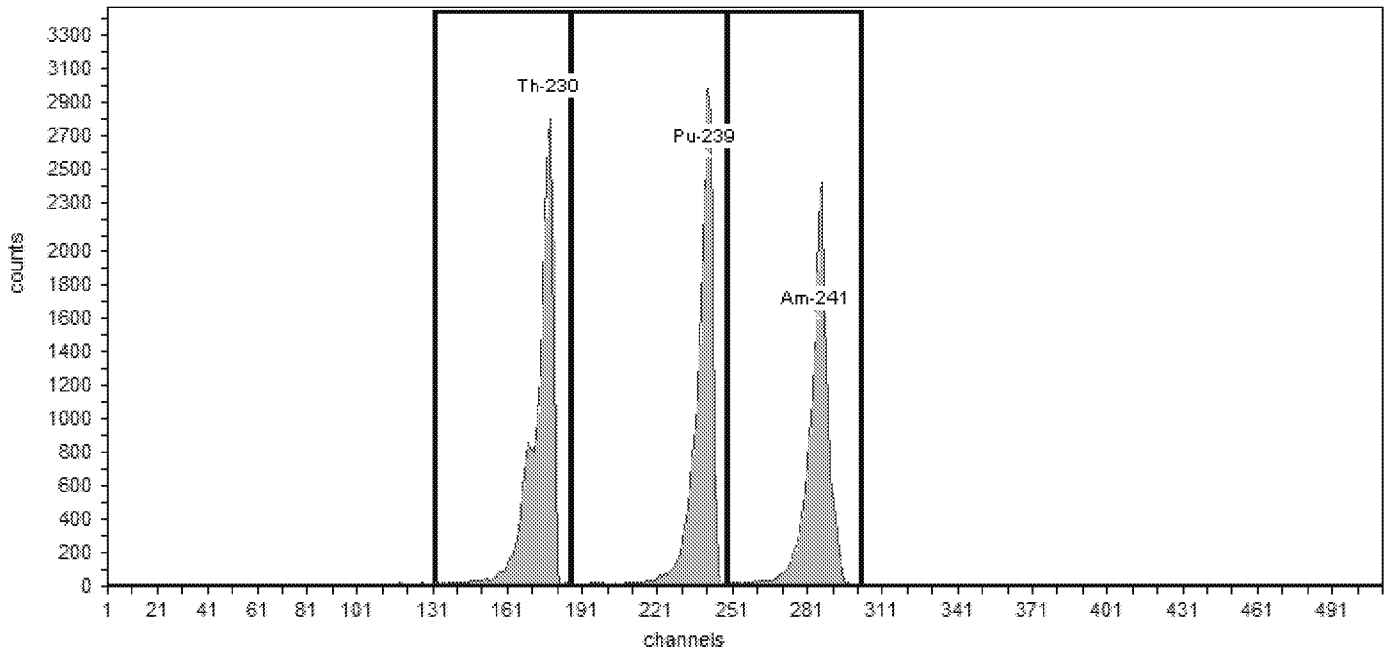
Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/15/2018 7:16:24PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1368447;AV241-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.37% +/- 0.22% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 38.57 | 21,443.00 | 153.16 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 39.23 | 19,911.00 | 142.22 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 40.28 | 18,325.00 | 130.89 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:28:26PM 11/16/2018

## Calibration

Sample Name: IC-1370622;AV243-11152018
Description:
Detector: AV243

Analyst: 60040
Analysis Date: 11/15/2018 10:58:43PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

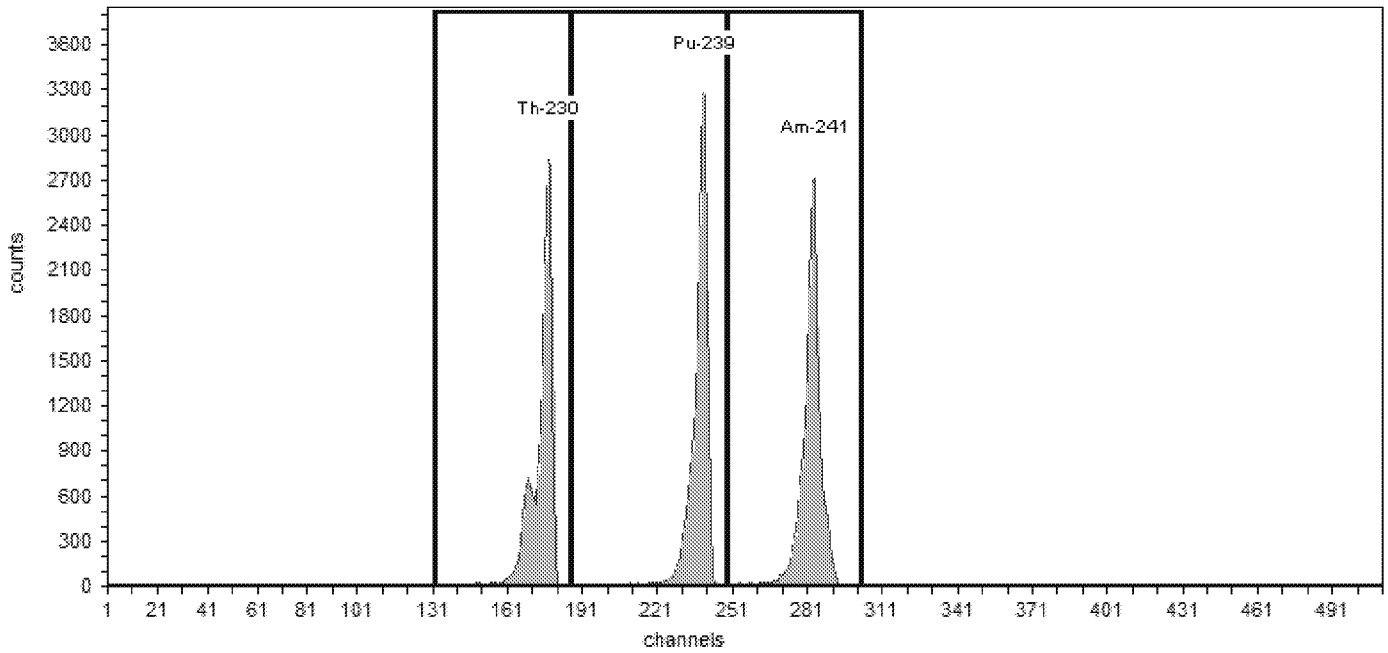
Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/15/2018 7:16:55PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370622;AV243-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.76% +/- 0.23% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 29.99 | 16,971.00 | 121.22 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.42 | 17,841.00 | 127.44 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 33.50 | 17,813.00 | 127.24 |

# Initial Calibration Verifications

# Alpha Spectroscopy Calibration Summary

## Detector: AV1

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371830/1 | 05/14/18 15:44 | 82232-334_00001 | 0.2436 | 0.20-0.32 | | |
| ICV 160-371933/1 | 05/18/18 19:25 | 82236-334_00001 | 0.2326 | 0.20-0.32 | 95.5 | 95-105 |
| CCV 160-446625/1 | 10/02/19 09:19 | 82232-334_00001 | 0.2427 | 0.20-0.32 | 99.6 | 95-105 |

## Detector: AV3

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371847/1 | 05/14/18 15:46 | 82236-334_00001 | 0.2444 | 0.20-0.32 | | |
| ICV 160-371942/1 | 05/18/18 19:25 | 82232-334_00001 | 0.2477 | 0.20-0.32 | 101.4 | 95-105 |
| CCV 160-446639/1 | 10/02/19 09:20 | 82236-334_00001 | 0.2463 | 0.20-0.32 | 100.8 | 95-105 |

## Detector: AV4

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371848/1 | 05/14/18 15:46 | 82237-334_00003 | 0.2279 | 0.20-0.32 | | |
| ICV 160-371943/1 | 05/18/18 19:26 | 82244-334_00001 | 0.2237 | 0.20-0.32 | 98.2 | 95-105 |
| CCV 160-446640/1 | 10/02/19 09:21 | 82237-334_00003 | 0.2248 | 0.20-0.32 | 98.7 | 95-105 |

## Detector: AV6

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371855/1 | 05/14/18 15:46 | 82240-334_00001 | 0.2387 | 0.20-0.32 | | |
| ICV 160-371944/1 | 05/18/18 19:26 | 82246-334_00001 | 0.2429 | 0.20-0.32 | 101.8 | 95-105 |
| CCV 160-446645/1 | 10/02/19 09:22 | 82240-334_00001 | 0.2357 | 0.20-0.32 | 98.7 | 95-105 |

## Detector: AV7

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371856/1 | 05/14/18 15:47 | 82241-334_00001 | 0.2298 | 0.20-0.32 | | |
| ICV 160-371945/1 | 05/18/18 19:26 | 82237-334_00003 | 0.2253 | 0.20-0.32 | 98.1 | 95-105 |
| CCV 160-446646/1 | 10/02/19 09:22 | 82241-334_00001 | 0.2260 | 0.20-0.32 | 98.4 | 95-105 |

## Detector: AV239

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401318/1 | 11/15/18 16:17 | 82246-334_00001 | 0.2434 | 0.20-0.32 | | |
| ICV 160-401855/1 | 11/16/18 14:20 | 82240-334_00001 | 0.2375 | 0.20-0.32 | 97.6 | 95-105 |
| CCV 160-444811/2 | 10/01/19 13:11 | 82246-334_00001 | 0.2437 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV240

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401319/1 | 11/15/18 16:17 | 108001_00001 | 0.2828 | 0.20-0.32 | | |
| ICV 160-401856/1 | 11/16/18 14:21 | 108002_00001 | 0.2874 | 0.20-0.32 | 101.6 | 95-105 |
| CCV 160-444812/2 | 10/01/19 13:11 | 108001_00001 | 0.2834 | 0.20-0.32 | 100.2 | 95-105 |

## Detector: AV241

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401320/1 | 11/15/18 19:16 | 108002_00001 | 0.2737 | 0.20-0.32 | | |
| ICV 160-401857/1 | 11/16/18 17:15 | 108001_00001 | 0.2713 | 0.20-0.32 | 99.1 | 95-105 |
| CCV 160-444813/2 | 10/01/19 14:33 | 108002_00001 | 0.2721 | 0.20-0.32 | 99.4 | 95-105 |

# Alpha Spectroscopy Calibration Summary

## Detector: AV243

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401322/1 | 11/15/18 19:16 | 108346_00001 | 0.2676 | 0.20-0.32 | | |
| ICV 160-401859/1 | 11/16/18 17:15 | 108345_00001 | 0.2688 | 0.20-0.32 | 100.4 | 95-105 |
| CCV 160-444815/2 | 10/01/19 14:34 | 108346_00001 | 0.2695 | 0.20-0.32 | 100.7 | 95-105 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:09PM 5/19/2018

## Calibration

Sample Name: ICV-8877;AV1-05182018
Description:
Detector: AV1

Calibration Date: 5/19/2018 3:58:05PM
Analyst: 60040

## Source Info

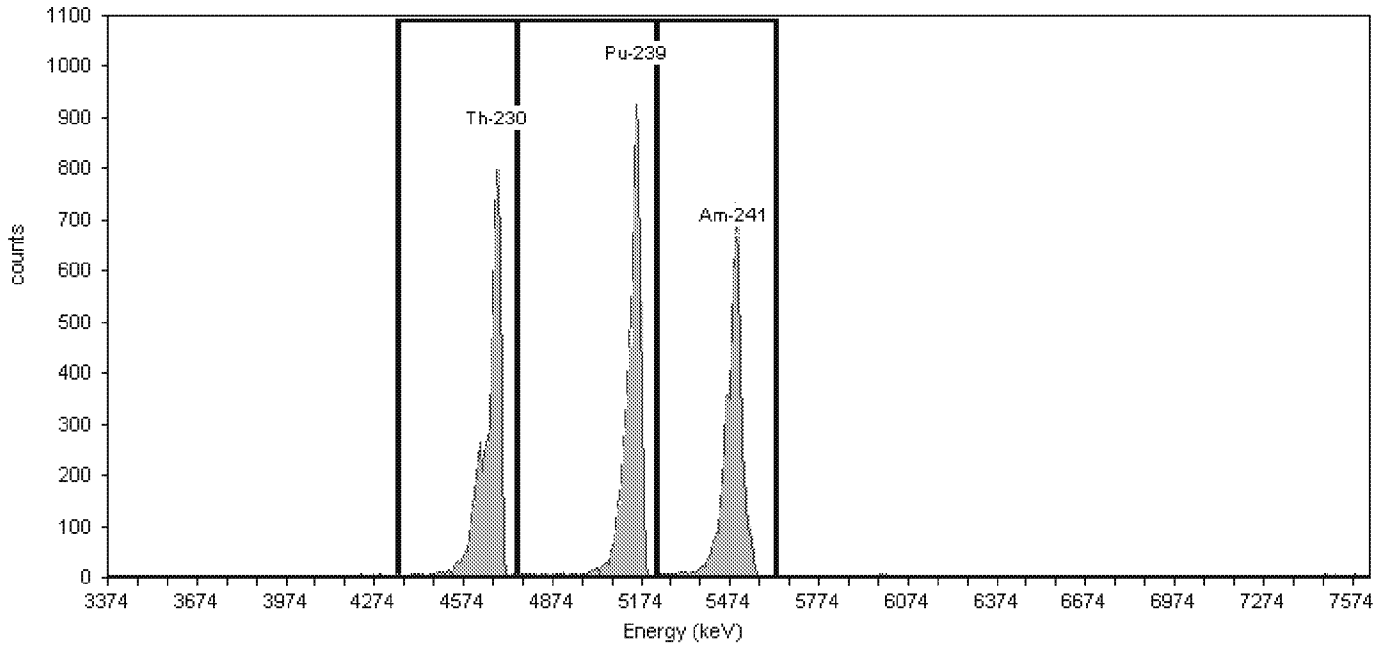
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 5/18/2018 7:25:01PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 23.26% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,697.00 | 94.95 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,038.00 | 100.63 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,570.00 | 92.83 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:37PM 5/19/2018

## Calibration

Sample Name: ICV-7107;AV3-05182018
Description:
Detector: AV3

Calibration Date: 5/19/2018 3:58:34PM
Analyst: 60040

## Source Info

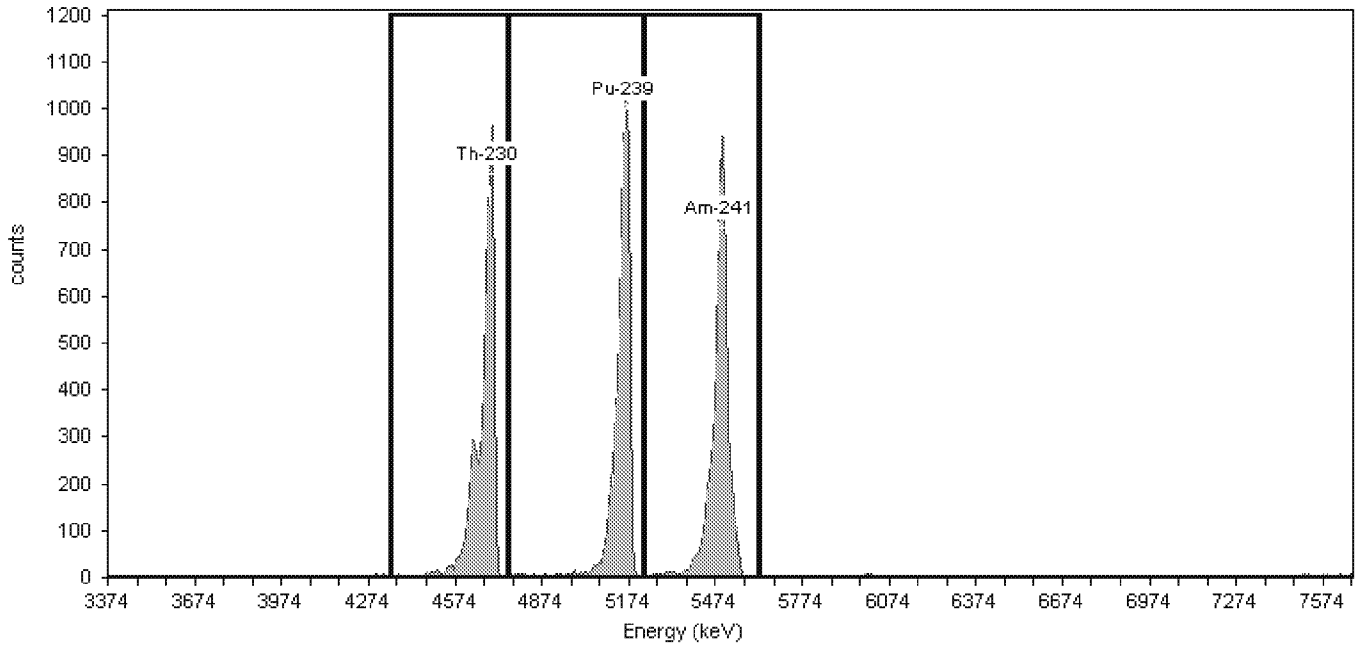
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 5/18/2018 7:25:51PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 24.77% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,662.00 | 111.03 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,545.00 | 109.08 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,389.00 | 106.48 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:48PM 5/19/2018

## Calibration

Sample Name: ICV-9817;AV4-05182018
Description:
Detector: AV4

Calibration Date: 5/19/2018 3:58:45PM
Analyst: 60040

## Source Info

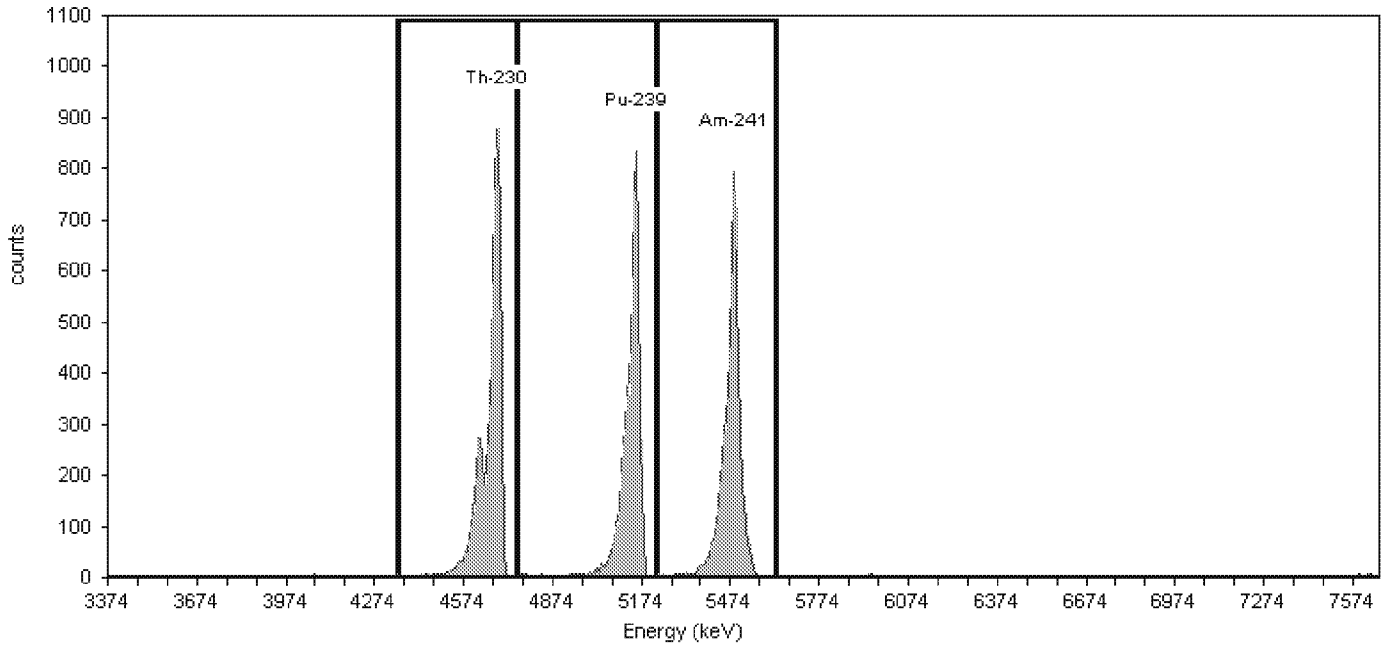
Certificate ID: 82244-334
Prepared by: Analytics

Certification Date: 6/9/2010 12:00:00PM
Description:

## Acquisition

Detector: AV4 , SN: 46-033Q4
Acquisition Start Date: 5/18/2018 7:26:15PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 22.37% +/- 0.38% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,064.00 | 101.07 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,321.00 | 88.68 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,439.00 | 90.65 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:59PM 5/19/2018

## Calibration

Sample Name: ICV-9885;AV6-05182018
Description:
Detector: AV6

Calibration Date: 5/19/2018 3:58:56PM
Analyst: 60040

## Source Info

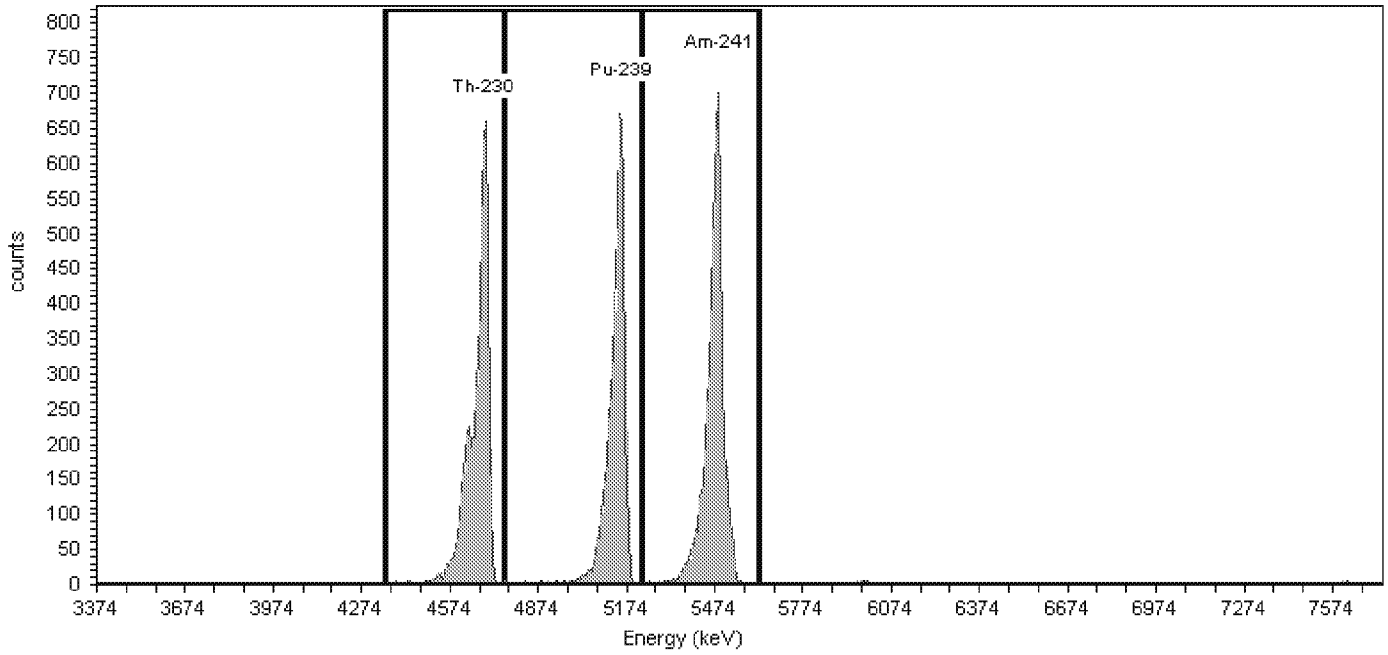
Certificate ID: 82246-334
Prepared by: Analytics

Certification Date: 6/9/2010 12:00:00PM
Description:

## Acquisition

Detector: AV6 , SN: 47-27FF2
Acquisition Start Date: 5/18/2018 7:26:35PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 24.29% +/- 0.47% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 4,962.00 | 82.70 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 4,660.00 | 77.67 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,120.00 | 85.33 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:12PM 5/19/2018

## Calibration

Sample Name: ICV-9520;AV7-05182018
Description:
Detector: AV7

Calibration Date: 5/19/2018 3:59:09PM
Analyst: 60040

## Source Info

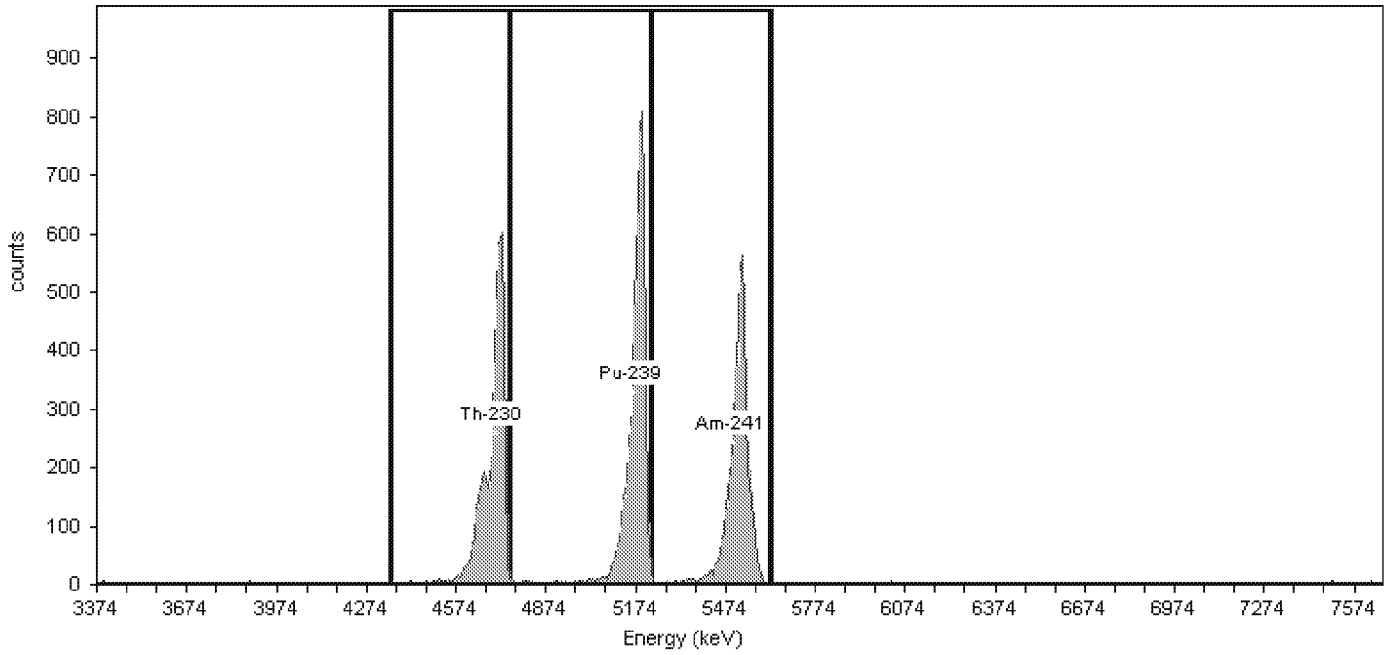
Certificate ID: 82237-334
Prepared by: Analytics

Certification Date: 6/1/2010 12:00:00PM
Description:

## Acquisition

Detector: AV7 , SN: 48-158EE5
Acquisition Start Date: 5/18/2018 7:26:58PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 22.53% +/- 0.43% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 4,559.00 | 75.98 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,466.00 | 91.10 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 4,443.00 | 74.05 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:12:38PM 11/20/2018

## Calibration

Sample Name: ICV-9792;AV239-11162018
Description:
Detector: AV239

Analyst: 60040
Analysis Date: 11/16/2018 5:12:22PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82240-334
Prepared by: Analytics
Description:

Certification Date: 6/8/2010 12:00:00PM

## Acquisition

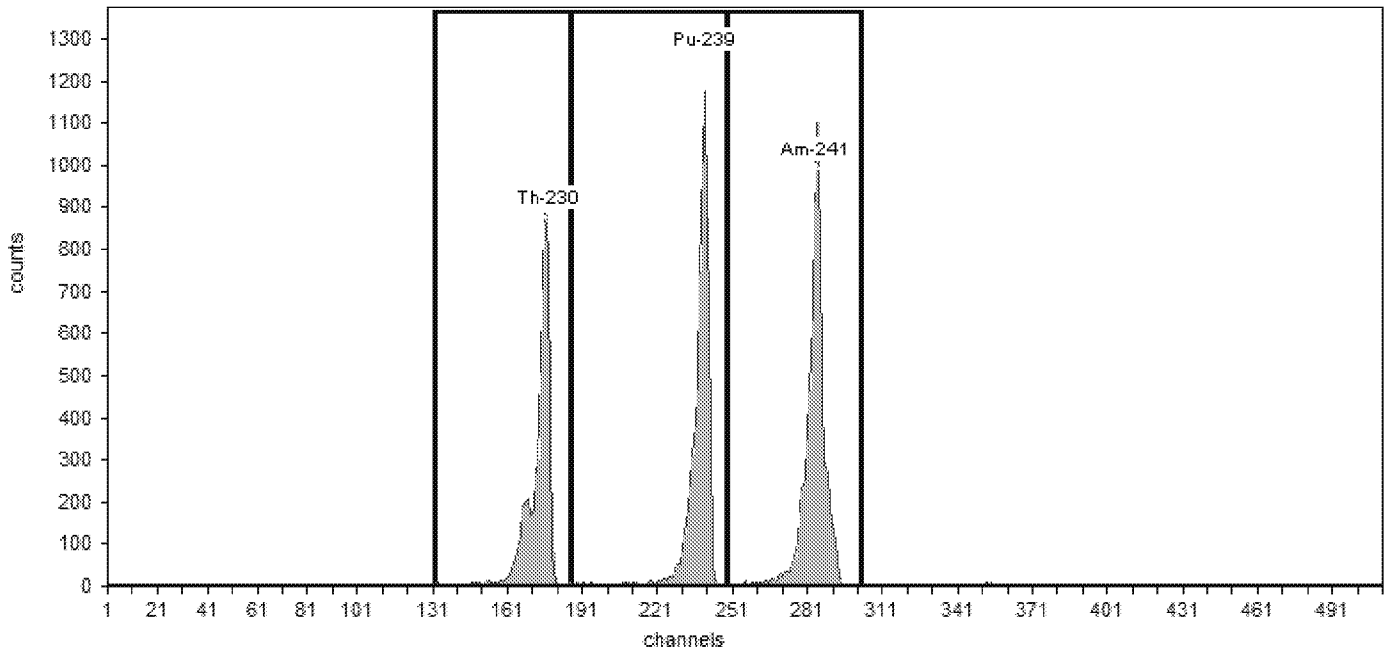
Detector: AV239 , SN: 51-005EE1
Acquisition Start Date: 11/16/2018 2:20:46PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-9792;AV239-1116201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.75% +/- 0.39% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 30.85 | 5,310.00 | 88.50 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 30.72 | 6,282.00 | 104.70 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 31.52 | 6,935.00 | 115.58 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:12:26PM 11/16/2018

## Calibration

Sample Name: ICV-1368447;AV240-11162018
Description:
Detector: AV240

Analyst: 60040
Analysis Date: 11/16/2018 5:12:25PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/1/2017 12:00:00PM

## Acquisition

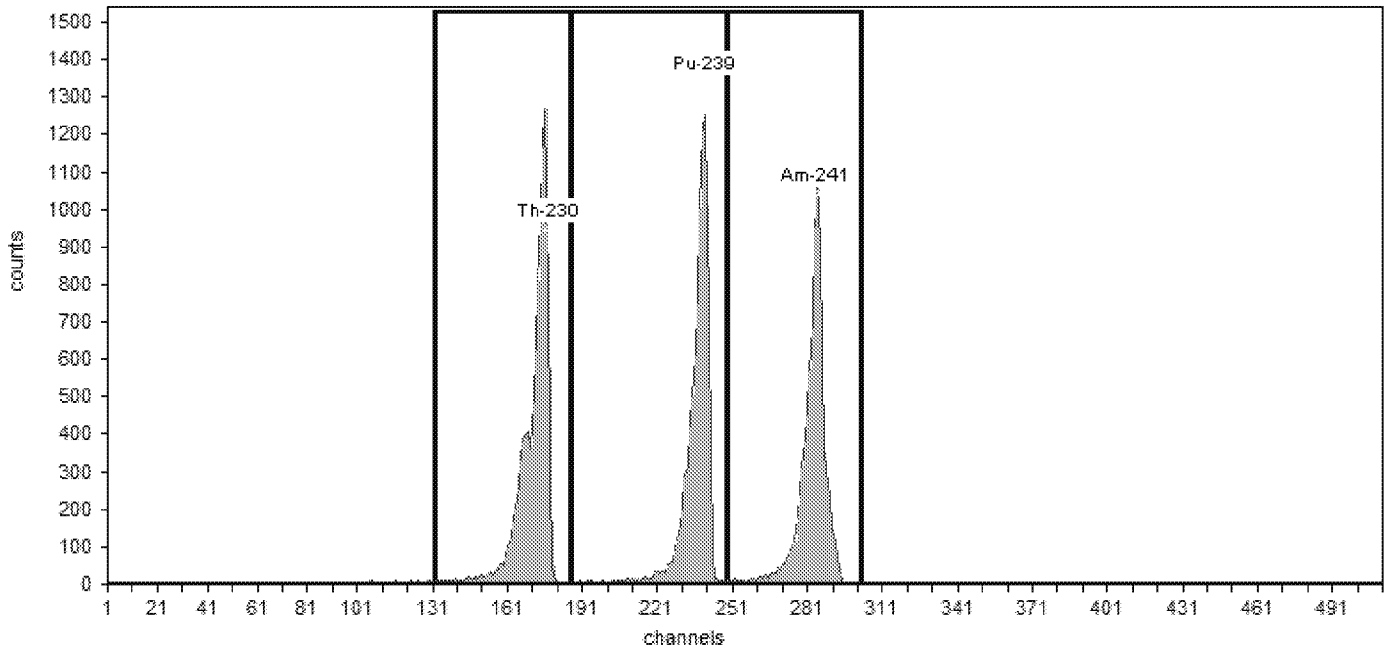
Detector: AV240 , SN: 51-005Q1
Acquisition Start Date: 11/16/2018 2:21:02PM

Live Time: 60.00 min.
Real Time: 60.01 min.

Efficiency Calibration Name: ICV-1368447;AV240-1116

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 28.74% +/- 0.35% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 39.81 | 9,756.00 | 162.60 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 40.63 | 8,813.00 | 146.88 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 41.10 | 8,286.00 | 138.10 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:47:44AM 11/18/2018

## Calibration

Sample Name: ICV-1368446;AV241-11162018
Description:
Detector: AV241

Analyst: 60040
Analysis Date: 11/18/2018 1:47:43AM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/6/2017 12:00:00PM

## Acquisition

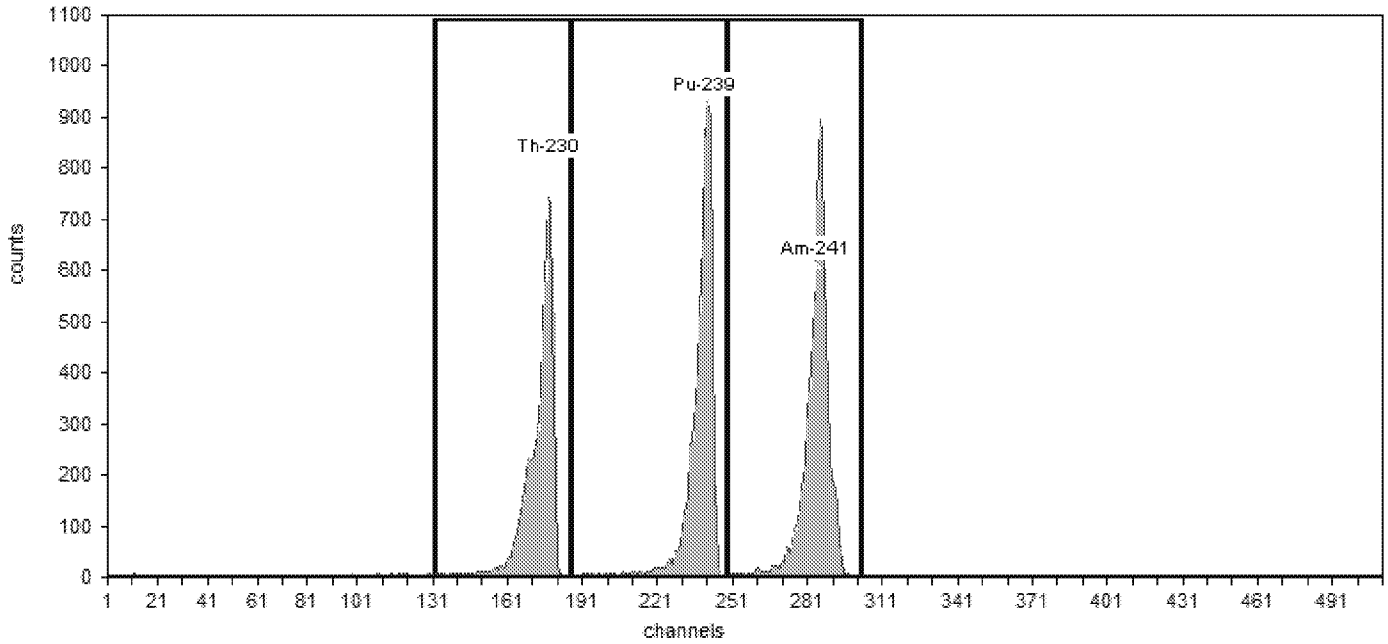
Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/16/2018 5:15:14PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-1368446;AV241-1116

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.13% +/- 0.39% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 39.41 | 5,791.00 | 96.52 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 41.69 | 6,631.00 | 110.52 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 43.52 | 7,055.00 | 117.58 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:12:45PM 11/20/2018

## Calibration

Sample Name: ICV-1370621;AV243-11162018
Description:
Detector: AV243

Analyst: 60040
Analysis Date: 11/18/2018 1:47:51AM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108345_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

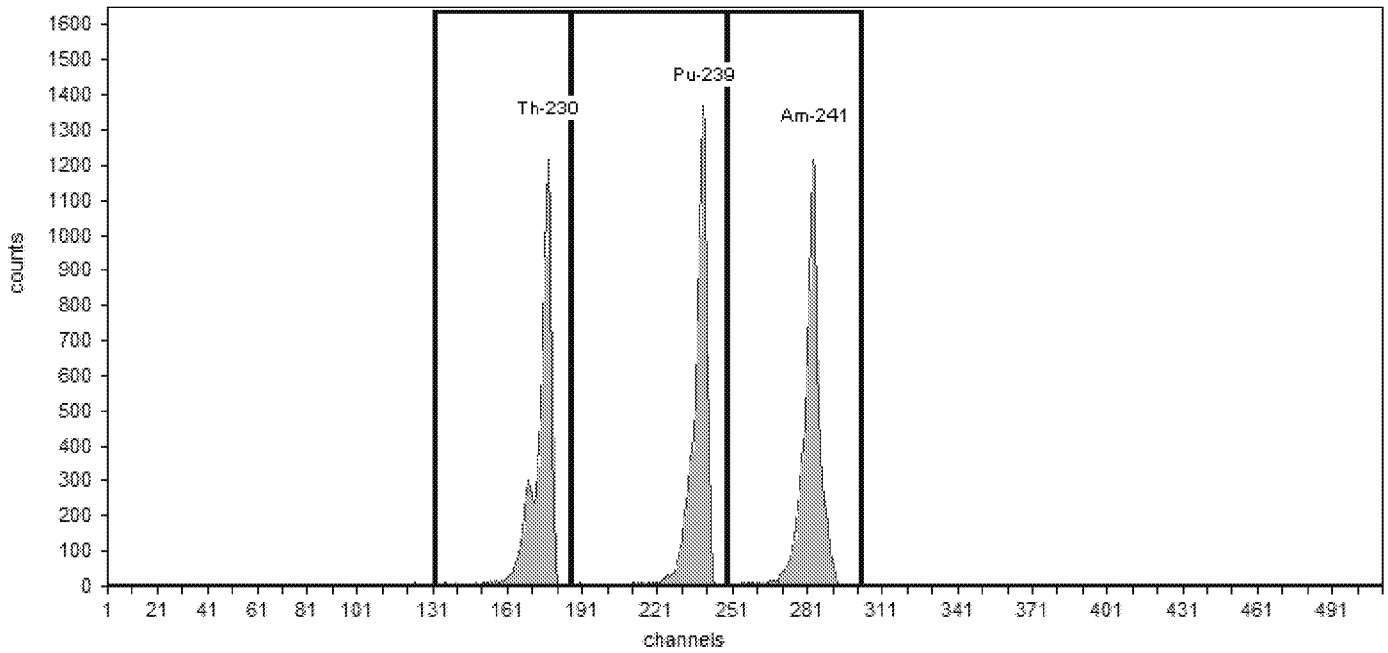
Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/16/2018 5:15:43PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-1370621;AV243-1116

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.88% +/- 0.36% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 29.90 | 7,075.00 | 117.92 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.61 | 7,493.00 | 124.88 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 31.71 | 7,611.00 | 126.85 |

# Monthly Calibration Verifications

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:52:18AM 10/2/2019

## Calibration

Sample Name: CCV-7107;AV1-20191002
Description:
Detector: AV1

Calibration Date: 10/2/2019 10:52:11AM
Analyst: 60040

## Source Info

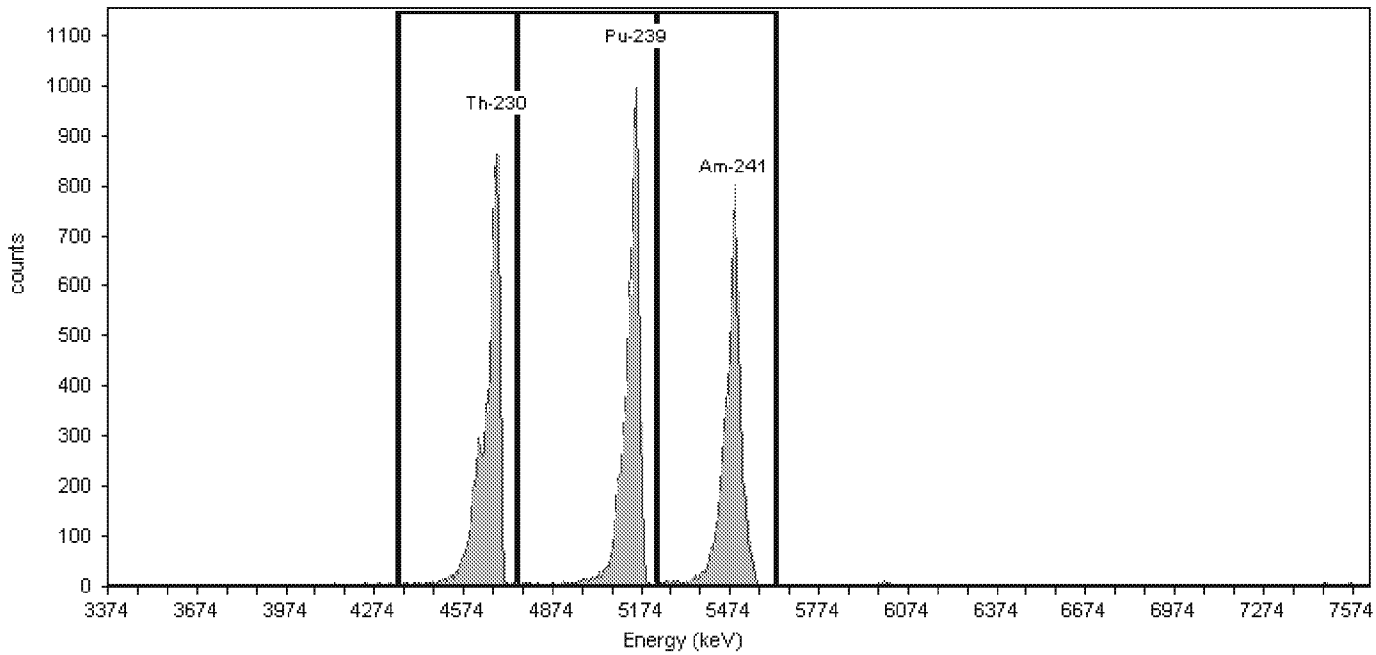
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 10/2/2019 9:19:24AM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 24.27% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,523.00 | 108.72 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,556.00 | 109.27 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,125.00 | 102.08 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:53:06AM 10/2/2019

## Calibration

Sample Name: CCV-8877;AV3-20191002
Description:
Detector: AV3

Calibration Date: 10/2/2019 10:53:02AM
Analyst: 60040

## Source Info

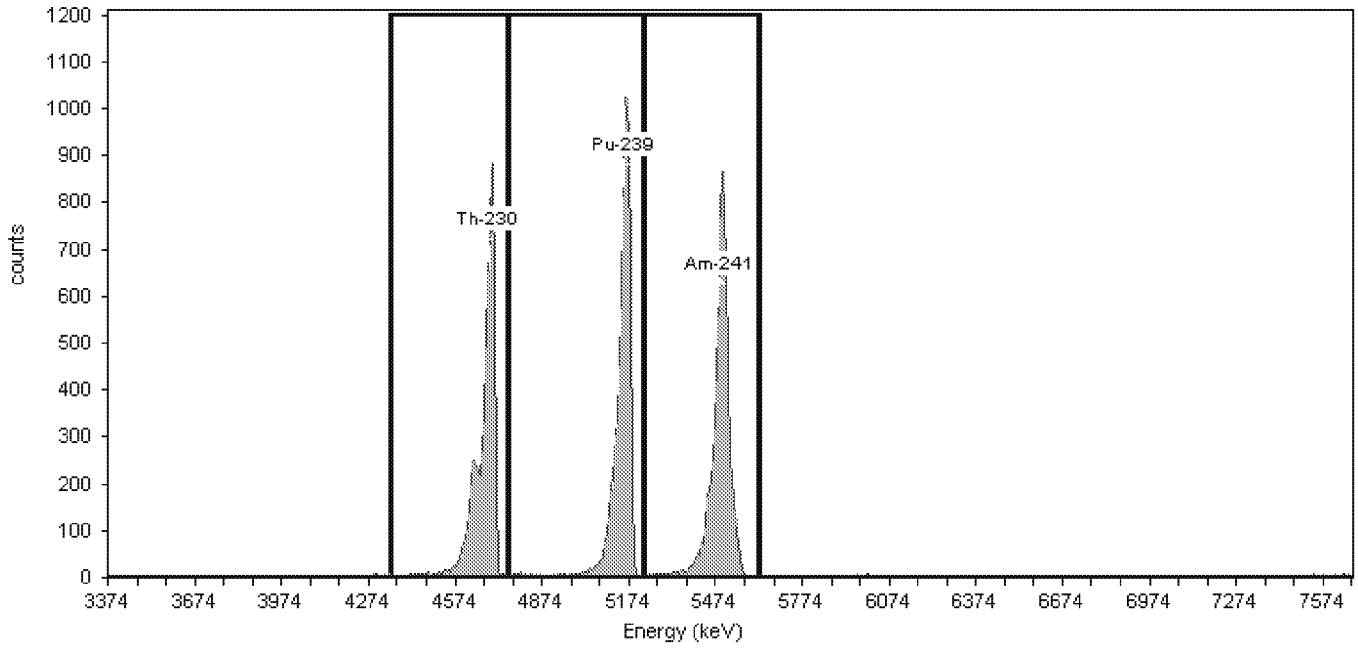
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 10/2/2019 9:20:46AM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 24.63% +/- 0.41% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,983.00 | 99.72 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,284.00 | 104.73 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,025.00 | 100.42 |

TestAmerica
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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:53:20AM 10/2/2019

## Calibration

Sample Name: CCV-9520;AV4-20191002
Description:
Detector: AV4

Calibration Date: 10/2/2019 10:53:16AM
Analyst: 60040

## Source Info

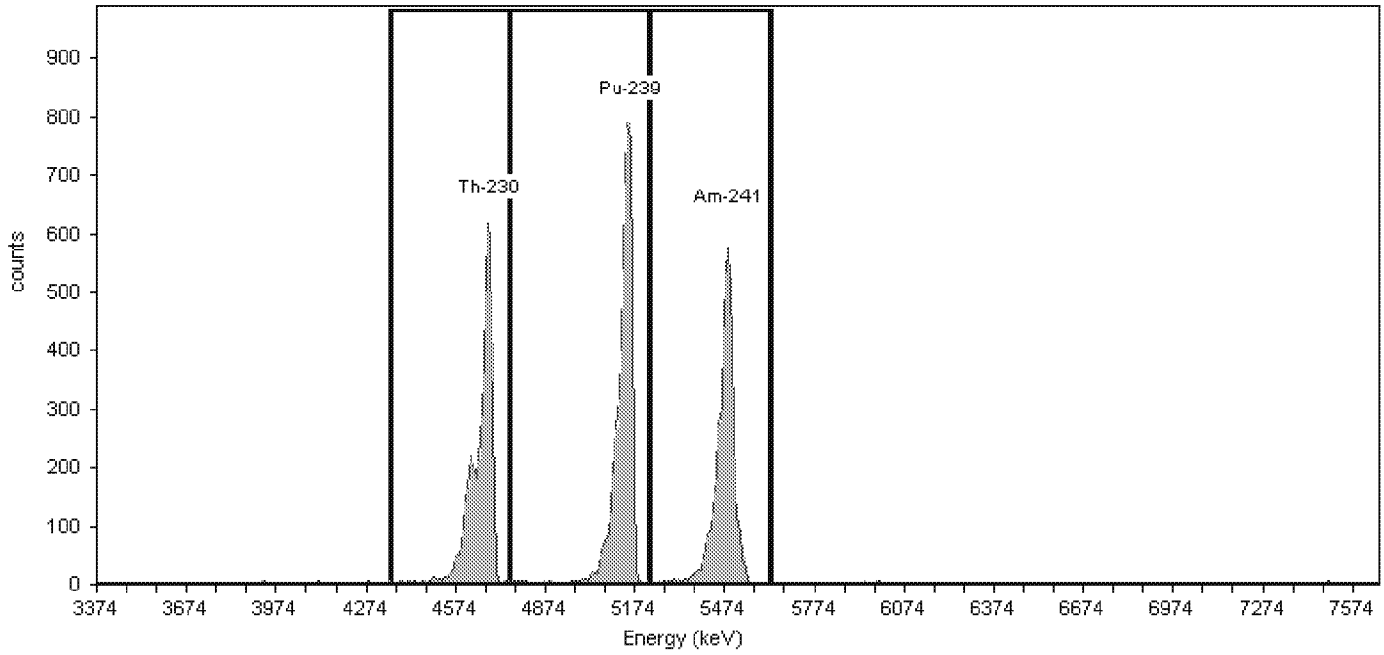
Certificate ID: 82237-334
Prepared by: Analytics

Certification Date: 6/1/2010 12:00:00PM
Description:

## Acquisition

Detector: AV4 , SN: 46-033Q4
Acquisition Start Date: 10/2/2019 9:21:30AM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 22.48% +/- 0.43% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 4,646.00 | 77.43 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,432.00 | 90.53 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 4,344.00 | 72.40 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:53:33AM 10/2/2019

## Calibration

Sample Name: CCV-9792;AV6-20191002
Description:
Detector: AV6

Calibration Date: 10/2/2019 10:53:29AM
Analyst: 60040

## Source Info

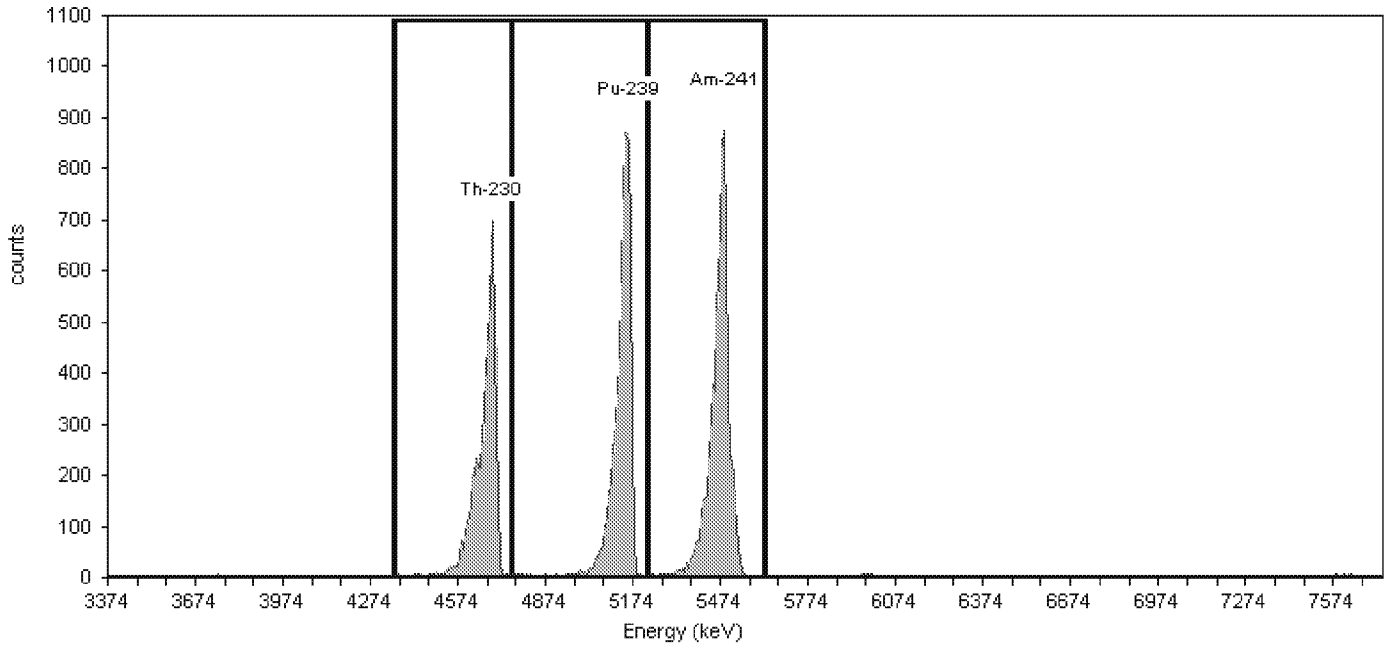
Certificate ID: 82240-334
Prepared by: Analytics

Certification Date: 6/8/2010 12:00:00PM
Description:

## Acquisition

Detector: AV6 , SN: 47-27FF2
Acquisition Start Date: 10/2/2019 9:22:10AM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 23.57% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,308.00 | 88.47 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,255.00 | 104.25 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,812.00 | 113.53 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:53:52AM 10/2/2019

## Calibration

Sample Name: CCV-9793;AV7-20191002
Description:
Detector: AV7

Calibration Date: 10/2/2019 10:53:47AM
Analyst: 60040

## Source Info

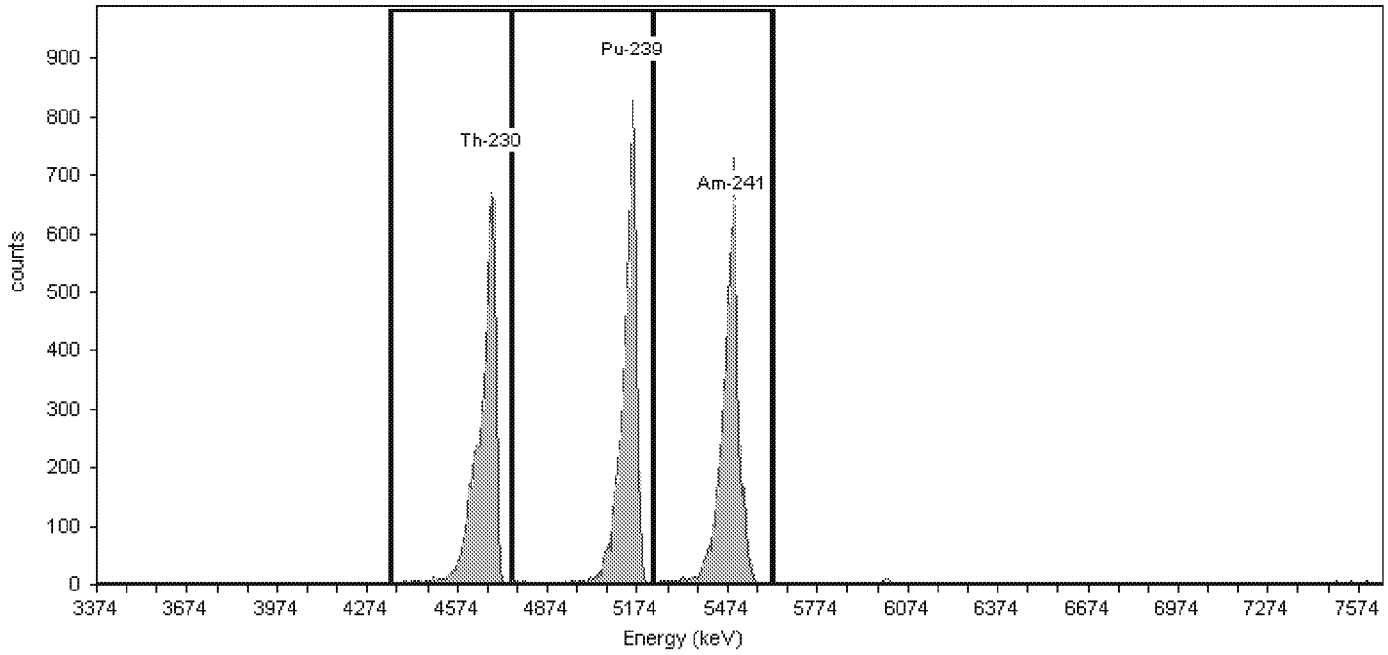
Certificate ID: 82241-334
Prepared by: Analytics

Certification Date: 6/8/2010 12:00:00PM
Description:

## Acquisition

Detector: AV7 , SN: 48-158EE5
Acquisition Start Date: 10/2/2019 9:22:41AM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 22.60% +/- 0.40% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,396.00 | 89.93 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,483.00 | 91.38 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,372.00 | 89.53 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:20:28PM 10/1/2019

## Calibration

Sample Name: CCV-9885;AV239-20191001
Description:
Detector: AV239

Analyst: 60040
Analysis Date: 10/1/2019 2:20:27PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82246-334
Prepared by: Analytics
Description:

Certification Date: 6/9/2010 12:00:00PM

## Acquisition

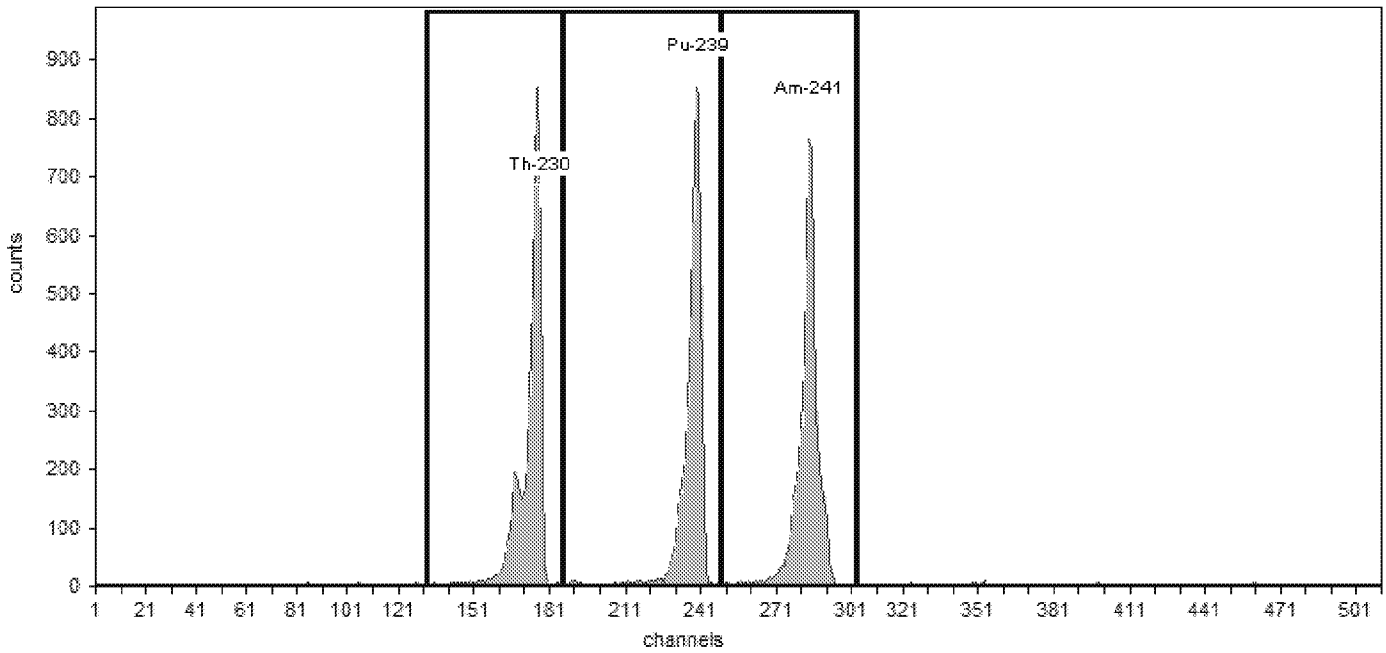
Detector: AV239 , SN: 51-005EE1
Acquisition Start Date: 10/1/2019 1:11:14PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: CCV-9885;AV239-201910(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.37% +/- 0.47% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 29.06 | 4,799.00 | 79.98 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 33.18 | 4,785.00 | 79.75 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 34.08 | 5,196.00 | 86.60 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:20:38PM 10/1/2019

## Calibration

Sample Name: CCV-1368446;AV240-20191001
Description:
Detector: AV240

Analyst: 60040
Analysis Date: 10/1/2019 2:20:37PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/6/2017 12:00:00PM

## Acquisition

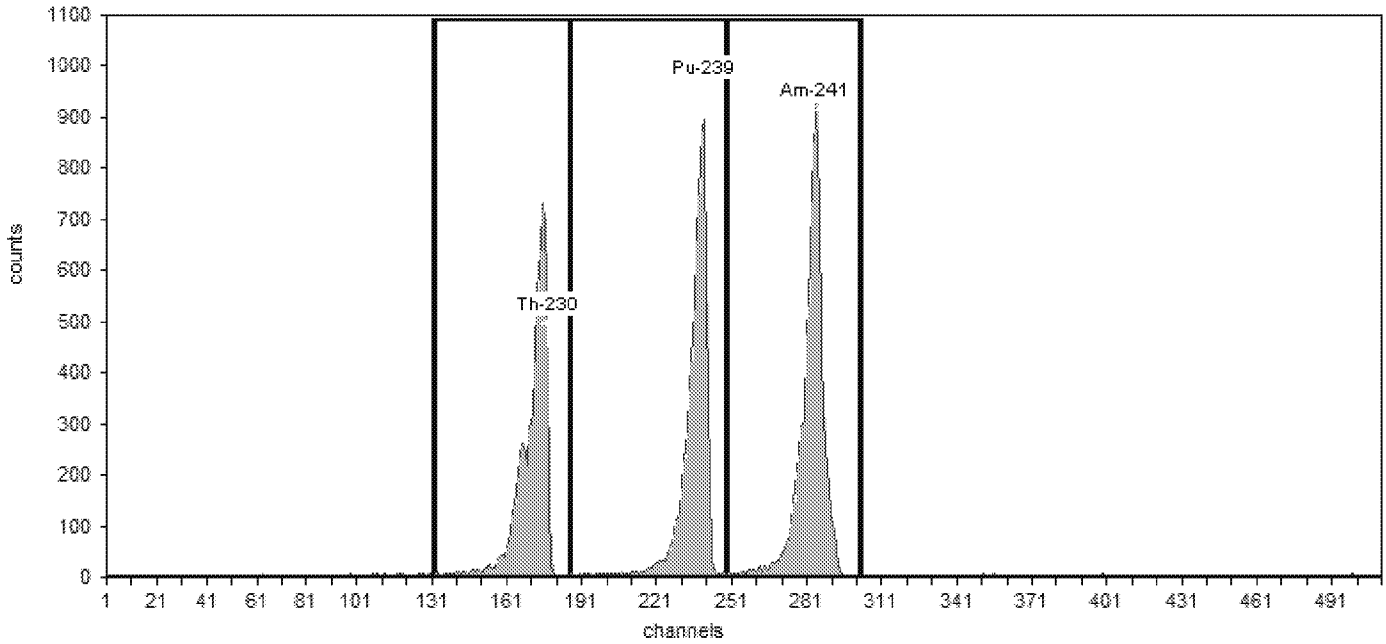
Detector: AV240 , SN: 51-005Q1
Acquisition Start Date: 10/1/2019 1:11:46PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: CCV-1368446;AV240-201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 28.34% +/- 0.40% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 43.01 | 6,168.00 | 102.80 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 44.68 | 6,699.00 | 111.65 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 45.04 | 7,464.00 | 124.40 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:24:58AM 10/2/2019

## Calibration

Sample Name: CCV-1368447;AV241-20191001
Description:
Detector: AV241

Analyst: 60040
Analysis Date: 10/2/2019 7:24:56AM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/1/2017 12:00:00PM

## Acquisition

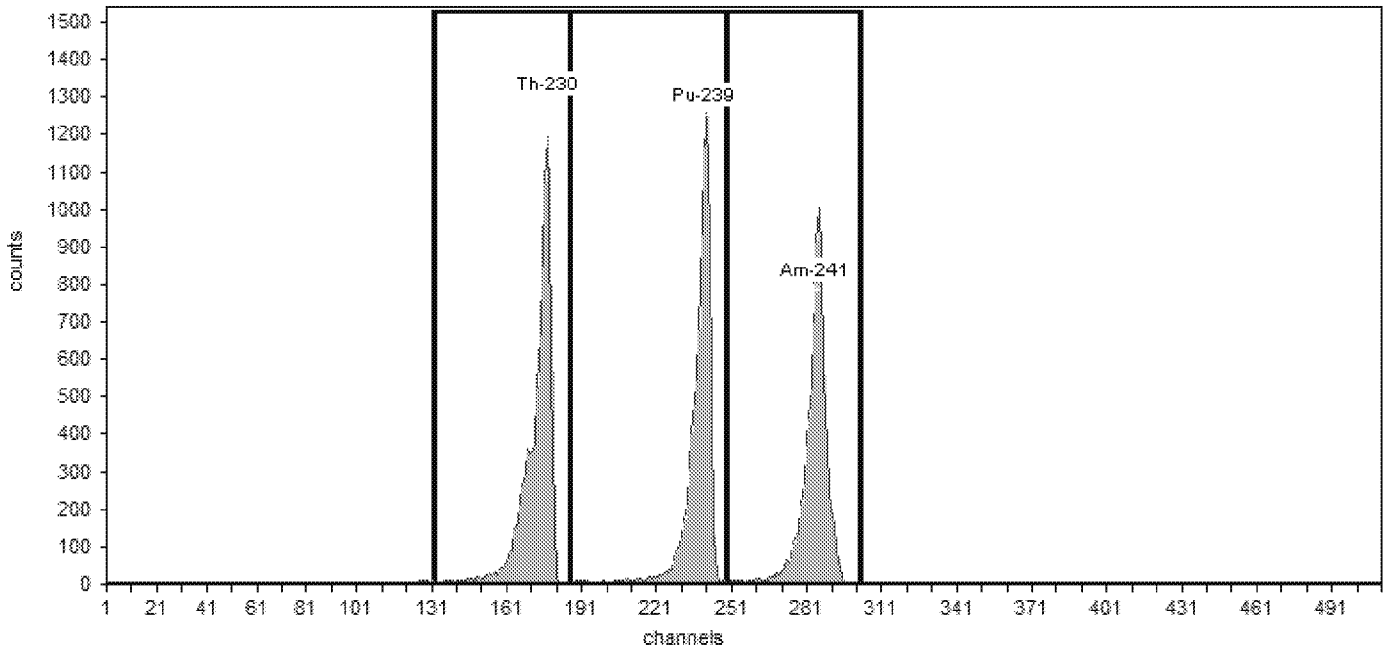
Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 10/1/2019 2:33:07PM

Live Time: 60.00 min.
Real Time: 60.01 min.

Efficiency Calibration Name: CCV-1368447;AV241-201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.21% +/- 0.34% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 40.29 | 9,185.00 | 153.08 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 37.65 | 8,445.00 | 140.75 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 40.87 | 7,784.00 | 129.73 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:25:20AM 10/2/2019

## Calibration

Sample Name: CCV-1370622;AV243-20191001
Description:
Detector: AV243

Analyst: 60040
Analysis Date: 10/2/2019 7:25:19AM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

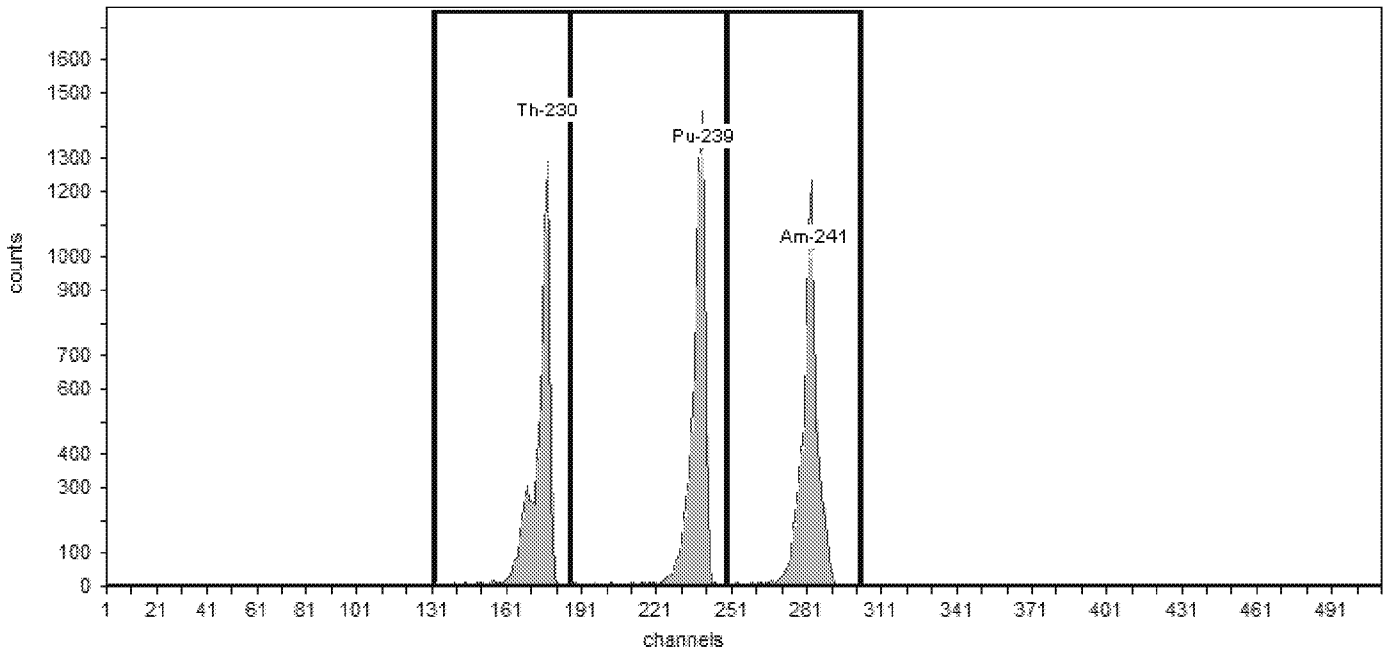
Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 10/1/2019 2:34:03PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: CCV-1370622;AV243-201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.95% +/- 0.36% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 29.18 | 7,291.00 | 121.52 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 32.19 | 7,784.00 | 129.73 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 32.01 | 7,637.00 | 127.28 |

# Monthly Backgrounds

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Background Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:35:02AM 10/6/2019

## Sample

Sample Name: ICB;AV1
Comment:

Spectrum #1 Analysis #1

## Batch

Batch Name: October2019
Description:

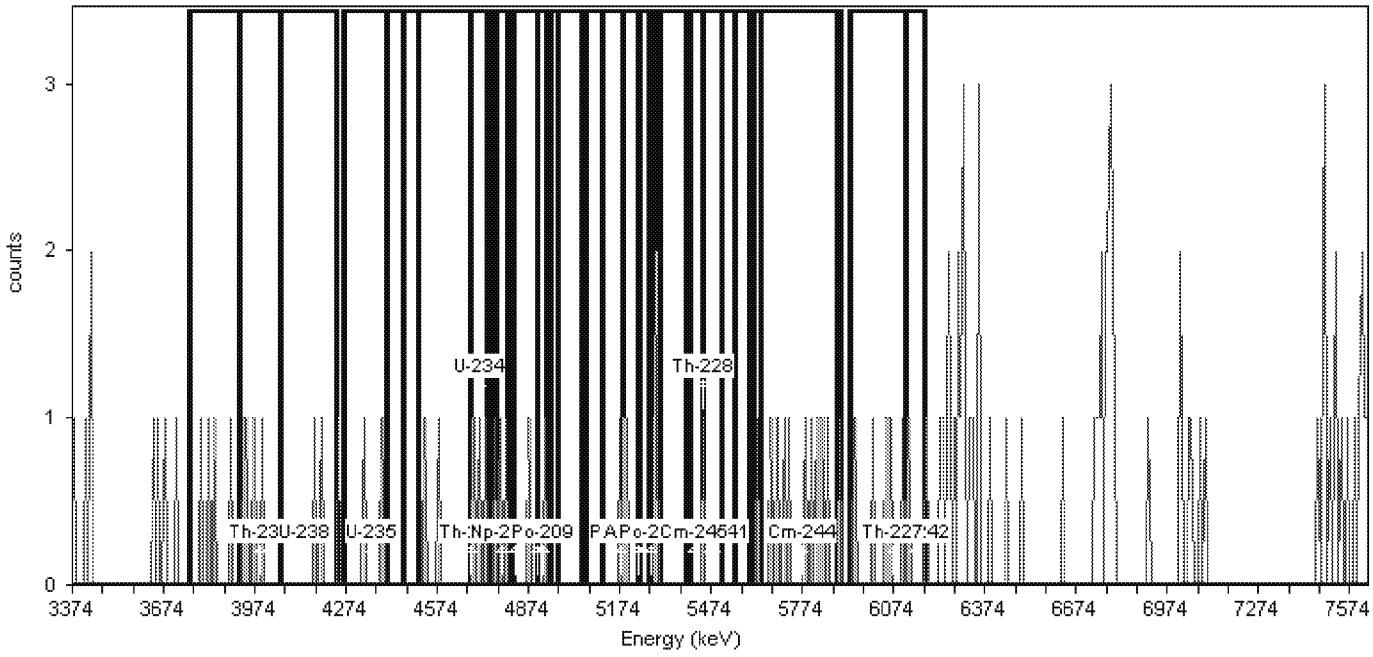
Analyst: 60040

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 10/5/2019 2:26:00PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 123.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (MeV) | Start Energy (MeV) | End Energy (MeV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Cm-242 | 6.15 | 6.12 | 6.18 | 1.00 | 1.042E-003 | 1.473E-003 |
| Th-232 | 3.99 | 3.75 | 4.05 | 9.00 | 9.375E-003 | 3.294E-003 |
| U-238 | 4.14 | 3.92 | 4.24 | 7.00 | 7.292E-003 | 2.946E-003 |
| U-235 | 4.36 | 4.26 | 4.46 | 2.00 | 2.083E-003 | 1.804E-003 |
| Th-230 | 4.68 | 4.40 | 4.75 | 6.00 | 6.250E-003 | 2.756E-003 |
| U-234 | 4.71 | 4.51 | 4.82 | 9.00 | 9.375E-003 | 3.294E-003 |
| Pu-242 | 4.90 | 4.68 | 4.95 | 9.00 | 9.375E-003 | 3.294E-003 |
| Th-229 | 4.83 | 4.74 | 5.12 | 5.00 | 5.208E-003 | 2.552E-003 |
| Np-237 | 4.78 | 4.77 | 4.81 | 2.00 | 2.083E-003 | 1.804E-003 |
| Po-209 | 4.92 | 4.90 | 4.93 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-239 | 5.18 | 4.97 | 5.24 | 3.00 | 3.125E-003 | 2.083E-003 |
| Am-243 | 5.23 | 5.05 | 5.31 | 5.00 | 5.208E-003 | 2.552E-003 |
| U-232 | 5.25 | 5.06 | 5.40 | 5.00 | 5.208E-003 | 2.552E-003 |
| Th-228 | 5.45 | 5.19 | 5.51 | 5.00 | 5.208E-003 | 2.552E-003 |
| Po-210 | 5.28 | 5.23 | 5.29 | 2.00 | 2.083E-003 | 1.804E-003 |
| Pu-238 | 5.47 | 5.27 | 5.55 | 3.00 | 3.125E-003 | 2.083E-003 |
| Am-241 | 5.48 | 5.30 | 5.60 | 1.00 | 1.042E-003 | 1.473E-003 |
| Cm-245 | 5.42 | 5.40 | 5.45 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-236 | 5.76 | 5.61 | 5.89 | 13.00 | 1.354E-002 | 3.898E-003 |
| Cm-244 | 5.78 | 5.64 | 5.90 | 13.00 | 1.354E-002 | 3.898E-003 |
| Th-227 | 6.07 | 5.93 | 6.18 | 7.00 | 7.292E-003 | 2.946E-003 |

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# Alpha-Spectroscopy Background Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:35:28AM 10/6/2019

## Sample

Sample Name: ICB;AV3
Comment:

Spectrum #1 Analysis #1

## Batch

Batch Name: October2019
Description:

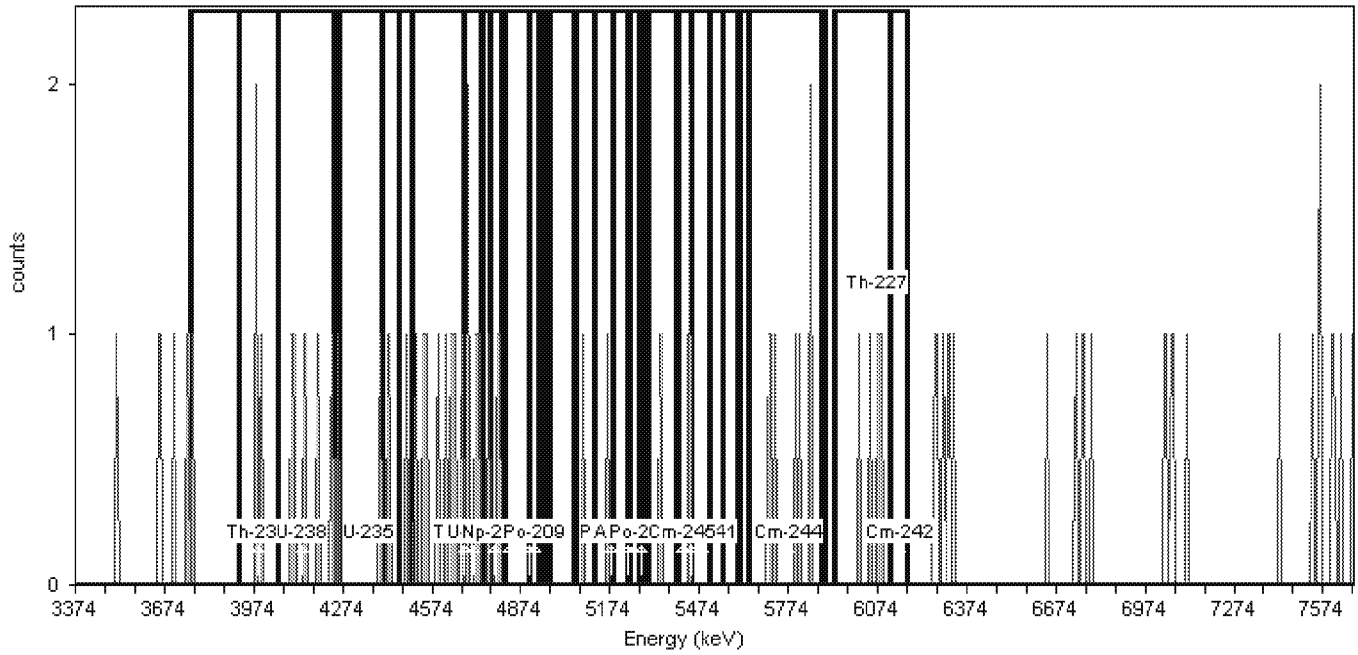
Analyst: 60040

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 10/5/2019 2:26:03PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.44% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 77.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (MeV) | Start Energy (MeV) | End Energy (MeV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3.99 | 3.75 | 4.05 | 4.00 | 4.167E-003 | 2.329E-003 |
| U-238 | 4.14 | 3.92 | 4.24 | 8.00 | 8.333E-003 | 3.125E-003 |
| U-235 | 4.36 | 4.26 | 4.46 | 2.00 | 2.083E-003 | 1.804E-003 |
| Th-230 | 4.68 | 4.40 | 4.75 | 16.00 | 1.667E-002 | 4.295E-003 |
| U-234 | 4.71 | 4.51 | 4.82 | 17.00 | 1.771E-002 | 4.419E-003 |
| Pu-242 | 4.90 | 4.68 | 4.95 | 8.00 | 8.333E-003 | 3.125E-003 |
| Th-229 | 4.83 | 4.74 | 5.12 | 4.00 | 4.167E-003 | 2.329E-003 |
| Np-237 | 4.78 | 4.77 | 4.81 | 2.00 | 2.083E-003 | 1.804E-003 |
| Po-209 | 4.92 | 4.90 | 4.93 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-239 | 5.18 | 4.97 | 5.24 | 2.00 | 2.083E-003 | 1.804E-003 |
| Am-243 | 5.23 | 5.05 | 5.31 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-232 | 5.25 | 5.06 | 5.40 | 3.00 | 3.125E-003 | 2.083E-003 |
| Th-228 | 5.45 | 5.19 | 5.51 | 3.00 | 3.125E-003 | 2.083E-003 |
| Po-210 | 5.28 | 5.23 | 5.29 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-238 | 5.47 | 5.27 | 5.55 | 3.00 | 3.125E-003 | 2.083E-003 |
| Am-241 | 5.48 | 5.30 | 5.60 | 3.00 | 3.125E-003 | 2.083E-003 |
| Cm-245 | 5.42 | 5.40 | 5.45 | 2.00 | 2.083E-003 | 1.804E-003 |
| Pu-236 | 5.76 | 5.61 | 5.89 | 7.00 | 7.292E-003 | 2.946E-003 |
| Cm-244 | 5.78 | 5.64 | 5.90 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-227 | 6.07 | 5.93 | 6.18 | 5.00 | 5.208E-003 | 2.552E-003 |
| Cm-242 | 6.15 | 6.12 | 6.18 | 0.00 | 0.000E+000 | 1.473E-003 |

TestAmerica
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# Alpha-Spectroscopy Background Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:35:37AM 10/6/2019

## Sample

Sample Name: ICB;AV4
Comment:

Spectrum #1 Analysis #1

## Batch

Batch Name: October2019
Description:

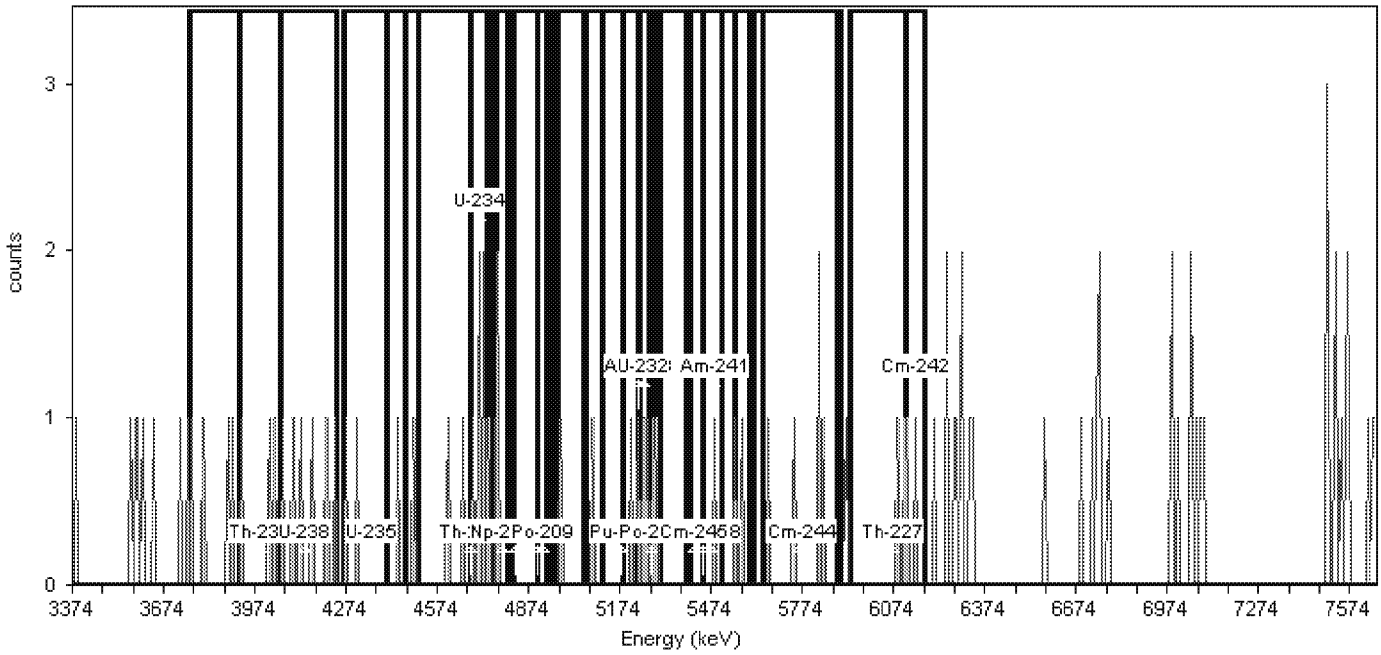
Analyst: 60040

## Acquisition

Detector: AV4 , SN: 46-033Q4
Acquisition Start Date: 10/5/2019 2:23:48PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 96.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (MeV) | Start Energy (MeV) | End Energy (MeV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3.99 | 3.75 | 4.05 | 8.00 | 8.333E-003 | 3.125E-003 |
| U-238 | 4.14 | 3.92 | 4.24 | 12.00 | 1.250E-002 | 3.756E-003 |
| U-235 | 4.36 | 4.26 | 4.46 | 3.00 | 3.125E-003 | 2.083E-003 |
| Th-230 | 4.68 | 4.40 | 4.75 | 10.00 | 1.042E-002 | 3.455E-003 |
| U-234 | 4.71 | 4.51 | 4.82 | 10.00 | 1.042E-002 | 3.455E-003 |
| Pu-242 | 4.90 | 4.68 | 4.95 | 8.00 | 8.333E-003 | 3.125E-003 |
| Th-229 | 4.83 | 4.74 | 5.12 | 5.00 | 5.208E-003 | 2.552E-003 |
| Np-237 | 4.78 | 4.77 | 4.81 | 2.00 | 2.083E-003 | 1.804E-003 |
| Po-209 | 4.92 | 4.90 | 4.93 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-239 | 5.18 | 4.97 | 5.24 | 4.00 | 4.167E-003 | 2.329E-003 |
| Am-243 | 5.23 | 5.05 | 5.31 | 7.00 | 7.292E-003 | 2.946E-003 |
| U-232 | 5.25 | 5.06 | 5.40 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-228 | 5.45 | 5.19 | 5.51 | 7.00 | 7.292E-003 | 2.946E-003 |
| Po-210 | 5.28 | 5.23 | 5.29 | 5.00 | 5.208E-003 | 2.552E-003 |
| Pu-238 | 5.47 | 5.27 | 5.55 | 4.00 | 4.167E-003 | 2.329E-003 |
| Am-241 | 5.48 | 5.30 | 5.60 | 3.00 | 3.125E-003 | 2.083E-003 |
| Cm-245 | 5.42 | 5.40 | 5.45 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-236 | 5.76 | 5.61 | 5.89 | 5.00 | 5.208E-003 | 2.552E-003 |
| Cm-244 | 5.78 | 5.64 | 5.90 | 5.00 | 5.208E-003 | 2.552E-003 |
| Th-227 | 6.07 | 5.93 | 6.18 | 4.00 | 4.167E-003 | 2.329E-003 |
| Cm-242 | 6.15 | 6.12 | 6.18 | 2.00 | 2.083E-003 | 1.804E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Background Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:35:46AM 10/6/2019

## Sample

Sample Name: ICB;AV6
Comment:

Spectrum #1 Analysis #1

## Batch

Batch Name: October2019
Description:

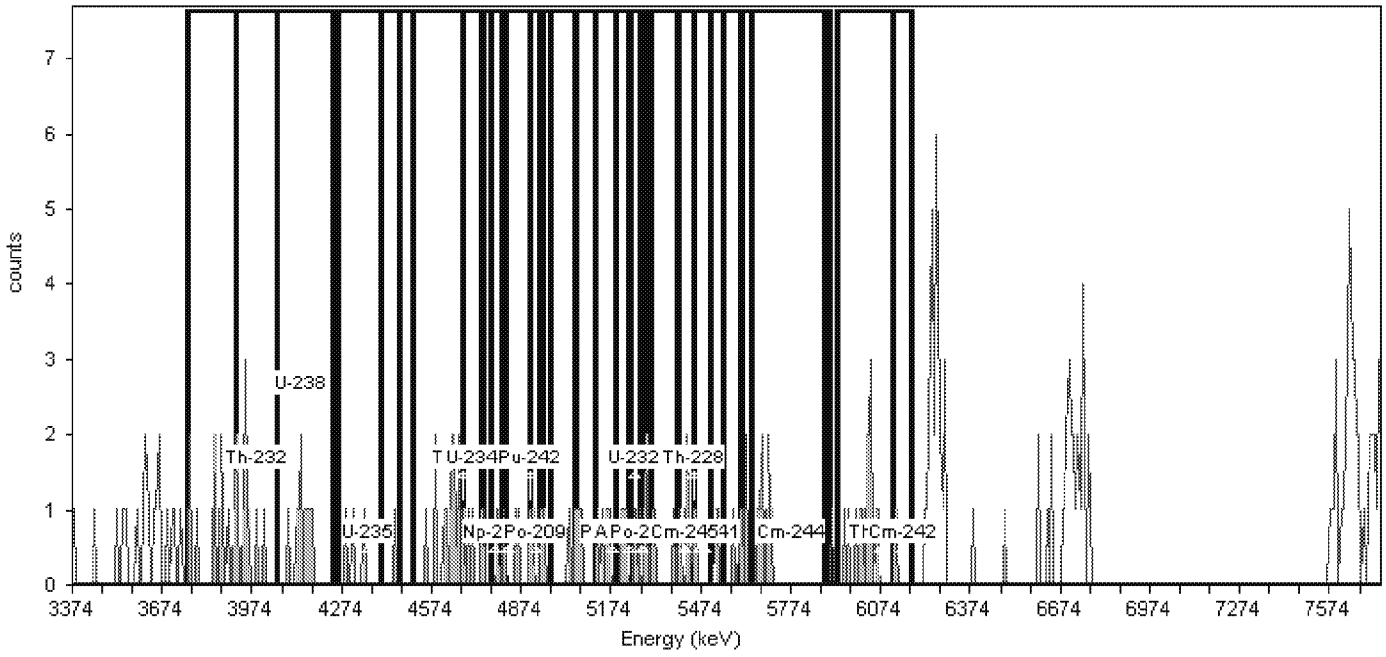
Analyst: 60040

## Acquisition

Detector: AV6 , SN: 47-27FF2
Acquisition Start Date: 10/5/2019 2:23:48PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: IC-9792;AV6-05142018
Calibration Date: 5/14/2018 6:25:47PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.87% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 228.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (MeV) | Start Energy (MeV) | End Energy (MeV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3.99 | 3.75 | 4.05 | 19.00 | 1.979E-002 | 4.658E-003 |
| U-238 | 4.14 | 3.92 | 4.24 | 18.00 | 1.875E-002 | 4.541E-003 |
| U-235 | 4.36 | 4.26 | 4.46 | 4.00 | 4.167E-003 | 2.329E-003 |
| Th-230 | 4.68 | 4.40 | 4.75 | 17.00 | 1.771E-002 | 4.419E-003 |
| U-234 | 4.71 | 4.51 | 4.82 | 18.00 | 1.875E-002 | 4.541E-003 |
| Pu-242 | 4.90 | 4.68 | 4.95 | 14.00 | 1.458E-002 | 4.034E-003 |
| Th-229 | 4.83 | 4.74 | 5.12 | 16.00 | 1.667E-002 | 4.295E-003 |
| Np-237 | 4.78 | 4.77 | 4.81 | 1.00 | 1.042E-003 | 1.473E-003 |
| Po-209 | 4.92 | 4.90 | 4.93 | 3.00 | 3.125E-003 | 2.083E-003 |
| Pu-239 | 5.18 | 4.97 | 5.24 | 13.00 | 1.354E-002 | 3.898E-003 |
| Am-243 | 5.23 | 5.05 | 5.31 | 16.00 | 1.667E-002 | 4.295E-003 |
| U-232 | 5.25 | 5.06 | 5.40 | 19.00 | 1.979E-002 | 4.658E-003 |
| Th-228 | 5.45 | 5.19 | 5.51 | 16.00 | 1.667E-002 | 4.295E-003 |
| Po-210 | 5.28 | 5.23 | 5.29 | 4.00 | 4.167E-003 | 2.329E-003 |
| Pu-238 | 5.47 | 5.27 | 5.55 | 14.00 | 1.458E-002 | 4.034E-003 |
| Am-241 | 5.48 | 5.30 | 5.60 | 13.00 | 1.354E-002 | 3.898E-003 |
| Cm-245 | 5.42 | 5.40 | 5.45 | 5.00 | 5.208E-003 | 2.552E-003 |
| Pu-236 | 5.76 | 5.61 | 5.89 | 10.00 | 1.042E-002 | 3.455E-003 |
| Cm-244 | 5.78 | 5.64 | 5.90 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-227 | 6.07 | 5.93 | 6.18 | 15.00 | 1.563E-002 | 4.167E-003 |
| Cm-242 | 6.15 | 6.12 | 6.18 | 1.00 | 1.042E-003 | 1.473E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Background Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:35:55AM 10/6/2019

## Sample

Sample Name: ICB;AV7
Comment:

Spectrum #1 Analysis #1

## Batch

Batch Name: October2019
Description:

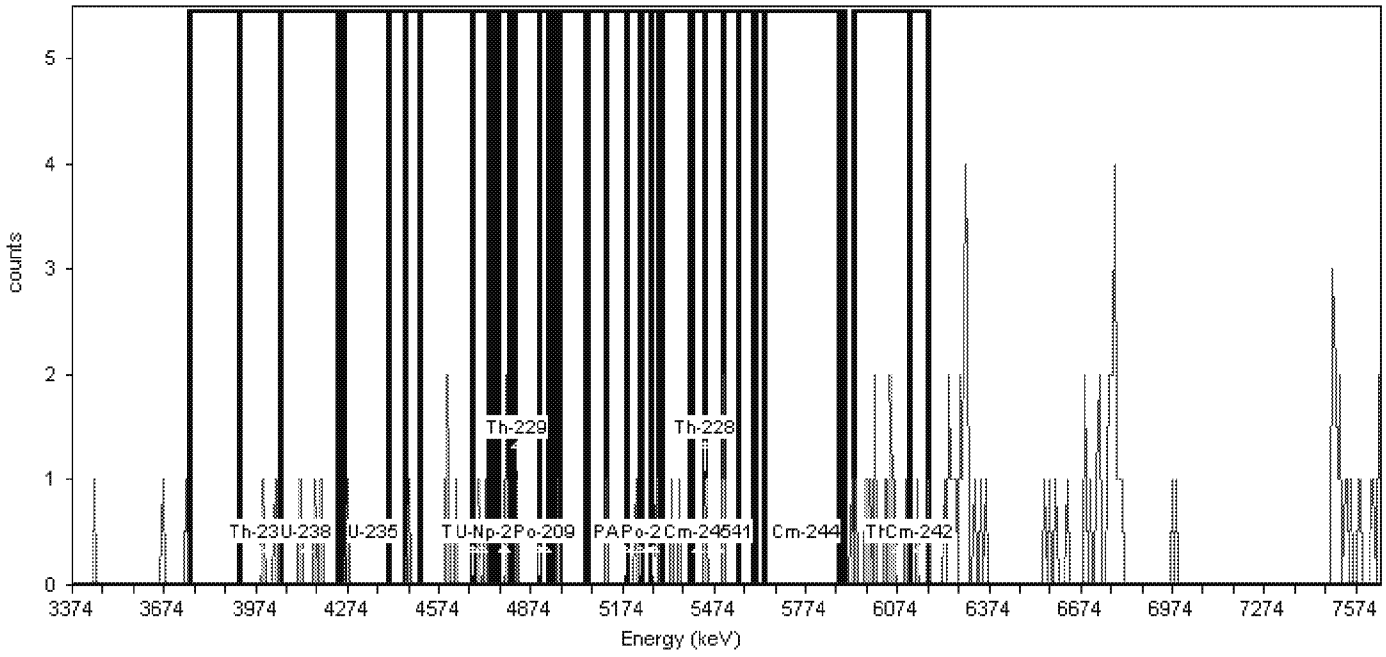
Analyst: 60040

## Acquisition

Detector: AV7 , SN: 48-158EE5
Acquisition Start Date: 10/5/2019 2:23:49PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: IC-9793;AV7-05142018
Calibration Date: 5/14/2018 6:26:13PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.98% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 106.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (MeV) | Start Energy (MeV) | End Energy (MeV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3.99 | 3.75 | 4.05 | 3.00 | 3.125E-003 | 2.083E-003 |
| U-238 | 4.14 | 3.92 | 4.24 | 8.00 | 8.333E-003 | 3.125E-003 |
| U-235 | 4.36 | 4.26 | 4.46 | 1.00 | 1.042E-003 | 1.473E-003 |
| Th-230 | 4.68 | 4.40 | 4.75 | 6.00 | 6.250E-003 | 2.756E-003 |
| U-234 | 4.71 | 4.51 | 4.82 | 7.00 | 7.292E-003 | 2.946E-003 |
| Pu-242 | 4.90 | 4.68 | 4.95 | 5.00 | 5.208E-003 | 2.552E-003 |
| Th-229 | 4.83 | 4.74 | 5.12 | 5.00 | 5.208E-003 | 2.552E-003 |
| Np-237 | 4.78 | 4.77 | 4.81 | 2.00 | 2.083E-003 | 1.804E-003 |
| Po-209 | 4.92 | 4.90 | 4.93 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-239 | 5.18 | 4.97 | 5.24 | 2.00 | 2.083E-003 | 1.804E-003 |
| Am-243 | 5.23 | 5.05 | 5.31 | 3.00 | 3.125E-003 | 2.083E-003 |
| U-232 | 5.25 | 5.06 | 5.40 | 5.00 | 5.208E-003 | 2.552E-003 |
| Th-228 | 5.45 | 5.19 | 5.51 | 7.00 | 7.292E-003 | 2.946E-003 |
| Po-210 | 5.28 | 5.23 | 5.29 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-238 | 5.47 | 5.27 | 5.55 | 6.00 | 6.250E-003 | 2.756E-003 |
| Am-241 | 5.48 | 5.30 | 5.60 | 5.00 | 5.208E-003 | 2.552E-003 |
| Cm-245 | 5.42 | 5.40 | 5.45 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-236 | 5.76 | 5.61 | 5.89 | 0.00 | 0.000E+000 | 1.473E-003 |
| Cm-244 | 5.78 | 5.64 | 5.90 | 0.00 | 0.000E+000 | 1.473E-003 |
| Th-227 | 6.07 | 5.93 | 6.18 | 14.00 | 1.458E-002 | 4.034E-003 |
| Cm-242 | 6.15 | 6.12 | 6.18 | 2.00 | 2.083E-003 | 1.804E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:33:21AM 11/10/2019

## Sample

Sample Name: ICB;AV239
Comment:

Spectrum #1 Analysis #1
Analyst: 60040

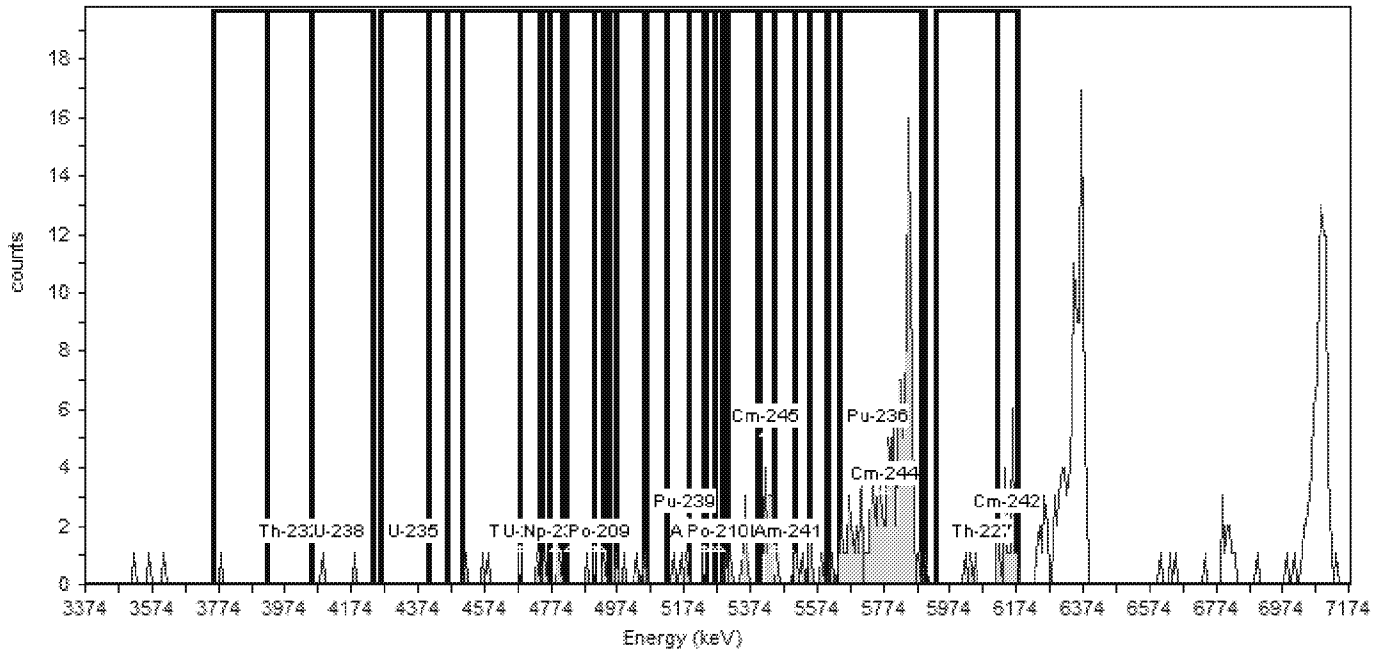
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV239 , SN: 51-005EE1
Acquisition Start Date: 11/9/2019 2:31:26PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Calibration Name: IC-9885;AV239-11152018
Calibration Date: 11/15/2018 6:58:44PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 373.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (keV) | Start Energy (keV) | End Energy (keV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3,985.93 | 3,754.75 | 4,053.05 | 1.00 | 1.042E-003 | 1.473E-003 |
| U-238 | 4,135.08 | 3,918.81 | 4,239.49 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-235 | 4,358.81 | 4,261.86 | 4,463.21 | 0.00 | 0.000E+000 | 1.473E-003 |
| Th-230 | 4,679.48 | 4,403.55 | 4,746.60 | 4.00 | 4.167E-003 | 2.329E-003 |
| U-234 | 4,709.31 | 4,507.96 | 4,821.17 | 8.00 | 8.333E-003 | 3.125E-003 |
| Pu-242 | 4,903.21 | 4,679.48 | 4,947.95 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-229 | 4,828.63 | 4,739.14 | 5,119.48 | 10.00 | 1.042E-002 | 3.455E-003 |
| Np-237 | 4,783.89 | 4,768.97 | 4,806.26 | 3.00 | 3.125E-003 | 2.083E-003 |
| Po-209 | 4,918.12 | 4,903.21 | 4,933.04 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-239 | 5,179.14 | 4,970.33 | 5,238.80 | 7.00 | 7.292E-003 | 2.946E-003 |
| Am-243 | 5,231.34 | 5,052.36 | 5,305.92 | 5.00 | 5.208E-003 | 2.552E-003 |
| U-232 | 5,253.71 | 5,059.82 | 5,402.86 | 10.00 | 1.042E-002 | 3.455E-003 |
| Th-228 | 5,447.61 | 5,186.59 | 5,507.27 | 20.00 | 2.083E-002 | 4.774E-003 |
| Po-210 | 5,276.09 | 5,231.34 | 5,291.00 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-238 | 5,469.98 | 5,268.63 | 5,552.01 | 24.00 | 2.500E-002 | 5.208E-003 |
| Am-241 | 5,484.90 | 5,298.46 | 5,604.22 | 26.00 | 2.708E-002 | 5.413E-003 |
| Cm-245 | 5,417.78 | 5,395.41 | 5,447.61 | 11.00 | 1.146E-002 | 3.608E-003 |
| Pu-236 | 5,760.83 | 5,611.67 | 5,887.60 | 115.00 | 1.198E-001 | 1.122E-002 |
| Cm-244 | 5,775.74 | 5,641.51 | 5,902.52 | 115.00 | 1.198E-001 | 1.122E-002 |
| Th-227 | 6,074.04 | 5,932.35 | 6,178.45 | 20.00 | 2.083E-002 | 4.774E-003 |
| Cm-242 | 6,148.62 | 6,118.79 | 6,178.45 | 17.00 | 1.771E-002 | 4.419E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:33:17AM 11/10/2019

## Sample

Sample Name: ICB;AV240
Comment:

Spectrum #1 Analysis #1
Analyst: 60040

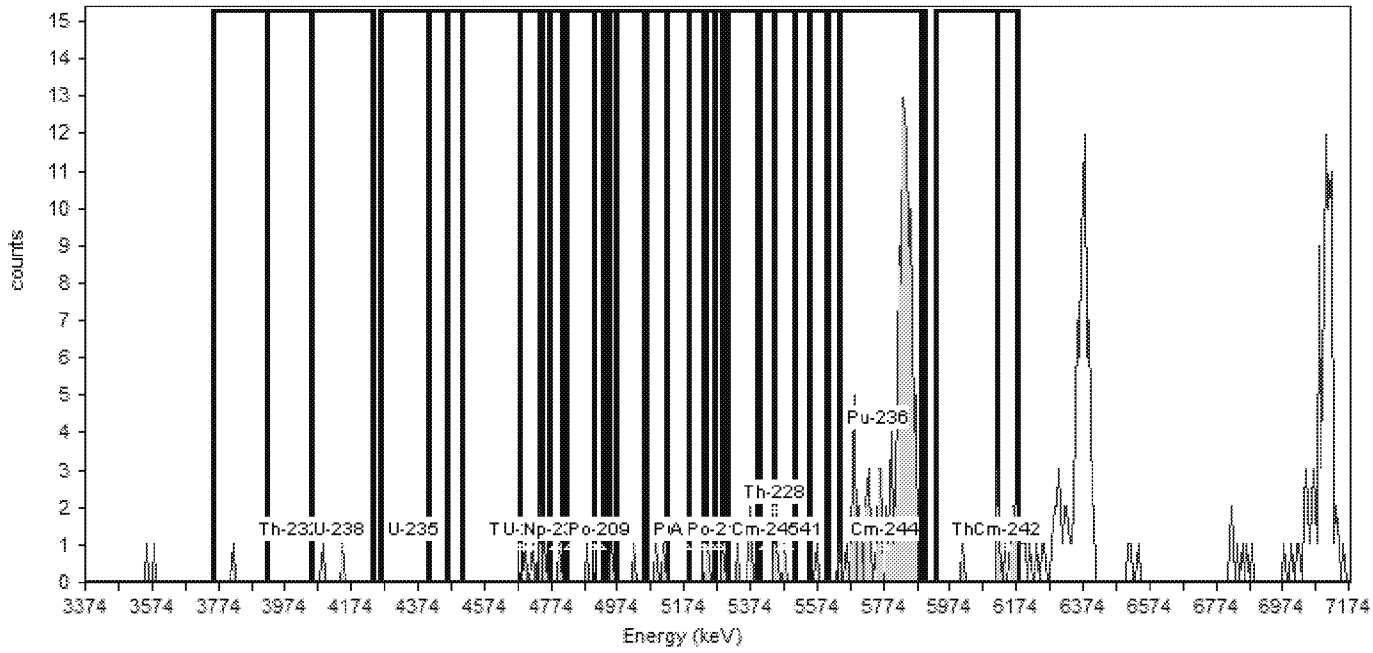
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV240 , SN: 51-005Q1
Acquisition Start Date: 11/9/2019 2:31:26PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Calibration Name: IC-1368446;AV240-11152018
Calibration Date: 11/15/2018 6:58:48PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 302.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (keV) | Start Energy (keV) | End Energy (keV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3,985.93 | 3,754.75 | 4,053.05 | 1.00 | 1.042E-003 | 1.473E-003 |
| U-238 | 4,135.08 | 3,918.81 | 4,239.49 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-235 | 4,358.81 | 4,261.86 | 4,463.21 | 0.00 | 0.000E+000 | 1.473E-003 |
| Th-230 | 4,679.48 | 4,403.55 | 4,746.60 | 4.00 | 4.167E-003 | 2.329E-003 |
| U-234 | 4,709.31 | 4,507.96 | 4,821.17 | 6.00 | 6.250E-003 | 2.756E-003 |
| Pu-242 | 4,903.21 | 4,679.48 | 4,947.95 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-229 | 4,828.63 | 4,739.14 | 5,119.48 | 9.00 | 9.375E-003 | 3.294E-003 |
| Np-237 | 4,783.89 | 4,768.97 | 4,806.26 | 1.00 | 1.042E-003 | 1.473E-003 |
| Po-209 | 4,918.12 | 4,903.21 | 4,933.04 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-239 | 5,179.14 | 4,970.33 | 5,238.80 | 4.00 | 4.167E-003 | 2.329E-003 |
| Am-243 | 5,231.34 | 5,052.36 | 5,305.92 | 5.00 | 5.208E-003 | 2.552E-003 |
| U-232 | 5,253.71 | 5,059.82 | 5,402.86 | 9.00 | 9.375E-003 | 3.294E-003 |
| Th-228 | 5,447.61 | 5,186.59 | 5,507.27 | 10.00 | 1.042E-002 | 3.455E-003 |
| Po-210 | 5,276.09 | 5,231.34 | 5,291.00 | 3.00 | 3.125E-003 | 2.083E-003 |
| Pu-238 | 5,469.98 | 5,268.63 | 5,552.01 | 8.00 | 8.333E-003 | 3.125E-003 |
| Am-241 | 5,484.90 | 5,298.46 | 5,604.22 | 8.00 | 8.333E-003 | 3.125E-003 |
| Cm-245 | 5,417.78 | 5,395.41 | 5,447.61 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-236 | 5,760.83 | 5,611.67 | 5,887.60 | 104.00 | 1.083E-001 | 1.067E-002 |
| Cm-244 | 5,775.74 | 5,641.51 | 5,902.52 | 104.00 | 1.083E-001 | 1.067E-002 |
| Th-227 | 6,074.04 | 5,932.35 | 6,178.45 | 12.00 | 1.250E-002 | 3.756E-003 |
| Cm-242 | 6,148.62 | 6,118.79 | 6,178.45 | 11.00 | 1.146E-002 | 3.608E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:33:09AM 11/10/2019

## Sample

Sample Name: ICB;AV241
Comment:

Spectrum #1 Analysis #1
Analyst: 60040

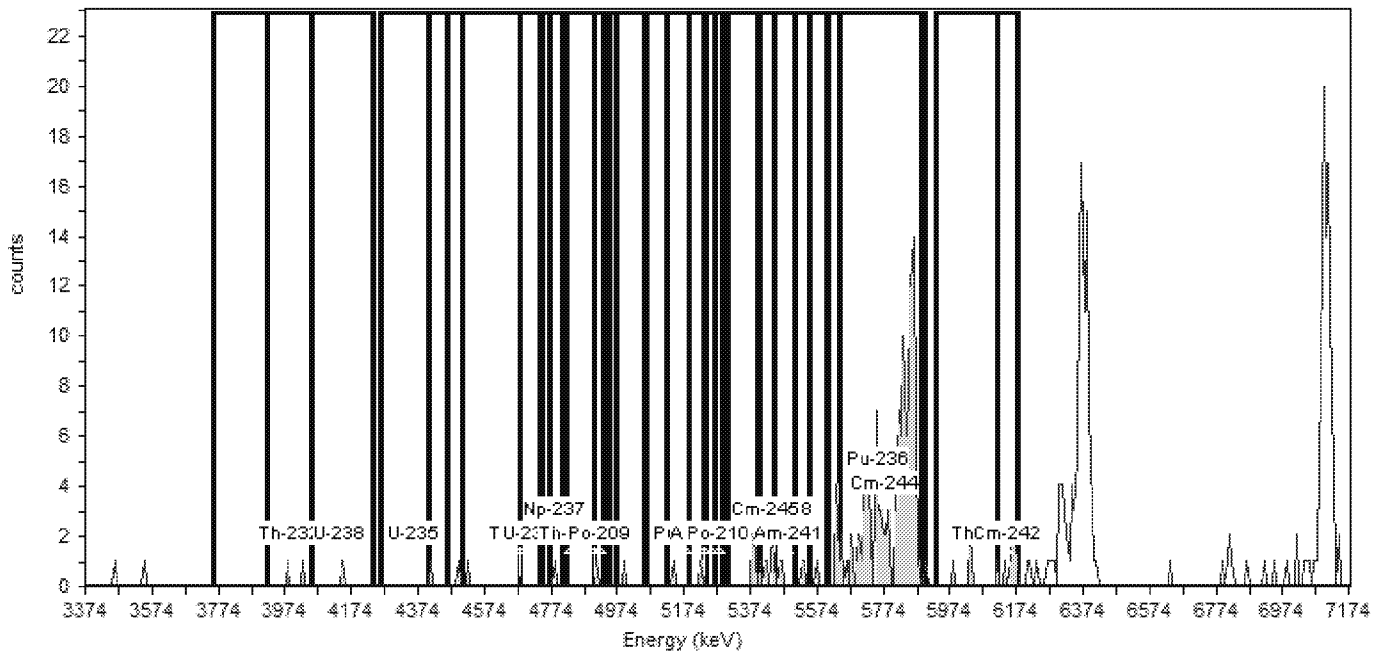
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/9/2019 2:31:26PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: IC-1368447;AV241-11152018
Calibration Date: 11/15/2018 10:58:36PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 356.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (keV) | Start Energy (keV) | End Energy (keV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3,985.93 | 3,754.75 | 4,053.05 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-238 | 4,135.08 | 3,918.81 | 4,239.49 | 3.00 | 3.125E-003 | 2.083E-003 |
| U-235 | 4,358.81 | 4,261.86 | 4,463.21 | 1.00 | 1.042E-003 | 1.473E-003 |
| Th-230 | 4,679.48 | 4,403.55 | 4,746.60 | 3.00 | 3.125E-003 | 2.083E-003 |
| U-234 | 4,709.31 | 4,507.96 | 4,821.17 | 2.00 | 2.083E-003 | 1.804E-003 |
| Pu-242 | 4,903.21 | 4,679.48 | 4,947.95 | 2.00 | 2.083E-003 | 1.804E-003 |
| Th-229 | 4,828.63 | 4,739.14 | 5,119.48 | 3.00 | 3.125E-003 | 2.083E-003 |
| Np-237 | 4,783.89 | 4,768.97 | 4,806.26 | 1.00 | 1.042E-003 | 1.473E-003 |
| Po-209 | 4,918.12 | 4,903.21 | 4,933.04 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-239 | 5,179.14 | 4,970.33 | 5,238.80 | 3.00 | 3.125E-003 | 2.083E-003 |
| Am-243 | 5,231.34 | 5,052.36 | 5,305.92 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-232 | 5,253.71 | 5,059.82 | 5,402.86 | 7.00 | 7.292E-003 | 2.946E-003 |
| Th-228 | 5,447.61 | 5,186.59 | 5,507.27 | 13.00 | 1.354E-002 | 3.898E-003 |
| Po-210 | 5,276.09 | 5,231.34 | 5,291.00 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-238 | 5,469.98 | 5,268.63 | 5,552.01 | 14.00 | 1.458E-002 | 4.034E-003 |
| Am-241 | 5,484.90 | 5,298.46 | 5,604.22 | 15.00 | 1.563E-002 | 4.167E-003 |
| Cm-245 | 5,417.78 | 5,395.41 | 5,447.61 | 6.00 | 6.250E-003 | 2.756E-003 |
| Pu-236 | 5,760.83 | 5,611.67 | 5,887.60 | 120.00 | 1.250E-001 | 1.146E-002 |
| Cm-244 | 5,775.74 | 5,641.51 | 5,902.52 | 117.00 | 1.219E-001 | 1.132E-002 |
| Th-227 | 6,074.04 | 5,932.35 | 6,178.45 | 11.00 | 1.146E-002 | 3.608E-003 |
| Cm-242 | 6,148.62 | 6,118.79 | 6,178.45 | 8.00 | 8.333E-003 | 3.125E-003 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:33:33AM 11/10/2019

## Sample

Sample Name: ICB;AV243
Comment:

Spectrum #1 Analysis #1
Analyst: 60040

## Batch

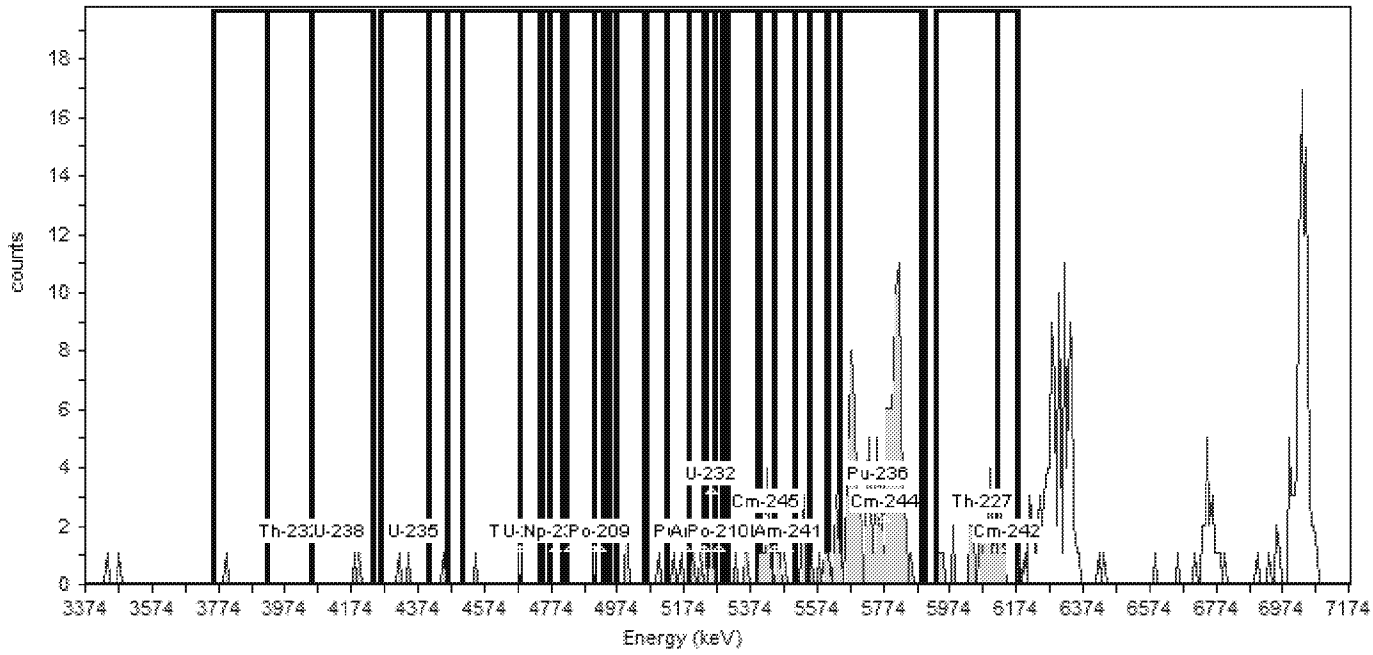
Batch Name: November2019c
Description:

## Acquisition

Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/9/2019 2:31:27PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Calibration Name: IC-1370622;AV243-11152018
Calibration Date: 11/15/2018 10:58:43PM

Energy Calibration Equation:

Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 11/05_BackgroundROI
Nuclide Library: Background ROI Library
Total Background Counts: 387.00

## *Nuclide Summary (ROI)*

| RegionName | Peak Energy (keV) | Start Energy (keV) | End Energy (keV) | GrossCounts | Count Rate (CPM) | CR Uncertainty (CPM) |
|---|---|---|---|---|---|---|
| Th-232 | 3,985.93 | 3,754.75 | 4,053.05 | 1.00 | 1.042E-003 | 1.473E-003 |
| U-238 | 4,135.08 | 3,918.81 | 4,239.49 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-235 | 4,358.81 | 4,261.86 | 4,463.21 | 3.00 | 3.125E-003 | 2.083E-003 |
| Th-230 | 4,679.48 | 4,403.55 | 4,746.60 | 2.00 | 2.083E-003 | 1.804E-003 |
| U-234 | 4,709.31 | 4,507.96 | 4,821.17 | 1.00 | 1.042E-003 | 1.473E-003 |
| Pu-242 | 4,903.21 | 4,679.48 | 4,947.95 | 0.00 | 0.000E+000 | 1.473E-003 |
| Th-229 | 4,828.63 | 4,739.14 | 5,119.48 | 3.00 | 3.125E-003 | 2.083E-003 |
| Np-237 | 4,783.89 | 4,768.97 | 4,806.26 | 0.00 | 0.000E+000 | 1.473E-003 |
| Po-209 | 4,918.12 | 4,903.21 | 4,933.04 | 0.00 | 0.000E+000 | 1.473E-003 |
| Pu-239 | 5,179.14 | 4,970.33 | 5,238.80 | 8.00 | 8.333E-003 | 3.125E-003 |
| Am-243 | 5,231.34 | 5,052.36 | 5,305.92 | 9.00 | 9.375E-003 | 3.294E-003 |
| U-232 | 5,253.71 | 5,059.82 | 5,402.86 | 13.00 | 1.354E-002 | 3.898E-003 |
| Th-228 | 5,447.61 | 5,186.59 | 5,507.27 | 21.00 | 2.188E-002 | 4.886E-003 |
| Po-210 | 5,276.09 | 5,231.34 | 5,291.00 | 4.00 | 4.167E-003 | 2.329E-003 |
| Pu-238 | 5,469.98 | 5,268.63 | 5,552.01 | 20.00 | 2.083E-002 | 4.774E-003 |
| Am-241 | 5,484.90 | 5,298.46 | 5,604.22 | 24.00 | 2.500E-002 | 5.208E-003 |
| Cm-245 | 5,417.78 | 5,395.41 | 5,447.61 | 9.00 | 9.375E-003 | 3.294E-003 |
| Pu-236 | 5,760.83 | 5,611.67 | 5,887.60 | 118.00 | 1.229E-001 | 1.136E-002 |
| Cm-244 | 5,775.74 | 5,641.51 | 5,902.52 | 113.00 | 1.177E-001 | 1.112E-002 |
| Th-227 | 6,074.04 | 5,932.35 | 6,178.45 | 29.00 | 3.021E-002 | 5.705E-003 |
| Cm-242 | 6,148.62 | 6,118.79 | 6,178.45 | 7.00 | 7.292E-003 | 2.946E-003 |

# Run Logs

# Alpha Spectroscopy Run Log

## Detector: AV1

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 05/14/18 15:44 | 140 | IC 160-371830/1 | | 371830 | | | RTM |
| 05/18/18 19:25 | 60 | ICV 160-371933/1 | | 371933 | | | PS |
| 10/02/19 09:19 | 60 | CCV 160-446625/1 | | 446625 | | | PS |
| 10/05/19 14:26 | 960 | ICB 160-446710/1 | | 446710 | | | PS |
| 10/29/19 13:02 | 1 | PULSER 160-448310/1 | | 448310 | | | JS |
| 10/29/19 13:45 | 240 | MB 160-447606/1-A | | 448310 | 447606 | A-01-R | JS |

## Detector: AV3

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 05/14/18 15:46 | 140 | IC 160-371847/1 | | 371847 | | | PS |
| 05/18/18 19:25 | 60 | ICV 160-371942/1 | | 371942 | | | PS |
| 10/02/19 09:20 | 60 | CCV 160-446639/1 | | 446639 | | | PS |
| 10/05/19 14:26 | 960 | ICB 160-446754/1 | | 446754 | | | PS |
| 10/29/19 13:02 | 1 | PULSER 160-448320/1 | | 448320 | | | JS |
| 10/29/19 13:45 | 240 | LCS 160-447606/2-A | | 448320 | 447606 | A-01-R | JS |

## Detector: AV4

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 05/14/18 15:46 | 140 | IC 160-371848/1 | | 371848 | | | PS |
| 05/18/18 19:26 | 60 | ICV 160-371943/1 | | 371943 | | | PS |
| 10/02/19 09:21 | 60 | CCV 160-446640/1 | | 446640 | | | PS |
| 10/05/19 14:23 | 960 | ICB 160-446755/1 | | 446755 | | | PS |
| 10/29/19 13:02 | 1 | PULSER 160-448321/1 | | 448321 | | | JS |
| 10/29/19 13:45 | 240 | 160-35853-1 | F-B01-S001 | 448321 | 447606 | A-01-R | JS |

## Detector: AV6

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 05/14/18 15:46 | 140 | IC 160-371855/1 | | 371855 | | | PS |
| 05/18/18 19:26 | 60 | ICV 160-371944/1 | | 371944 | | | PS |
| 10/02/19 09:22 | 60 | CCV 160-446645/1 | | 446645 | | | PS |
| 10/05/19 14:23 | 960 | ICB 160-446763/1 | | 446763 | | | PS |
| 10/29/19 13:02 | 1 | PULSER 160-448322/1 | | 448322 | | | JS |
| 10/29/19 13:45 | 240 | 160-35853-1 DU | F-B01-S001 DU | 448322 | 447606 | A-01-R | JS |

## Detector: AV7

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 05/14/18 15:47 | 140 | IC 160-371856/1 | | 371856 | | | PS |
| 05/18/18 19:26 | 60 | ICV 160-371945/1 | | 371945 | | | PS |
| 10/02/19 09:22 | 60 | CCV 160-446646/1 | | 446646 | | | PS |
| 10/05/19 14:23 | 960 | ICB 160-446772/1 | | 446772 | | | PS |
| 10/29/19 13:02 | 1 | PULSER 160-448323/1 | | 448323 | | | JS |
| 10/29/19 13:45 | 240 | 160-35853-2 | F-B01-S002 | 448323 | 447606 | A-01-R | JS |

## Detector: AV233

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/15/18 16:14 | 140 | IC 160-401312/1 | | 401312 | | | PS |

# Alpha Spectroscopy Run Log

## Detector: AV233 (Continued)

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/16/18 14:19 | 60 | ICV 160-401849/1 | | 401849 | | | PS |
| 10/01/19 08:15 | 1 | PULSER 160-444805/1 | | 444805 | | | |
| 10/01/19 13:07 | 60 | CCV 160-444805/2 | | 444805 | | | PS |
| 11/09/19 14:31 | 960 | ICB 160-450001/1 | | 450001 | | | PS |
| 11/16/19 06:18 | 1 | PULSER 160-450745/1 | | 450745 | | | KRR |
| 11/16/19 07:02 | 240 | ZZZZZ | | 450745 | | | |
| 11/16/19 13:38 | 960 | ZZZZZ | | 450745 | | | |

## Detector: AV239

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/15/18 16:17 | 140 | IC 160-401318/1 | | 401318 | | | PS |
| 11/16/18 14:20 | 60 | ICV 160-401855/1 | | 401855 | | | PS |
| 10/01/19 08:15 | 1 | PULSER 160-444811/1 | | 444811 | | | |
| 10/01/19 13:11 | 60 | CCV 160-444811/2 | | 444811 | | | PS |
| 11/09/19 14:31 | 960 | ICB 160-450007/1 | | 450007 | | | PS |
| 11/16/19 06:18 | 1 | PULSER 160-450751/1 | | 450751 | | | KRR |
| 11/16/19 07:02 | 240 | ZZZZZ | | 450751 | | | |
| 11/16/19 13:38 | 960 | 160-35853-2 | F-B01-S002 | 450751 | 448621 | A-01-R | KRR |

## Detector: AV240

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/15/18 16:17 | 140 | IC 160-401319/1 | | 401319 | | | PS |
| 11/16/18 14:21 | 60 | ICV 160-401856/1 | | 401856 | | | PS |
| 10/01/19 08:15 | 1 | PULSER 160-444812/1 | | 444812 | | | |
| 10/01/19 13:11 | 60 | CCV 160-444812/2 | | 444812 | | | PS |
| 11/09/19 14:31 | 960 | ICB 160-450008/1 | | 450008 | | | PS |
| 11/16/19 06:18 | 1 | PULSER 160-450752/1 | | 450752 | | | KRR |
| 11/16/19 07:02 | 240 | ZZZZZ | | 450752 | | | |
| 11/16/19 13:38 | 960 | 160-35853-1 | F-B01-S001 | 450752 | 448621 | A-01-R | KRR |

## Detector: AV241

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/15/18 19:16 | 140 | IC 160-401320/1 | | 401320 | | | PS |
| 11/16/18 17:15 | 60 | ICV 160-401857/1 | | 401857 | | | PS |
| 10/01/19 08:15 | 1 | PULSER 160-444813/1 | | 444813 | | | |
| 10/01/19 14:33 | 60 | CCV 160-444813/2 | | 444813 | | | PS |
| 11/09/19 14:31 | 960 | ICB 160-450009/1 | | 450009 | | | PS |
| 11/16/19 06:18 | 1 | PULSER 160-450753/1 | | 450753 | | | KRR |
| 11/16/19 07:02 | 240 | ZZZZZ | | 450753 | | | |
| 11/16/19 13:38 | 960 | LCS 160-448621/2-A | | 450753 | 448621 | A-01-R | KRR |

## Detector: AV243

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/15/18 19:16 | 140 | IC 160-401322/1 | | 401322 | | | PS |
| 11/16/18 17:15 | 60 | ICV 160-401859/1 | | 401859 | | | PS |
| 10/01/19 08:15 | 1 | PULSER 160-444815/1 | | 444815 | | | |
| 10/01/19 14:34 | 60 | CCV 160-444815/2 | | 444815 | | | PS |

# Alpha Spectroscopy Run Log

## Detector: AV243 (Continued)

| Analysis Date | Count Minutes | Lab Sample ID | Client Sample ID | Analysis Batch | Prep Batch | Method | Analyst Initials |
|---|---|---|---|---|---|---|---|
| 11/09/19 14:31 | 960 | ICB 160-450011/1 | | 450011 | | | PS |
| 11/16/19 06:18 | 1 | PULSER 160-450755/1 | | 450755 | | | KRR |
| 11/16/19 07:02 | 240 | ZZZZZ | | 450755 | | | |
| 11/16/19 13:38 | 960 | MB 160-448621/1-A | | 450755 | 448621 | A-01-R | KRR |

# Radiological
## Pre-Preparation Data

# Shipping and Receiving Documents

APTIM

# CHAIN OF CUSTODY

Ref. Document # F_B01_001
Page 1 of 1

APTIM Federal Services, LLC
4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 501008
Project Name: CTO-4550 Rad Works Task
Project Location: HPNS - Parcel F
Purchase Order #: 204589
Shipment/Pickup Date:
Waybill Number:
Lab Destination: TestAmerica (St. Louis Lab)
13715 Rider Trail North
Earth City, MO 63045
Lab Contact Name / ph. #: Rhonda Ridenhower (344) 298-8566

Project Manager: *Lisa Bercik*
(Name & phone #)

Send Report To: *Eddie Kalombo*
Phone/Fax Number: *415-987-0760*
Address: *4005 Port Chicago Hwy*
City: *Concord, CA, 94520*
Sampler's Name(s): MARK EGAN

Analyses Requested

| Sample ID Number | Sample Description | Collection Information: Date | Time | Method | Matrix | # of containers | Container Type | Gamma Spec (EPA 191.1 M) - (7 day in-growth preliminary results and full 21 day in growth for full gamma results) | Total Strontium (EPA 905 MOD) | | Strontium 90 (EPA 905 MOD) | | | Dose Rate µR/Hr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Preservative (water) | | | | | | | |
| | | | | | | | Preservative (soil) | N/A | N/A | | N/A | | | |
| F-B01-S001 | Parcel F concrete reference area: pre-scrabbling surface sample | 10/2/19 | 0910 | G | SO | 1 | 16 oz. plastic jar | X | X | | X | | | 5 |
| F-B01-S002 | Parcel F concrete reference area: post-scrabbling surface sample | 10/2/19 | 1230 | G | SO | 1 | 16 oz. plastic jar | X | X | | X | | | 6 |

N/A

160-35853 Chain of Custody

Special Instructions:
7 days ingrown draft and follow with 21 days final.
Analyze for Total Strontium as a screening step, and isotopic Sr-90 only if Total Strontium is above project action limit of 0.331 pCi/g.

Standard TAT -10-day ☐ 24-hr ☐ 5-day ☐ 10-day

Level Of QC Required: I II III Project Specific

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| MARK R. EGAN [signature] | 10/2/19 | 1231 | [signature] | 10/2/19 | 1231 |
| [signature] | 10/2/19 | 1316 | EDDIE KALOMBO [signature] | 10.2.19 | 1316 |
| EDDIE KALOMBO [signature] | 10.2.19 | 1500 | [signature] TASIL | 10/3/19 | 08:40 |
| | | | | | |

Method Codes: C = Composite G = Grab

Matrix Codes: DW = Drinking Water; GW = Ground Water; WW = Waste Water; A = Air; SO = Soil; SL = Sludge; CP = Chip Samples; ABS=Asbestos, PO=Pipe Opening

# Login Sample Receipt Checklist

Client: Aptim Federal Services LLC

Job Number: 160-35853-3

**Login Number: 35853**
**List Number: 1**
**Creator: Press, Nicholas B**

**List Source: Eurofins TestAmerica, St. Louis**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | N/A | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Job Number: 160-36160-2

Job Description: Hunters Point Parcel F/ 501008

For:
Aptim Federal Services LLC
4005 Port Chicago Hwy, Suite 200
Concord, CA 94520

Attention: Eddie Kalombo

Rhonda Ridenhower

Approved for release.
Rhonda E Ridenhower
Manager of Project Management
12/4/2019 4:23 PM

Rhonda E Ridenhower, Manager of Project Management
13715 Rider Trail North, Earth City, MO, 63045
rhonda.ridenhower@testamericainc.com
12/04/2019

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. Pursuant to NELAP, this report shall not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager.

Louisiana Lab Certification ID (Non-Potable, Solid/Haz. Material): 106151
Florida Lab Certification ID (Drinking Water): E87689.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

**Eurofins TestAmerica, St. Louis**
13715 Rider Trail North, Earth City, MO 63045
Tel (314) 298-8566 Fax (314) 298-8757 www.testamericainc.com

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# Definitions/Glossary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Qualifiers

### Rad

| Qualifier | Qualifier Description |
|---|---|
| Q | Tracer is outside acceptance limits. |
| U | Undetected at the Limit of Detection. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# CASE NARRATIVE

## Client: Aptim Federal Services LLC

## Project: Hunters Point Parcel F/ 501008

## Report Number: 160-36160-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, St. Louis attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Manual Integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure. Detailed information can be found in the raw data section of the level IV report.

The following clean-up methods for Organic analyses may have been used on the samples in this data set. Specific methods employed are documented on the batch extraction logs:

Method 3600C: Cleanup
Method 3620C: Florisil Cleanup
Method 3630C: Silica Gel Cleanup
Method 3640A: Gel-Permeation Cleanup
Method 3650B: Acid-Base Partition Cleanup
Method 3660B: Sulfur Cleanup
Method 3665A: Sulfuric Acid/Permanganate Cleanup

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

**RECEIPT**
The samples were received on 10/29/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 22.0 C. Polonium was requested by the client and not listed on the COC.

**TOTAL BETA STRONTIUM (GFPC)**
Samples F-SU3-B01-S001 (160-36160-1), F-SU3-B04-S001 (160-36160-2), F-SU3-B05-S001 (160-36160-3), F-SU3-B07-S001 (160-36160-4), F-SU3-B09-S001 (160-36160-5), F-SU3-B11-S001 (160-36160-6), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B15-S001 (160-36160-9), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11), F-SU3-B30-S001

(160-36160-12), F-SU4-B04-S001 (160-36160-13), F-SU5-B05-S001 (160-36160-14) and F-SU5-B10-S001 (160-36160-15) were analyzed for Total Beta Strontium (GFPC) in accordance with EPA 905. The samples were dried on 10/29/2019, prepared on 11/04/2019 and analyzed on 11/23/2019.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**ISOTOPIC POLONIUM (ALPHA SPECTROMETRY)**

Samples F-SU3-B01-S001 (160-36160-1), F-SU3-B04-S001 (160-36160-2), F-SU3-B05-S001 (160-36160-3), F-SU3-B07-S001 (160-36160-4), F-SU3-B09-S001 (160-36160-5), F-SU3-B11-S001 (160-36160-6), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B15-S001 (160-36160-9), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11), F-SU3-B30-S001 (160-36160-12), F-SU4-B04-S001 (160-36160-13), F-SU5-B05-S001 (160-36160-14) and F-SU5-B10-S001 (160-36160-15) were analyzed for Isotopic Polonium (Alpha Spectrometry) in accordance with A01-R_Polonium. The samples were dried on 10/29/2019, prepared on 11/03/2019 and analyzed on 11/16/2019.

The tracer recovery is below the lower QC limit (30%). There are sufficient tracer counts to keep the count uncertainty of the tracer <10% (2 sigma), the resolution is within limit, and the client RL was met.
F-SU3-B14-S001 (160-36160-8) and F-SU5-B10-S001 (160-36160-15)

The following sample turned bright green when nitric and hydrochloric acid were added during the digestion step:F-SU3-B14-S001 (160-36160-8). When the sample was removed from the heat it turned blue.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**ISOTOPIC PLUTONIUM (ALPHA SPECTROMETRY)**

Samples F-SU3-B01-S001 (160-36160-1), F-SU3-B04-S001 (160-36160-2), F-SU3-B05-S001 (160-36160-3), F-SU3-B07-S001 (160-36160-4), F-SU3-B09-S001 (160-36160-5), F-SU3-B11-S001 (160-36160-6), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B15-S001 (160-36160-9), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11), F-SU3-B30-S001 (160-36160-12), F-SU4-B04-S001 (160-36160-13), F-SU5-B05-S001 (160-36160-14) and F-SU5-B10-S001 (160-36160-15) were analyzed for Isotopic Plutonium (Alpha Spectrometry) in accordance with A-01-R. The samples were dried on 10/29/2019, prepared on 11/05/2019 and analyzed on 11/14/2019 and 11/15/2019.

The following sample(s) could not be thoroughly homogenized before sub-sampling was performed due to sample matrix:
F-SU3-B01-S001 (160-36160-1), F-SU3-B04-S001 (160-36160-2), F-SU3-B05-S001 (160-36160-3), F-SU3-B07-S001 (160-36160-4), F-SU3-B09-S001 (160-36160-5), F-SU3-B11-S001 (160-36160-6), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B15-S001 (160-36160-9), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11), F-SU3-B30-S001 (160-36160-12), F-SU4-B04-S001 (160-36160-13), F-SU5-B05-S001 (160-36160-14) and F-SU5-B10-S001 (160-36160-15). The samples contained rocks.

During the digestion process the following sample appeared to be a fluorescent green and once the digestion process was finished the sample was a light blue. F-SU3-B14-S001 (160-36160-8)

The sample was inadvertently counted on a detector for which the daily pulser failed for energy/centroid. The sample count, however, exhibited the tracer peak within the expected energy/centroid tolerance (50 keV). No significant peaks other than the tracer are seen in the sample spectrum. The laboratory does not believe this excursion adversely affects the results.F-SU3-B30-S001 (160-36160-12)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**RADIUM-226 BY GAMMA SPEC (21 DAY INGROWTH)**

Samples F-SU3-B01-S001 (160-36160-1), F-SU3-B04-S001 (160-36160-2), F-SU3-B05-S001 (160-36160-3), F-SU3-B07-S001 (160-36160-4), F-SU3-B09-S001 (160-36160-5), F-SU3-B11-S001 (160-36160-6), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B15-S001 (160-36160-9), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11), F-SU3-B30-S001 (160-36160-12), F-SU4-B04-S001 (160-36160-13), F-SU5-B05-S001 (160-36160-14) and F-SU5-B10-S001 (160-36160-15) were analyzed for Radium-226 by gamma spec (21 day ingrowth) in accordance with EPA GA_01_R. The samples were dried on 10/29/2019, prepared on 11/01/2019 and analyzed on 11/23/2019 and 11/26/2019.

The cesium-137 detection goal of 0.0700 pCi/g was not met. This is caused by statistical fluctuations in the Compton background due to low level activity in the samples in conjunction with the software attempting to fit a peak into the noise of this baseline. F-SU3-B01-S001 (160-36160-1), F-SU3-B09-S001 (160-36160-5), F-SU3-B12-S001 (160-36160-7), F-SU3-B14-S001 (160-36160-8), F-SU3-B23-S001 (160-36160-10), F-SU3-B29-S001 (160-36160-11) and F-SU5-B05-S001 (160-36160-14)

The following samples exhibited a negative Cs-137 result greater in magnitude than the 3 sigma TPU: F-SU5-B05-S001 (160-36160-14). This occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected. No further action is required.

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from Reported to Analyte

| | |
|---|---|
| Th-234 | Pa-234 |
| Th-234 | U-238 |
| Pb-210 | Po-210 |
| Pb-210 | Bi-210 |
| Cs-137 | Ba-137m |
| Pb-212 | Po-216 |
| Xe-131m | Xe-131 |
| Sb-125 | Te-125m |
| Ag-108m | Ag-108 |
| Rh-106 | Ru-106 |
| Pb-212 | Th-228 |
| Pb-212 | Ra-224 |
| U-235 | Th-231 |
| Ac-228 | Th-232 |
| Ac-228 | Ra-228 |
| Th-227 | Ra-223 |
| Th-227 | Ac-227 |
| Th-227 | Bi-211 |
| Th-227 | Pb-211 |
| Bi-214 | Ra-226 |

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B01-S001

**Lab Sample ID: 160-36160-1**

**Date Collected: 10/24/19 11:50**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0455 | U | 0.0799 | 0.0799 | 0.331 | 0.0622 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *74.0* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00581 | U | 0.0236 | 0.0236 | 1.00 | 0.0159 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | -0.00776 | U | 0.00776 | 0.00779 | 1.00 | 0.0143 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *93.3* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.643** | | 0.104 | 0.117 | 1.00 | 0.0666 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *54.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.312** | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Actinium-227 | -0.383 | U | 0.980 | 0.981 | | 0.591 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Bismuth-212 | 0.0846 | U | 1.16 | 1.16 | | 0.945 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Bismuth-214** | **0.555** | | 0.209 | 0.217 | | 0.0814 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Cesium-137 | -0.0264 | U | 0.109 | 0.109 | 0.0700 | 0.0924 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Lead-210 | -0.569 | U | 2.05 | 2.05 | | 1.48 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Lead-212 | 0.0323 | U | 0.172 | 0.172 | | 0.139 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Lead-214** | **0.412** | | 0.155 | 0.161 | | 0.0631 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Potassium-40** | **8.14** | | 2.27 | 2.42 | | 0.765 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Protactinium-231 | 1.02 | U | 3.22 | 3.22 | | 2.59 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Radium-226** | **0.555** | | 0.209 | 0.217 | 0.500 | 0.0814 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Radium-228** | **0.312** | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Thallium-208** | **0.149** | | 0.0630 | 0.0649 | | 0.0146 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Thorium-228 | 0.0323 | U | 0.172 | 0.172 | | 0.139 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Thorium-232** | **0.312** | | 0.343 | 0.344 | | 0.198 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Thorium-234** | **0.885** | | 0.810 | 0.816 | | 0.515 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| Uranium-235 | -0.0630 | U | 0.444 | 0.444 | | 0.372 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |
| **Uranium-238** | **0.885** | | 0.810 | 0.816 | | 0.515 | pCi/g | 11/01/19 16:18 | 11/26/19 09:34 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B04-S001

Lab Sample ID: 160-36160-2
Date Collected: 10/24/19 10:41
Matrix: Solid
Date Received: 10/29/19 09:00

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total Beta Strontium** | **0.109** | | 0.0725 | 0.0729 | 0.331 | 0.0513 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *88.4* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0159 | U | 0.0113 | 0.0114 | 1.00 | 0.0207 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | -0.00798 | U | 0.00798 | 0.00801 | 1.00 | 0.0147 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *83.5* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.499** | | 0.0808 | 0.0911 | 1.00 | 0.0438 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *57.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.427** | | 0.207 | 0.211 | | 0.159 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Actinium-227 | 0.197 | U | 0.403 | 0.404 | | 0.381 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Bismuth-212 | -0.403 | U | 0.929 | 0.930 | | 0.723 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Bismuth-214** | **0.623** | | 0.175 | 0.186 | | 0.0547 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Cesium-137 | 0.0241 | U | 0.0550 | 0.0551 | 0.0700 | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Lead-210 | 0.843 | U | 1.65 | 1.66 | | 1.22 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Lead-212** | **0.360** | | 0.110 | 0.116 | | 0.0618 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Lead-214** | **0.461** | | 0.147 | 0.154 | | 0.0662 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Potassium-40** | **9.79** | | 1.64 | 1.91 | | 0.160 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Protactinium-231 | 0.000 | U | 0.626 | 0.626 | | 2.63 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Radium-226** | **0.623** | | 0.175 | 0.186 | 0.500 | 0.0547 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Radium-228** | **0.427** | | 0.207 | 0.211 | | 0.159 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Thallium-208 | 0.0522 | U | 0.125 | 0.125 | | 0.0638 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Thorium-228** | **0.360** | | 0.110 | 0.116 | | 0.0618 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Thorium-232** | **0.427** | | 0.207 | 0.211 | | 0.159 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Thorium-234** | **0.707** | | 0.729 | 0.734 | | 0.565 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| Uranium-235 | -0.0572 | U | 0.383 | 0.383 | | 0.583 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |
| **Uranium-238** | **0.707** | | 0.729 | 0.734 | | 0.565 | pCi/g | 11/01/19 16:18 | 11/23/19 20:23 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B05-S001

**Lab Sample ID: 160-36160-3**

**Date Collected: 10/24/19 10:08**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0136 | U | 0.0797 | 0.0797 | 0.331 | 0.0645 | pCi/g | 11/04/19 09:55 | 11/23/19 11:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *71.9* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | U | 0.0185 | 0.0185 | 1.00 | 0.0152 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |
| Plutonium-239/240 | 0.00620 | U | 0.0170 | 0.0170 | 1.00 | 0.00760 | pCi/g | 11/05/19 18:12 | 11/14/19 23:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *81.9* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.547** | | 0.0867 | 0.0981 | 1.00 | 0.0595 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *56.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium 228 | 0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Actinium-227 | 0.114 | U | 0.213 | 0.214 | | 0.388 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Bismuth-212 | 0.275 | U | 0.627 | 0.628 | | 0.486 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Bismuth-214** | **0.413** | | 0.146 | 0.153 | | 0.0608 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Cesium-137 | -0.0264 | U | 0.0364 | 0.0365 | 0.0700 | 0.0488 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Lead-210 | 0.837 | U | 1.24 | 1.24 | | 0.967 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Lead-212** | **0.379** | | 0.0906 | 0.103 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Lead-214** | **0.489** | | 0.117 | 0.127 | | 0.0698 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Potassium-40** | **7.87** | | 1.31 | 1.54 | | 0.325 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Protactinium-231 | 0.000 | U | 0.716 | 0.716 | | 2.20 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Radium-226** | **0.413** | | 0.146 | 0.153 | 0.500 | 0.0608 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Radium-228 | 0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Thallium-208** | **0.193** | | 0.0529 | 0.0565 | | 0.0148 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| **Thorium-228** | **0.379** | | 0.0906 | 0.103 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thorium-232 | 0.101 | U | 0.244 | 0.244 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Thorium-234 | 0.00459 | U | 0.0105 | 0.0105 | | 1.19 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Uranium-235 | -0.0323 | U | 0.0552 | 0.0553 | | 0.397 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |
| Uranium-238 | 0.00459 | U | 0.0105 | 0.0105 | | 1.19 | pCi/g | 11/01/19 16:18 | 11/23/19 21:08 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B07-S001

Lab Sample ID: 160-36160-4

Date Collected: 10/24/19 09:40
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total Beta Strontium** | **0.0772** | | 0.0722 | 0.0724 | 0.331 | 0.0529 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *80.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00201 | U | 0.0251 | 0.0251 | 1.00 | 0.0196 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00604 | U | 0.0166 | 0.0166 | 1.00 | 0.00741 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *88.2* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.386** | | 0.0783 | 0.0847 | 1.00 | 0.0614 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *50.2* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.513** | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Actinium-227 | 0.234 | U | 0.452 | 0.453 | | 0.384 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Bismuth-212 | 0.390 | U | 0.945 | 0.946 | | 0.736 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Bismuth-214** | **0.617** | | 0.171 | 0.182 | | 0.0430 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Cesium-137 | 0.0146 | U | 0.0783 | 0.0783 | 0.0700 | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Lead-210** | **1.91** | | 2.22 | 2.23 | | 1.44 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Lead-212** | **0.235** | | 0.102 | 0.105 | | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Lead-214** | **0.495** | | 0.170 | 0.177 | | 0.0767 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Potassium-40** | **8.26** | | 1.55 | 1.76 | | 0.170 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Protactinium-231 | -0.0000000398 | U | 3.42 | 3.42 | | 2.82 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Radium-226** | **0.617** | | 0.171 | 0.182 | 0.500 | 0.0430 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Radium-228** | **0.513** | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Thallium-208** | **0.215** | | 0.0635 | 0.0671 | | 0.0109 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Thorium-228** | **0.235** | | 0.102 | 0.105 | | 0.0629 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| **Thorium-232** | **0.513** | | 0.229 | 0.235 | | 0.0982 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Thorium-234 | -0.532 | U | 0.761 | 0.763 | | 0.652 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Uranium-235 | 0.233 | U | 0.421 | 0.421 | | 0.278 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |
| Uranium-238 | -0.532 | U | 0.761 | 0.763 | | 0.652 | pCi/g | 11/01/19 16:18 | 11/23/19 21:09 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B09-S001

Lab Sample ID: 160-36160-5

Date Collected: 10/24/19 09:17
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0185 | U | 0.0775 | 0.0775 | 0.331 | 0.0653 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *65.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00887 | U | 0.00794 | 0.00797 | 1.00 | 0.0146 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00711 | U | 0.00711 | 0.00713 | 1.00 | 0.0131 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *96.8* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.461** | | 0.0782 | 0.0873 | 1.00 | 0.0551 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *58.6* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.469** | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Actinium-227 | 0.0526 | U | 0.645 | 0.645 | | 0.398 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Bismuth-212 | -0.430 | U | 1.09 | 1.09 | | 0.848 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Bismuth-214 | 0.111 | U | 0.236 | 0.236 | | 0.224 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Cesium-137 | -0.0644 | U | 0.156 | 0.156 | 0.0700 | 0.0845 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Lead-210** | **0.802** | | 1.17 | 1.17 | | 0.775 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Lead-212** | **0.338** | | 0.101 | 0.110 | | 0.0499 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Lead-214** | **0.470** | | 0.128 | 0.137 | | 0.0406 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Potassium-40** | **7.99** | | 1.76 | 1.94 | | 0.413 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Protactinium-231 | -0.504 | U | 3.21 | 3.21 | | 2.62 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Radium-226 | 0.111 | U | 0.236 | 0.236 | 0.500 | 0.224 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Radium-228** | **0.469** | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Thallium-208** | **0.155** | | 0.0571 | 0.0593 | | 0.0121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Thorium-228** | **0.338** | | 0.101 | 0.110 | | 0.0499 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| **Thorium-232** | **0.469** | | 0.191 | 0.197 | | 0.0961 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Thorium-234 | -0.213 | U | 0.923 | 0.923 | | 0.768 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Uranium-235 | 0.0686 | U | 0.363 | 0.363 | | 0.294 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |
| Uranium-238 | -0.213 | U | 0.923 | 0.923 | | 0.768 | pCi/g | 11/01/19 16:18 | 11/23/19 21:14 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B11-S001

Lab Sample ID: 160-36160-6

Date Collected: 10/24/19 11:32
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0487 | U | 0.0795 | 0.0796 | 0.331 | 0.0692 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *69.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00602 | U | 0.0244 | 0.0244 | 1.00 | 0.0165 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00602 | U | 0.00696 | 0.00697 | 1.00 | 0.0128 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *86.9* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.508** | | 0.0802 | 0.0909 | 1.00 | 0.0549 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *61.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.437** | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Actinium-227 | -0.0285 | U | 0.141 | 0.141 | | 0.374 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Bismuth-212 | -0.346 | U | 0.697 | 0.698 | | 0.628 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Bismuth-214** | **0.551** | | 0.144 | 0.155 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Cesium-137 | 0.0342 | U | 0.0673 | 0.0674 | 0.0700 | 0.0524 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Lead-210 | 0.655 | U | 1.46 | 1.46 | | 1.16 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Lead-212** | **0.346** | | 0.0855 | 0.0965 | | 0.0431 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Lead-214** | **0.499** | | 0.103 | 0.115 | | 0.0556 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Potassium-40** | **8.43** | | 1.38 | 1.63 | | 0.335 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Protactinium-231 | 0.661 | U | 1.98 | 1.98 | | 2.11 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Radium-226** | **0.551** | | 0.144 | 0.155 | 0.500 | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Radium-228** | **0.437** | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Thallium-208** | **0.0977** | | 0.0646 | 0.0654 | | 0.0316 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Thorium-228** | **0.346** | | 0.0855 | 0.0965 | | 0.0431 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| **Thorium-232** | **0.437** | | 0.210 | 0.214 | | 0.0874 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Thorium-234 | 0.312 | U | 0.432 | 0.433 | | 0.333 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Uranium-235 | 0.0717 | U | 0.199 | 0.200 | | 0.369 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |
| Uranium-238 | 0.312 | U | 0.432 | 0.433 | | 0.333 | pCi/g | 11/01/19 16:18 | 11/23/19 21:47 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B12-S001

**Lab Sample ID: 160-36160-7**

**Date Collected: 10/24/19 11:00**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0586 | U | 0.0619 | 0.0621 | 0.331 | 0.0565 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *76.1* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00207 | U | 0.0180 | 0.0180 | 1.00 | 0.0132 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00621 | U | 0.00717 | 0.00719 | 1.00 | 0.0132 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *96.0* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.487** | | 0.0876 | 0.0967 | 1.00 | 0.0701 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *52.0* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.287** | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Actinium-227** | **0.540** | | 0.544 | 0.547 | | 0.295 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-212 | -0.469 | U | 1.18 | 1.18 | | 0.923 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Bismuth-214** | **0.598** | | 0.175 | 0.185 | | 0.0449 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Cesium-137 | 0.0627 | U | 0.109 | 0.109 | 0.0700 | 0.0840 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Lead-210** | **2.53** | | 2.11 | 2.13 | | 1.37 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Lead-212** | **0.304** | | 0.109 | 0.114 | | 0.0617 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Lead-214** | **0.492** | | 0.153 | 0.161 | | 0.0657 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Potassium-40** | **9.63** | | 1.75 | 2.00 | | 0.185 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Protactinium-231 | 0.000 | U | 0.727 | 0.727 | | 3.15 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Radium-226** | **0.598** | | 0.175 | 0.185 | 0.500 | 0.0449 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Radium-228** | **0.287** | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thallium-208** | **0.173** | | 0.0594 | 0.0619 | | 0.0119 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thorium-228** | **0.304** | | 0.109 | 0.114 | | 0.0617 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thorium-232** | **0.287** | | 0.154 | 0.156 | | 0.0478 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thorium-234** | **1.24** | | 1.02 | 1.03 | | 0.624 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-235 | 0.136 | U | 0.675 | 0.675 | | 0.551 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Uranium-238** | **1.24** | | 1.02 | 1.03 | | 0.624 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B14-S001

**Lab Sample ID: 160-36160-8**

**Date Collected: 10/24/19 10:23**
**Date Received: 10/29/19 09:00**

**Matrix: Solid**

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0281 | U | 0.0734 | 0.0734 | 0.331 | 0.0626 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *74.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0101 | U | 0.0202 | 0.0202 | 1.00 | 0.0223 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00405 | U | 0.0250 | 0.0250 | 1.00 | 0.0182 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *105* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.699** | | 0.161 | 0.171 | 1.00 | 0.127 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *26.4* | *Q* | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.352** | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Actinium-227 | 0.147 | U | 0.328 | 0.328 | | 0.570 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Bismuth-212 | 0.000 | U | 0.384 | 0.384 | | 0.448 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Bismuth-214** | **0.396** | | 0.151 | 0.156 | | 0.0550 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Cesium-137 | -0.00197 | U | 0.102 | 0.102 | 0.0700 | 0.0836 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Lead-210** | **1.51** | | 1.74 | 1.74 | | 1.08 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-212 | 0.0268 | U | 0.149 | 0.149 | | 0.121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Lead-214 | 0.0487 | U | 0.151 | 0.152 | | 0.195 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Potassium-40** | **5.68** | | 1.61 | 1.71 | | 0.463 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Protactinium-231 | 0.000 | U | 0.927 | 0.927 | | 2.84 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Radium-226** | **0.396** | | 0.151 | 0.156 | 0.500 | 0.0550 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Radium-228** | **0.352** | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thallium-208** | **0.160** | | 0.117 | 0.118 | | 0.0472 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-228 | 0.0268 | U | 0.149 | 0.149 | | 0.121 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| **Thorium-232** | **0.352** | | 0.315 | 0.317 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Thorium-234 | -0.301 | U | 1.17 | 1.17 | | 0.975 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-235 | -0.0583 | U | 0.343 | 0.343 | | 0.338 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |
| Uranium-238 | -0.301 | U | 1.17 | 1.17 | | 0.975 | pCi/g | 11/01/19 16:18 | 11/23/19 21:48 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B15-S001

Lab Sample ID: 160-36160-9

Date Collected: 10/24/19 09:52
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0931 | U | 0.0744 | 0.0747 | 0.331 | 0.0681 | pCi/g | 11/04/19 09:55 | 11/23/19 11:03 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *76.7* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 11:03* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00569 | U | 0.0249 | 0.0249 | 1.00 | 0.0231 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |
| **Plutonium-239/240** | **0.0266** | | 0.0308 | 0.0309 | 1.00 | 0.00987 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *104* | | *30 - 110* | *11/05/19 18:12* | *11/15/19 09:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.488** | | 0.0848 | 0.0942 | 1.00 | 0.0609 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *62.5* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.465** | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Actinium-227 | 0.101 | U | 0.180 | 0.181 | | 0.388 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-212 | -0.0311 | U | 0.876 | 0.876 | | 0.634 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Bismuth-214** | **0.388** | | 0.120 | 0.127 | | 0.0504 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Cesium-137 | -0.0174 | U | 0.0492 | 0.0493 | 0.0700 | 0.0665 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-210 | -0.375 | U | 1.87 | 1.88 | | 1.16 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Lead-212** | **0.312** | | 0.0796 | 0.0892 | | 0.0386 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Lead-214** | **0.431** | | 0.105 | 0.114 | | 0.0541 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Potassium-40** | **7.48** | | 1.31 | 1.52 | | 0.336 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Protactinium-231 | -0.836 | U | 2.71 | 2.72 | | 2.21 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Radium-226** | **0.388** | | 0.120 | 0.127 | 0.500 | 0.0504 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Radium-228** | **0.465** | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Thallium-208** | **0.125** | | 0.0556 | 0.0571 | | 0.0249 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Thorium-228** | **0.312** | | 0.0796 | 0.0892 | | 0.0386 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Thorium-232** | **0.465** | | 0.171 | 0.178 | | 0.0555 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-234 | -0.363 | U | 1.09 | 1.09 | | 0.884 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-235 | -0.195 | U | 0.572 | 0.573 | | 0.466 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-238 | -0.363 | U | 1.09 | 1.09 | | 0.884 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B23-S001

Lab Sample ID: 160-36160-10

Date Collected: 10/24/19 13:46
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0214 | U | 0.0760 | 0.0760 | 0.331 | 0.0642 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *75.6* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Plutonium-238** | **0.0359** | | 0.0506 | 0.0506 | 1.00 | 0.0301 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |
| Plutonium-239/240 | -0.00212 | U | 0.00423 | 0.00424 | 1.00 | 0.00778 | pCi/g | 11/05/19 18:12 | 11/15/19 09:56 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *97.8* | | *30 - 110* | *11/05/19 18:12* | *11/15/19 09:56* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.378** | | 0.0883 | 0.0938 | 1.00 | 0.0860 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *54.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.186** | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Actinium-227 | -0.104 | U | 0.754 | 0.754 | | 0.464 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Bismuth-212 | 0.473 | U | 0.938 | 0.939 | | 0.718 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Bismuth-214** | **0.503** | | 0.162 | 0.170 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Cesium-137 | -0.0341 | U | 0.0913 | 0.0913 | 0.0700 | 0.0719 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-210 | 0.705 | U | 1.80 | 1.81 | | 1.34 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Lead-212 | 0.0291 | U | 0.183 | 0.183 | | 0.149 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Lead-214** | **0.617** | | 0.187 | 0.197 | | 0.0834 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Potassium-40** | **10.6** | | 1.79 | 2.09 | | 0.176 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Protactinium-231 | 0.000 | U | 0.244 | 0.244 | | 3.17 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Radium-226** | **0.503** | | 0.162 | 0.170 | 0.500 | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Radium-228** | **0.186** | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Thallium-208** | **0.305** | | 0.101 | 0.105 | | 0.0337 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-228 | 0.0291 | U | 0.183 | 0.183 | | 0.149 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| **Thorium-232** | **0.186** | | 0.331 | 0.331 | | 0.175 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Thorium-234 | 0.249 | U | 0.809 | 0.809 | | 0.646 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-235 | -0.283 | U | 0.427 | 0.428 | | 0.597 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |
| Uranium-238 | 0.249 | U | 0.809 | 0.809 | | 0.646 | pCi/g | 11/01/19 16:18 | 11/23/19 22:22 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B29-S001

Lab Sample ID: 160-36160-11

Date Collected: 10/24/19 14:21
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0448 | U | 0.0784 | 0.0784 | 0.331 | 0.0679 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *70.7* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0562 | U | 0.0520 | 0.0523 | 1.00 | 0.0553 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.0703 | U | 0.0431 | 0.0435 | 1.00 | 0.0528 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *105* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.371** | | 0.0715 | 0.0780 | 1.00 | 0.0554 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *63.4* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium 228 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Actinium-227 | -0.426 | U | 0.994 | 0.996 | | 0.598 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Bismuth-212 | -0.423 | U | 1.36 | 1.36 | | 1.08 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Bismuth-214** | **0.223** | | 0.166 | 0.168 | | 0.171 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Cesium-137 | -0.0526 | U | 0.131 | 0.131 | 0.0700 | 0.123 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Lead-210 | -0.342 | U | 2.09 | 2.09 | | 1.50 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Lead-212** | **0.306** | | 0.121 | 0.128 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Lead-214** | **0.478** | | 0.163 | 0.171 | | 0.0758 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Potassium-40** | **6.96** | | 1.85 | 1.98 | | 0.506 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Protactinium-231 | 0.727 | U | 1.64 | 1.64 | | 1.83 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Radium-226** | **0.223** | | 0.166 | 0.168 | 0.500 | 0.171 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Radium-228 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thallium-208 | 0.0585 | U | 0.110 | 0.111 | | 0.0595 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Thorium-228** | **0.306** | | 0.121 | 0.128 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thorium-232 | 0.118 | U | 0.443 | 0.443 | | 0.242 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Thorium-234 | -0.318 | U | 1.12 | 1.12 | | 0.934 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| **Uranium-235** | **0.412** | | 0.317 | 0.319 | | 0.166 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |
| Uranium-238 | -0.318 | U | 1.12 | 1.12 | | 0.934 | pCi/g | 11/01/19 16:18 | 11/23/19 22:23 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B30-S001

Lab Sample ID: 160-36160-12

Date Collected: 10/24/19 14:04
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0593 | U | 0.0724 | 0.0725 | 0.331 | 0.0640 | pCi/g | 11/04/19 09:55 | 11/23/19 19:01 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *78.2* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:01* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0197 | U | 0.0449 | 0.0449 | 1.00 | 0.0307 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | 0.00788 | U | 0.0236 | 0.0236 | 1.00 | 0.0145 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *88.1* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.415** | | 0.0953 | 0.102 | 1.00 | 0.0835 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *39.8* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.505** | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Actinium-227 | -0.0710 | U | 0.620 | 0.620 | | 0.366 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Bismuth-212 | -0.320 | U | 0.909 | 0.909 | | 0.704 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Bismuth-214** | **0.459** | | 0.148 | 0.155 | | 0.0596 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Cesium-137 | 0.0247 | U | 0.0793 | 0.0793 | 0.0700 | 0.0633 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Lead-210 | -0.00897 | U | 1.38 | 1.38 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Lead-212** | **0.335** | | 0.0863 | 0.0966 | | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Lead-214** | **0.484** | | 0.116 | 0.126 | | 0.0569 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Potassium-40** | **9.24** | | 1.79 | 2.02 | | 0.588 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Protactinium-231 | 0.000 | U | 0.258 | 0.258 | | 2.44 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Radium-226** | **0.459** | | 0.148 | 0.155 | 0.500 | 0.0596 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Radium-228** | **0.505** | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Thallium-208** | **0.152** | | 0.0576 | 0.0597 | | 0.0225 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Thorium-228** | **0.335** | | 0.0863 | 0.0966 | | 0.0418 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| **Thorium-232** | **0.505** | | 0.189 | 0.196 | | 0.0610 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Thorium-234 | 0.378 | U | 1.38 | 1.38 | | 1.12 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Uranium-235 | 0.208 | U | 0.416 | 0.417 | | 0.347 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |
| Uranium-238 | 0.378 | U | 1.38 | 1.38 | | 1.12 | pCi/g | 11/01/19 16:18 | 11/23/19 22:55 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU4-B04-S001

Lab Sample ID: 160-36160-13

Date Collected: 10/24/19 15:04
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.0379 | U | 0.0720 | 0.0720 | 0.331 | 0.0563 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *83.4* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0164 | U | 0.0434 | 0.0435 | 1.00 | 0.0302 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00411 | U | 0.00581 | 0.00582 | 1.00 | 0.0107 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *87.1* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.610** | | 0.0852 | 0.0994 | 1.00 | 0.0428 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *60.1* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.477** | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Actinium-227 | -0.187 | U | 0.807 | 0.807 | | 0.494 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-212 | -0.439 | U | 1.12 | 1.12 | | 0.886 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Bismuth-214** | **0.903** | | 0.188 | 0.210 | | 0.0367 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Cesium-137 | -0.0235 | U | 0.0877 | 0.0877 | 0.0700 | 0.0700 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Lead-210** | **2.17** | | 1.92 | 1.94 | | 1.25 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Lead-212** | **0.370** | | 0.112 | 0.119 | | 0.0624 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Lead-214** | **0.822** | | 0.170 | 0.190 | | 0.0803 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Potassium-40** | **4.91** | | 1.45 | 1.53 | | 0.406 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Protactinium-231 | -1.04 | U | 3.95 | 3.95 | | 3.22 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Radium-226** | **0.903** | | 0.188 | 0.210 | 0.500 | 0.0367 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Radium-228** | **0.477** | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Thallium-208** | **0.281** | | 0.0932 | 0.0975 | | 0.0306 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Thorium-228** | **0.370** | | 0.112 | 0.119 | | 0.0624 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Thorium-232** | **0.477** | | 0.317 | 0.320 | | 0.135 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-234 | 0.566 | U | 0.357 | 0.363 | | 1.07 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-235 | 0.0790 | U | 0.164 | 0.165 | | 0.529 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-238 | 0.566 | U | 0.357 | 0.363 | | 1.07 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU5-B05-S001

Lab Sample ID: 160-36160-14

Date Collected: 10/24/19 15:58
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0530 | U | 0.0700 | 0.0701 | 0.331 | 0.0621 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *70.8* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0127 | U | 0.0512 | 0.0512 | 1.00 | 0.0455 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| **Plutonium-239/240** | **0.0233** | | 0.0353 | 0.0353 | 1.00 | 0.0175 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *82.4* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.639** | | 0.123 | 0.135 | 1.00 | 0.0980 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *38.7* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Actinium 228** | **0.250** | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Actinium-227 | 0.197 | U | 0.468 | 0.469 | | 0.362 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Bismuth-212 | 0.473 | U | 0.964 | 0.966 | | 0.738 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Bismuth-214** | **0.745** | | 0.205 | 0.219 | | 0.0677 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Cesium-137 | -0.0925 | U | 0.0534 | 0.0542 | 0.0700 | 0.101 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Lead-210** | **1.09** | | 1.42 | 1.43 | | 0.936 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Lead-212 | 0.0332 | U | 0.156 | 0.156 | | 0.126 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Lead-214** | **0.604** | | 0.146 | 0.159 | | 0.0845 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Potassium-40** | **5.31** | | 1.70 | 1.79 | | 0.613 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Protactinium-231 | 0.000 | U | 0.541 | 0.541 | | 2.52 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Radium-226** | **0.745** | | 0.205 | 0.219 | 0.500 | 0.0677 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Radium-228** | **0.250** | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Thallium-208** | **0.154** | | 0.0557 | 0.0579 | | 0.0117 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-228 | 0.0332 | U | 0.156 | 0.156 | | 0.126 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| **Thorium-232** | **0.250** | | 0.131 | 0.133 | | 0.244 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Thorium-234 | -0.800 | U | 0.707 | 0.713 | | 0.944 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-235 | 0.169 | U | 0.359 | 0.360 | | 0.273 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |
| Uranium-238 | -0.800 | U | 0.707 | 0.713 | | 0.944 | pCi/g | 11/01/19 16:18 | 11/23/19 22:56 | 1 |

# Client Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU5-B10-S001

Lab Sample ID: 160-36160-15

Date Collected: 10/24/19 15:38
Date Received: 10/29/19 09:00

Matrix: Solid

### Method: 905.0 - Total Beta Strontium (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | -0.0503 | U | 0.0678 | 0.0679 | 0.331 | 0.0599 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *78.1* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

### Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0157 | U | 0.0333 | 0.0334 | 1.00 | 0.0204 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.00197 | U | 0.0180 | 0.0180 | 1.00 | 0.0162 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *90.8* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

### Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Polonium-210** | **0.730** | | 0.144 | 0.156 | 1.00 | 0.0873 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *27.5* | *Q* | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

### Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium 228 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Actinium-227 | 0.166 | U | 0.597 | 0.598 | | 0.348 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Bismuth-212 | -0.0164 | U | 0.946 | 0.946 | | 0.780 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Bismuth-214** | **0.310** | | 0.125 | 0.129 | | 0.205 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Cesium-137 | -0.0539 | U | 0.114 | 0.114 | 0.0700 | 0.0641 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Lead-210 | -0.785 | U | 1.74 | 1.74 | | 1.39 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Lead-212** | **0.417** | | 0.0880 | 0.103 | | 0.0405 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Lead-214** | **0.541** | | 0.117 | 0.130 | | 0.0522 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Potassium-40** | **5.52** | | 1.12 | 1.25 | | 0.324 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Protactinium-231 | 0.000 | U | 0.714 | 0.714 | | 2.15 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Radium-226** | **0.310** | | 0.125 | 0.129 | 0.500 | 0.205 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Radium-228 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Thallium-208** | **0.179** | | 0.0707 | 0.0731 | | 0.0293 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| **Thorium-228** | **0.417** | | 0.0880 | 0.103 | | 0.0405 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thorium-232 | 0.130 | U | 0.255 | 0.255 | | 0.156 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Thorium-234 | 0.0591 | U | 0.141 | 0.141 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Uranium-235 | 0.125 | U | 0.261 | 0.262 | | 0.476 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |
| Uranium-238 | 0.0591 | U | 0.141 | 0.141 | | 1.14 | pCi/g | 11/01/19 16:18 | 11/23/19 23:28 | 1 |

# Tracer/Carrier Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Method: 905.0 - Total Beta Strontium (GFPC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID** | **Client Sample ID** | **Sr Carrier (40-110)** | | | | | | |
| 160-36160-1 | F-SU3-B01-S001 | 74.0 | | | | | | |
| 160-36160-2 | F-SU3-B04-S001 | 88.4 | | | | | | |
| 160-36160-3 | F-SU3-B05-S001 | 71.9 | | | | | | |
| 160-36160-4 | F-SU3-B07-S001 | 80.2 | | | | | | |
| 160-36160-5 | F-SU3-B09-S001 | 65.8 | | | | | | |
| 160-36160-6 | F-SU3-B11-S001 | 69.8 | | | | | | |
| 160-36160-7 | F-SU3-B12-S001 | 76.1 | | | | | | |
| 160-36160-8 | F-SU3-B14-S001 | 74.2 | | | | | | |
| 160-36160-9 | F-SU3-B15-S001 | 76.7 | | | | | | |
| 160-36160-10 | F-SU3-B23-S001 | 75.6 | | | | | | |
| 160-36160-11 | F-SU3-B29-S001 | 70.7 | | | | | | |
| 160-36160-12 | F-SU3-B30-S001 | 78.2 | | | | | | |
| 160-36160-13 | F-SU4-B04-S001 | 83.4 | | | | | | |
| 160-36160-14 | F-SU5-B05-S001 | 70.8 | | | | | | |
| 160-36160-15 | F-SU5-B10-S001 | 78.1 | | | | | | |
| LCS 160-448689/1-A | Lab Control Sample | 85.5 | | | | | | |
| MB 160-448689/19-A | Method Blank | 84.5 | | | | | | |

**Tracer/Carrier Legend**

Sr Carrier = Sr Carrier

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID** | **Client Sample ID** | **Pu-242 (T) (30-110)** | | | | | | |
| 160-36160-1 | F-SU3-B01-S001 | 93.3 | | | | | | |
| 160-36160-2 | F-SU3-B04-S001 | 83.5 | | | | | | |
| 160-36160-3 | F-SU3-B05-S001 | 81.9 | | | | | | |
| 160-36160-4 | F-SU3-B07-S001 | 88.2 | | | | | | |
| 160-36160-5 | F-SU3-B09-S001 | 96.8 | | | | | | |
| 160-36160-6 | F-SU3-B11-S001 | 86.9 | | | | | | |
| 160-36160-7 | F-SU3-B12-S001 | 96.0 | | | | | | |
| 160-36160-8 | F-SU3-B14-S001 | 105 | | | | | | |
| 160-36160-9 | F-SU3-B15-S001 | 104 | | | | | | |
| 160-36160-10 | F-SU3-B23-S001 | 97.8 | | | | | | |
| 160-36160-11 | F-SU3-B29-S001 | 105 | | | | | | |
| 160-36160-12 | F-SU3-B30-S001 | 88.1 | | | | | | |
| 160-36160-13 | F-SU4-B04-S001 | 87.1 | | | | | | |
| 160-36160-14 | F-SU5-B05-S001 | 82.4 | | | | | | |
| 160-36160-15 | F-SU5-B10-S001 | 90.8 | | | | | | |
| LCS 160-449075/2-A | Lab Control Sample | 100 | | | | | | |
| MB 160-449075/1-A | Method Blank | 88.9 | | | | | | |

**Tracer/Carrier Legend**

Pu-242 (T) = Pu-242 (T)

# Tracer/Carrier Summary

Client: Aptim Federal Services LLC
Job ID: 160-36160-2
Project/Site: Hunters Point Parcel F/ 501008

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

**Matrix: Solid**
**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| | | ›lonium-2( |
| **Lab Sample ID** | **Client Sample ID** | **(30-110)** |
| 160-36160-1 | F-SU3-B01-S001 | 54.8 |
| 160-36160-1 DU | F-SU3-B01-S001 | 46.2 |
| 160-36160-2 | F-SU3-B04-S001 | 57.8 |
| 160-36160-3 | F-SU3-B05-S001 | 56.5 |
| 160-36160-4 | F-SU3-B07-S001 | 50.2 |
| 160-36160-5 | F-SU3-B09-S001 | 58.6 |
| 160-36160-6 | F-SU3-B11-S001 | 61.5 |
| 160-36160-7 | F-SU3-B12-S001 | 52.0 |
| 160-36160-8 | F-SU3-B14-S001 | 26.4 Q |
| 160-36160-9 | F-SU3-B15-S001 | 62.5 |
| 160-36160-10 | F-SU3-B23-S001 | 54.8 |
| 160-36160-11 | F-SU3-B29-S001 | 63.4 |
| 160-36160-12 | F-SU3-B30-S001 | 39.8 |
| 160-36160-13 | F-SU4-B04-S001 | 60.1 |
| 160-36160-14 | F-SU5-B05-S001 | 38.7 |
| 160-36160-15 | F-SU5-B10-S001 | 27.5 Q |
| LCS 160-448621/2-A | Lab Control Sample | 65.7 |
| MB 160-448621/1-A | Method Blank | 69.9 |

**Tracer/Carrier Legend**

Polonium-209 = Polonium-209

# QC Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Method: 905.0 - Total Beta Strontium (GFPC)

**Lab Sample ID: MB 160-448689/19-A**
**Matrix: Solid**
**Analysis Batch: 451797**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 448689**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 0.06655 | | 0.0676 | 0.0678 | 0.331 | 0.0501 | pCi/g | 11/04/19 09:55 | 11/23/19 19:02 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Sr Carrier* | *84.5* | | *40 - 110* | *11/04/19 09:55* | *11/23/19 19:02* | *1* |

**Lab Sample ID: LCS 160-448689/1-A**
**Matrix: Solid**
**Analysis Batch: 451797**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 448689**

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Total Beta Strontium | 7.96 | 6.656 | | 0.554 | 0.331 | 0.0573 | pCi/g | 84 | 75 - 125 |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Sr Carrier* | *85.5* | | *40 - 110* |

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry)

**Lab Sample ID: MB 160-448621/1-A**
**Matrix: Solid**
**Analysis Batch: 450755**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 448621**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.03012 | U | 0.0318 | 0.0319 | 1.00 | 0.0512 | pCi/g | 11/03/19 13:15 | 11/16/19 13:38 | 1 |

| *Tracer* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Polonium-209* | *69.9* | | *30 - 110* | *11/03/19 13:15* | *11/16/19 13:38* | *1* |

**Lab Sample ID: LCS 160-448621/2-A**
**Matrix: Solid**
**Analysis Batch: 450753**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 448621**

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 8.44 | 8.187 | | 0.747 | 1.00 | 0.0399 | pCi/g | 97 | 75 - 113 |

| *Tracer* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Polonium-209* | *65.7* | | *30 - 110* |

# QC Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Method: A-01-R - Isotopic Polonium (Alpha Spectrometry) (Continued)

**Lab Sample ID: 160-36160-1 DU**
**Matrix: Solid**
**Analysis Batch: 450745**

**Client Sample ID: F-SU3-B01-S001**
**Prep Type: Total/NA**
**Prep Batch: 448621**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | LOQ | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.643 | | | 0.5417 | | 0.113 | 1.00 | 0.0774 | pCi/g | | | 0.44 | 1 |

| *Tracer* | *%Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Polonium-209* | *46.2* | | *30 - 110* |

## Method: A-01-R - Isotopic Plutonium (Alpha Spectrometry)

**Lab Sample ID: MB 160-449075/1-A**
**Matrix: Solid**
**Analysis Batch: 450540**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 449075**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.01299 | U | 0.0318 | 0.0318 | 1.00 | 0.0195 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |
| Plutonium-239/240 | -0.002168 | U | 0.00434 | 0.00434 | 1.00 | 0.00797 | pCi/g | 11/05/19 18:12 | 11/14/19 23:57 | 1 |

| *Tracer* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Pu-242 (T)* | *88.9* | | *30 - 110* | *11/05/19 18:12* | *11/14/19 23:57* | *1* |

**Lab Sample ID: LCS 160-449075/2-A**
**Matrix: Solid**
**Analysis Batch: 450571**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 449075**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | | | 5.27 | 5.177 | | 0.590 | 1.00 | 0.0122 | pCi/g | 98 | 80 - 125 | | |
| Plutonium-239/240 | | | 5.28 | 5.268 | | 0.598 | 1.00 | 0.00998 | pCi/g | 100 | 81 - 125 | | |

| *Tracer* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Pu-242 (T)* | *100* | | *30 - 110* |

## Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

**Lab Sample ID: MB 160-448571/1-A**
**Matrix: Solid**
**Analysis Batch: 451809**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 448571**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium 228 | 0.05257 | U | 0.251 | 0.251 | | 0.129 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Actinium-227 | 0.1063 | U | 0.269 | 0.269 | | 0.333 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Bismuth-212 | -0.3813 | U | 1.02 | 1.02 | | 0.807 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Bismuth-214 | 0.08282 | U | 0.0676 | 0.0681 | | 0.230 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Cesium-137 | 0.02393 | U | 0.0530 | 0.0531 | 0.0700 | 0.0400 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Lead-210 | 0.2319 | U | 1.37 | 1.37 | | 1.03 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Lead-212 | -0.08417 | U | 0.148 | 0.148 | | 0.103 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |

# QC Sample Results

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

**Lab Sample ID: MB 160-448571/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 451809** — **Prep Batch: 448571**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Lead-214 | -0.08903 | U | 0.208 | 0.209 | | 0.110 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Potassium-40 | 0.3398 | U | 0.860 | 0.860 | | 0.388 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Protactinium-231 | 0.0000 | U | 0.439 | 0.439 | | 2.01 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Radium-226 | 0.08282 | U | 0.0676 | 0.0681 | 0.500 | 0.230 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Radium-228 | 0.05257 | U | 0.251 | 0.251 | | 0.129 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Thallium-208 | 0.06107 | | 0.0353 | 0.0358 | | 0.0365 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Thorium-228 | -0.08417 | U | 0.148 | 0.148 | | 0.103 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Thorium-232 | 0.05257 | U | 0.251 | 0.251 | | 0.129 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Thorium-234 | -0.5769 | U | 0.805 | 0.807 | | 0.688 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Uranium-235 | 0.03972 | U | 0.399 | 0.399 | | 0.326 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |
| Uranium-238 | -0.5769 | U | 0.805 | 0.807 | | 0.688 | pCi/g | 11/01/19 16:18 | 11/23/19 19:15 | 1 |

**Lab Sample ID: LCS 160-448571/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 451807** — **Prep Batch: 448571**

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Americium-241 | 96.6 | 95.97 | | 10.1 | | 0.508 | pCi/g | 99 | 87 - 116 |
| Cesium-137 | 27.4 | 27.03 | | 2.87 | 0.0700 | 0.0699 | pCi/g | 99 | 87 - 120 |
| Cobalt-60 | 10.9 | 10.51 | | 1.10 | 0.200 | 0.0347 | pCi/g | 97 | 87 - 115 |

**Lab Sample ID: 160-36160-1 DU** — **Client Sample ID: F-SU3-B01-S001**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 451807** — **Prep Batch: 448571**

| Analyte | Sample Result | Sample Qual | DU Result | DU Qual | Total Uncert. (2σ+/-) | LOQ | DLC | Unit | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Actinium 228 | 0.312 | | 0.1436 | | 0.200 | | 0.142 | pCi/g | 0.31 | 1 |
| Actinium-227 | -0.383 | U | -0.4258 | U | 0.829 | | 0.478 | pCi/g | 0.02 | 1 |
| Bismuth-212 | 0.0846 | U | -0.01095 | U | 0.738 | | 0.609 | pCi/g | 0.05 | 1 |
| Bismuth-214 | 0.555 | | 0.2846 | | 0.121 | | 0.0529 | pCi/g | 0.80 | 1 |
| Cesium-137 | -0.0264 | U | -0.05738 | U | 0.0649 | 0.0700 | 0.0639 | pCi/g | 0.18 | 1 |
| Lead-210 | -0.569 | U | -0.4456 | U | 1.75 | | 1.42 | pCi/g | 0.03 | 1 |
| Lead-212 | 0.0323 | U | 0.04697 | U | 0.122 | | 0.0981 | pCi/g | 0.05 | 1 |
| Lead-214 | 0.412 | | 0.4454 | | 0.129 | | 0.0566 | pCi/g | 0.11 | 1 |
| Potassium-40 | 8.14 | | 7.834 | | 1.62 | | 0.368 | pCi/g | 0.08 | 1 |
| Protactinium-231 | 1.02 | U | 0.3312 | U | 1.49 | | 2.31 | pCi/g | 0.15 | 1 |
| Radium-226 | 0.555 | | 0.2846 | | 0.121 | 0.500 | 0.0529 | pCi/g | 0.80 | 1 |
| Radium-228 | 0.312 | | 0.1436 | | 0.200 | | 0.142 | pCi/g | 0.31 | 1 |
| Thallium-208 | 0.149 | | 0.09003 | | 0.100 | | 0.0461 | pCi/g | 0.36 | 1 |
| Thorium-228 | 0.0323 | U | 0.04697 | U | 0.122 | | 0.0981 | pCi/g | 0.05 | 1 |
| Thorium-232 | 0.312 | | 0.1436 | | 0.200 | | 0.142 | pCi/g | 0.31 | 1 |
| Thorium-234 | 0.885 | | 0.2680 | U | 0.914 | | 0.859 | pCi/g | 0.36 | 1 |
| Uranium-235 | -0.0630 | U | 0.08004 | U | 0.237 | | 0.345 | pCi/g | 0.21 | 1 |
| Uranium-238 | 0.885 | | 0.2680 | U | 0.914 | | 0.859 | pCi/g | 0.36 | 1 |

# QC Association Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Rad

### Leach Batch: 448209

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-2 | F-SU3-B04-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-3 | F-SU3-B05-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-4 | F-SU3-B07-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-5 | F-SU3-B09-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-6 | F-SU3-B11-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-7 | F-SU3-B12-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-8 | F-SU3-B14-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-9 | F-SU3-B15-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-10 | F-SU3-B23-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-11 | F-SU3-B29-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-12 | F-SU3-B30-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-13 | F-SU4-B04-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-14 | F-SU5-B05-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-15 | F-SU5-B10-S001 | Total/NA | Solid | Dry and Grind | |
| 160-36160-1 DU | F-SU3-B01-S001 | Total/NA | Solid | Dry and Grind | |

### Prep Batch: 448571

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-2 | F-SU3-B04-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-3 | F-SU3-B05-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-4 | F-SU3-B07-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-5 | F-SU3-B09-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-6 | F-SU3-B11-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-7 | F-SU3-B12-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-8 | F-SU3-B14-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-9 | F-SU3-B15-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-10 | F-SU3-B23-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-11 | F-SU3-B29-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-12 | F-SU3-B30-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-13 | F-SU4-B04-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-14 | F-SU5-B05-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| 160-36160-15 | F-SU5-B10-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |
| MB 160-448571/1-A | Method Blank | Total/NA | Solid | Fill_Geo-21 | |
| LCS 160-448571/2-A | Lab Control Sample | Total/NA | Solid | Fill_Geo-21 | |
| 160-36160-1 DU | F-SU3-B01-S001 | Total/NA | Solid | Fill_Geo-21 | 448209 |

### Prep Batch: 448621

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-2 | F-SU3-B04-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-3 | F-SU3-B05-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-4 | F-SU3-B07-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-5 | F-SU3-B09-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-6 | F-SU3-B11-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-7 | F-SU3-B12-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-8 | F-SU3-B14-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-9 | F-SU3-B15-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-10 | F-SU3-B23-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-11 | F-SU3-B29-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |

# QC Association Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Rad (Continued)

### Prep Batch: 448621 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-12 | F-SU3-B30-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-13 | F-SU4-B04-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-14 | F-SU5-B05-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| 160-36160-15 | F-SU5-B10-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |
| MB 160-448621/1-A | Method Blank | Total/NA | Solid | Digest/Cu Plate | |
| LCS 160-448621/2-A | Lab Control Sample | Total/NA | Solid | Digest/Cu Plate | |
| 160-36160-1 DU | F-SU3-B01-S001 | Total/NA | Solid | Digest/Cu Plate | 448209 |

### Prep Batch: 448689

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-2 | F-SU3-B04-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-3 | F-SU3-B05-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-4 | F-SU3-B07-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-5 | F-SU3-B09-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-6 | F-SU3-B11-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-7 | F-SU3-B12-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-8 | F-SU3-B14-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-9 | F-SU3-B15-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-10 | F-SU3-B23-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-11 | F-SU3-B29-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-12 | F-SU3-B30-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-13 | F-SU4-B04-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-14 | F-SU5-B05-S001 | Total/NA | Solid | DPS-0 | 448209 |
| 160-36160-15 | F-SU5-B10-S001 | Total/NA | Solid | DPS-0 | 448209 |
| MB 160-448689/19-A | Method Blank | Total/NA | Solid | DPS-0 | |
| LCS 160-448689/1-A | Lab Control Sample | Total/NA | Solid | DPS-0 | |

### Prep Batch: 449075

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-2 | F-SU3-B04-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-3 | F-SU3-B05-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-4 | F-SU3-B07-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-5 | F-SU3-B09-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-6 | F-SU3-B11-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-7 | F-SU3-B12-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-8 | F-SU3-B14-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-9 | F-SU3-B15-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-10 | F-SU3-B23-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-11 | F-SU3-B29-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-12 | F-SU3-B30-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-13 | F-SU4-B04-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-14 | F-SU5-B05-S001 | Total/NA | Solid | ExtChrom | 448209 |
| 160-36160-15 | F-SU5-B10-S001 | Total/NA | Solid | ExtChrom | 448209 |
| MB 160-449075/1-A | Method Blank | Total/NA | Solid | ExtChrom | |
| LCS 160-449075/2-A | Lab Control Sample | Total/NA | Solid | ExtChrom | |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B01-S001

**Lab Sample ID: 160-36160-1**
**Date Collected: 10/24/19 11:50**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450585 | 11/14/19 23:56 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450746 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 452002 | 11/26/19 09:34 | KLS | TAL SL |

## Client Sample ID: F-SU3-B04-S001

**Lab Sample ID: 160-36160-2**
**Date Collected: 10/24/19 10:41**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450544 | 11/14/19 23:56 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450744 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451809 | 11/23/19 20:23 | KLS | TAL SL |

## Client Sample ID: F-SU3-B05-S001

**Lab Sample ID: 160-36160-3**
**Date Collected: 10/24/19 10:08**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450551 | 11/14/19 23:56 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450742 | 11/16/19 13:38 | KRR | TAL SL |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B05-S001

**Lab Sample ID: 160-36160-3**
**Date Collected: 10/24/19 10:08**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451807 | 11/23/19 21:08 | KLS | TAL SL |

## Client Sample ID: F-SU3-B07-S001

**Lab Sample ID: 160-36160-4**
**Date Collected: 10/24/19 09:40**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450563 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450741 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451809 | 11/23/19 21:09 | KLS | TAL SL |

## Client Sample ID: F-SU3-B09-S001

**Lab Sample ID: 160-36160-5**
**Date Collected: 10/24/19 09:17**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450564 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450740 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451822 | 11/23/19 21:14 | KLS | TAL SL |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B11-S001

**Lab Sample ID: 160-36160-6**
**Date Collected: 10/24/19 11:32**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450565 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450739 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451807 | 11/23/19 21:47 | KLS | TAL SL |

## Client Sample ID: F-SU3-B12-S001

**Lab Sample ID: 160-36160-7**
**Date Collected: 10/24/19 11:00**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450566 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450737 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451809 | 11/23/19 21:48 | KLS | TAL SL |

## Client Sample ID: F-SU3-B14-S001

**Lab Sample ID: 160-36160-8**
**Date Collected: 10/24/19 10:23**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450567 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450735 | 11/16/19 13:38 | KRR | TAL SL |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B14-S001

**Lab Sample ID: 160-36160-8**
**Date Collected: 10/24/19 10:23**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451822 | 11/23/19 21:48 | KLS | TAL SL |

## Client Sample ID: F-SU3-B15-S001

**Lab Sample ID: 160-36160-9**
**Date Collected: 10/24/19 09:52**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 11:03 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450536 | 11/15/19 09:56 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450736 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451807 | 11/23/19 22:22 | KLS | TAL SL |

## Client Sample ID: F-SU3-B23-S001

**Lab Sample ID: 160-36160-10**
**Date Collected: 10/24/19 13:46**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:01 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450537 | 11/15/19 09:56 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450733 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451809 | 11/23/19 22:22 | KLS | TAL SL |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU3-B29-S001

**Lab Sample ID: 160-36160-11**
**Date Collected: 10/24/19 14:21**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:01 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450570 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450728 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451822 | 11/23/19 22:23 | KLS | TAL SL |

## Client Sample ID: F-SU3-B30-S001

**Lab Sample ID: 160-36160-12**
**Date Collected: 10/24/19 14:04**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:01 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450575 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450727 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451807 | 11/23/19 22:55 | KLS | TAL SL |

## Client Sample ID: F-SU4-B04-S001

**Lab Sample ID: 160-36160-13**
**Date Collected: 10/24/19 15:04**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450576 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450726 | 11/16/19 13:38 | KRR | TAL SL |

# Lab Chronicle

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Client Sample ID: F-SU4-B04-S001

**Lab Sample ID: 160-36160-13**
**Date Collected: 10/24/19 15:04**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451809 | 11/23/19 22:56 | KLS | TAL SL |

## Client Sample ID: F-SU5-B05-S001

**Lab Sample ID: 160-36160-14**
**Date Collected: 10/24/19 15:58**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450578 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450730 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451822 | 11/23/19 22:56 | KLS | TAL SL |

## Client Sample ID: F-SU5-B10-S001

**Lab Sample ID: 160-36160-15**
**Date Collected: 10/24/19 15:38**
**Matrix: Solid**
**Date Received: 10/29/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | DPS-0 | | | 448689 | 11/04/19 09:55 | RBR | TAL SL |
| Total/NA | Analysis | 905.0 | | 1 | 451797 | 11/23/19 19:02 | AJD | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | ExtChrom | | | 449075 | 11/05/19 18:12 | KLH | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450586 | 11/14/19 23:57 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Digest/Cu Plate | | | 448621 | 11/03/19 13:15 | MLG | TAL SL |
| Total/NA | Analysis | A-01-R | | 1 | 450729 | 11/16/19 13:38 | KRR | TAL SL |
| Total/NA | Leach | Dry and Grind | | | 448209 | 10/29/19 22:55 | SJS | TAL SL |
| Total/NA | Prep | Fill_Geo-21 | | | 448571 | 11/01/19 16:18 | KRS | TAL SL |
| Total/NA | Analysis | GA-01-R | | 1 | 451807 | 11/23/19 23:28 | KLS | TAL SL |

**Laboratory References:**
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Accreditation/Certification Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

## Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| ANAB | DoD | L2305 | 04-06-22 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 905.0 | DPS-0 | Solid | Total Beta Strontium |

# Method Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 905.0 | Total Beta Strontium (GFPC) | DOE | TAL SL |
| A-01-R | Isotopic Plutonium (Alpha Spectrometry) | DOE | TAL SL |
| A-01-R | Isotopic Polonium (Alpha Spectrometry) | DOE | TAL SL |
| GA-01-R | Radium-226 & Other Gamma Emitters (GS) | DOE | TAL SL |
| Digest/Cu Plate | Preparation, Digestion & Copper Plating | TAL-STL | TAL SL |
| DPS-0 | Preparation, Digestion/ Precipitate | None | TAL SL |
| Dry and Grind | Preparation, Dry and Grind | None | TAL SL |
| ExtChrom | Preparation, Extraction Chromatography Resin Actinide Separation | None | TAL SL |
| Fill_Geo-21 | Fill Geometry, 21-Day In-Growth | None | TAL SL |

**Protocol References:**

DOE = U.S. Department of Energy
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

**Laboratory References:**

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Sample Summary

Client: Aptim Federal Services LLC
Project/Site: Hunters Point Parcel F/ 501008

Job ID: 160-36160-2

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 160-36160-1 | F-SU3-B01-S001 | Solid | 10/24/19 11:50 | 10/29/19 09:00 | |
| 160-36160-2 | F-SU3-B04-S001 | Solid | 10/24/19 10:41 | 10/29/19 09:00 | |
| 160-36160-3 | F-SU3-B05-S001 | Solid | 10/24/19 10:08 | 10/29/19 09:00 | |
| 160-36160-4 | F-SU3-B07-S001 | Solid | 10/24/19 09:40 | 10/29/19 09:00 | |
| 160-36160-5 | F-SU3-B09-S001 | Solid | 10/24/19 09:17 | 10/29/19 09:00 | |
| 160-36160-6 | F-SU3-B11-S001 | Solid | 10/24/19 11:32 | 10/29/19 09:00 | |
| 160-36160-7 | F-SU3-B12-S001 | Solid | 10/24/19 11:00 | 10/29/19 09:00 | |
| 160-36160-8 | F-SU3-B14-S001 | Solid | 10/24/19 10:23 | 10/29/19 09:00 | |
| 160-36160-9 | F-SU3-B15-S001 | Solid | 10/24/19 09:52 | 10/29/19 09:00 | |
| 160-36160-10 | F-SU3-B23-S001 | Solid | 10/24/19 13:46 | 10/29/19 09:00 | |
| 160-36160-11 | F-SU3-B29-S001 | Solid | 10/24/19 14:21 | 10/29/19 09:00 | |
| 160-36160-12 | F-SU3-B30-S001 | Solid | 10/24/19 14:04 | 10/29/19 09:00 | |
| 160-36160-13 | F-SU4-B04-S001 | Solid | 10/24/19 15:04 | 10/29/19 09:00 | |
| 160-36160-14 | F-SU5-B05-S001 | Solid | 10/24/19 15:58 | 10/29/19 09:00 | |
| 160-36160-15 | F-SU5-B10-S001 | Solid | 10/24/19 15:38 | 10/29/19 09:00 | |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-36160-2

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **108001_00001** | 12/06/67 | | Eckert and Ziegler, Lot 108001 | | (Purchased Reagent) | | Americium-241 | 7.286 Bq |
| | | | | | | | Plutonium-239/240 | 6.646 Bq |
| | | | | | | | Th-230 | 6.01 Bq |
| **108002_00001** | 12/07/67 | | Eckert and Ziegler, Lot 108002 | | (Purchased Reagent) | | Americium-241 | 8.089 Bq |
| | | | | | | | Plutonium-239/240 | 8.515 Bq |
| | | | | | | | Th-230 | 9.349 Bq |
| **108345_00001** | 01/22/68 | | Eckert & Ziegler, Lot 108345 | | (Purchased Reagent) | | Americium-241 | 7.916 Bq |
| | | | | | | | Plutonium-239/240 | 7.695 Bq |
| | | | | | | | Th-230 | 7.314 Bq |
| **108346_00001** | 01/22/68 | | Eckert & Ziegler, Lot 108346 | | (Purchased Reagent) | | Americium-241 | 8.008 Bq |
| | | | | | | | Plutonium-239/240 | 7.835 Bq |
| | | | | | | | Th-230 | 7.57 Bq |
| **108347_00001** | 01/23/68 | | Eckert & Ziegler, Lot 108347 | | (Purchased Reagent) | | Americium-241 | 8.643 Bq |
| | | | | | | | Plutonium-239/240 | 8.035 Bq |
| | | | | | | | Pulser | |
| | | | | | | | Th-230 | 8.101 Bq |
| | | | | | | | U | |
| **108348_00001** | 01/23/68 | | Eckert & Ziegler, Lot 108348 | | (Purchased Reagent) | | Americium-241 | 7.497 Bq |
| | | | | | | | Plutonium-239/240 | 7.067 Bq |
| | | | | | | | Pulser | |
| | | | | | | | Th-230 | 6.956 Bq |
| | | | | | | | U | |
| **82232-334_00001** | 06/03/60 | | Eckert & Ziegler, Lot 82232-334 | | (Purchased Reagent) | | Americium-241 | 7.281 Bq |
| | | | | | | | Plutonium-239/240 | 7.137 Bq |
| | | | | | | | Th-230 | 7.63 Bq |
| **82233-334_00001** | 06/03/60 | | Eckert & Zigler, Lot 82233-334 | | (Purchased Reagent) | | Americium-241 | 5.114 Bq |
| | | | | | | | Plutonium-239/240 | 6.064 Bq |
| | | | | | | | Th-230 | 4.95 Bq |
| **82236-334_00001** | 06/02/60 | | Eckert & Ziegler, Lot 82236-334 | | (Purchased Reagent) | | Americium-241 | 6.891 Bq |
| | | | | | | | Plutonium-239/240 | 6.664 Bq |
| | | | | | | | Th-230 | 7.107 Bq |
| **82237-334_00003** | 06/01/60 | | Eckert & Ziegler, Lot 82237-334 | | (Purchased Reagent) | | Americium-241 | 5.608 Bq |
| | | | | | | | Plutonium-239/240 | 6.424 Bq |
| | | | | | | | Th-230 | 5.856 Bq |
| **82240-334_00001** | 06/08/60 | | Eckert & Ziegler, Lot 82240-334 | | (Purchased Reagent) | | Americium-241 | 8.298 Bq |
| | | | | | | | Plutonium-239/240 | 7.163 Bq |
| | | | | | | | Th-230 | 6.304 Bq |
| **82241-334_00001** | 06/08/60 | | Eckert & Ziegler, Lot 82241-334 | | (Purchased Reagent) | | Americium-241 | 6.638 Bq |
| | | | | | | | Plutonium-239/240 | 6.797 Bq |
| | | | | | | | Th-230 | 6.629 Bq |
| **82243-334_00001** | 06/09/60 | | Eckert & Ziegler, Lot 82243-334 | | (Purchased Reagent) | | Americium-241 | 6.39 Bq |
| | | | | | | | Plutonium-239/240 | 5.979 Bq |
| | | | | | | | Th-230 | 5.856 Bq |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-36160-2

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **82244-334_00001** | 06/09/60 | Eckert & Zigler, Lot 82244-334 | | | (Purchased Reagent) | | Americium-241 | 6.897 Bq |
| | | | | | | | Plutonium-239/240 | 6.717 Bq |
| | | | | | | | Th-230 | 7.352 Bq |
| **82246-334_00001** | 06/09/60 | Eckert & Ziegler, Lot 82246-334 | | | (Purchased Reagent) | | Americium-241 | 6.002 Bq |
| | | | | | | | Plutonium-239/240 | 5.353 Bq |
| | | | | | | | Th-230 | 5.57 Bq |
| **Pb-210_00025** | 10/02/20 | 10/01/19 | 1M HNO3, Lot n/a | 250 mL | Pb-210_00017 | 10 mL | Lead-210 | 90.4903 dpm/mL |
| | | | | | | | Polonium-210 | 90.4903 dpm/mL |
| .Pb-210_00017 | 10/02/20 | 07/23/14 | 1M HNO3, Lot n/a | 100 mL | Pb-210_00016 | 5.1868 mL | Lead-210 | 2262.26 dpm/mL |
| | | | | | | | Polonium-210 | 2262.26 dpm/mL |
| ..Pb-210_00016 | 11/01/63 | Analytics, Lot 95149 | | | (Purchased Reagent) | | Lead-210 | 726.928 Bq/g |
| | | | | | | | Polonium-210 | 726.928 Bq/g |
| **Po-209_00008** | 11/29/19 | 11/27/18 | 2M HCl, Lot n/a | 200 mL | Po-209_00007 | 5.12 g | Polonium-209 | 107.77 dpm/mL |
| .Po-209_00007 | 11/13/68 | Eckert & Ziegler, Lot 111092 | | | (Purchased Reagent) | | Polonium-209 | 70.1626 Bq/g |
| **Pu-238_00016** | 06/20/20 | 11/19/18 | 3M HNO3, Lot n/a | 250 mL | Pu-238_00009 | 5.4151 mL | Plutonium-238 | 60.3549 dpm/mL |
| .Pu-238_00009 | 12/02/65 | Eckert & Ziegler- Analytics, Lot 101995 | | | (Purchased Reagent) | | Plutonium-238 | 46.4403 Bq/g |
| **Pu-239_00015** | 06/20/20 | 11/19/18 | 3M HNO3, Lot n/a | 250 mL | Pu-239_00003 | 10 mL | Plutonium-239/240 | 58.6749 dpm/mL |
| .Pu-239_00003 | 07/30/20 | 08/11/08 | 3M HNO3, Lot 0 | 100 mL | Pu-239_00001 | 5.5996 g | Plutonium-239/240 | 1466.87 dpm/mL |
| ..Pu-239_00001 | 12/13/40 | US EPA NRAD-LV, Lot 2510-1 | | | (Purchased Reagent) | | Plutonium-239/240 | 11800 pCi/g |
| **Pu-242_00036** | 06/20/20 | 06/06/19 | 3M HNO3, Lot N/A | 250 mL | Pu-242_00034 | 5.4506 g | Pu-242 | 68.2253 dpm/mL |
| | | | | | | | Pu-242 (T) | 68.2253 dpm/mL |
| | | | | | Pu-242_00035 | 5.4494 g | Pu-242 | 68.2253 dpm/mL |
| | | | | | | | Pu-242 (T) | 68.2253 dpm/mL |
| .Pu-242_00034 | 06/20/20 | NIST, Lot 4334j | | | (Purchased Reagent) | | Pu-242 | 26.08 Bq/g |
| | | | | | | | Pu-242 (T) | 26.08 Bq/g |
| .Pu-242_00035 | 06/20/20 | NIST, Lot 4334j | | | (Purchased Reagent) | | Pu-242 | 26.08 Bq/g |
| | | | | | | | Pu-242 (T) | 26.08 Bq/g |
| **Source A_00001** | 04/01/59 | 02/23/11 | water, Lot 79670-334 | 0.9986 Source | Gamma Ampuole_00001 | 0.9986 g | Americium-241 | 9.4429 Bq |
| | | | | | | | Cd-109 | 132.909 Bq |
| | | | | | | | Ce-139 | 4.4538 Bq |
| | | | | | | | Cesium-137 | 3.7296 Bq |
| | | | | | | | Co-57 | 2.9513 Bq |
| | | | | | | | Cobalt-60 | 6.2002 Bq |
| | | | | | | | Hg-203 | 9.6996 Bq |
| | | | | | | | Sn-113 | 7.6266 Bq |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-36160-2

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Y-88 | 12.712 Bq |
| .Gamma Ampuole_00001 | 04/07/59 | | Analytics, Lot 79670-334 | | (Purchased Reagent) | | Americium-241 | 9442.9 Bq |
| | | | | | | | Cd-109 | 132909 Bq |
| | | | | | | | Ce-139 | 4453.8 Bq |
| | | | | | | | Cesium-137 | 3729.6 Bq |
| | | | | | | | Co-57 | 2951.3 Bq |
| | | | | | | | Cobalt-60 | 6200.2 Bq |
| | | | | | | | Hg-203 | 9699.6 Bq |
| | | | | | | | Sn-113 | 7626.6 Bq |
| | | | | | | | Y-88 | 12712 Bq |
| **Source E_00001** | 04/01/59 | 02/23/11 | water, Lot 79670-334 | 1.0205 g | Gamma Ampuole_00001 | 1.0205 g | Americium-241 | 9442.9 Bq |
| | | | | | | | Cd-109 | 132909 Bq |
| | | | | | | | Ce-139 | 4453.8 Bq |
| | | | | | | | Cesium-137 | 3729.6 Bq |
| | | | | | | | Co-57 | 2951.3 Bq |
| | | | | | | | Cobalt-60 | 6200.2 Bq |
| | | | | | | | Hg-203 | 9699.6 Bq |
| | | | | | | | Sn-113 | 7626.6 Bq |
| | | | | | | | Y-88 | 12712 Bq |
| .Gamma Ampuole_00001 | 04/07/59 | | Analytics, Lot 79670-334 | | (Purchased Reagent) | | Americium-241 | 9442.9 Bq |
| | | | | | | | Cd-109 | 132909 Bq |
| | | | | | | | Ce-139 | 4453.8 Bq |
| | | | | | | | Cesium-137 | 3729.6 Bq |
| | | | | | | | Co-57 | 2951.3 Bq |
| | | | | | | | Cobalt-60 | 6200.2 Bq |
| | | | | | | | Hg-203 | 9699.6 Bq |
| | | | | | | | Sn-113 | 7626.6 Bq |
| | | | | | | | Y-88 | 12712 Bq |
| **Source H_00002** | 01/01/51 | 01/01/12 | wataer, Lot 83725-334 | 10 mL | Gamma Ampuole_00003 | 2.1184 g | Americium-241 | 1924.27 Bq |
| | | | | | | | Cd-109 | 27950 Bq |
| | | | | | | | Ce-139 | 927.965 Bq |
| | | | | | | | Cesium-137 | 774.911 Bq |
| | | | | | | | Co-57 | 605.079 Bq |
| | | | | | | | Cobalt-60 | 1273.92 Bq |
| | | | | | | | Hg-203 | 2007.23 Bq |
| | | | | | | | Sn-113 | 1643.41 Bq |
| | | | | | | | Y-88 | 2681.34 Bq |
| .Gamma Ampuole_00003 | 01/19/61 | | Analytics, Lot 83725-334 | | (Purchased Reagent) | | Americium-241 | 9083.6 Bq |
| | | | | | | | Cd-109 | 131939 Bq |
| | | | | | | | Ce-139 | 4380.5 Bq |
| | | | | | | | Cesium-137 | 3658 Bq |
| | | | | | | | Co-57 | 2856.3 Bq |
| | | | | | | | Cobalt-60 | 6013.6 Bq |
| | | | | | | | Hg-203 | 9475.2 Bq |
| | | | | | | | Sn-113 | 7757.8 Bq |
| | | | | | | | Y-88 | 12657.4 Bq |
| **Sr Carrier_00050** | 06/26/20 | | CPI, Lot 10070249-5 | | (Purchased Reagent) | | Sr Carrier | 0.0249 g |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-36160-2

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **Sr-90_00004** | 09/17/59 | 06/21/11 | 0.1M HCL, Lot 0 | 100 mL | Sr-90_00001 | 5.0139 g | Gross Beta | 45120.6 dpm/mL |
| | | | | | | | Sr | 22560.3 dpm/mL |
| | | | | | | | Sr-90 | 22560.3 dpm/mL |
| .Sr-90_00001 | 09/17/59 | Eckert & Ziegler, Lot 80573-334 | | | (Purchased Reagent) | | Gross Beta | 14998.5 Bq/g |
| | | | | | | | Sr | 7499.25 Bq/g |
| | | | | | | | Sr-90 | 7499.25 Bq/g |
| **Sr-90_00018** | 04/19/20 | 11/28/12 | 0.1M HCL, Lot 0 | 100 mL | Sr-90_00017 | 4.9997 g | Gross Beta | 44774.2 dpm/mL |
| | | | | | | | Sr-90 | 22387.1 dpm/mL |
| .Sr-90_00017 | 11/29/62 | Analytics, Lot 92352 | | | (Purchased Reagent) | | Gross Beta | 14925.6 Bq/g |
| | | | | | | | Sr-90 | 7462.82 Bq/g |
| **Sr-90_00039** | 04/19/20 | 04/09/19 | 0.1M HCL, Lot n/a | 500 mL | Sr-90_00012 | 0.5 mL | Gross Beta | 45.1206 dpm/mL |
| | | | | | | | Sr-90 | 22.5603 dpm/mL |
| | | | | | | | Total Beta Strontium | 22.5603 dpm/mL |
| .Sr-90_00012 | 04/19/20 | 06/01/11 | 0.1M HCL, Lot 0 | 100 mL | Sr-90_00011 | 5.0139 g | Gross Beta | 45120.6 dpm/mL |
| | | | | | | | Sr-90 | 22560.3 dpm/mL |
| | | | | | | | Total Beta Strontium | 22560.3 dpm/mL |
| ..Sr-90_00011 | 09/17/59 | Eckert & Ziegler, Lot 0 | | | (Purchased Reagent) | | Gross Beta | 14998.5 Bq/g |
| | | | | | | | Sr-90 | 7499.25 Bq/g |
| | | | | | | | Total Beta Strontium | 7499.25 Bq/g |
| **Th-230_00016** | 11/29/62 | 11/28/12 | 0.5M HNO3, Lot 0 | 100 mL | Th-230_00015 | 5.0489 g | Gross Alpha | 2374.49 dpm/mL |
| | | | | | | | Th-230 | 2374.49 dpm/mL |
| .Th-230_00015 | 11/29/62 | Analytics, Lot 92523 | | | (Purchased Reagent) | | Gross Alpha | 783.829 Bq/g |
| | | | | | | | Th-230 | 783.829 Bq/g |
| **Th-230_00019** | 10/03/20 | 08/13/13 | 1M HNO3, Lot n/a | 100 mL | Th-230_00018 | 5.0731 mL | Gross Alpha | 2228.23 dpm/mL |
| | | | | | | | Th-230 | 2228.23 dpm/mL |
| .Th-230_00018 | 08/08/63 | Eckert & Ziegler Analytics, Lot 92776 | | | (Purchased Reagent) | | Gross Alpha | 43922.5 dpm/g |
| | | | | | | | Th-230 | 43922.5 dpm/g |
| **Tuna Can LCS_00009** | 09/13/20 | Analytics, Lot 74139-334 | | | (Purchased Reagent) | | Americium-241 | 219 dpm/g |
| | | | | | | | Cesium-137 | 82.3 dpm/g |
| | | | | | | | Cobalt-60 | 136 dpm/g |
| **Tuna Can_00003** | 02/09/17 | Eckert & Ziegler, Lot 90099 | | | (Purchased Reagent) | | Americium-241 | 1164 Bq |
| | | | | | | | Cd-109 | 16373 Bq |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 160-36160-2

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Ce-139 | 549 Bq |
| | | | | | | | Cesium-137 | 467 Bq |
| | | | | | | | Co-57 | 362 Bq |
| | | | | | | | Cobalt-60 | 735 Bq |
| | | | | | | | Hg-203 | 1171 Bq |
| | | | | | | | Lead-210 | 14936 Bq |
| | | | | | | | Sn-113 | 967 Bq |
| | | | | | | | Y-88 | 1590 Bq |
| **Tuna Can_00006** | 03/01/16 | Eckert & Ziegler, Lot 83814-334 | | | (Purchased Reagent) | | Americium-241 | 1195 Bq |
| | | | | | | | Cd-109 | 16353 Bq |
| | | | | | | | Ce-139 | 543 Bq |
| | | | | | | | Cesium-137 | 453 Bq |
| | | | | | | | Co-57 | 354 Bq |
| | | | | | | | Cobalt-60 | 745 Bq |
| | | | | | | | Hg-203 | 1175 Bq |
| | | | | | | | Lead-210 | 14606 Bq |
| | | | | | | | Sn-113 | 961 Bq |
| | | | | | | | Y-88 | 1568 Bq |

# Reagent

# 108001_00001

Eckert & Ziegler
Analytics

1368446
ID: 108001_00001
Alpha Calibration source

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108001
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2698841, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 06-December-2017 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 6.646E+00 | 4950-5240 | 8.806E+06 | 1.2 | 1.5 | 3.9 |
| Am-241 | 7.286E+00 | 5280-5600 | 1.580E+05 | 1.1 | 1.5 | 3.8 |
| Th-230 | 6.010E+00 | 4470-4760 | 2.753E+07 | 1.2 | 1.5 | 3.9 |
| Total Activity | 1.997E+01 | 3000-8000 | | 0.7 | 1.5 | 3.4 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

**SRS Number:** 108001

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 19-DEC-17
J. Lahr, Spectroscopist

# Reagent

# 108002_00001

Eckert & Ziegler
Analytics

1368447
ID 108002_00001
Alpha Calibration source

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108002
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2698841, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 07-December-2017 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 8.515E+00 | 4960-5240 | 8.806E+06 | 1.0 | 1.5 | 3.7 |
| Am-241 | 8.089E+00 | 5280-5600 | 1.580E+05 | 1.0 | 1.5 | 3.7 |
| Th-230 | 9.349E+00 | 4470-4760 | 2.753E+07 | 1.0 | 1.5 | 3.6 |
| Total Activity | 2.599E+01 | 3000-8000 | | 0.6 | 1.5 | 3.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

**SRS Number:** 108002

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 19-DEC-17
J. Lahr, Spectroscopist

# Reagent

# 108345_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108345
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2695542, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 22-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 7.695E+00 | 4950-5240 | 8.806E+06 | 1.1 | 1.5 | 3.7 |
| Am-241 | 7.916E+00 | 5280-5600 | 1.580E+05 | 1.1 | 1.5 | 3.7 |
| Th-230 | 7.314E+00 | 4470-4760 | 2.753E+07 | 1.1 | 1.5 | 3.7 |
| Total Activity | 2.294E+01 | 3000-8000 | | 0.7 | 1.5 | 3.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-CR-S2, Rev. 0, 01 Nov 14



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355



Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**SRS Number:** 108345

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: .....

A. Chen, Spectroscopist

QC Approved by: ..... Date: 29-JAN-18

J. Lazu, Spectroscopist

# Reagent

# 108346_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108346
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2695542, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 22-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 7.835E+00 | 4950-5240 | 8.806E+06 | 1.2 | 1.5 | 3.8 |
| Am-241 | 8.008E+00 | 5280-5600 | 1.580E+05 | 1.2 | 1.5 | 3.8 |
| Th-230 | 7.570E+00 | 4470-4760 | 2.753E+07 | 1.2 | 1.5 | 3.8 |
| Total Activity | 2.343E+01 | 3000-8000 | | 0.9 | 1.5 | 3.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-CR-02 Rev. 0 01 Nov 13

**SRS Number:** 108346

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 29-Jul-19
J. Dahr, Spectroscopist

# Reagent

# 108347_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108347
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2702184, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 23-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 8.035E+00 | 4950-5240 | 8.806E+06 | 1.0 | 1.5 | 3.6 |
| Am-241 | 8.643E+00 | 5280-5600 | 1.580E+05 | 1.0 | 1.5 | 3.6 |
| Th-230 | 8.101E+00 | 4470-4760 | 2.753E+07 | 1.0 | 1.5 | 3.6 |
| Total Activity | 2.480E+01 | 3000-8000 | | 0.5 | 1.5 | 3.2 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-CR-32, Rev. 0, 01 Nov 14



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

**SRS Number:** 108347

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 29-JAN-18
J. Lahr, Spectroscopist

# Reagent

# 108348_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 108348
**Source Description:** 24.1 mm Diameter x 0.77 mm Thick Stainless Steel Disk
**Product Code:** MIX-EAB-FOIL
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 2702184, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities (if detected) were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectrometry. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 23-January-2018 12:00 PM EST

| Isotope | Activity, Bq | Energy Range, keV | Half-Life, d | Uncertainty $u_A$, % | $u_B$, % | $U$, %* |
|---|---|---|---|---|---|---|
| Pu-239 | 7.067E+00 | 4950-5240 | 8.806E+06 | 1.1 | 1.5 | 3.7 |
| Am-241 | 7.497E+00 | 5280-5600 | 1.580E+06 | 1.1 | 1.5 | 3.7 |
| Th-230 | 6.966E+00 | 4470-4760 | 2.753E+07 | 1.1 | 1.5 | 3.7 |
| Total Activity | 2.154E+01 | 3000-8000 | | 0.7 | 1.5 | 3.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

F-QR-32, Rev 0, 01 Nov 14



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

**SRS Number:** 108348

**Comments:**

Diameter of active area: 19 mm

Mounted on customer supplied 31.8 mm diameter x 0.45 mm thick stainless steel disk.

**CAUTION:**

Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Calibrated by: _____
A. Chen, Spectroscopist

QC Approved by: _____ Date: 29-JAN-18
J. Lahr, Spectroscopist

# Reagent

# 82232-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82232-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 3-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.630E+00 | 4420-4800 | 7.540E+04 | 0.7 | 1.1 | 2.6 |
| Pu-239 | 7.137E+00 | 4950-5240 | 2.410E+04 | 0.7 | 1.1 | 2.6 |
| Am-241 | 7.281E+00 | 5280-5600 | 4.326E+02 | 0.7 | 1.1 | 2.6 |
| Total Activity | 2.210E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82233-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82233-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 3-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 4.950E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 6.064E+00 | 4950-5240 | 2.410E+04 | 0.7 | 1.1 | 2.6 |
| Am-241 | 5.114E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 1.616E+01 | 3000-8000 | | 0.1 | 1.1 | 2.2 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82236-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82236-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 2-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.107E+00 | 4420-4800 | 7.540E+04 | 0.7 | 1.1 | 2.6 |
| Pu-239 | 6.664E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 6.891E+00 | 5280-5600 | 4.326E+02 | 0.7 | 1.1 | 2.6 |
| Total Activity | 2.071E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form006 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.46 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82237-334_00003

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82237-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 1-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 5.856E+00 | 4420-4800 | 7.540E+04 | 1.0 | 1.1 | 3.0 |
| Pu-239 | 6.424E+00 | 4960-5240 | 2.410E+04 | 0.9 | 1.1 | 2.8 |
| Am-241 | 5.608E+00 | 5280-5600 | 4.326E+02 | 1.0 | 1.1 | 3.0 |
| Total Activity | 1.793E+01 | 3000-8000 | | 0.6 | 1.1 | 2.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form005 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1960



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355



Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82240-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82240-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 8-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 6.304E+00 | 4420-4800 | 7.540E+04 | 0.9 | 1.1 | 2.8 |
| Pu-239 | 7.163E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 8.298E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 2.182E+01 | 3000-8000 | | 0.5 | 1.1 | 2.4 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958

ANA Form005 Rev. —



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355



Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82241-334_00001

Eckert & Ziegler
Analytics

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Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82241-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 8-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 6.629E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 6.797E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 6.638E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 2.011E+01 | 3000-8000 | | 0.4 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1966

ANA Form005 Rev. —

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82243-334_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82243-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 9-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 5.856E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 5.979E+00 | 4950-5240 | 2.410E+04 | 0.8 | 1.1 | 2.7 |
| Am-241 | 6.390E+00 | 5280-5600 | 4.326E+02 | 0.8 | 1.1 | 2.7 |
| Total Activity | 1.827E+01 | 3000-8000 | | 0.3 | 1.1 | 2.3 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1966

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82244-334_00001

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Analytics

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Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82244-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 9-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 7.352E+00 | 4420-4800 | 7.540E+04 | 0.8 | 1.1 | 2.7 |
| Pu-239 | 6.717E+00 | 4950-5240 | 2.410E+04 | 0.9 | 1.1 | 2.8 |
| Am-241 | 6.897E+00 | 5280-5600 | 4.326E+02 | 0.9 | 1.1 | 2.8 |
| Total Activity | 2.101E+01 | 3000-8000 | | 0.6 | 1.1 | 2.5 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form005 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.45 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06-24-2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# 82246-334_00001

Eckert & Ziegler
Analytics

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Atlanta, Georgia 30318
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Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

82246-334

24.1 mm Diameter x 0.65 mm Thick Stainless Steel Disk

**Customer:** Test America/St. Louis
**P.O. No.:** 2355182, Item 1

This standard radionuclide source was prepared by electrodeposition onto a stainless steel disk. Total alpha activity was determined with a ZnS scintillation detector. Radionuclide activities and impurities were calculated from the total activity and the fraction of activity for each radionuclide determined by alpha spectroscopy. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

**Reference Date:** 9-Jun-2010 12:00 PM EST

| Isotope | Activity (Bq) | Energy Range (keV) | Half-Life, years | Uncertainty* Type (%) $u_A$ | $u_B$ | U |
|---|---|---|---|---|---|---|
| Th-230 | 5.570E+00 | 4420-4800 | 7.540E+04 | 1.0 | 1.1 | 3.0 |
| Pu-239 | 5.353E+00 | 4950-5240 | 2.410E+04 | 1.0 | 1.1 | 3.0 |
| Am-241 | 6.002E+00 | 5280-5600 | 4.326E+02 | 1.0 | 1.1 | 3.0 |
| Total Activity | 1.696E+01 | 3000-8000 | | 0.7 | 1.1 | 2.6 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
Diameter of active area: 19 mm. Disk mounted on customer supplied disk 31.8 mm diameter x 0.46 mm thick stainless steel disk.

CAUTION: Active material deposited on the unmarked surface. Handle carefully to prevent scratching or damaging the active surface of this source (i.e., use Teflon coated forceps). Store in the container provided when not in use.

Source Calibrated by: _____
A. Chen, Spectroscopist

QA Approved: _____ Date: 06·24·2010
E. A. Taskaev, QA Manager Alternate

# Reagent

# Gamma Ampuole_00001

Eckert & Ziegler
Analytics

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Atlanta, Georgia 30318
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Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

### 79670-334

### 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2303925, Item 1
**Calibration Date:** 01-Apr-2009 12:00 EST **Grams of Master Source:** 0.028371

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Am-241 | 59.5 | 157860 | ——— | 3.390E+03 | 0.1 | 0.9 | 1.8 | 4π LS |
| Cd-109 | 88.0 | 462.60 | 1.691E+05 | 4.798E+03 | 0.4 | 1.7 | 3.5 | HPGe |
| Co-57 | 122.1 | 271.79 | 8.904E+04 | 2.526E+03 | 0.5 | 1.3 | 2.8 | HPGe |
| Ce-139 | 165.9 | 137.6 | 1.256E+05 | 3.563E+03 | 0.4 | 1.1 | 2.3 | HPGe |
| Hg-203 | 279.2 | 46.61 | 2.788E+05 | 7.910E+03 | 0.3 | 1.1 | 2.3 | HPGe |
| Sn-113 | 391.7 | 115.1 | 1.725E+05 | 4.894E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Cs-137 | 661.7 | 10983 | 1.120E+05 | 3.178E+03 | 0.7 | 1.2 | 2.8 | HPGe |
| Y-88 | 898.0 | 106.6 | 4.205E+05 | 1.193E+04 | 0.8 | 1.1 | 2.7 | HPGe |
| Co-60 | 1173.2 | 1925.4 | 2.184E+05 | 6.196E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Co-60 | 1332.5 | 1925.4 | 2.185E+05 | 6.199E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Y-88 | 1836.1 | 106.6 | 4.444E+05 | 1.261E+04 | 0.7 | 1.1 | 2.6 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
5.31740 grams 4M HCl solution with approximately 30 microg/g each of Cd, Co, Ce, Hg, Sn, Cs, and Y carriers.

This standard will expire one year after the calibration date.

Source Prepared by: [signature] for
W. Mao, Radiochemist

QA Approved: [signature] Date: 5-13-09
D. M. Montgomery, QA Manager

End of Certificate

# Reagent

# Gamma Ampuole_00003

Eckert & Ziegler
Analytics

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Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

### 83725-334

### 5 mL Liquid in Flame Sealed Vial

**Customer:** Test America St. Louis/Earth City, MO
**P.O. No.:** 2397508, Item 1
**Reference Date:** 01-Jan-2011 12:00 PM EST **Grams of Master Source:** 0.028066

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Am-241 | 59.5 | 1.580E+05 | ——— | 3.261E+03 | 0.1 | 0.9 | 1.8 | 4π LS |
| Cd-109 | 88.0 | 4.626E+02 | 1.697E+05 | 4.763E+03 | 0.8 | 1.7 | 3.8 | HPGe |
| Co-57 | 122.1 | 2.718E+02 | 8.711E+04 | 2.445E+03 | 0.5 | 1.3 | 2.8 | HPGe |
| Ce-139 | 165.9 | 1.376E+02 | 1.247E+05 | 3.500E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Hg-203 | 279.2 | 4.661E+01 | 2.753E+05 | 7.727E+03 | 0.4 | 1.1 | 2.3 | HPGe |
| Sn-113 | 391.7 | 1.151E+02 | 1.769E+05 | 4.965E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Cs-137 | 661.7 | 1.098E+04 | 1.109E+05 | 3.113E+03 | 0.7 | 1.2 | 2.8 | HPGe |
| Y-88 | 898.0 | 1.066E+02 | 4.224E+05 | 1.186E+04 | 0.5 | 1.1 | 2.4 | HPGe |
| Co-60 | 1173.2 | 1.925E+03 | 2.142E+05 | 6.012E+03 | 0.6 | 1.1 | 2.5 | HPGe |
| Co-60 | 1332.5 | 1.925E+03 | 2.143E+05 | 6.015E+03 | 0.6 | 1.1 | 2.5 | HPGe |
| Y-88 | 1836.1 | 1.066E+02 | 4.472E+05 | 1.255E+04 | 0.5 | 1.1 | 2.4 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form005 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
5.30203 grams 4M HCl solution with approximately 30 μg/g each of Cd, Co, Ce, Hg, Sn, Cs, and Y carriers.

This standard will expire one year after the reference date.

Source Prepared by: MITaskaeva
M. I. Taskaeva, Radiochemist

QA Approved: _____ Date: 13/JAN/11
J. D. McCorvey, QA Manager Alternate

# Reagent

# Pb-210_00016

Eckert & Ziegler
Analytics

410059
ID: Pb-210_00016
Exp:11/01/63 Prod.SCB Opn:07/23/14
Pb-210 Ampoule

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

95149

Pb-210 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica - St. Louis
**P.O. No.:** 2842087, Item I Product Code: 8210

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Pb-210 | 8.109E+03 | 3.795E+03 | 0.1 | 0.5 | 1.1 | 11/01/2013 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: γ-impurities<0.1%.
5.22060 g 1M HNO3 solution. Carrier free.

Source Prepared by: A. Herron
A. Herron, Radiochemist

QC Approved: J.D. McCorvey, Counting Room Manager Date: 1 NOV 13

ANA Form005 Rev. —

Single Isotope Certificate Rev 5, 1 October 2013

Page 1 of 1

# Reagent

# Pb-210_00025

TestAmerica

St. Louis Radiological Standard Verification

Printed: 10/7/2019 11:27 PM

Standard ID Number: Pb-210_00025
True Value = 33886 pCi/L or g
Date Analyzed: 10/2/2019

Radionuclide: Pb-210

| | Replicates | |
|---|---|---|
| #1 | 33900 | pCi/L or g |
| #2 | 33300 | pCi/L or g |
| #3 | 34900 | pCi/L or g |

Mean = 34033.333

1 sigma = 808.29038 1.96 sigma = 1584.249

True Value minus 5% = 32191.7 (True Value - 5%)
True Value plus 5% = 35580.3 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: TJR 10/7/2019

2nd Reviewed By/Date: 10-9-19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Pb-210 Standard Verification

Std #: Pb-210_00025 (1806832)
Amount: 1.0mL
Activity: 90.49 dpm/mL
Reference Date: 11/1/2013

| Vial # | Cleaned Standard (mL) | Ultima Gold AB ( mL) | Nitromethane (µL) |
|---|---|---|---|
| *Reagent ID* | *N/A* | *1792154* | *1699190* |
| 1 | 5 | 15 | 0 |
| 2 | 5 | 15 | 25 |
| 3 | 5 | 15 | 50 |

Due to the presence of Bi-210 and Po-210 found in equilibrium with the Pb-210 in the calibration standard, the following clean up procedure was used to selectively remove the Pb-210 from the contaminants:

- 4 mL of the Pb-210_00024 standard and 1.5 mL of lead carrier (10mg/mL) were diluted up to 20mL with 1M nitric acid in a single digi-tube.
- The lead solution was then isolated using Eichrom lead resin and the ST-RC-0211 procedure (one cartridge).
- 5 mL of the eluted solution was used for each quench curve point.

Reagents:
Lead carrier (1742396)
1 M nitric (1804256)
0.1 M Nitric (1786919)
Lead Eichrom Cartidge (PBSR17A)

*Background Vial is prepared with 1 mL of lead carrier, 4mL of DI water, and 15mL of Ultima Gold AB cocktail

Prepared by: Molly Olson
Date: 10/01/19

*Pipette ID: RAD118*

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 11/1/2013 0:00 | | |
| **Decayto Date/Time (t):** | 10/2/19 0:00 | | |
| **Initial Activity ($A_0$):** | 90.49 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 90.49 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pb-210 | | |
| **Half-Life (days):** | 8108.55 | decay days | fraction |
| ****Decay Factor:** | 0.8313 | 2161.00 | 0.26651 |
| **Decay Corr Activity:** | 7.5227E+01 dpm | | |
| **Decay Corr Conc:** | 7.5227E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | L |
| **Volume Unit Factor:** | 0.001 |
| **Final Concentration:** | 3.3886E+04 pCi/L |
| **Aliquot Volume:** | 1.0000E+00 L |
| **Final Activity (A):** | 3.3886E+04 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

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Pb-210_00025

## Reagent ID: Pb-210_00025

| | | | |
|---|---|---|---|
| | | Expiration Date: | 09/30/2020 |
| Description: | Pb-210 / Po-210 Spike | Laboratory: | Eurofins TestAmerica, St. Louis |
| No. of Bottles: | 1 | Prepared By: | Olson, Molly M |
| Storage Location: | RAD Separations Reagents - Rm 131 | Solvent: | 1M HNO3 |
| Reagent Volume: | 250.000 mL | Solvent Lot: | n/a |
| Creation Date: | 10/01/2019 | | |
| Open Date: | | | |
| Container(s): | 1806832 | | |
| Comment: | Re-certified from Pb-210_00021 | | |

Ref Date: 11/1/2013

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pb-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |
| Po-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pb-210_00017 | Pb-210 / Po-210 Parent | | 10/26/19 | | | | 10.00000 | mL |

10/2/2019 4:54:08 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 1
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default
Pb210_2018 Protocol 20

**Assay Definition**

Assay Description:
Pb-210 Protocol 20 TEAL Ocotober, 2018
Assay Type: DPM (Single)
Report Name: Pb210 Protocol 20
Output Data Path: W:\
Raw Results Path: C:\Packard\Tricarb\Results\Default\Pb210_2018 Protocol 20\20191002_0156\20191002_0156.results
Assay File Name: C:\Packard\TriCarb\Assays\Pb210_2018 Protocol 20.lsa

Additional Data Files Generated with this Protocol:
20Pb210
[Auto] 20Pb210.001

**Count Conditions**

Nuclide: Pb210_2018
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 15 sec
Pre-Count Delay (min): 0.00
Quench Set:
Low Energy: Pb210_2018
Count Time (min): 90.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

**Background Subtract**

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: On - Any Region

| Regions | LL | UL | 2Sigma % Terminator |
|---|---|---|---|
| A | 20.0 | 63.0 | 1.50 |
| B | 2.0 | 63.0 | 0.00 |
| C | 63.1 | 150.0 | 0.00 |

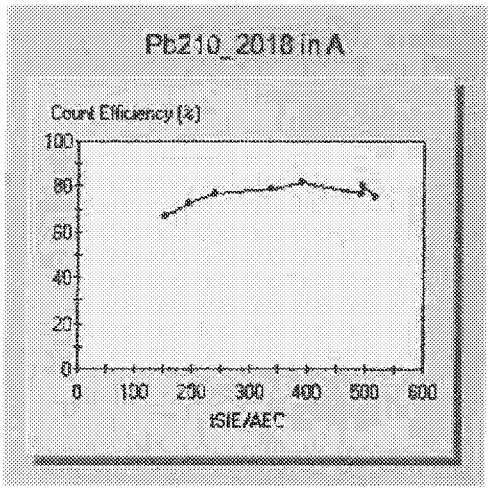
**Count Corrections**

Static Controller: On Luminescence Correction: Off
Colored Samples: Off Heterogeneity Monitor: Off
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Cycle 1 Results
**Quench Curve Block Data**

10/2/2019 4:54:09 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 2
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default

Pb210_2018 Protocol 20

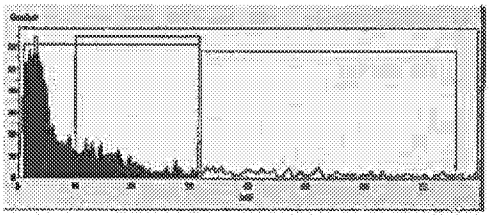



Date Acquired: 10/22/2018
Date Modified:
Pb210_2018 in A

| tSIE/AEC | Count Efficiency (%) |
|---|---|
| 517.63 | 75.17 |
| 493.96 | 79.97 |
| 491.56 | 76.77 |
| 389.68 | 81.61 |
| 338.27 | 78.99 |
| 239.36 | 76.57 |
| 194.54 | 72.55 |
| 152.63 | 66.72 |

| S# | SMPL ID | Count Time | CPMA | MESSAGES | tSIE | DATE | TIME | Eff | DPM1 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BKG | 90.00 | 3.36e+000 | | 452.31 | 10/2/2019 | 1:57:02 AM | 0.786 | 4.27e+000 |

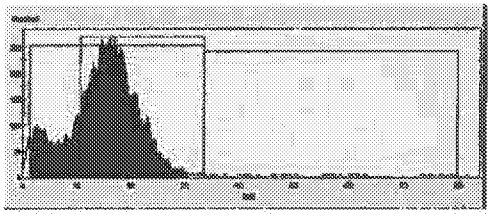
SpectraView Block Data



| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 160-35668-A-6-A | 90.00 | 6.11e+001 | | 483.72 | 10/2/2019 | 3:35:51 AM | 0.771 | 7.92e+001 |

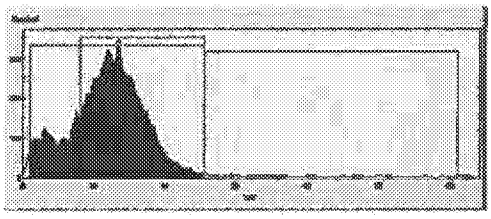
SpectraView Block Data

10/2/2019 4:54:09 PM QuantaSmart (TM) - 4.00 - Serial# 117384 Page # 3
Protocol# 20 - Pb210_2018 Protocol 20.lsa User: Default
Pb210_2018 Protocol 20



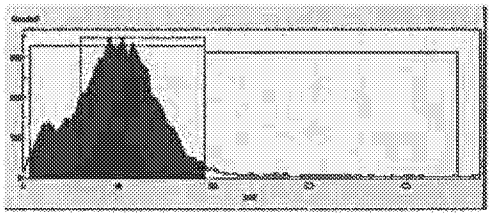
3 160-35668-A-6-B 90.00 6.18e+001 345.80 10/2/2019
5:14:40 AM 0.794 7.79e+001

SpectraView Block Data



4 160-35668-A-6-C 90.00 6.19e+001 231.63 10/2/2019
6:53:30 AM 0.759 8.15e+001

SpectraView Block Data



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## Analysis Report for Lead 210 by LSC

Batch: 444696 Operator:

| Sample ID / Analyte | Work Order # / Cs | Cb | Aliquot / Effs | Adjusted Aliquot / Effb | CPMs | Dilution / CPMb | Sample Date/Time / DPMs | DPMb | Instrument / Activity | RunDateTime | UncCount | Ts / UncTotal | Tb | Sigma / MDA | Yield / DLC | TruncYield | Decay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-35668-A-6-A | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 3:35 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,499.00 | 302.40 | 0.7710 | 0.7860 | 61.10 | 3.36 | 79.25 | 4.273.390E+00 | pCi/L | 4.969E+00 | 1.605E+00 | 5.474E+00 | | 2.639E+00 | | 1604.5506 | |
| 160-35668-A-6-B | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 5:14 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,562.00 | 302.40 | 0.7940 | 0.7860 | 61.80 | 3.36 | 77.83 | 4.273.332E+00 | pCi/L | 4.851E+00 | 1.576E+00 | 5.316E+00 | | 2.563E+00 | | 1575.9606 | |
| 160-35668-A-6-C | 160-35668- | | 1.0000mL | | 0.9950mL | 1.00 | 9/17/19 8:00 | | LSCTeal | 10/2/19 6:53 | | 90.00 | 90.00 | 1.00 | 100.00% | False | 1.00 |
| Pb-210 | 5,571.00 | 302.40 | 0.7560 | 0.7860 | 61.90 | 3.36 | 81.55 | 4.273.492E+00 | pCi/L | 5.079E+00 | 1.651E+00 | 5.561E+00 | | 2.681E+00 | | 1651.3070 | |

### Laboratory Control Sample Information

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Duplicate Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

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## *Radiochemistry Data Review Checklist*

**Batch:** 444696 **Analysis:** Lead-210 by LSC

| Lot Number | Analytical Due Date |
|---|---|
| 160-35668-A-6-A | |
| 160-35668-A-6-B | |
| 160-35668-A-6-C | |

| Review Item | Yes | No | N/A | 2 Rvw |
|---|---|---|---|---|
| ***Rad Prep*** | | | | |
| 1 Are all samples on batch sheet present or removed from batch? | ☑ | ☐ | ☐ | ☑ |
| 2 Are all samples, QC and methods in compliance with client requirements? | ☑ | ☐ | ☐ | ☑ |
| 3 Were forms checked for transcription errors? | ☑ | ☐ | ☐ | ☑ |
| 4 Are all TALS entries complete? (End Dates and appropriate worksheet fields completed) | ☑ | ☐ | ☐ | ☑ |
| 5 Are all problems and deviations documented? (NCM printed and attached with paperwork) | ☐ | ☐ | ☑ | ☑ |
| 6 Does this batch contain re-extracts? | ☐ | ☒ | ☐ | ☑ |
| ***Sample Analysis*** | | | | |
| 1 Are carrier/tracer yields within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 2 Were all sample holding times met? | ☐ | ☐ | ☑ | ☑ |
| 3 If alpha or LSC, were samples analyzed using normal ROI's, and were spectra evaluated for interferences? | ☑ | ☐ | ☐ | ☑ |
| ***QC Samples*** | | | | |
| 1 Is the blank activity <= MDA | ☐ | ☐ | ☑ | ☑ |
| 2 Is the blank activity <= client CRDL? | ☐ | ☐ | ☑ | ☑ |
| 3 If blank activity exceeds limit, is sample activity >= 5X blank activity? | ☐ | ☐ | ☑ | ☑ |
| 4 Is LCS recovery within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 5 Is duplicate precision (e.g. RPD/RER/DER/z-score) within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 6 Is MS/MSD recovery within acceptance limits? | ☐ | ☐ | ☑ | ☑ |
| 7 Do samples meet CRDL? | ☐ | ☐ | ☑ | ☑ |
| 8 Is the absolute value of any negative result < 3sigma uncert.? | ☐ | ☐ | ☑ | ☑ |
| ***Other*** | | | | |
| 1 Are all nonconformances documented and noted? | ☐ | ☐ | ☑ | ☑ |
| 2 Were manual data entries and/or calculations checked? | ☐ | ☐ | ☑ | ☑ |
| ***Data Packaging*** 445005 TB 10/7/19 | | | | |
| 1 Run logs included? 445006 445007 | ☐ | ☐ | ☐ | ☐ |
| 2 Daily checks included? | ☐ | ☐ | ☐ | ☐ |
| 3 Backgrounds included? 10/1/19 10/2/19 | ☐ | ☐ | ☐ | ☐ |
| 4 Calibrations included? Seal | ☐ | ☐ | ☐ | ☐ |

Page 1 of 2

Batch: 444696 Analysis: Lead-210 by LSC

Comments:

Prep Analyst: MMO Date: 10/1/19

Analyst: [illegible] Date: 10/7/19

Second Level Reviewer [illegible] Date: 10/8/19

Date Uploaded: 10/8/19

Date Verified: 10/8/19

Date Review Released: 10/8/19

10-1-19
Test
Not 20
90 min

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696

Analyst: Olson, Molly M

Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Preparation, Extraction Chromatography

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | BKG=1 | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 2 | |
| 2 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 3 | |
| 3 | 160-35668-A-6 (LSC_Pb210) | N/A (160-35668-1) | Water | 1 mL | | 10/11/19 | 18_Days | 2 | Pb-210_00025 Spike Reverification | 4 | |

TA
90 min
Pb-210: 5.00 pCi/L

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM
Batch End: 10/1/2019 12:38:00PM

## Lead-210 (LSC)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |
| 2 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |
| 3 | 160-35668-A-6 (LSC_Pb210) | (Standard Target List) | Pb, Pb-210 |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyte used for Carrier | Pb |
| Analyst ID - Reagent Drop | MMO |
| Analyst ID - Reagent Drop Witness | HET per MMO |
| Pipette ID | RAD118 |
| SOP Number | ST-RC-0211 |
| Batch Comment | Pb-210_00025 Reverification |

## Comments

# Ext_Chrom_LSC Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-444696 Analyst: Olson, Molly M Batch Open: 10/1/2019 12:27:00PM

Batch End: 10/1/2019 12:38:00PM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |
| 160-35668-A-6 | Pb-210_00025 | 1 mL | | | |

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

# Rad Worksheet

Batch Number: 160-444696
Method: Ext_Chrom_LSC
Analyst: Olson, Molly M

Date Open: Oct 01 2019 12:27PM
Batch End: Oct 01 2019 12:58PM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Elution Volume | Volume of Final Tracer Split | Tracer Concentration Final | Pb-210_00025 |
|---|---|---|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | 1 mL | 20 mL | 0.1 mL | 10 mg/L | 1 mL |

Balance ID: N/A
Analyst ID - Reagent Drop: MMO
Analyst ID - Reagent Drop Witness: HET per MMO
Pipette ID: RAD118
SOP Number: ST-RC-0211

# Rad Worksheet

Batch Number: 160-444696
Method: Ext_Chrom_LSC
Analyst: Olson, Molly M

Date Open: Oct 01 2019 12:27PM
Batch End: Oct 01 2019 12:38PM

| Lab ID | Client ID | Method Chain | Basis | Analysis comment | Comments |
|---|---|---|---|---|---|
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |
| 160-35668-A-6 | Pb-210_00024 | Ext_Chrom_LSC, LSC_Pb210 | T | Pb-210_00025 Spike Reverification | |

Batch Comment: Pb-210_00025 Reverification

# Reagent

# Po-209_00007

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

**SRS Number:** 111092
**Source Description:** 5 mL Liquid in Flame Sealed Ampoule
**Product Code:** 8209
**Customer:** TestAmerica Laboratories - St. Louis
**P.O. Number:** 3008779, Item 1

This standard radionuclide source was prepared gravimetrically from a master solution calibrated by Eckert & Ziegler Analytics (EZA). The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. EZA maintains traceability to the National Institute of Standards and Technology (NIST) through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

**Reference Date:** 13-November-2018 12:00 PM EST

| Isotope | Half-Life, d | Activity, Bq | Uncertainty $u_A$, % | $u_B$, % | $U$, %* | Calibration Method** |
|---|---|---|---|---|---|---|
| Po-208 | 3.726E+04 | 3.814E+02 | 0.3 | 1.0 | 2.0 | 4π LS |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results." ****Calibration Methods:** 4π LS - 4π Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber.

(Certificate continued on reverse side)



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

**ERS Number:** 111092

**Comments:**
5.15089 g of 2 M HCl solution, carrier free.

**Impurities:**
γ-impurities < 0.1%
α-impurities < 0.2%

This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

Source Prepared by: _____
K. Bardley, Radiochemist

QC Approved by: _____ Date: 31-OCT-18
J. Kalx, Spectroscopist

# Reagent

# Po-209_00008

TestAmerica

St. Louis Radiological Standard Verification

Printed: 11/30/2018 10:21 PM

Standard ID Number: Po-209_00008
True Value = 104.12 dpm/mL
Date Analyzed: 11/29/2018

Radionuclide: Po-209

| | Replicates | |
|---|---|---|
| #1 | 111.8 | dpm/mL |
| #2 | 107.85 | dpm/mL |
| #3 | 107.7 | dpm/mL |

Mean = 109.116667

1 sigma = 2.3250448 1.96 sigma = 4.557088

True Value minus 5% = 98.914 (True Value - 5%)
True Value plus 5% = 109.326 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: MS 11/30/18

2nd Reviewed By/Date: RM 12-6-18

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| Initial Date/Time ($t_0$): | 11/1/2013 12:00 | | |
| Decayto Date/Time (t): | 11/29/18 12:00 | | |
| Initial Activity ($A_0$): | 90.49 dpm | | |
| Initial Aliquot: | 1 mL | | |
| Initial Conc: | 90.49031 dpm/mL | | |
| *Soln. Density: | 1 g/mL | | |
| Nuclide: | Pb-210 | | |
| Half-Life (days): | 8108.55 | decay days | fraction |
| **Decay Factor: | 0.8534 | 1854.00 | 0.22865 |
| Decay Corr Activity: | 7.7228E+01 dpm | | |
| Decay Corr Conc: | 7.7228E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| Final Activity Unit: | dpm |
| Activity Unit Factor: | 1.00000 |
| Final Volume Unit: | mL |
| Volume Unit Factor: | 1.000 |
| Final Concentration: | 7.7228E+01 dpm/mL |
| Aliquot Volume: | 1.0000E+00 mL |
| Final Activity (A): | 7.7228E+01 dpm |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pb - 210 - 00023

Ref. 11/1/2013

## Reagent ID: Pb-210_00023

| | | | |
|---|---|---|---|
| | | Expiration Date: | 07/11/2019 |
| Description: | Pb-210 / Po-210 Spike | Laboratory: | TestAmerica St. Louis |
| No. of Bottles: | 1 | Prepared By: | Bernsen, Sarah C |
| Storage Location: | RAD Separations Reagents - Rm 131 | Solvent: | 1M HNO3 |
| Reagent Volume: | 250.000 mL | Solvent Lot: | n/a |
| Creation Date: | 07/12/2018 | | |
| Open Date: | | | |
| Container(s): | 1507235 | | |
| Comment: | Re-certified from Pb-210_00021 | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pb-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |
| Po-210 | Pb-210_00017 | 10/26/2019 | 2262.25800 | dpm/mL | 90.49031 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pb-210_00017 | Pb-210 / Po-210 Parent | | 10/26/19 | | | | 10.00000 | mL |

11/30/2018 21:32

Page 1 of 1

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| Initial Date/Time ($t_0$): | 11/1/2013 12:00 | | |
| Decayto Date/Time (t): | 11/29/18 12:00 | | |
| Initial Activity ($A_0$): | 107.77 dpm | | |
| Initial Aliquot: | 1 mL | | |
| Initial Conc: | 107.7698 dpm/mL | | |
| *Soln. Density: | 1 g/mL | | |
| Nuclide: | Po-209 | | |
| Half-Life (days): | 37255.5 | decay days | fraction |
| **Decay Factor: | 0.9661 | 1854.00 | 0.04976 |
| Decay Corr Activity: | 1.0412E+02 dpm | | |
| Decay Corr Conc: | 1.0412E+02 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| Final Activity Unit: | dpm |
| Activity Unit Factor: | 1.00000 |
| Final Volume Unit: | mL |
| Volume Unit Factor: | 1.000 |
| Final Concentration: | 1.0412E+02 dpm/mL |
| Aliquot Volume: | 1.0000E+00 mL |
| Final Activity (A): | 1.0412E+02 dpm |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Po - 209 _ 00008

Ref. 11/13/18 11:00

## Reagent ID: Po-209_00008

| | | | |
|---|---|---|---|
| Description: | Po-209 Tracer | Expiration Date: | 11/27/2019 |
| No. of Bottles: | 1 | Laboratory: | TestAmerica St. Louis |
| Storage Location: | RAD Actinide STDs | Prepared By: | Bernsen, Sarah C |
| Reagent Volume: | 200.000 mL | Solvent: | 2M HCl |
| Creation Date: | 11/27/2018 | Solvent Lot: | n/a |
| Open Date: | | | |
| Container(s): | 1626809 | | |
| Comment: | parent standard used as tracer. Verified annually since used as a working standard. | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Po-209 | Po-209_00007 | 11/13/2068 | 70.16300 | Bq/g | 107.76980 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Po-209_00007 | Po-209 Ampoule | ASTD | 11/13/68 | Eckert & Ziegler | 111092 | 8209 | 5.12000 | g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:48:54PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-A
SampleType: Sample
: 160-32037-A-1-A
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749751

Analyst: 60040

### Tracer

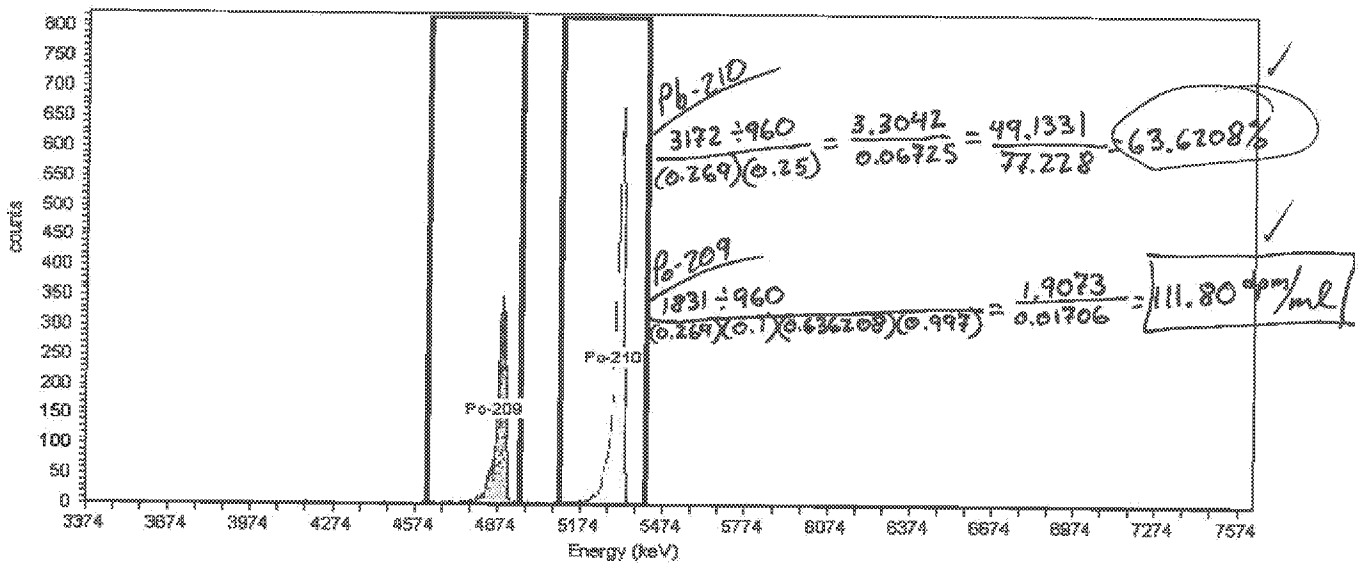
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 585,637.30%

### Acquisition

Detector: AV119
Serial Number: 49-037G6
Acquisition Start Date: 11/29/2018 11:47:26PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:42PM
Background Info: Sample: ICB;AV119; Det: AV119; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370621;AV119-05172018
Calibration Date: 5/17/2018 8:56:46AM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.90% +/- 0.24% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.2 | 99.7 | 1831 | 0.0000 | 1831.00 | 5.468 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.6 | 100.0 | 3172 | 1.0000 | 3171.00 | 6,786,000.0 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:47:12PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-B
SampleType: Sample
: 160-32037-A-1-B
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749752

Analyst: 60040

### Tracer

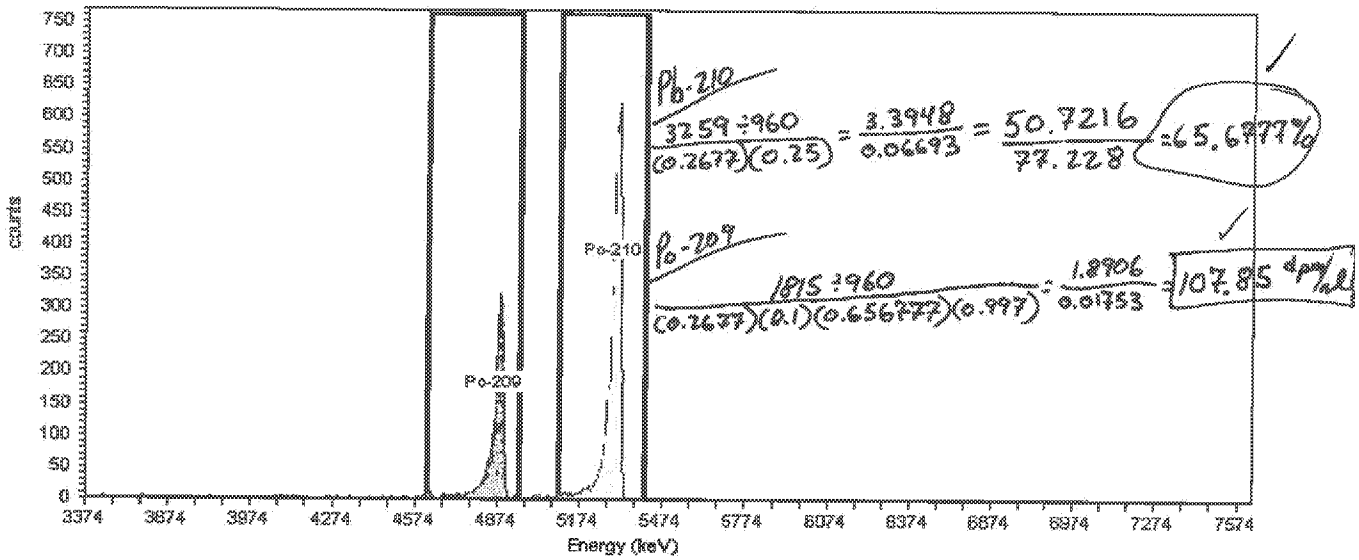
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 604,137.30%

### Acquisition

Detector: AV120
Serial Number: 49-037W3
Acquisition Start Date: 11/29/2018 11:46:29PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:43PM
Background Info: Sample: ICB;AV120; Det: AV120; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370622;AV120-05172018
Calibration Date: 5/17/2018 8:56:57AM
Energy Cal: Gain = 7.4575 keV / Ch; Offset = 3,366.95 keV; Quadratic = 0.0000 keV / Ch²
Efficiency: 26.77% +/- 0.23% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.2 | 99.7 | 1815 | 3.0000 | 1812.00 | 5.270 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.1 | 100.0 | 3259 | 3.0000 | 3256.00 | 5,638,300.0 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:47:21PM 11/30/2018

### Sample

Sample Name: 160-32037-A-1-C
SampleType: Sample
: 160-32037-A-1-C
Sample Collection Date: 11/29/2018 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0001L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 403266
AnalysisID: 749753

Analyst: 60040

### Tracer

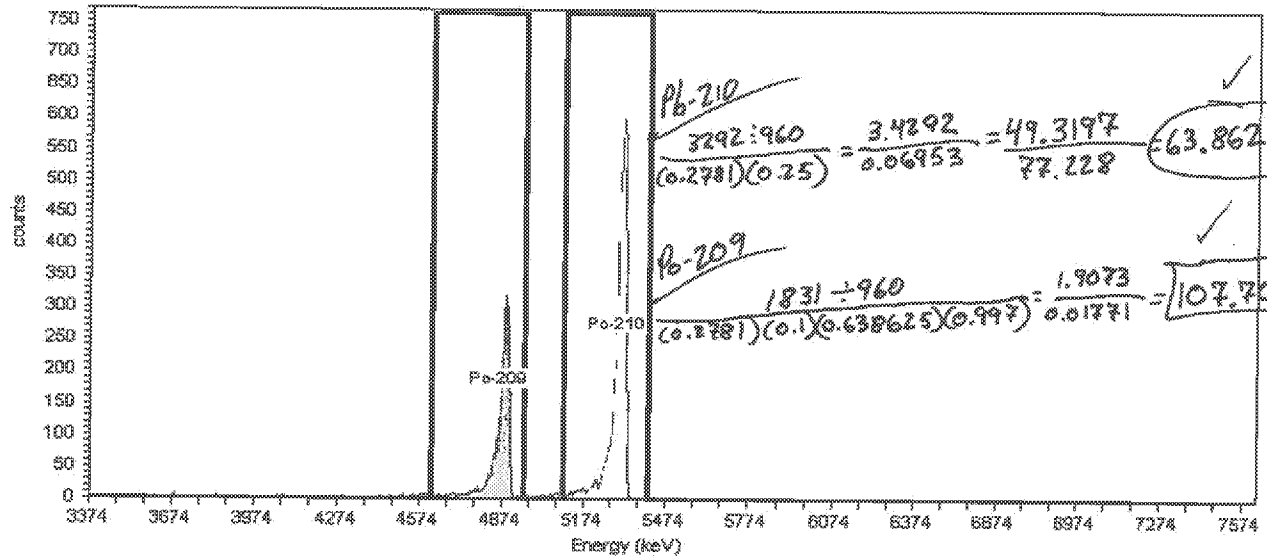
Tracer Name: Pb-210_00023
Tracer Activity: 90.49 DPM/mL x (Vol.)0.25 mL = 22.62 DPM
Tracer Ref. Date: 11/1/2013 11:00:15AM

Tracer Nuclide: Po-210
Tracer Recovery: 587,996.30%

### Acquisition

Detector: AV121
Serial Number: 49-037W2
Acquisition Start Date: 11/29/2018 11:46:32PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/10/2018 10:39:45PM
Background Info: Sample: ICB;AV121; Det: AV121; Spectrum #1; Nov-10-2018 22:39

Calibration Name: IC-1370619;AV121-05172018
Calibration Date: 5/17/2018 8:57:08AM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.81% +/- 0.23% TPU(2 sigma)




Pb-210
$\frac{3292 \div 960}{(0.2781)(0.25)} = \frac{3.4292}{0.06953} = \frac{49.3197}{77.228} = 63.8625\%$

Po-209
$\frac{1831 \div 960}{(0.2781)(0.1)(0.638625)(0.997)} = \frac{1.9073}{0.01771} = 107.70$ dpm/mL

### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PoROI
Decay Correction: 11/29/2018 11:45:39PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Polonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Po-209 | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 48.3 | 99.7 | 1831 | 0.0000 | 1831.00 | 5.267 | pCi/L |
| Po-210 | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.0 | 100.0 | 3292 | 0.0000 | 3292.00 | 9,190,100.0 | pCi/L |

# Dig_CuPlate Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-403266 Analyst: Cooper, Sarah J Batch Open: 11/29/2018 10:53:00AM

Batch End: 11/29/2018 3:01:00PM

## Preparation, Digestion & Copper Plating

| | Input Sample Lab ID | Input Sample Lab ID (Analytical Method) | SDG | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 119 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 1 |
| 2 | 120 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 2 |
| 3 | 121 | 160-32037-A-1 (A01R_Po) | N/A | Water | 0.1 mL | | 12/26/18 | 18_Days | N/A | 3 |

### Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop Witness | MMO per SJC |
| Analyst ID - Reagent Drop | SJC |
| Pipette ID | RAD097, RAD116 |
| Batch Comment | Po-209_00008 Tracer Verification |
| SOP Number | ST-RC-0210 |

### Comments

# Dig_CuPlate Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-403266 Analyst: Cooper, Sarah J Batch Open: 11/29/2018 10:53:00AM
Batch End: 11/29/2018 3:01:00PM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |
| 160-32037-A-1 | Pb-210_00023 | 0.25 mL | | | |
| 160-32037-A-1 | Po-209_00008 | 0.1 mL | | | |

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

Printed : 11/30/2018 Page 2 of 2 TestAmerica St. Louis

TestAmerica

**Batch Reagent/Chemical IDs**

**Printed:** 11/29/2018 12:09 PM
**Form:** QA-0093 Blank Form (Rev 1-30-2014)

**Batch number:** 403266

**Date:** 11-29-2018

**Analyst:** SSC

Reagent IDs used:

| | |
|---|---|
| 01 | 0.2% HCl 1608230 |
| 02 | 30% $H_2NOHCl$ 1604646 |
| 03 | |
| 04 | |
| 05 | |
| 06 | |
| 07 | |
| 08 | |
| 09 | |
| 10 | |
| 11 | PM 11/29/18 |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |

# Reagent

# Pu-238_00009

Eckert & Ziegler
Analytics

rcvd. 12/4/15

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.ezag.com

# CERTIFICATE OF CALIBRATION
## Standard Reference Source

101995

Pu-238 5 mL Liquid in Flame Sealed Vial

**Customer:** Test America
**P.O. No.:** 2628937, Item 1 Product Code: 8238

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Pu-238 | 3.203E+04 | 2.531E+02 | 0.4 | 1.0 | 2.1 | 12/02/2015 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: α-impurities 0.23%, γ-impurities <0.1%
5.45001 g 3M HNO3 solution, carrier free.

Source Prepared by: A. Herron
A. Herron, Radiochemist

QC Approved: J. S. Luby, Spectroscopist Date: 24 NOV 15

913519
ID: Pu-238_00009
Exp: 12/02/65 Prpd: SCB
Pu-238 Ampoule

F-CR-32, Rev. 0, 01 Nov 14

# Reagent

# Pu-238_00016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 12/10/2018 11:38 AM

Standard ID Number: Pu-238_00016
True Value = 26546 pCi/L
Date Analyzed: 12/8/2018

Radionuclide: Pu-238

| | Replicates | |
|---|---|---|
| #1 | 27117.63 | pCi/L |
| #2 | 26961.68 | pCi/L |
| #3 | 28709.96 | pCi/L |

Mean = 27596.4233

1 sigma = 967.498337

1.96 sigma = 1896.297

True Value minus 5% = 25218.7 (True Value - 5%)
True Value plus 5% = 27873.3 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: AB 12/10/18

2nd Reviewed By/Date: RM 12·10·18

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 11:00 | | |
| **Decayto Date/Time (t):** | 12/8/18 23.50 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9764 | 1102.53 | 0.03442 |
| **Decay Corr Activity:** | 5.8932E+01 dpm | | |
| **Decay Corr Conc:** | 5.8932E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | L |
| **Volume Unit Factor:** | 0.001 |
| **Final Concentration:** | 2.6546E+04 pCi/L |
| **Aliquot Volume:** | 1.0000E+00 L |
| **Final Activity (A):** | 2.6546E+04 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pu-238_00016

Ref. 12/2/2015 11:00

## Reagent ID: Pu-238_00016

| | | | |
|---|---|---|---|
| Description: | Pu-238 spike | Expiration Date: | 12/31/2018 |
| No. of Bottles: | 1 | Laboratory: | TestAmerica St. Louis |
| Storage Location: | RAD Actinide STDs | Prepared By: | Bernsen, Sarah C |
| Reagent Volume: | 250.000 mL | Solvent: | 3M HNO3 |
| Creation Date: | 11/19/2018 | Solvent Lot: | n/a |
| Open Date: | | | |
| Container(s): | 1622546 | | |
| Comment: | re-certified from Pu-238_00012 | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Pu-238 | Pu-238_00009 | 12/02/2065 | 46.44000 | Bq/g | 60.35490 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Pu-238_00009 | Pu-238 Ampoule | ASTD | 12/02/65 | Eckert & Ziegler- Analyt | 101995 | | 5.41510 | mL |

# ExtChrom_Actin Prep Worksheet

(Used for Collecting Prep Info)

Batch Number: 160-404669 Analyst: Mazariegos, Chelsea M Batch Open: 12/7/2018 3:21:00PM

Batch End: 12/8/2018 9:47:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID | Input Sample Lab ID (Analytical Method) | SDG | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-31716-A-3 221 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |
| 2 | 160-31716-A-3 228 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |
| 3 | 160-31716-A-3 229 | 160-31716-A-3 (A01R_Pu) | N/A | Water | 0.1 mL | | 11/30/18 | 18_Days | N/A | Pu-238_00016 and Pu-239_00015 verifcation |

### Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CMM |
| Analyst ID - Reagent Drop Witness | pms per nmn |
| Pipette ID | RAD116 |
| Analyst ID - Column | nmn |
| Column Date | 12/8/18 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 12/8/18 |
| SOP Number | ST-RC-0100, ST-RC-0242 |
| Batch Comment | Pu-238/Pu-239 Verification |

# Rad Worksheet

Batch Number: 160-404669
Method: ExtChrom
Analyst: Mazariegos, Chelsea M

Date Open: Dec 07 2018 3:21PM
Batch End: Dec 08 2018 9:47AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-236_00015 | Pu-238_00016 | Pu-239_00015 |
|---|---|---|---|---|---|---|---|
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |
| 160-31716-A-3 | Pu-238/Pu-239 #1 | ExtChrom_Actin, A01R_Pu | T | 0.1 mL | 0.2 mL | 0.1 mL | 0.1 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CMM |
| Analyst ID - Reagent Drop Witness: | pms per nmn |
| Pipette ID: | RAD116 |
| Analyst ID - Column: | nmn |
| Column Date: | 12/8/18 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 12/8/18 |
| SOP Number: | ST-RC-0100, ST-RC-0242 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Alpha Spectroscopy

**Batch:** 404669 **Operator:**

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-J | 160-31716-A-3-J | 0.1000 mL | 1.00 | 1.00 | AV227 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 88.79% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 4.15077E+004 | pCi/L | 8.471E+002 | 1.938E+003 | 3.157E+002 | 1.322E+002 | 1,938.2202 |
| Pu-238 | 2.71178E+004 | pCi/L | 7.269E+002 | 1.351E+003 | 2.775E+002 | 1.098E+002 | 1,350.6632 |
| Pu-239 | 2.60985E+004 | pCi/L | 7.098E+002 | 1.303E+003 | 2.134E+002 | 7.774E+001 | 1,302.7006 |
| Pu-242 | 3.08374E+002 | pCi/L | 9.828E+001 | 9.913E+001 | 2.583E+002 | 1.003E+002 | 99.1251 |

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-K | 160-31716-A-3-K | 0.1000 mL | 1.00 | 1.00 | AV228 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 86.11% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 4.02548E+004 | pCi/L | 8.325E+002 | 1.885E+003 | 3.472E+002 | 1.481E+002 | 1,884.5348 |
| Pu-238 | 2.69817E+004 | pCi/L | 7.343E+002 | 1.350E+003 | 3.347E+002 | 1.378E+002 | 1,349.8230 |
| Pu-239 | 2.81544E+004 | pCi/L | 7.479E+002 | 1.399E+003 | 2.431E+002 | 9.193E+001 | 1,399.1596 |
| Pu-242 | 3.15803E+002 | pCi/L | 1.008E+002 | 1.015E+002 | 2.548E+002 | 1.027E+002 | 101.5131 |

| Sample ID | Work Order # | Aliquot | Dilution | Sigma | Instrument | RunDateTime | RunDuration | TracerID | TracerAnalyte | TracerAdded | TracerYield |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-31716-A-3-L | 160-31716-A-3-L | 0.1000 mL | 1.00 | 1.00 | AV229 | 12/8/18 23:50 | 960.00 | Pu-236_00015 | Pu-236 | 4.679E+004 | 82.74% |

| Analyte | Activity | | CountUnc | TotalUnc | MDA | DLC | |
|---|---|---|---|---|---|---|---|
| Pu-236 | 3.86790E+004 | pCi/L | 8.118E+002 | 1.816E+003 | 3.535E+002 | 1.515E+002 | 1,816.0396 |
| Pu-238 | 2.87100E+004 | pCi/L | 7.705E+002 | 1.431E+003 | 4.015E+002 | 1.703E+002 | 1,430.9598 |
| Pu-239 | 2.81493E+004 | pCi/L | 7.569E+002 | 1.404E+003 | 1.565E+002 | 4.728E+001 | 1,403.8185 |
| Pu-242 | 2.84257E+002 | pCi/L | 7.597E+001 | 7.690E+001 | 6.091E+001 | 4.724E+001 | 76.9033 |

### Laboratory Control Sample Information

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Analyte | Sample Activity | Dup Sample ID | Dup Activity | RPD | RER | DER | Qualifier | ZFactor |
|---|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery |
|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

12/10/2018 11:08:25AM Page 1 of 1 RadCapture, version 6.2.5, released 6/27/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:30PM 12/9/2018

### Sample

Sample Name: 160-31716-A-3-J Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-J
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

### Batch

Batch Name: 404669
AnalysisResultsID: 234640
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

### Tracer

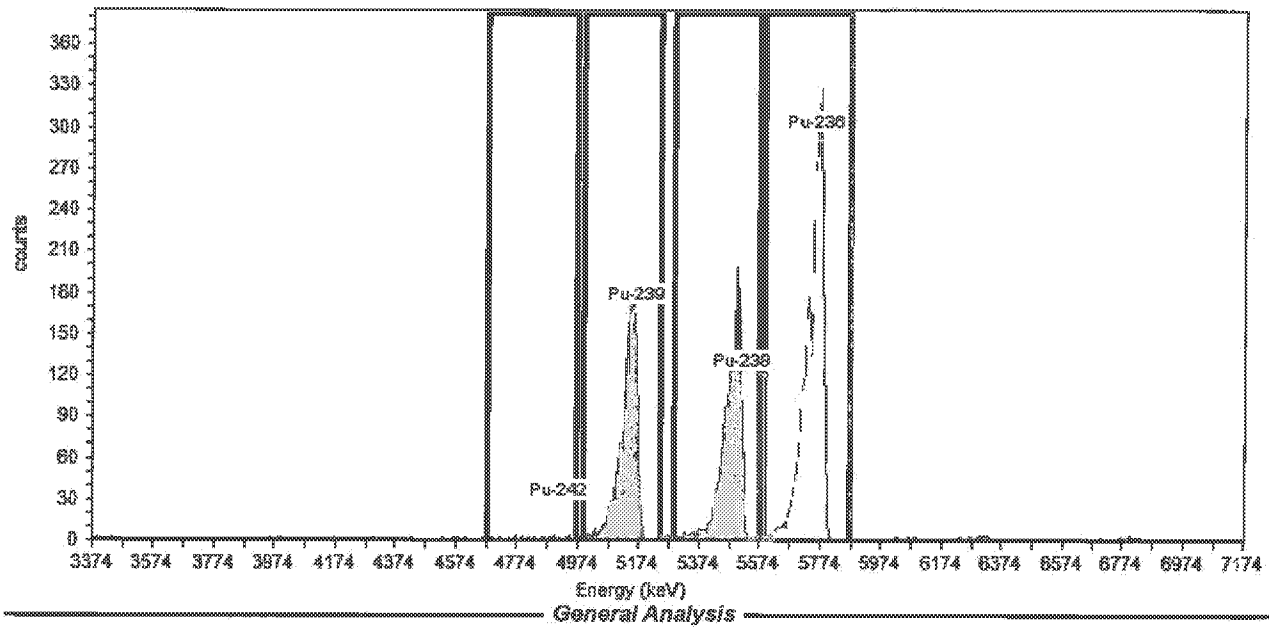
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 88.79%

### Acquisition

Detector: AV227 SN: 50-120DD5
Acquisition Start Date: 12/8/2018 11:50:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV227; Det: AV227; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370621;AV227-11152018
Efficiency Calibration:IC-1370621;AV227-11152018
Calibration Date: 11/15/2018 6:58:05PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.42% +/- 0.24% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:07PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity Units |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 10.0 | 100.0 | 21 | 5.0000 | 16.00 | 3.084E+002 pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.5 | 99.9 | 1351 | 3.0000 | 1348.00 | 2.601E+004 pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5281.0 | 5574.4 | 62.4 | 100.0 | 1413 | 6.0000 | 1407.00 | 2.712E+004 pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 61.9 | 99.9 | 2434 | 11.0000 | 2423.00 | 5.009E+004 pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:39PM 12/9/2018

## Sample

Sample Name: 160-31716-A-3-K Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-K
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 404669
AnalysisResultsID: 234641
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

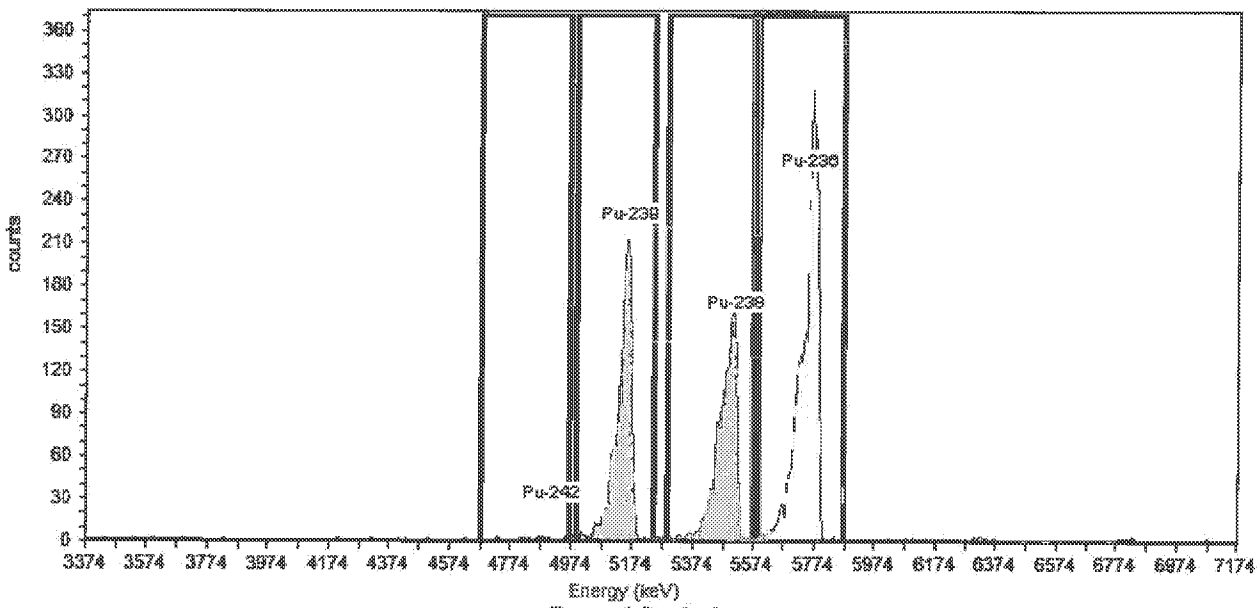
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 86.11%

## Acquisition

Detector: AV228 SN: 51-005Q6
Acquisition Start Date: 12/8/2018 11:50:14PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV228; Det: AV228; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370622;AV228-11152018
Efficiency Calibration:IC-1370622;AV228-11152018
Calibration Date: 11/15/2018 6:58:08PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.61% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:08PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 6.3 | 100.0 | 21 | 5.0000 | 16.00 | 3.158E+002 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 52.3 | 99.9 | 1429 | 4.0000 | 1425.00 | 2.815E+004 | pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 67.6 | 100.0 | 1375 | 9.0000 | 1366.00 | 2.696E+004 | pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 58.9 | 99.9 | 2380 | 14.0000 | 2366.00 | 5.828E+004 | pCi/L |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:50:19PM 12/9/2018

## Sample

Sample Name: 160-31716-A-3-L Type: Sample
Spectrum #1 Analysis #1
: 160-31716-A-3-L
Sample Collection Date: 11/5/2018 12:00:00PM
Comment:

Sample Volume : 0.00 Sample Units: L
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 404669
AnalysisResultsID: 234639
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

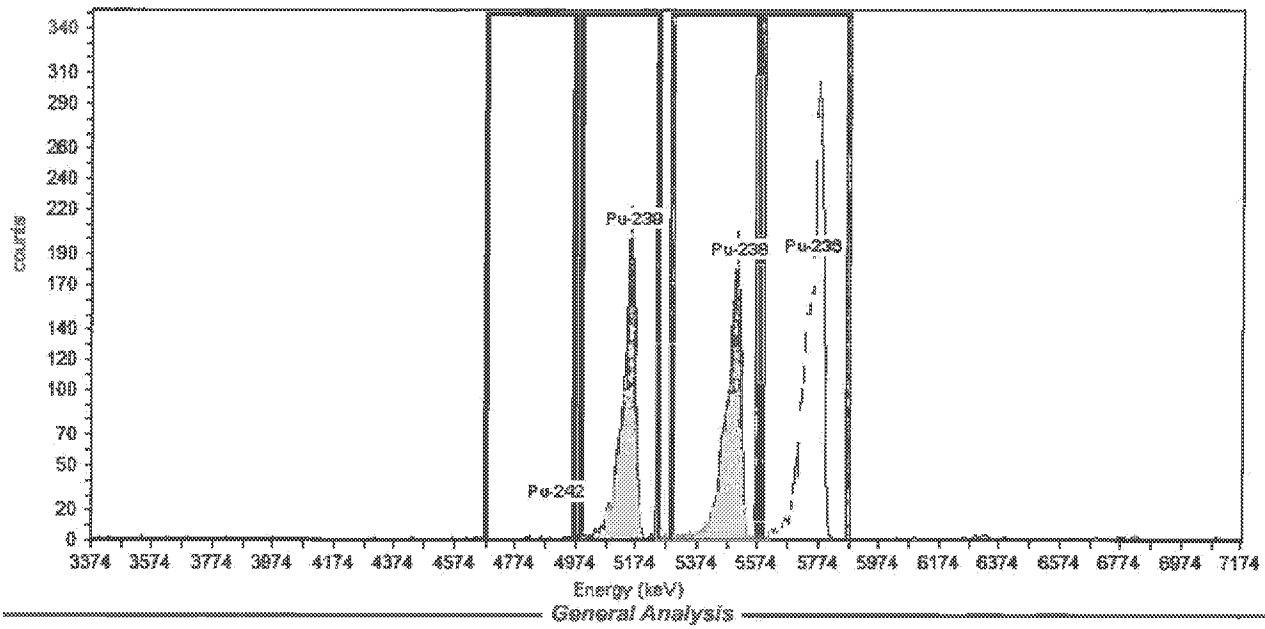
Tracer Name: Pu-236_00015
Tracer Activity: 75.12 DPM / mL x (Vol.) 0.20 mL = 15.02 DPM
Tracer Ref. Date: 6/1/2017 8:18:14AM

Tracer Nuclide: Pu-236
Tracer Recovery: 82.74%

## Acquisition

Detector: AV229 SN: 51-005EE4
Acquisition Start Date: 12/8/2018 11:50:15PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/20/2018 7:22:23PM
Bkgd Info: Sample: ICB;AV229; Det: AV229; Spectrum #2; 11/20/2018 7:22:23 PM

Energy Calibration: IC-1370619;AV229-11152018
Efficiency Calibration:IC-1370619;AV229-11152018
Calibration Date: 11/15/2018 6:58:12PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.93% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Plutonium_Pu236 Tracer
Decay Correction:12/8/2018 11:49:08PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4910.7 | 4,900.6 | 10.1 | 4672.0 | 4970.3 | 12.8 | 100.0 | 14 | 0.0000 | 14.00 | 2.843E+002 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 52.8 | 99.9 | 1386 | 1.0000 | 1385.00 | 2.815E+004 | pCi/L |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 57.8 | 100.0 | 1427 | 13.0000 | 1414.00 | 2.871E+004 | pCi/L |
| Pu-236 | 5760.8 | 5,770.1 | -9.3 | 5569.3 | 5872.7 | 60.7 | 99.9 | 2315 | 15.0000 | 2300.00 | 5.599E+004 | pCi/L |

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: TJR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0.00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0.00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6435E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6435E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

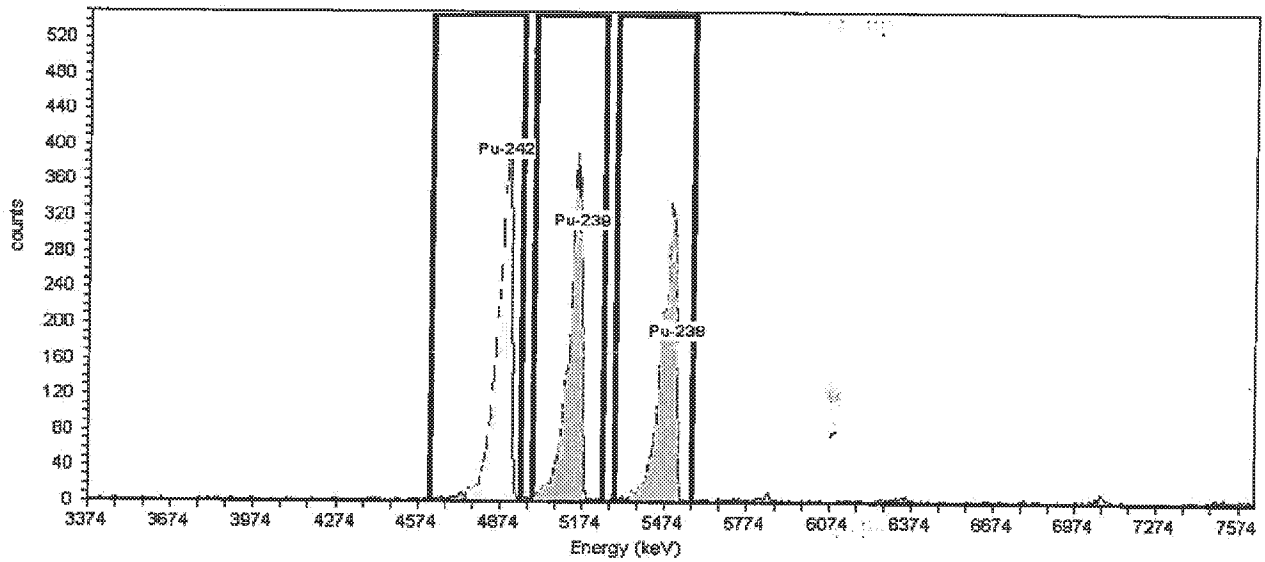
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1;
May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name =
Detector Correction: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

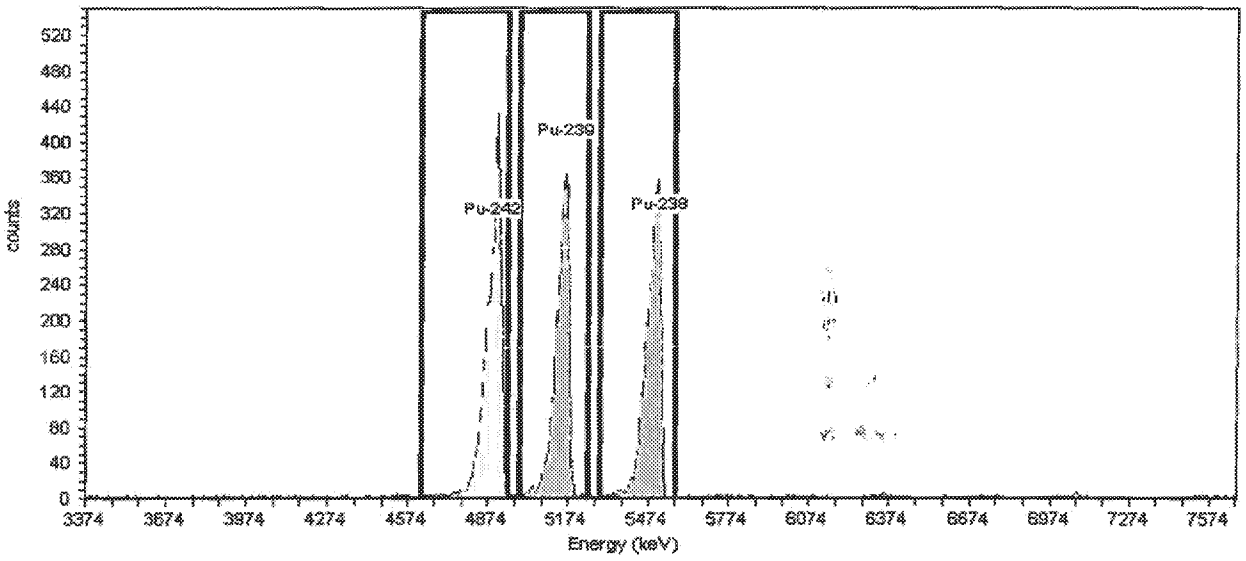
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible]/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

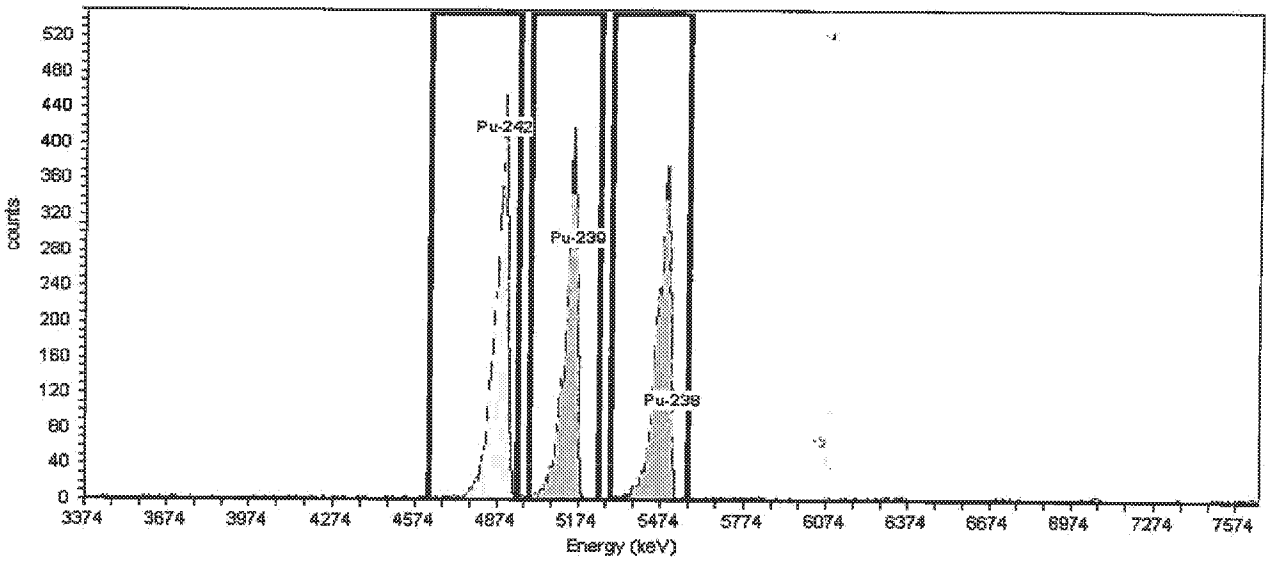
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Pu-242
Detection Date: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

U.S. Environmental Protection Agency
Environmental Monitoring Systems Laboratory-Las Vegas
Nuclear Radiation Assessment Division

Calibration Certificate

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %
(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mm

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

Printed : 6/14/2019 Page 1 of 5 Eurofins TestAmerica, St. Louis

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622

Analyst: Park, Cassandra L.

Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 4311022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Pipette ID: | RAD117 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

V:MMo 6/13/19

# Reagent

# Pu-239_00001

**U.S. Environmental Protection Agency**
**Environmental Monitoring Systems Laboratory-Las Vegas**
**Nuclear Radiation Assessment Division**

**Calibration Certificate**

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

curies Per gram

of the daughter nuclide

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %
(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( $+\delta - \delta'$ ). These have been estimated not to exceed

+2.7 % or -2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( $+\delta, -\delta'$ )
The overall uncertainty is therefore calculated on the basis of + [t(sm) $+\delta$], - [t(sm) $+\delta'$]
and is + 3.1 %, - 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Hahn



Revised 1/84

# Reagent

# Pu-239_00015

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0.00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0.00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6435E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6435E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

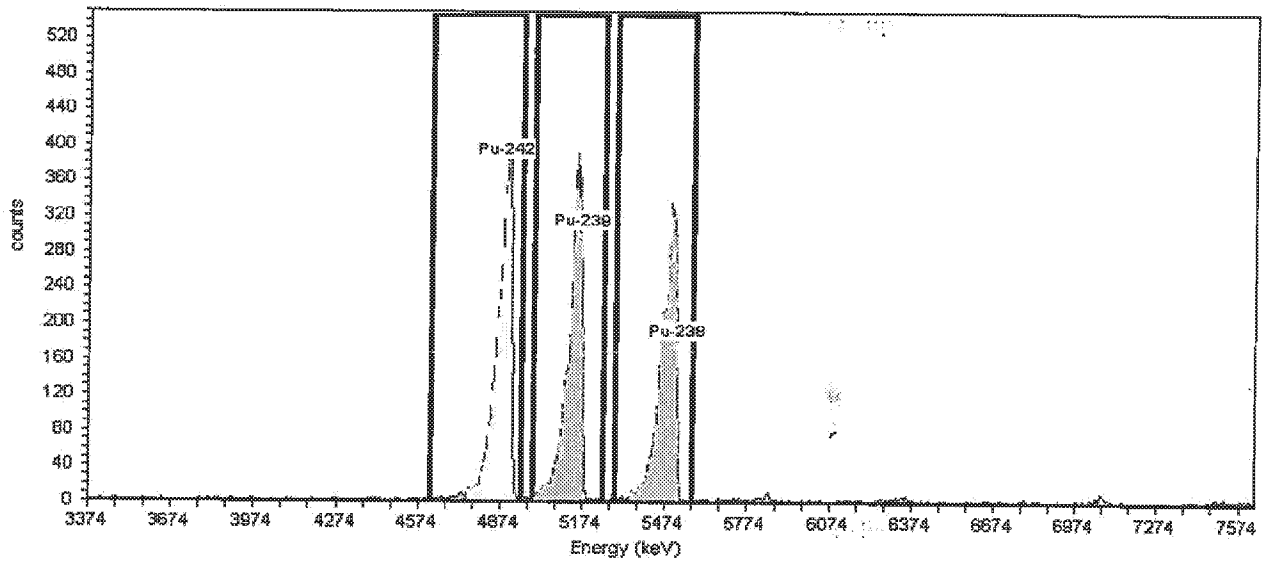
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1;
May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name =
Decay Correction: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

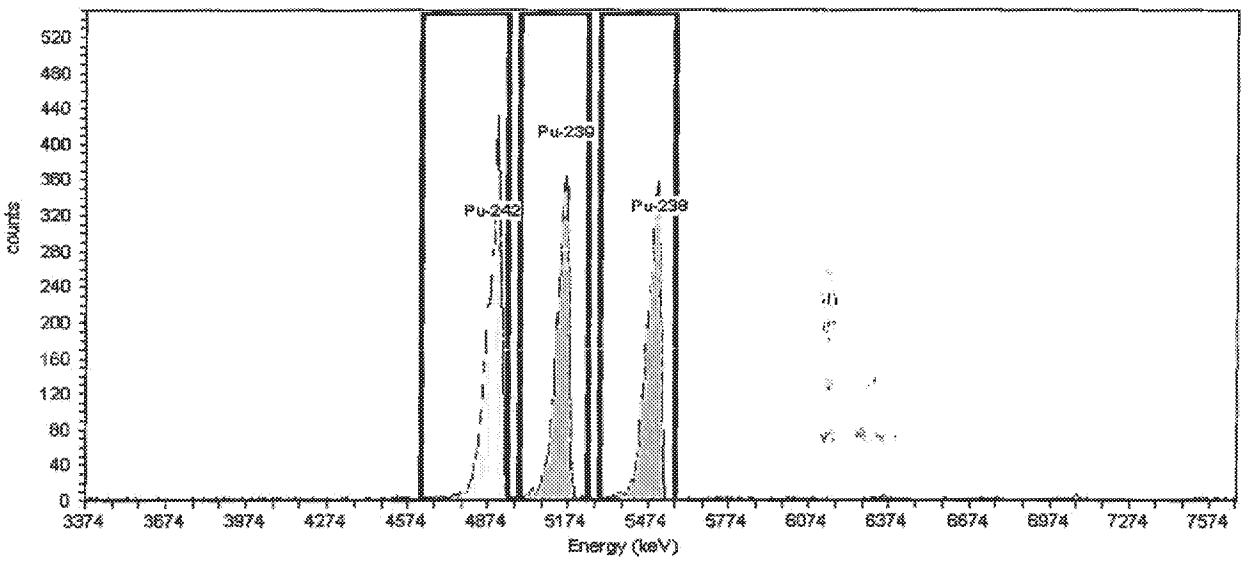
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible]/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

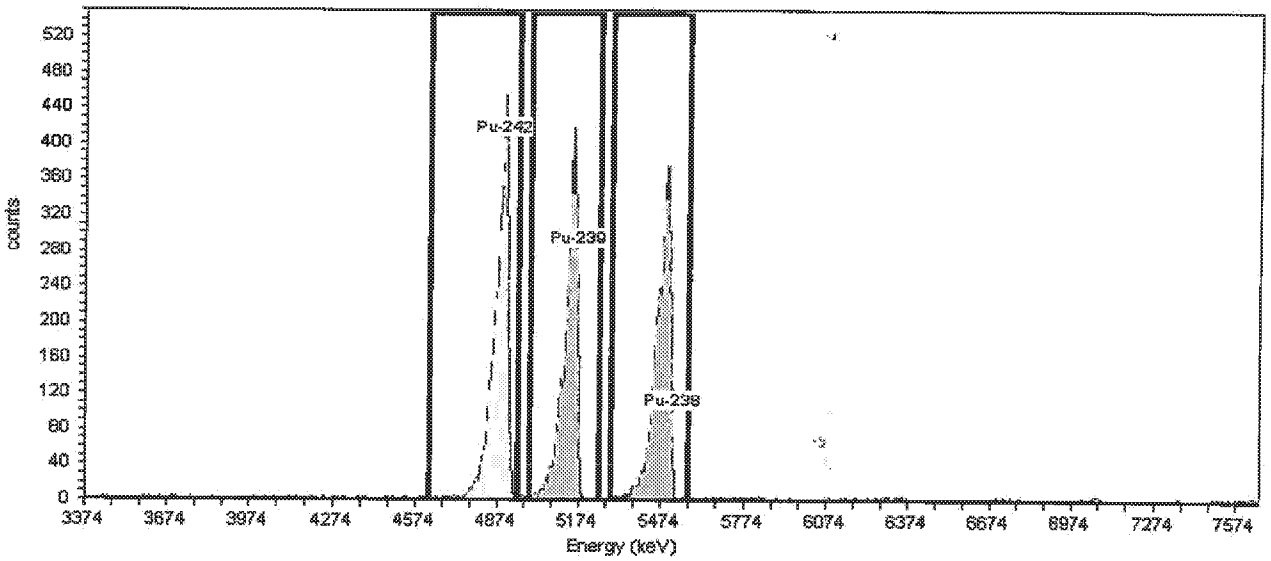
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Pu-242 Pu-239 Pu-238
Date/Time: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

U.S. Environmental Protection Agency
Environmental Monitoring Systems Laboratory-Las Vegas
Nuclear Radiation Assessment Division

Calibration Certificate

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %
(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mm

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

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12/04/2019

Printed : 6/14/2019 Page 1 of 5 Eurofins TestAmerica, St. Louis

J-432

ED_006061A_00000075-03734

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622

Analyst: Park, Cassandra L.

Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 4311022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Pipette ID: | RAD117 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

V:MMo 6/13/19

# Reagent

# Pu-242_00034

National Institute of Standards & Technology #1

# Certificate

## Standard Reference Material® 4334j

### Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of a solution of a standardized and certified quantity of radioactive plutonium-242 in a suitably stable and homogeneous matrix. It is intended primarily for the calibration of instruments that are used to measure radioactivity and for the monitoring of radiochemical procedures. A unit of SRM 4334j consists of approximately 5 mL of a solution, whose composition is specified in Tables 1 and 2, contained in a flame-sealed borosilicate-glass ampoule [1].

The certified **Plutonium-242** massic activity, at a **Reference Time of 1200 EST, 9 August 2017**, is:

$$(26.08 \pm 0.13)\ \mathrm{Bq \cdot g^{-1}}.$$

A NIST certified value, as used within the context of this certificate, is a value for which NIST has the highest confidence in its uncertainty assessment. It is a "measurement result" [2] obtained directly or indirectly from a "primary reference measurement procedure" [3]. The certified value is traceable to the derived SI unit, becquerel (Bq).

Additional physical, chemical, and radiological properties for this SRM, as well as details on the standardization method, are given in Tables 1 and 2. Uncertainties for the certified quantities are expanded ($k = 2$). The uncertainties are calculated according to the ISO/JCGM and NIST Guides [4,5]. Table 3 contains a specification of the components that comprise the uncertainty analysis.

**Expiration of Certification:** The certification of **SRM 4334j** is valid indefinitely, within the measurement uncertainty specified, provided that the SRM is handled and stored properly and that no evaporation or change in composition has occurred. The solution matrix, in an unopened ampoule, is homogeneous and stable within its half-life-dependent useful lifetime provided the SRM is handled in accordance with instructions given in this certificate (see "Instructions for Handling and Storage"). Periodic recertification of this SRM is not required. The certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:** NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

**Radiological and chemical hazard:** Consult the Safety Data Sheet (SDS), enclosed with the SRM shipment, for radiological and chemical hazard information.

This SRM was prepared in the NIST Physical Measurement Laboratory, Radiation Physics Division, under the direction of M.P. Unterweger, Group Leader of the Radioactivity Group. Overall technical direction and physical measurement leading to certification were provided by R. Collé and L. Laureano-Perez of the NIST Radiation Physics Division, Radioactivity Group. Photon-emitting-impurity analyses were provided by L. Pibida.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

Michael G. Mitch, Acting Chief
Radiation Physics Division

Gaithersburg, Maryland 20899
Certificate Issue Date: 30 May 2018

Steven J. Choquette, Director
Office of Reference Materials

Table 1. Certified Massic Activity of SRM 4334j

| | |
|---|---|
| Radionuclide | Plutonium-242 |
| Reference time | 1200 EST, 09 August 2017 |
| Massic activity of the solution | 26.08 Bq•g$^{-1}$ [(a)] |
| Relative expanded uncertainty ($k$ = 2) | 0.51 % [(b)] |

[(a)] Both SRM 4334j and SRM 4334i (a previous issue of $^{242}$Pu) were derived from two independent gravimetric dilutions of the identical standard master solution. The massic activity of SRM 4334j is in agreement with the decay corrected massic activity of SRM 4334i to ± 0.12 %.

[(b)] The uncertainties on certified values are expanded uncertainties, $U = ku_c$. The quantity $u_c$ is the combined standard uncertainty calculated according to the ISO/JCGM and NIST Guides [4-5]. The combined standard uncertainty is multiplied by a coverage factor of $k$ = 2 and was chosen to obtain an approximate 95 % level of confidence.

Table 2. Uncertified Information of SRM 4334j

| | |
|---|---|
| Source description | Liquid in a flame-sealed 5 mL borosilicate-glass ampoule [1] |
| Solution composition | 3.1 mol•L$^{-1}$ $HNO_3$ |
| Solution density | (1.099 ± 0.002) g•mL$^{-1}$ at 24.4 °C[a] |
| Solution mass | (5.499 ± 0.003) g[a] |
| Alpha-particle- emitting impurities | $^{241}$Am: (0.0021 ± 0.0003) Bq•g$^{-1}$[a,b,c,d] |
| Beta-particle- emitting impurities | $^{241}$Pu: (0.039 ± 0.009) Bq•g$^{-1}$[a,d] |
| Photon-emitting impurities | None detected [e], excepting $^{241}$Am |
| Half-lifes used [6] | $^{242}$Pu: (3.73 ± 0.03) × 10$^5$ a[f]<br>$^{241}$Pu: (14.33 ± 0.04) a<br>$^{240}$Pu: (6 561 ± 7) a<br>$^{239}$Pu: (24 100 ± 11) a<br>$^{238}$Pu: (87.74 ± 0.03) a<br>$^{241}$Am: (432.6 ± 0.6) a |
| Calibration methods (and instruments) | The certified massic activity for $^{242}$Pu was obtained by 4πα liquid scintillation (LS) spectrometry with two commercial LS counters. Four separate measurement trials using nine LS cocktails prepared directly from the SRM solution and six cocktails prepared from a master stock solution with known gravimetric dilution factor. |

(a) The stated uncertainty is two times the standard uncertainty [5].

(b) The $^{242}$Pu was chemically purified 07 June 1994 at the Lawrence Livermore National Laboratory (LLNL). Americium-241, the daughter of $^{241}$Pu, was removed but has been growing in since that time. Photonic emission measurements of the $^{241}$Am ingrowth were made at NIST in 1998-1999 and 2017.

(c) The estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (number of alpha-particles emission rates per second per gram), are:

0.003 s$^{-1}$•g$^{-1}$ for energies less than 3.1 MeV,
0.03 s$^{-1}$•g$^{-1}$ for energies between 3.1 MeV and 4.4 MeV, and
0.003 s$^{-1}$•g$^{-1}$ for energies greater than 5.0 MeV

(d) The $^{242}$Pu was chemically purified 07 June 1994. The relative massic activities of radionuclidic impurities follow;

| Radionuclide | Relative Activity at Purification Time (07 June 1994) As Measured By | | |
|---|---|---|---|
| | LLNL in 1994 | NIST in 1998-1999 | NIST in 2017 |
| $^{242}$Pu | 1 | 1 | 1 |
| $^{241}$Pu | -- | (3.5 ± 0.4) × 10$^{-3}$[1,2] | (3.6 ± 1.1) × 10$^{-3}$[1,5] |
| $^{240}$Pu + $^{239}$Pu | < 10$^{-6}$ [3] | (2.0 ± 2.1) × 10$^{-5}$[1,4] | -- |
| $^{238}$Pu + $^{241}$Am | < 1.6 × 10$^{-5}$ [3] | (9 ± 16) × 10$^{-6}$[1,4] | -- |
| $^{241}$Am | -- | assumed 0[2] | assumed 0 [5] |

1) The stated uncertainty is the standard uncertainty.
2) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 25 November 1998, assuming that $^{241}$Am was completely removed at the time of chemical purification.
3) Using alpha-particle spectrometry. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at LLNL in July of 1994.
4) Alpha-particle spectrometry measurements were made at the National Institute of Standards and Technology (NIST) in June and July 1999.
5) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 01 September 2017, assuming that $^{241}$Am was completely removed at the time of chemical purification.

(e) The estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:

1 × 10$^{-3}$ s$^{-1}$•g$^{-1}$ for energies between 20 keV and 35 keV,
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 40 keV and 50 keV,
5 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 55 keV and 95 keV,
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 100 keV and 600 keV
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 610 keV and 1440 keV
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1450 keV and 1480 keV, and
3 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1490 keV and 2000 keV,

provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of $^{242}$Pu, $^{241}$Pu, or $^{241}$Am.

(f) The stated uncertainty is the standard uncertainty. See reference 6.

Table 2. Uncertainty evaluation for the massic activity of SRM 4334j

| Uncertainty component | | Assessment Type[a] | Relative standard uncertainty contribution on massic activity of $^{242}Pu$ (%) |
|---|---|---|---|
| 1 | LS measurement precision: Relative standard deviation of the mean on the great-grand mean for 4 LS measurement trials, considering all of the within-trial and between-trial components of variance. Each of the 4 grand mean values was based on 5 replicate measurements on each of either 6 or 9 LS counting sources. The typical within-trial relative standard deviation of the mean (considering the variations for the between 5 measurements and the between 6 to 9 sources) for each trial was 0.08 %. The between-trial relative standard deviation across the 4 trials was 0.18 %. | A | 0.22 |
| 2 | Background; LS measurement variability and cocktail composition stability effects; wholly embodied in component 1. | A | -- |
| 3 | LS counters dependencies; wholly embodied in components 1 & 2 | A | -- |
| 4 | Live time determinations for LS counting time intervals, includes uncorrected dead time effects | B | 0.07 |
| 5 | Aliquant mass determinations by gravimetric measurements for preparation of counting sources; includes mass measurement precision partially embodied in component 1. | B | 0.05 |
| 6 | LS detection inefficiency, includes wall effect; partially embodied in component 1. | B | 0.01 |
| 7 | $^{242}Pu$ decay corrections for half-life uncertainty of 0.22 %. | B | $< 10^{-10}$ |
| 8 | Potential alpha- and photon-emitting impurities | B | 0.1 |
| **Relative combined standard uncertainty** | | | **0.26** |
| **Relative expanded uncertainty ($k = 2$)** | | | **0.51** |

[a] Letter A denotes evaluation by statistical methods; B denotes evaluation by other methods.

## INSTRUCTIONS FOR USE AND HANDLING

**Storage:** SRM 4334j should be stored and used at a temperature between 5 °C and 65 °C. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material.

**Handling:** If the ampoule is transported, it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of both the radioactivity and the strong acid. The ampoule should be opened only by persons qualified to handle both radioactive material and alkaline and/or acidic solutions. Appropriate shielding and/or distance should be used to minimize personnel exposure. Refer to SDS for further information.

## REFERENCES

[1] NIST Physical Measurement Laboratory; *Storage and Handling of Radioactive Standard Reference Materials, Ampoule Specifications and Opening Procedure*; available at https://www.nist.gov/pml/radiation-physics/ampoule-specifications-and-opening-procedure (accessed May 2018). Note: This SRM is contained in a generic borosilicate-glass ampoule and not in the standard NIST ampoule.

[2] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; Joint Committee for Guides in Metrology (JCGM): BIPM, Sevres Cedex, France; p. 19 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[3] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; JCGM: BIPM, Sevres Cedex, France; p. 18 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[4] JCGM 100:2008; *Guide to the Expression of Uncertainty in Measurement*; (GUM 1995 with Minor Corrections), JCGM: BIPM, Sevres Cedex, France (2008); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed May 2018).

[5] Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297, U.S. Government Printing Office: Washington, DC (1994); available at https://www.nist.gov/pml/nist-technical-note-1297 (accessed Apr 2018).

[6] Chechev, V.P.; *LNE-LNHB/CEA Table of Radionuclides*, $^{242}Pu$; (June 2009); available at http://www.nucleide.org/DDEP_WG/Nuclides/Pu-242_tables.pdf (accessed May 2018).



*Users of this SRM should ensure that the Certificate in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail* srmmsds@nist.gov; *or via the Internet at https://www.nist.gov/srm.*

# Reagent

# Pu-242_00035

National Institute of Standards & Technology #2

# Certificate

## Standard Reference Material® 4334j

### Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of a solution of a standardized and certified quantity of radioactive plutonium-242 in a suitably stable and homogeneous matrix. It is intended primarily for the calibration of instruments that are used to measure radioactivity and for the monitoring of radiochemical procedures. A unit of SRM 4334j consists of approximately 5 mL of a solution, whose composition is specified in Tables 1 and 2, contained in a flame-sealed borosilicate-glass ampoule [1].

The certified **Plutonium-242** massic activity, at a **Reference Time of 1200 EST, 9 August 2017**, is:

$$(26.08 \pm 0.13)\ \mathrm{Bq \cdot g^{-1}}.$$

A NIST certified value, as used within the context of this certificate, is a value for which NIST has the highest confidence in its uncertainty assessment. It is a "measurement result" [2] obtained directly or indirectly from a "primary reference measurement procedure" [3]. The certified value is traceable to the derived SI unit, becquerel (Bq).

Additional physical, chemical, and radiological properties for this SRM, as well as details on the standardization method, are given in Tables 1 and 2. Uncertainties for the certified quantities are expanded ($k = 2$). The uncertainties are calculated according to the ISO/JCGM and NIST Guides [4,5]. Table 3 contains a specification of the components that comprise the uncertainty analysis.

**Expiration of Certification:** The certification of **SRM 4334j** is valid indefinitely, within the measurement uncertainty specified, provided that the SRM is handled and stored properly and that no evaporation or change in composition has occurred. The solution matrix, in an unopened ampoule, is homogeneous and stable within its half-life-dependent useful lifetime provided the SRM is handled in accordance with instructions given in this certificate (see "Instructions for Handling and Storage"). Periodic recertification of this SRM is not required. The certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:** NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

**Radiological and chemical hazard:** Consult the Safety Data Sheet (SDS), enclosed with the SRM shipment, for radiological and chemical hazard information.

This SRM was prepared in the NIST Physical Measurement Laboratory, Radiation Physics Division, under the direction of M.P. Unterweger, Group Leader of the Radioactivity Group. Overall technical direction and physical measurement leading to certification were provided by R. Collé and L. Laureano-Perez of the NIST Radiation Physics Division, Radioactivity Group. Photon-emitting-impurity analyses were provided by L. Pibida.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

Michael G. Mitch, Acting Chief
Radiation Physics Division

Gaithersburg, Maryland 20899
Certificate Issue Date: 30 May 2018

Steven J. Choquette, Director
Office of Reference Materials

Table 1. Certified Massic Activity of SRM 4334j

| | |
|---|---|
| Radionuclide | Plutonium-242 |
| Reference time | 1200 EST, 09 August 2017 |
| Massic activity of the solution | 26.08 Bq•g$^{-1}$ [(a)] |
| Relative expanded uncertainty ($k$ = 2) | 0.51 % [(b)] |

[(a)] Both SRM 4334j and SRM 4334i (a previous issue of $^{242}$Pu) were derived from two independent gravimetric dilutions of the identical standard master solution. The massic activity of SRM 4334j is in agreement with the decay corrected massic activity of SRM 4334i to ± 0.12 %.

[(b)] The uncertainties on certified values are expanded uncertainties, $U = ku_c$. The quantity $u_c$ is the combined standard uncertainty calculated according to the ISO/JCGM and NIST Guides [4-5]. The combined standard uncertainty is multiplied by a coverage factor of $k$ = 2 and was chosen to obtain an approximate 95 % level of confidence.

Table 2. Uncertified Information of SRM 4334j

| | |
|---|---|
| Source description | Liquid in a flame-sealed 5 mL borosilicate-glass ampoule [1] |
| Solution composition | 3.1 mol•L$^{-1}$ $HNO_3$ |
| Solution density | (1.099 ± 0.002) g•mL$^{-1}$ at 24.4 °C[a] |
| Solution mass | (5.499 ± 0.003) g[a] |
| Alpha-particle- emitting impurities | $^{241}$Am: (0.0021 ± 0.0003) Bq•g$^{-1}$[a,b,c,d] |
| Beta-particle- emitting impurities | $^{241}$Pu: (0.039 ± 0.009) Bq•g$^{-1}$[a,d] |
| Photon-emitting impurities | None detected [e], excepting $^{241}$Am |
| Half-lifes used [6] | $^{242}$Pu: (3.73 ± 0.03) × 10$^5$ a[f]<br>$^{241}$Pu: (14.33 ± 0.04) a<br>$^{240}$Pu: (6 561 ± 7) a<br>$^{239}$Pu: (24 100 ± 11) a<br>$^{238}$Pu: (87.74 ± 0.03) a<br>$^{241}$Am: (432.6 ± 0.6) a |
| Calibration methods (and instruments) | The certified massic activity for $^{242}$Pu was obtained by 4πα liquid scintillation (LS) spectrometry with two commercial LS counters. Four separate measurement trials using nine LS cocktails prepared directly from the SRM solution and six cocktails prepared from a master stock solution with known gravimetric dilution factor. |

(a) The stated uncertainty is two times the standard uncertainty [5].

(b) The $^{242}$Pu was chemically purified 07 June 1994 at the Lawrence Livermore National Laboratory (LLNL). Americium-241, the daughter of $^{241}$Pu, was removed but has been growing in since that time. Photonic emission measurements of the $^{241}$Am ingrowth were made at NIST in 1998-1999 and 2017.

(c) The estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (number of alpha-particles emission rates per second per gram), are:

0.003 s$^{-1}$•g$^{-1}$ for energies less than 3.1 MeV,
0.03 s$^{-1}$•g$^{-1}$ for energies between 3.1 MeV and 4.4 MeV, and
0.003 s$^{-1}$•g$^{-1}$ for energies greater than 5.0 MeV

(d) The $^{242}$Pu was chemically purified 07 June 1994. The relative massic activities of radionuclidic impurities follow;

| Radionuclide | Relative Activity at Purification Time (07 June 1994) As Measured By | | |
|---|---|---|---|
| | LLNL in 1994 | NIST in 1998-1999 | NIST in 2017 |
| $^{242}$Pu | 1 | 1 | 1 |
| $^{241}$Pu | -- | (3.5 ± 0.4) × 10$^{-3}$[1,2] | (3.6 ± 1.1) × 10$^{-3}$[1,5] |
| $^{240}$Pu + $^{239}$Pu | < 10$^{-6}$ [3] | (2.0 ± 2.1) × 10$^{-5}$[1,4] | -- |
| $^{238}$Pu + $^{241}$Am | < 1.6 × 10$^{-5}$ [3] | (9 ± 16) × 10$^{-6}$[1,4] | -- |
| $^{241}$Am | -- | assumed 0[2] | assumed 0 [5] |

1) The stated uncertainty is the standard uncertainty.
2) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 25 November 1998, assuming that $^{241}$Am was completely removed at the time of chemical purification.
3) Using alpha-particle spectrometry. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at LLNL in July of 1994.
4) Alpha-particle spectrometry measurements were made at the National Institute of Standards and Technology (NIST) in June and July 1999.
5) The $^{241}$Pu activity was calculated from a gamma-ray measurement of the $^{241}$Am ingrowth as of 01 September 2017, assuming that $^{241}$Am was completely removed at the time of chemical purification.

(e) The estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:

1 × 10$^{-3}$ s$^{-1}$•g$^{-1}$ for energies between 20 keV and 35 keV,
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 40 keV and 50 keV,
5 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 55 keV and 95 keV,
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 100 keV and 600 keV
4 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 610 keV and 1440 keV
6 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1450 keV and 1480 keV, and
3 × 10$^{-4}$ s$^{-1}$•g$^{-1}$ for energies between 1490 keV and 2000 keV,

provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of $^{242}$Pu, $^{241}$Pu, or $^{241}$Am.

(f) The stated uncertainty is the standard uncertainty. See reference 6.

Table 2. Uncertainty evaluation for the massic activity of SRM 4334j

| Uncertainty component | | Assessment Type[a] | Relative standard uncertainty contribution on massic activity of $^{242}Pu$ (%) |
|---|---|---|---|
| 1 | LS measurement precision: Relative standard deviation of the mean on the great-grand mean for 4 LS measurement trials, considering all of the within-trial and between-trial components of variance. Each of the 4 grand mean values was based on 5 replicate measurements on each of either 6 or 9 LS counting sources. The typical within-trial relative standard deviation of the mean (considering the variations for the between 5 measurements and the between 6 to 9 sources) for each trial was 0.08 %. The between-trial relative standard deviation across the 4 trials was 0.18 %. | A | 0.22 |
| 2 | Background; LS measurement variability and cocktail composition stability effects; wholly embodied in component 1. | A | -- |
| 3 | LS counters dependencies; wholly embodied in components 1 & 2 | A | -- |
| 4 | Live time determinations for LS counting time intervals, includes uncorrected dead time effects | B | 0.07 |
| 5 | Aliquant mass determinations by gravimetric measurements for preparation of counting sources; includes mass measurement precision partially embodied in component 1. | B | 0.05 |
| 6 | LS detection inefficiency, includes wall effect; partially embodied in component 1. | B | 0.01 |
| 7 | $^{242}Pu$ decay corrections for half-life uncertainty of 0.22 %. | B | $< 10^{-10}$ |
| 8 | Potential alpha- and photon-emitting impurities | B | 0.1 |
| **Relative combined standard uncertainty** | | | **0.26** |
| **Relative expanded uncertainty ($k = 2$)** | | | **0.51** |

[a] Letter A denotes evaluation by statistical methods; B denotes evaluation by other methods.

## INSTRUCTIONS FOR USE AND HANDLING

**Storage:** SRM 4334j should be stored and used at a temperature between 5 °C and 65 °C. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material.

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## REFERENCES

[1] NIST Physical Measurement Laboratory; *Storage and Handling of Radioactive Standard Reference Materials, Ampoule Specifications and Opening Procedure*; available at https://www.nist.gov/pml/radiation-physics/ampoule-specifications-and-opening-procedure (accessed May 2018). Note: This SRM is contained in a generic borosilicate-glass ampoule and not in the standard NIST ampoule.

[2] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; Joint Committee for Guides in Metrology (JCGM): BIPM, Sevres Cedex, France; p. 19 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[3] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; JCGM: BIPM, Sevres Cedex, France; p. 18 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed May 2018).

[4] JCGM 100:2008; *Guide to the Expression of Uncertainty in Measurement*; (GUM 1995 with Minor Corrections), JCGM: BIPM, Sevres Cedex, France (2008); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed May 2018).

[5] Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297, U.S. Government Printing Office: Washington, DC (1994); available at https://www.nist.gov/pml/nist-technical-note-1297 (accessed Apr 2018).

[6] Chechev, V.P.; *LNE-LNHB/CEA Table of Radionuclides, $^{242}Pu$*; (June 2009); available at http://www.nucleide.org/DDEP_WG/Nuclides/Pu-242_tables.pdf (accessed May 2018).



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# Reagent

# Pu-242_00036

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 11:02 PM

Standard ID Number: Pu-239_00015/Pu-242_00036
True Value = 26408 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-239/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 28199 | pCi/L or g |
| #2 | 27486 | pCi/L or g |
| #3 | 26812 | pCi/L or g |

Mean = 27499

1 sigma = 693.59138

1.96 sigma = 1359.439

True Value minus 5% = 25087.6 (True Value - 5%)
True Value plus 5% = 27728.4 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JAR 6/28/19

2nd Reviewed By/Date: 7/1/19

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/13/1990 0:00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0:00 | | |
| **Initial Activity ($A_0$):** | 58.67 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 58.6749 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-239 | | |
| **Half-Life (days):** | 8806177.5 | decay days | fraction |
| ****Decay Factor:** | 0.9992 | 10416.00 | 0.00118 |
| **Decay Corr Activity:** | 5.8627E+01 dpm | | |
| **Decay Corr Conc:** | 5.8627E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6408E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6408E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica

St. Louis Radiological Standard Verification

Printed: 6/28/2019 10:59 PM

Standard ID Number: Pu-238_00016/Pu-242_00036
True Value = 26435 pCi/L or g
Date Analyzed: 6/20/2019

Radionuclide: Pu-238/Pu-242

| | Replicates | |
|---|---|---|
| #1 | 27319 | pCi/L or g |
| #2 | 27560 | pCi/L or g |
| #3 | 27371 | pCi/L or g |

Mean = 27416.667

1 sigma = 126.82403

1.96 sigma = 248.5751

True Value minus 5% = 25113.25 (True Value - 5%)
True Value plus 5% = 27756.75 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: JR 6/28/19

2nd Reviewed By/Date:

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 12/2/2015 0.00 | | |
| **Decayto Date/Time (t):** | 6/20/19 0.00 | | |
| **Initial Activity ($A_0$):** | 60.35 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 60.3549 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Pu-238 | | |
| **Half-Life (days):** | 32032.425 | decay days | fraction |
| ****Decay Factor:** | 0.9723 | 1296.00 | 0.04046 |
| **Decay Corr Activity:** | 5.8686E+01 dpm | | |
| **Decay Corr Conc:** | 5.8686E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | mL |
| **Volume Unit Factor:** | 1.000 |
| **Final Concentration:** | 2.6435E+01 pCi/mL |
| **Aliquot Volume:** | 1.0000E+00 mL |
| **Final Activity (A):** | 2.6435E+01 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:32:45PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-A
SampleType: Sample
: 160-34508-A-3-A
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766779

Analyst: 60040

### Tracer

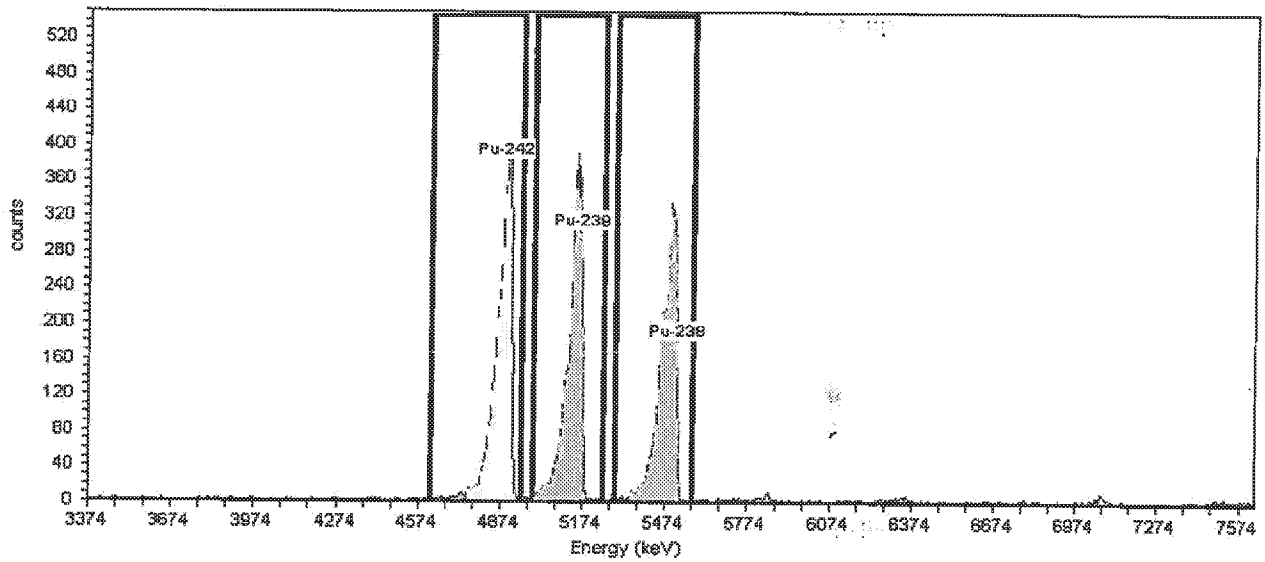
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.33%

### Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 6/20/2019 9:32:20PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:51PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Detail Pu-Rev2
Detail Correlation 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 47.4 | 100.0 | 3242 | 9.0000 | 3233.00 | 31,140.170 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 54.8 | 99.9 | 2877 | 1.0000 | 2876.00 | 28,199.310 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 65.8 | 100.0 | 2791 | 2.0000 | 2789.00 | 27,318.920 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:03PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-B
SampleType: Sample
: 160-34508-A-3-B
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766780

Analyst: 60040

### Tracer

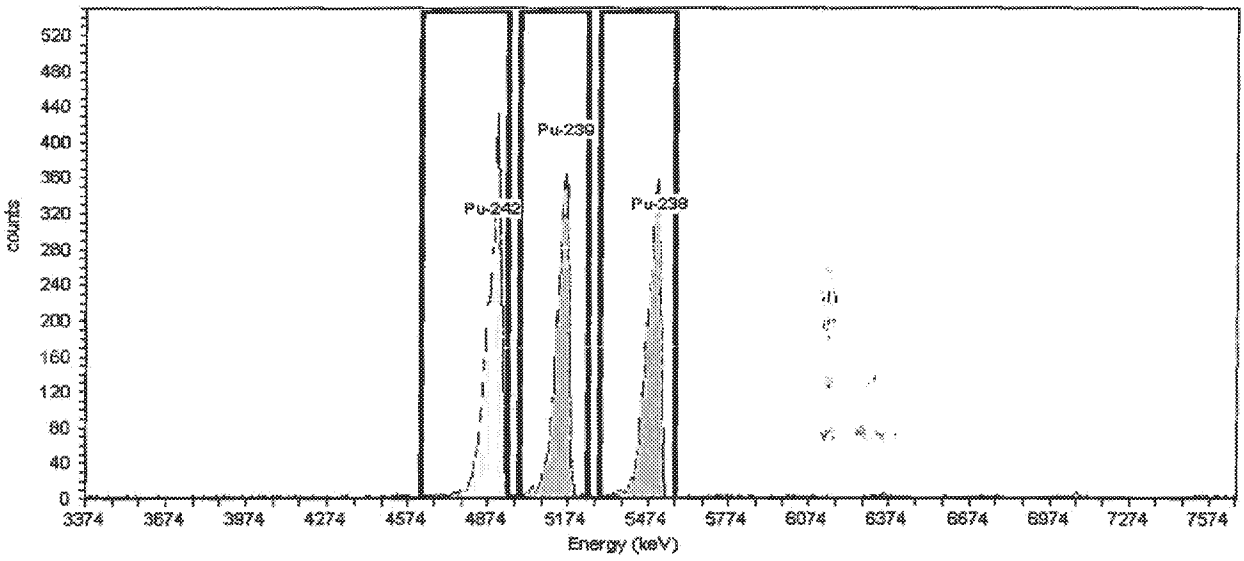
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.35%

### Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 6/20/2019 9:32:21PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:55PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 29.44% +/- 0.30% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = [illegible]
[illegible] 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Count | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.3 | 100.0 | 3162 | 17.0000 | 3145.00 | 30,196.810 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 56.1 | 99.9 | 2728 | 1.0000 | 2727.00 | 27,466.520 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.0 | 100.0 | 2742 | 5.0000 | 2737.00 | 27,559.730 | pCi/L * |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Alpha-Spectroscopy Analysis Report**

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:33:12PM 6/21/2019

### Sample

Sample Name: 160-34508-A-3-C
SampleType: Sample
: 160-34508-A-3-C
Sample Collection Date: 6/10/2019 8:00:00AM

Spectrum #1 Analysis #1
Sample Volume : 0.0002L
Aliquot: N/A Aliquot Fraction: N/A

### Batch

Batch Name: 431622
AnalysisID: 766781

Analyst: 60040

### Tracer

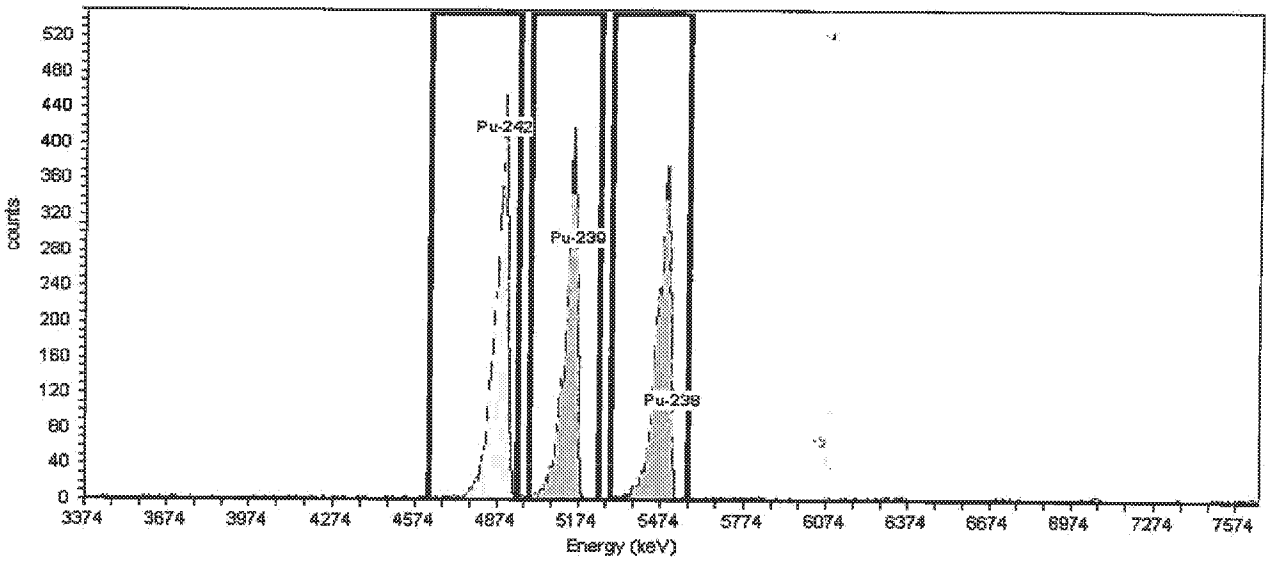
Tracer Name: Pu-242_00030
Tracer Activity: 70.30 DPM/mL x (Vol.)0.20 mL = 14.06 DPM
Tracer Ref. Date: 1/1/2010 11:00:29AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.74%

### Acquisition

Detector: AV4
Serial Number: 46-033Q4
Acquisition Start Date: 6/20/2019 9:32:23PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 5/11/2019 4:32:56PM
Background Info: Sample: ICB;AV4; Det: AV4; Spectrum #1; May-11-2019 16:32

Calibration Name: IC-9520;AV4-05142018
Calibration Date: 5/14/2018 6:25:34PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 22.79% +/- 0.33% TPU(2 sigma)




### General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = Pu-242 (7)
Detection Date: 6/20/2019 9:30:05PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

### Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pu-242 | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 50.0 | 100.0 | 3196 | 5.0000 | 3191.00 | 32,851.860 | pCi/L |
| Pu-239 | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 53.9 | 99.9 | 2701 | 2.0000 | 2699.00 | 26,812.130 | pCi/L * |
| Pu-238 | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5674.4 | 60.9 | 100.0 | 2761 | 3.0000 | 2758.00 | 27,370.850 | pCi/L * |

U.S. Environmental Protection Agency
Environmental Monitoring Systems Laboratory-Las Vegas
Nuclear Radiation Assessment Division

Calibration Certificate

**Description**

Principal radionuclide: PLUTONIUM-239 Half-life: $2.4 \times 10^4$ years

Nominal activity: 59 nano curies

Nominal volume: 5 ml in ampoule/bottle number: 2510-1

**Measurement** Activity of principal radionuclide

Activity per gram of this solution

11.8 nano curies of Plutonium-239

at 0400 hours PST on December 13, 1990

Activity of daughter radionuclide

The principal activity was accompanied at the quoted time by

[ ] curies per gram

of the daughter nuclide [ ]

Total mass of this solution

APPROX. 5.0 grams

Method of measurement

The activity of the primary solution was measured by an internal gas flow proportional counter.

The activity of the dilution was measured by liquid scintillation counting.

**Useful Life**

This radionuclide has decayed through [ ] half lives since it was obtained by EMSL-LV

We recommend that this solution should not be used after [ ]

**Purity**

The manufacturer states that activities other than that of the principal nuclide and of its daughter nuclides, if any, were estimated/known to be:

| | | | |
|---|---|---|---|
| (1) see remarks | less than equal to | % | of the principal activity |
| (2) | less than equal to | % | of the principal activity |
| (3) | less than equal to | % | of the principal activity |

The activity of impurity (1) is not (2) is not (3) is not included in the quoted figures of the principal activity.

**Random Errors**

The precision of this standard was such that the certified value of the radioactive concentration of the principal activity had a standard error (sm) not greater than ± 0.13 %

(The 99.7% confidence limits are given by t(sm) where t is obtained from the student t factor for the degree of freedom (n-1)).

The maximum uncertainty due to the assessable systematic errors (dilution, counting, and known uncertainty of the standard) is obtained by the separate arithmetic summation of the positive and negative systematic error ( + δ − δ ' ). These have been estimated not to exceed

+ 2.7 % or − 2.7 %

the overall uncertainty (often called accuracy) is an estimate of the possible divergence of the quoted result from the true value. It is a combination of random error [t(sm)] at the 99.7% confidence limits and the worst case estimate of the systematic errors ( + δ , − δ ' )
The overall uncertainty is therefore calculated on the basis of + [t(sm) + δ], − [t(sm) + δ]
and is + 3.1 %, − 3.1 % of the quoted radioactive concentration.

**Decay Schemes**

This standardization is based on the following assumptions of the principle nuclide, its daughter nuclides and impurities (no allowance for error in these assumptions or the assumption of quoted half-life have been included in the statement of accuracy above).

Plutonium-239 and impurities were assumed to decay 100 percent by alpha emission.

**Chemical Composition of Solution**

Carrier content per gram of solution:

Other components:

4M Nitric acid

Preservative:

**Remarks**

| | | | |
|---|---|---|---|
| | Pu-238 | 0.033% | of the total activity |
| | Pu-240 | $4.6 \times 10^{-5}$% | of the total activity |
| IMPURITIES: | Pu-241 | $1.5 \times 10^{-3}$% | of the total activity |
| | Pu-242 | $8.8 \times 10^{-6}$% | of the total activity |
| | Pu-244 | $6.2 \times 10^{-9}$% | of the total activity |

Date Certificate Prepared December 13, 1990

Approval Signature Paul B. Blake

Revised 1/84

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

960 mn

Batch Number: 160-431622 Analyst: Park, Cassandra L Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

## Preparation, Extraction Chromatography Resin Actinide Separation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | * | 1 |
| 2 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 3 |
| 3 | 160-34508-A-3 (A01R_Pu) | N/A (160-34508-1) | Water | 0.2 mL | | 7/5/19 | 18_Days | 2 | | 4 |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Isotopic Plutonium (Alpha Spectrometry)

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 2 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |
| 3 | 160-34508-A-3 (A01R_Pu) | (Standard Target List) | Pu-238, Pu-239, Pu-242 (T) |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 | Analyst: Park, Cassandra L. | Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CLP |
| Analyst ID - Reagent Drop Witness | mmo per nmnm |
| Pipette ID | RAD117 |
| Analyst ID - Column | clp per nmn |
| Column Date | 6/13/19 |
| Analyst ID - CoPrecipitation | nmn |
| CoPrecipitation Date | 6/14/19 |
| SOP Number | ST-RC-0242, ST-RC-0100 |
| Batch Comment | |

## Comments

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM
Batch End: 6/14/2019 5:05:00AM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-238_00016 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-239_00015 | 0.2 mL | | | |
| 160-34508-A-3 | Pu-242_00036 | 0.2 mL | | | |

# ExtChrom_Actin Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-431622 Analyst: Park, Cassandra L. Batch Open: 6/13/2019 1:05:00PM

Batch End: 6/14/2019 5:05:00AM

**Other Reagents:**

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

TestAmerica

**Batch Reagent/Chemical IDs**

Printed: 6/13/2019 1:14 PM
Form: QA-0093 Pu (Rev 12-27-18)

**Batch number:** 431622 Pu

**Date:** 6/13/19

**Analyst:** CLP

## Reagent IDs used:

| | |
|---|---|
| 01 | ~~calcium nitrate~~ |
| 02 | ammonium phosphate dibasic |
| 03 | bromocresol purple |
| 04 | NH4OH |
| 05 | HNO3 |
| 06 | ~~HCL~~ CLP 6/13/19 |
| 07 | HF 1744488 |
| 08 | ~~3M HNO3/0.25M Boric~~ CLP 6/13/19 |
| 09 | Load 1714066 |
| 10 | 3M HNO3 1725615 |
| 11 | 9M HCl 1742257 |
| 12 | 6M HCl ~~1799161~~ CLP 6/13/19 1742394 |
| 13 | 1M HCl 1738149 |
| 14 | TiCl3 1601267 |
| 15 | H2O2 1635536 |
| 16 | Neodymium carrier 1682538 |
| 17 | ethanol 1697875 |
| 18 | ~~pH strip lot~~ CLP 6/13/19 |
| 19 | syringe filter lot 10928442 |
| 20 | centrifuge tube lot 02119095 |
| 21 | |
| 22 | NO 6.14.19 6.13.19 NO 6.14.19 |

# Sequential Thorium, Plutonium and Uranium via TEVA/UTEVA ST-RC-0242

Batch: 431022

All rinses should flow at 1 mL/minute (only 3M $HNO_3$ may be done at 3 mL/minute)
*only necessary when analyzing for *Pu*

CLP

TEVA lot: TESR18H
UTEVA lot: N/A

11.5.2 Stack TEVA on top of UTEVA cartridge

11.5.3 5mL 3M $HNO_3$ — COMPLETED ☑

*11.5.4 To samples, add 1mL ascorbic acid solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.5 To samples, add 1mL $NaNO_2$ solution Place in hot water bath for 5 minutes — COMPLETED ☑

*11.5.6 Cold water bath until samples reach room temperature

11.5.7 Load sample

11.5.8 20mL 3M $HNO_3$ — COMPLETED ☑

11.59 Split cartridges TEVA UTEVA

11.5.10-11.5.11 Elute *Th* into clean tube using 20mL 9M HCl — COMPLETED ☑

11.5.12 5mL 6M HCl into *Th* tube — COMPLETED ☑

11.5.16 Elute *Pu* into clean tube with 20mL 1M HCl + 0.250 mL $TiCl_3$ — COMPLETED ☑ COMPLETED ☑

11.5.19 5mL 3M $HNO_3$ — COMPLETED ☐

11.5.20 5mL 9M HCl — COMPLETED ☐

11.5.21 20mL 5M HCl / 0.05M oxalic — COMPLETED ☐

11.5.22-11.5.23 Elute *U* into clean tube with 15mL 1M HCl — COMPLETED ☐

Form: RAD-0063, Revised 09/18/13

# Rad Worksheet

Batch Number: 160-431822
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:05PM
Batch End: Jun 14 2019 5:05AM

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

| | |
|---|---|
| Balance ID: | N/A |
| Analyst ID - Reagent Drop: | CLP |
| Analyst ID - Reagent Drop Witness: | mmc per nmnm |
| Pipette ID: | RAD117 |
| Analyst ID - Column: | clp per nmn |
| Column Date: | 6/13/19 |
| Analyst ID - CoPrecipitation: | nmn |
| CoPrecipitation Date: | 6/14/19 |
| SOP Number: | ST-RC-0242, ST-RC-0100 |

# Rad Worksheet

P
Spike verification

Batch Number: 160-431622
Method: ExtChrom
Analyst: Park, Cassandra L

Date Open: Jun 13 2019 1:06PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Pu-238_00016 | Pu-239_00015 | Pu-242_00036 |
|---|---|---|---|---|---|---|---|
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |
| 160-34508-A-3 | Pu-242_00036 | ExtChrom_Actin, A01R_Pu | T | 0.2 mL | 0.2 mL | 0.2 mL | 0.2 mL |

Balance ID: N/A
Analyst ID - Reagent Drop: CLP
Pipette ID: RAD117
SOP Number: ST-RC-0242, ST-RC-0100

V:MMO 6/13/19

# Reagent

---

# Source A_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

79670-334

5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2303925, Item 1
**Calibration Date:** 01-Apr-2009 12:00 EST **Grams of Master Source:** 0.028371

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Am-241 | 59.5 | 157860 | ——— | 3.390E+03 | 0.1 | 0.9 | 1.8 | 4π LS |
| Cd-109 | 88.0 | 462.60 | 1.691E+05 | 4.798E+03 | 0.4 | 1.7 | 3.5 | HPGe |
| Co-57 | 122.1 | 271.79 | 8.904E+04 | 2.526E+03 | 0.5 | 1.3 | 2.8 | HPGe |
| Ce-139 | 165.9 | 137.6 | 1.256E+05 | 3.563E+03 | 0.4 | 1.1 | 2.3 | HPGe |
| Hg-203 | 279.2 | 46.61 | 2.788E+05 | 7.910E+03 | 0.3 | 1.1 | 2.3 | HPGe |
| Sn-113 | 391.7 | 115.1 | 1.725E+05 | 4.894E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Cs-137 | 661.7 | 10983 | 1.120E+05 | 3.178E+03 | 0.7 | 1.2 | 2.8 | HPGe |
| Y-88 | 898.0 | 106.6 | 4.205E+05 | 1.193E+04 | 0.8 | 1.1 | 2.7 | HPGe |
| Co-60 | 1173.2 | 1925.4 | 2.184E+05 | 6.196E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Co-60 | 1332.5 | 1925.4 | 2.185E+05 | 6.199E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Y-88 | 1836.1 | 106.6 | 4.444E+05 | 1.261E+04 | 0.7 | 1.1 | 2.6 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
5.31740 grams 4M HCl solution with approximately 30 microg/g each of Cd, Co, Ce, Hg, Sn, Cs, and Y carriers.

This standard will expire one year after the calibration date.

Source Prepared by: [signature] for
W. Mao, Radiochemist

QA Approved: [signature] Date: 5-13-09
D. M. Montgomery, QA Manager

End of Certificate

# Reagent

# Source E_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

### 79670-334

### 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2303925, Item 1
**Calibration Date:** 01-Apr-2009 12:00 EST **Grams of Master Source:** 0.028371

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Am-241 | 59.5 | 157860 | ——— | 3.390E+03 | 0.1 | 0.9 | 1.8 | 4π LS |
| Cd-109 | 88.0 | 462.60 | 1.691E+05 | 4.798E+03 | 0.4 | 1.7 | 3.5 | HPGe |
| Co-57 | 122.1 | 271.79 | 8.904E+04 | 2.526E+03 | 0.5 | 1.3 | 2.8 | HPGe |
| Ce-139 | 165.9 | 137.6 | 1.256E+05 | 3.563E+03 | 0.4 | 1.1 | 2.3 | HPGe |
| Hg-203 | 279.2 | 46.61 | 2.788E+05 | 7.910E+03 | 0.3 | 1.1 | 2.3 | HPGe |
| Sn-113 | 391.7 | 115.1 | 1.725E+05 | 4.894E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Cs-137 | 661.7 | 10983 | 1.120E+05 | 3.178E+03 | 0.7 | 1.2 | 2.8 | HPGe |
| Y-88 | 898.0 | 106.6 | 4.205E+05 | 1.193E+04 | 0.8 | 1.1 | 2.7 | HPGe |
| Co-60 | 1173.2 | 1925.4 | 2.184E+05 | 6.196E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Co-60 | 1332.5 | 1925.4 | 2.185E+05 | 6.199E+03 | 0.7 | 1.1 | 2.6 | HPGe |
| Y-88 | 1836.1 | 106.6 | 4.444E+05 | 1.261E+04 | 0.7 | 1.1 | 2.6 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
5.31740 grams 4M HCl solution with approximately 30 microg/g each of Cd, Co, Ce, Hg, Sn, Cs, and Y carriers.

This standard will expire one year after the calibration date.

Source Prepared by: [signature] for
W. Mao, Radiochemist

QA Approved: [signature] Date: 5-13-09
D. M. Montgomery, QA Manager

End of Certificate

# Reagent

# Source H_00002

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

### 83725-334

### 5 mL Liquid in Flame Sealed Vial

**Customer:** Test America St. Louis/Earth City, MO
**P.O. No.:** 2397508, Item 1
**Reference Date:** 01-Jan-2011 12:00 PM EST **Grams of Master Source:** 0.028066

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Am-241 | 59.5 | 1.580E+05 | ——— | 3.261E+03 | 0.1 | 0.9 | 1.8 | 4π LS |
| Cd-109 | 88.0 | 4.626E+02 | 1.697E+05 | 4.763E+03 | 0.8 | 1.7 | 3.8 | HPGe |
| Co-57 | 122.1 | 2.718E+02 | 8.711E+04 | 2.445E+03 | 0.5 | 1.3 | 2.8 | HPGe |
| Ce-139 | 165.9 | 1.376E+02 | 1.247E+05 | 3.500E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Hg-203 | 279.2 | 4.661E+01 | 2.753E+05 | 7.727E+03 | 0.4 | 1.1 | 2.3 | HPGe |
| Sn-113 | 391.7 | 1.151E+02 | 1.769E+05 | 4.965E+03 | 0.5 | 1.1 | 2.4 | HPGe |
| Cs-137 | 661.7 | 1.098E+04 | 1.109E+05 | 3.113E+03 | 0.7 | 1.2 | 2.8 | HPGe |
| Y-88 | 898.0 | 1.066E+02 | 4.224E+05 | 1.186E+04 | 0.5 | 1.1 | 2.4 | HPGe |
| Co-60 | 1173.2 | 1.925E+03 | 2.142E+05 | 6.012E+03 | 0.6 | 1.1 | 2.5 | HPGe |
| Co-60 | 1332.5 | 1.925E+03 | 2.143E+05 | 6.015E+03 | 0.6 | 1.1 | 2.5 | HPGe |
| Y-88 | 1836.1 | 1.066E+02 | 4.472E+05 | 1.255E+04 | 0.5 | 1.1 | 2.4 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ANA Form005 Rev. —

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

**Comments:**
5.30203 grams 4M HCl solution with approximately 30 μg/g each of Cd, Co, Ce, Hg, Sn, Cs, and Y carriers.

This standard will expire one year after the reference date.

Source Prepared by: MITaskaeva
M. I. Taskaeva, Radiochemist

QA Approved: _____ Date: 13/JAN/11
J. D. McCorvey, QA Manager Alternate

# Reagent

# Sr Carrier_00050

# REPORT OF ANALYSIS

Single-Element Aqueous RM

**Custom Standard** Product #: 4400-132858-1L

Matrix: 5% $HNO_3$ Lot #: 10070249-5

| Element | Certified Concentration |
|---|---|
| Sr | **25,000 µg/mL** |

**Intended Use:** This solution is intended for use as a reference material (RM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

**Certification & Traceability:** This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025.** This RM was prepared to a nominal concentration of 25,000 µg/mL by gravimetric methods using single-element concentrate dissolved in high purity nitric acid ($HNO_3$) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration was determined based upon gravimetric procedures. Secondary verification of the certified concentration was performed using ICP-OES and is traceable to **NIST SRM 3153a**. The uncertainty associated with the certified concentration is ±0.5% relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution, and transpiration through the container. This represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

**Instructions for Use:** We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

**Period of Validity:** CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

May 17, 2019
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

# Reagent

# Sr-90_00001

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

80573-334
5 mL Liquid in Flame Sealed Vial

**Customer:** Test America St. Louis
**P.O. No.:** 2324797, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting. Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Sr-90 | 10515.5 | 3.782E+04 | 0.1 | 0.9 | 1.8 | 09/17/2009 |

*Uncertainty: U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: γ-impurities <0.1%. 6.04317 grams 0.1M HCl solution with approximately 30 microg/g each of Sr and Y carriers. NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total beta emission rate for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

Source Prepared by: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 9-22-09
D. M. Montgomery, QA Manager

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

# Reagent

# Sr-90_00011

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

80573-334
5 mL Liquid in Flame Sealed Vial

**Customer:** Test America St. Louis
**P.O. No.:** 2324797, Item 1

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting. Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Sr-90 | 10515.5 | 3.782E+04 | 0.1 | 0.9 | 1.8 | 09/17/2009 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: γ-impurities <0.1%. 5.04317 grams 0.1M HCl solution with approximately 30 microg/g each of Sr and Y carriers. NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total beta emission rate for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

Source Prepared by: _____
W. Mao, Radiochemist

QA Approved: _____ Date: 9-22-09
D. M. Montgomery, QA Manager

ACCREDITED SOURCE CALIBRATION LABORATORY
HEALTH PHYSICS SOCIETY
FOUNDED 1955



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

# Reagent

# Sr-90_00017

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

92352

Sr-90 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2502682, Item 1 Product Code: 8090-5FSA-37kBq

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Sr-90 | 1.052E+04 | 3.749E+04 | 0.1 | 0.9 | 1.8 | 11/29/2012 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: γ-impurities<0.1%.
5.02357 g 0.1M HCl solution with approximately 30 µg/g each Sr and Y carriers.

NOTE: This source also contains Y-90 in secular equilibrium with Sr-90. The Y-90 activity is equal to the Sr-90 activity. Since Sr-90 and Y-90 both decay 100% by beta emission, the total activity for the source is twice the certified Sr-90 activity. The half-life for Y-90 is 64.08 hours.

Source Prepared by: _____
Z. Dimitrova, Radiochemist

QA Approved: _____ Date: 26 Nov 12
J.D. McCorvey, Counting Room Manager

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RAD12-0042
Sr-90
hursts
None
Prep/Opened: 11/28/2012
Exp(1): 11/28/2062
Exp(2): 11/28/2062

51511
ID Sr-90_00017
Sr-90 Ampoule

Single Isotope Certificate Rev 3, 23 August 2012



**Corporate Office**
24937 Avenue Tibbitts Valencia, California 91355

**Laboratory**
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

# Reagent

# Sr-90_00018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sr-90_00018

## Reagent ID: Sr-90_00018

| | | | |
|---|---|---|---|
| | | Expiration Date: | 11/29/2062 |
| Description: | Sr-90 Calibration STD | Laboratory: | TestAmerica St. Louis |
| No. of Bottles: | 1 | Prepared By: | Hurst, Sarah |
| Storage Location: | RAD Separations Reagents - 1 | Solvent: | 0.1M HCL |
| Reagent Volume: | 100.000 mL | Solvent Lot: | 0 |
| Creation Date: | 11/28/2012 | | |
| Container(s): | 51512 | | |
| Comment: | Rad12-0043 | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Gross Beta | Sr-90_00017 | 11/29/2062 | 14925.64000 | Bq/g | 44774.23338 | dpm/mL |
| Sr-90 | Sr-90_00017 | 11/29/2062 | 7462.82000 | Bq/g | 22387.11669 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Sr-90_00017 | Sr-90 Ampoule | ASTD | 11/29/62 | Analytics | 92352 | | 4.99970 | g |

## St. Louis Radiological Standard Reverification Form

Standard ID Number: Sr-90_00018 (51512)
True Value = 1976.75 pCi/sample or g
Date Analyzed: 2/10/2014

Radionuclide: Sr-90 (Low mass)

| | Replicates | |
|---|---|---|
| #1 | 1935 | pCi/sample or g |
| #2 | 1941 | pCi/sample or g |
| #3 | 1924 | pCi/sample or g |

Mean = 1933.333

1 sigma = 8.621678 1.96 sigma = 16.89849

True Value minus 5% = 1877.913 (True Value - 5%)
True Value plus 5% = 2075.588 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** **Yes** **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** **Yes** **(Acceptance Criteria)**

**Standard Reverification Acceptable?** **Yes**

Note: Criteria for reverification of radiological standards is taken from the DOE QSAS and LANL Statements of Work

Reviewed By/Date: Jody Watson 2/10/14

SOP Reference: STL-QA-0002, Current Revision

**St. Louis Radiological Standard Reverification Form**

Standard ID Number: Sr-90_00018 (51512)
True Value = 1948.75 pCi/sample or g
Date Analyzed: 2/10/2014

Radionuclide: Sr-90 (Medium mass)

| | Replicates | |
|---|---|---|
| #1 | 1911 | pCi/sample or g |
| #2 | 1945 | pCi/sample or g |
| #3 | 1893 | pCi/sample or g |

Mean = 1916.333

1 sigma = 26.40707 1.96 sigma = 51.75786

True Value minus 5% = 1851.313 (True Value - 5%)
True Value plus 5% = 2046.188 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** **Yes** **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** **Yes** **(Acceptance Criteria)**

**Standard Reverification Acceptable?** **Yes**

Note: Criteria for reverification of radiological standards is taken from the DOE QSAS and LANL Statements of Work

Reviewed By/Date: Jody Watson 2/10/14

SOP Reference: STL-QA-0002, Current Revision

**St. Louis Radiological Standard Reverification Form**

Standard ID Number: Sr-90_00018 (51512)
True Value = 1992 pCi/sample or g
Date Analyzed: 2/10/2014

Radionuclide: Sr-90 (High mass)

| | Replicates | |
|---|---|---|
| #1 | 1907 | pCi/sample or g |
| #2 | 1930 | pCi/sample or g |
| #3 | 1937 | pCi/sample or g |

Mean = 1924.667

1 sigma = 15.69501 1.96 sigma = 30.76222

True Value minus 5% = 1892.4 (True Value - 5%)
True Value plus 5% = 2091.6 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DOE QSAS and LANL Statements of Work

Reviewed By/Date: Jody Watson 2/10/14

SOP Reference: STL-QA-0002, Current Revision

| Protean Beta ICV-ACV recoveries from March 2013 | | | |
|---|---|---|---|
| **Protean Detector** | **Low** pCi/sample | **Medium** pCi/sample | **High** pCi/sample |
| 0 | 1962 | 1945 | 1971 |
| 1 | 2003 | 1947 | 1995 |
| 2 | 1960 | 1965 | 1998 |
| 3 | 1988 | 1942 | 1995 |
| 4 | 1977 | 1940 | 1997 |
| 5 | 1969 | 1949 | 2013 |
| 6 | 1986 | 1938 | 1986 |
| 7 | 1969 | 1964 | 1981 |
| **Average** pCi/sample | 1976.75 | 1948.75 | 1992 |

| Protean Beta ICV-ACV recoveries from February 2014 | | | |
|---|---|---|---|
| **Protean Detector** | **Low** pCi/sample | **Medium** pCi/sample | **High** pCi/sample |
| 4 | 1935 | 1911 | 1907 |
| 5 | 1941 | 1945 | 1930 |
| 6 | 1924 | 1893 | 1937 |
| **Average** pCi/sample | 1933.33 | 1916.33 | 1924.67 |

**Standard ID**
Strontium 90
Sr-90_00018 #51512
Cert# 92352 Ref. date 11/29/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Gross Alpha/Beta

**Batch:** M122640 **Operator:** 63903

| Sample ID | WRKNO / Analyte | Aliquot / Cs | Cb | Mass / XT | Instr ID / CPMs | CountTime / CPMb | Eff | Activity | Ts / UncTot | Tb / UncCnt | Dilution / MDA | Sigma / DLC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ICVABT-51512;B1 | NA | 1.000E+000sample | | 0.0513 g | Protean4 | 2/10/14 22:54 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 49 | 0.00 | 0.000E+000 | 4.900E-002 | 0.1157 | **-1.908E-001**pCi/sample | 5.869E-002 | 5.452E-002 | 3.382E+000 | 8.968E-001 |
| | Gross Beta | 9072 | 417 | 0.00 | 1.814E+003 | 4.170E-001 | 0.4224 | **1.935E+003**pCi/sample | 1.977E+002 | 4.063E+001 | 1.594E+000 | 7.165E-001 |
| ICVABT-51512;B2 | NA | 1.000E+000sample | | 0.1114 g | Protean4 | 2/10/14 23:19 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 1 | 49 | 0.00 | 2.000E-001 | 4.900E-002 | 0.0830 | **8.194E-001**pCi/sample | 2.174E+000 | 2.172E+000 | 4.713E+000 | 1.250E+000 |
| | Gross Beta | 8432 | 417 | 0.00 | 1.686E+003 | 4.170E-001 | 0.3973 | **1.911E+003**pCi/sample | 1.956E+002 | 4.164E+001 | 1.694E+000 | 7.616E-001 |
| ICVABT-51512;B3 | NA | 1.000E+000sample | | 0.1813 g | Protean4 | 2/10/14 23:04 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 1 | 49 | 0.00 | 2.000E-001 | 4.900E-002 | 0.0540 | **1.260E+000**pCi/sample | 3.343E+000 | 3.340E+000 | 7.248E+000 | 1.922E+000 |
| | Gross Beta | 8054 | 417 | 0.00 | 1.611E+003 | 4.170E-001 | 0.3804 | **1.907E+003**pCi/sample | 1.954E+002 | 4.251E+001 | 1.770E+000 | 7.956E-001 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Gross Alpha/Beta

**Batch:** M122640 **Operator:** 63903

| Sample ID | WRKNO / Analyte | Aliquot Cs | Cb | Mass XT | g | Instr ID CPMs | CountTime CPMb | Eff | Activity | Ts | Tb UncTot | Dilution UncCnt | Sigma MDA | DLC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ICVABT-51512;B1 | NA | 1.000E+000 | sample | 0.0513 | g | Protean5 | 2/10/14 23:04 | | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 43 | 0.00 | | 0.000E+000 | 4.300E-002 | 0.1145 | **-1.692E-001** pCi/sample | | 5.510E-002 | 5.161E-002 | 3.337E+000 | 8.490E-001 |
| | Gross Beta | 9111 | 398 | 0.00 | | 1.822E+003 | 3.980E-001 | 0.4228 | **1.941E+003** pCi/sample | | 1.983E+002 | 4.068E+001 | 1.569E+000 | 6.992E-001 |
| ICVABT-51512;B2 | NA | 1.000E+000 | sample | 0.1114 | g | Protean5 | 2/10/14 22:54 | | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 43 | 0.00 | | 0.000E+000 | 4.300E-002 | 0.0823 | **-2.353E-001** pCi/sample | | 7.661E-002 | 7.176E-002 | 4.639E+000 | 1.180E+000 |
| | Gross Beta | 8552 | 398 | 0.00 | | 1.710E+003 | 3.980E-001 | 0.3960 | **1.945E+003** pCi/sample | | 1.990E+002 | 4.207E+001 | 1.675E+000 | 7.465E-001 |
| ICVABT-51512;B3 | NA | 1.000E+000 | sample | 0.1813 | g | Protean5 | 2/10/14 23:19 | | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 2 | 43 | 0.00 | | 4.000E-001 | 4.300E-002 | 0.0532 | **3.022E+000** pCi/sample | | 4.802E+000 | 4.790E+000 | 7.178E+000 | 1.826E+000 |
| | Gross Beta | 8046 | 398 | 0.00 | | 1.609E+003 | 3.980E-001 | 0.3755 | **1.930E+003** pCi/sample | | 1.977E+002 | 4.304E+001 | 1.766E+000 | 7.873E-001 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Gross Alpha/Beta

**Batch:** M122640 **Operator:** 63903

| Sample ID | WRKNO / Analyte | Aliquot / Cs | Cb | Mass / XT | | Instr ID / CPMs | CountTime / CPMb | Eff | Activity | Ts / Tb / UncTot | Dilution / UncCnt | Sigma / MDA | DLC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ICVABT-51512;B1 | NA | 1.000E+000sample | | 0.0513 | g | Protean6 | 2/10/14 23:19 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 87 | 0.00 | | 0.000E+000 | 8.700E-002 | 0.1165 | **-3.362E-001**pCi/sample | 8.166E-002 | 7.210E-002 | 3.776E+000 | 1.186E+000 |
| | Gross Beta | 8992 | 520 | 0.00 | | 1.798E+003 | 5.200E-001 | 0.4209 | **1.924E+003**pCi/sample | 1.966E+002 | 4.059E+001 | 1.718E+000 | 8.029E-001 |
| ICVABT-51512;B2 | NA | 1.000E+000sample | | 0.1114 | g | Protean6 | 2/10/14 23:04 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 87 | 0.00 | | 0.000E+000 | 8.700E-002 | 0.0842 | **-4.657E-001**pCi/sample | 1.131E-001 | 9.985E-002 | 5.230E+000 | 1.642E+000 |
| | Gross Beta | 8356 | 520 | 0.00 | | 1.671E+003 | 5.200E-001 | 0.3976 | **1.893E+003**pCi/sample | 1.937E+002 | 4.142E+001 | 1.819E+000 | 8.499E-001 |
| ICVABT-51512;B3 | NA | 1.000E+000sample | | 0.1813 | g | Protean6 | 2/10/14 22:54 | | 5.00 | 1000.00 | 1.00 | 2.00 | |
| | Gross Alpha | 0 | 87 | 0.00 | | 0.000E+000 | 8.700E-002 | 0.0559 | **-7.014E-001**pCi/sample | 1.703E-001 | 1.504E-001 | 7.877E+000 | 2.474E+000 |
| | Gross Beta | 8127 | 520 | 0.00 | | 1.625E+003 | 5.200E-001 | 0.3778 | **1.937E+003**pCi/sample | 1.985E+002 | 4.300E+001 | 1.914E+000 | 8.945E-001 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

# TestAmerica St. Louis

## Standards Preparation Logbook Record

Nov-28-2012

Logbook: \\Qstlmo01\Stdslog\RAD_STD.std

RAD12-0042, Sr-90 Sr-90-00017 #51511 Analyst: hursts

Vendor: Analytics Lot No.: 92352
Solvent: None
Date Prep./Opened: 11-28-2012
Date Expires(1): 11-29-2062 (50 Years)
Date Expires(2): 11-29-2062 (50 Years)
Cert: 92352 Activity: 37490Bq Mass: 5.02357 Ref. Date: 11/29/12

| Component | Initial Conc (dpm/g) | Final Conc (dpm/g) |
|---|---|---|
| Sr-90 | 447,769 | 447,769 |

RAD12-0043, Sr-90 Calibration STD Sr-90-00018 #51512 Analyst: hursts

Solvent: None Volume (ml): 100.00
Date Prep./Opened: 11-28-2012
Date Expires(1): 11-29-2062 (50 Years)
Date Expires(2): 11-29-2062 (50 Years)

Parent Std No.: RAD12-0042, Sr-90 Aliquot Amount (g): 4.9997
Parent Date Expires(1): 11-29-2062 Parent Date Expires(2): 11-29-2062

| Component | Initial Conc (dpm/g) | Final Conc (dpm/mL) |
|---|---|---|
| Sr-90 | 447,769 | 22,387 |

Reviewed By: SB

Page 1 of 1

## St. Louis Radiological Standard Reverification Form

Standard ID Number: Rad12-0043
True Value = 2016.7 pCi/L or g
Date Analyzed: 11/30/2012

Radionuclide: Sr90

| | Replicates | |
|---|---|---|
| #1 | 1964 | pCi/L or g |
| #2 | 1958 | pCi/L or g |
| #3 | 2015 | pCi/L or g |

Mean = 1979

1 sigma = 31.32092 1.96 sigma = 61.389

True Value minus 5% = 1915.865 (True Value - 5%)
True Value plus 5% = 2117.535 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DOE QSAS and LANL Statements of Work

Reviewed By/Date: 11/30/12

SOP Reference: STL-QA-0002, Current Revision

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Gross Alpha/Beta

**Batch:** M122629 **Operator:** 63903

| Sample ID | WRKNO | Aliquot | | Mass | Instr ID | CountTime | | Ts | Tb | Dilution | Sigma | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cs | Cb | XT | CPMs | CPMb | Eff | Activity | UncTot | UncCnt | MDA | DLC |
| verification-1b | NA | 1.000E+000sample | | 0.0536 g | Purple16 | 11/30/12 10:42 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 123 | 175 | 0.00 | 1.538E+001 | 1.750E-001 | 0.4314 | **1.587E+001**pCi/sample | 1.707E+000 | 1.448E+000 | 8.638E-001 | 3.593E-001 |
| | Gross Beta | 14954 | 485 | 0.00 | 1.869E+003 | 4.850E-001 | 0.4285 | **1.964E+003**pCi/sample | 9.953E+001 | 1.607E+001 | 1.211E+000 | 6.021E-001 |
| verification-2b | NA | 1.000E+000sample | | 0.0529 g | Purple17 | 11/30/12 10:43 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 53 | 87 | 0.00 | 6.625E+000 | 8.700E-002 | 0.1306 | **2.254E+001**pCi/sample | 3.391E+000 | 3.138E+000 | 2.356E+000 | 8.365E-001 |
| | Gross Beta | 15152 | 362 | 0.00 | 1.894E+003 | 3.620E-001 | 0.4356 | **1.958E+003**pCi/sample | 9.919E+001 | 1.591E+001 | 1.077E+000 | 5.117E-001 |
| verification-3b | NA | 1.000E+000sample | | 0.0528 g | Purple18 | 11/30/12 10:43 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 85 | 62 | 0.00 | 1.063E+001 | 6.200E-002 | 0.1313 | **3.624E+001**pCi/sample | 4.462E+000 | 3.954E+000 | 2.160E+000 | 7.027E-001 |
| | Gross Beta | 15378 | 395 | 0.00 | 1.922E+003 | 3.950E-001 | 0.4296 | **2.015E+003**pCi/sample | 1.020E+002 | 1.625E+001 | 1.125E+000 | 5.420E-001 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Prep Report for Gross Alpha/Beta

**Batch:** M122629 **Prep Analyst:** 250

| SampID | WRKNO | Aliquot | | Gross | Tare | Mass | Dilution |
|---|---|---|---|---|---|---|---|
| verification-1b | NA | 1.000E+000 | sample | 8.7067 g | 8.6531 g | 0.0536 g | 1.00 |
| verification-2b | NA | 1.000E+000 | sample | 8.6615 g | 8.6086 g | 0.0529 g | 1.00 |
| verification-3b | NA | 1.000E+000 | sample | 8.6935 g | 8.6407 g | 0.0528 g | 1.00 |

purple 16
17
18

## Spike Information

| Sample ID | Standard ID | Analyte | Std Conc | Aliquot | Ref Date | StdAdded |
|---|---|---|---|---|---|---|
| | Rad12-0043 | SR-90 | 22.387 dpm/mL | 0.1 mL | 11-29-12 | |

MS — Spiked By
LM — Spike Verified By
11-28-12 — Spike Date

## Standard Operating Procedures

| SOPNumber | Title | Revision |
|---|---|---|
| ☐ | | |

Reviewed By — 11/30/12 Review Date

MS — Analyst/Relenquished By — 11/28/12 Release Date

Received By — 11/28/12 Receipt Date

MS 11-30-12 ~~1123~~ 1123433897/MS/11-28-12
Balance ID / Initials / Date

# Reagent

# Sr-90_00039

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 4/25/2019 10:55 AM

Standard ID Number: Sr-90_00039
True Value = 1.6150E+04 pCi/L
Date Analyzed: 4/19/2019

Radionuclide: Gross Beta

| | Replicates | |
|---|---|---|
| #1 | 1.50E+04 | pCi/L |
| #2 | 1.60E+04 | pCi/L |
| #3 | 1.60E+04 | pCi/L |

Mean = 15656.6667

1 sigma = 586.543548

1.96 sigma = 1149.625

True Value minus 5% = 15342.5 (True Value - 5%)
True Value plus 5% = 16957.5 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: Jody Watson 4/25/19

2nd Reviewed By/Date: [illegible] 4/25/19

eurofins | Environment Testing TestAmerica

Sr-90_00039

## Reagent ID: Sr-90_00039

| | | | |
|---|---|---|---|
| Description: | Sr-90 Spike | Expiration Date: | 08/05/2019 |
| No. of Bottles: | 1 | Laboratory: | Eurofins TestAmerica, St. Louis |
| Storage Location: | RAD Separations Reagents - Rm 131 | Prepared By: | Mazarjegos, Chelsea M |
| Reagent Volume: | 500.000 mL | Solvent: | 0.1M HCL |
| Creation Date: | 04/09/2019 | Solvent Lot: | n/a |
| Open Date: | | | |
| Container(s): | 1704500 | | |
| Comment: | | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Exp. Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Gross Beta | Sr-90_00012 | 08/05/2019 | 45120.55100 | dpm/mL | 45.12055 | dpm/mL |
| Sr-90 | Sr-90_00012 | 08/05/2019 | 22560.29800 | dpm/mL | 22.56030 | dpm/mL |
| Total Beta Strontium | Sr-90_00012 | 08/05/2019 | 22560.29800 | dpm/mL | 22.56030 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Sr-90_00012 | Sr-90 Parent | | 08/05/19 | | | | 0.50000 | mL |

TestAmerica St. Louis

# Decay Calculations

**Raw Sample/Standard Information**

| | | | |
|---|---|---|---|
| **Initial Date/Time ($t_0$):** | 9/17/2009 0:00 | | |
| **Decayto Date/Time (t):** | 4/16/19 0:00 | | |
| **Initial Activity ($A_0$):** | 45.12 dpm | | |
| **Initial Aliquot:** | 1 mL | | |
| **Initial Conc:** | 45.12055 dpm/mL | | |
| ***Soln. Density:** | 1 g/mL | | |
| **Nuclide:** | Sr-90 | | |
| **Half-Life (days):** | 10555.725 | decay days | fraction |
| ****Decay Factor:** | 0.7948 | 3498.00 | 0.33138 |
| **Decay Corr Activity:** | 3.5861E+01 dpm | | |
| **Decay Corr Conc:** | 3.5861E+01 dpm/mL | | |

**Conversion/Calculations**

| | |
|---|---|
| **Final Activity Unit:** | pCi |
| **Activity Unit Factor:** | 0.45045 |
| **Final Volume Unit:** | L |
| **Volume Unit Factor:** | 0.001 |
| **Final Concentration:** | 1.6153E+04 pCi/L |
| **Aliquot Volume:** | 1.0000E+00 L |
| **Final Activity (A):** | 1.6153E+04 pCi |

** Uses basic decay equation: $A = A_0 * \exp(-\ln(2)*(t-t_0)/(\text{half-life})$

* Soln. Density to be used when converting from liquid expressed in mass (g) units to liquid units (mL), and is only applied in that case.

# Evaporation Analysis Sheet

(To Accompany Samples to Instruments)

200 mL

Batch Number: 160-423903

Analyst: Mazariegos, Chelsea M

Batch Open: 4/15/2019 3:58:00PM
Batch End: 4/16/2019 8:18:00PM

## Preparation, Evaporation

| | Input Sample Lab ID (Analytical Method) | SDG (Job #) | Matrix | Initial Amount | Final Amount | Due Date | Analytical TAT | Div Rank | Comments Blnc | Output Sample Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160-33680-A-1 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 4 | 160-33680-A-1-A |
| 2 | 160-33680-A-1 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 5 | 160-33680-A-1-B |
| 3 | 160-33680-A-1 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 6 | 160-33680-A-1-C |
| | 160-33680-A-2 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 7 | 160-33680-A-2-A |
| | 160-33680-A-2 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 8 | 160-33680-A-2-B |
| | 160-33680-A-2 (900.0) | N/A (160-33680-1) | Water | 1 mL | | 5/7/19 | 18_Days | 2 | 9 | 160-33680-A-2-C |

# Evaporation Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-423903 Analyst: Mazariegos, Chelsea M Batch Open: 4/15/2019 3:58:00PM

Batch End: 4/16/2019 8:18:00PM

## Gross Alpha and Gross Beta Radioactivity

| | Input Sample Lab ID (Analytical Method) | (Sub-List) | Analytes |
|---|---|---|---|
| 1 | 160-33680-A-1 (900.0) | (Standard Target List) | Gross Beta |
| 2 | 160-33680-A-1 (900.0) | (Standard Target List) | Gross Beta |
| 3 | 160-33680-A-1 (900.0) | (Standard Target List) | Gross Beta |
| 4 | 160-33680-A-2 (900.0) | (Standard Target List) | Gross Beta |
| 5 | 160-33680-A-2 (900.0) | (Standard Target List) | Gross Beta |
| 6 | 160-33680-A-2 (900.0) | (Standard Target List) | Gross Beta |

Analytes that are not being reported with be displayed in [...] brackets. Analytes that are not being reported but are on the spike list with be displayed in (...) parentheses.

# Evaporation Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-423903

Analyst: Mazariegos, Chelsea M

Batch Open: 4/15/2019 3:58:00PM
Batch End: 4/16/2019 8:18:00PM

## Batch Notes

| | |
|---|---|
| Balance ID | N/A |
| Analyst ID - Reagent Drop | CMM |
| Analyst ID - Reagent Drop Witness | PJM per CMM |
| Pipette ID | RAD104 |
| SOP Number | ST-RC-0002, ST-RC-0020 |
| Batch Comment | Plated 4/16/19 |

## Comments

# Evaporation Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 160-423903

Analyst: Mazariegos, Chelsea M

Batch Open: 4/15/2019 3:58:00PM
Batch End: 4/16/2019 8:18:00PM

## Reagent Additions Worksheet

| Lab ID | Reagent Code | Amount Added | Final Amount | By | Witness |
|---|---|---|---|---|---|
| 160-33680-A-1 | Sr-90_00039 | 1 mL | | | |
| 160-33680-A-1 | Sr-90_00039 | 1 mL | | | |
| 160-33680-A-1 | Sr-90_00039 | 1 mL | | | |
| 160-33680-A-2 | Sr-90_00040 | 1 mL | | | |
| 160-33680-A-2 | Sr-90_00040 | 1 mL | | | |
| 160-33680-A-2 | Sr-90_00040 | 1 mL | | | |

### Other Reagents:

| Reagent | Amount/Units | Lot#: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

# Rad Worksheet

Batch Number: 160-423903
Method: Evaporation
Analyst: Mazariegos, Chelsea M

Date Open: Apr 15 2019 3:58PM
Batch End:

| Lab ID | Client ID | Method Chain | Basis | Initial weight/volume of sample | Sr-90_00039 | Sr-90_00040 |
|---|---|---|---|---|---|---|
| 160-33680-A-1 | Sr-90_00039 | Evaporation, 900.0 | T | 1 mL | 1 mL | |
| 160-33680-A-1 | Sr-90_00039 | Evaporation, 900.0 | T | 1 mL | 1 mL | |
| 160-33680-A-1 | Sr-90_00039 | Evaporation, 900.0 | T | 1 mL | 1 mL | |
| 160-33680-A-2 | Sr-90_00040 | Evaporation, 900.0 | T | 1 mL | | 1 mL |
| 160-33680-A-2 | Sr-90_00040 | Evaporation, 900.0 | T | 1 mL | | 1 mL |
| 160-33680-A-2 | Sr-90_00040 | Evaporation, 900.0 | T | 1 mL | | 1 mL |

Analyst ID - Reagent Drop: CMM
Pipette ID: RAD104
SOP Number: ST-RC-0002, ST-RC-0020

12/04/2019

TestAmerica



**Batch Reagent/Chemical IDs**

**Printed:** 4/15/2019 7:09 PM
**Form:** QA-0093 ABT (Rev 12-27-18)

**Batch number:** 423903 ABT

**Date:** 4/15/19

**Analyst:** cmm

Reagent IDs used:

| | |
|---|---|
| 01 | HNO3 lw94385 |
| 02 | Salt Solution lw51819 |
| 03 | 4M HNO3 |
| 04 | ~~centrifuge tube lot~~ |
| 05 | |
| 06 | |
| 07 | |
| 08 | |
| 09 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | cmm 4/15/19 |

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## Analysis Report for Gross Alpha/Beta

**Batch:** 423903 **Operator:**

| Sample ID / Analyte | WRKNO | Aliquot Cs | Cb | Mass XI | | Instr ID CPMs | CountTime CPMb | Eff | Ts Activity | Tb UncTot | Dilution UncCnt | Sigma MDA | DLC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160-33680-A-1-A | 160-33680-A-1-A | 1.000E+000mL | | 0.0402 | g | Blue4 | 4/19/19 13:16 | | 200.00 | 1000.00 | 1.00 | 1.00 | | |
| Gross Beta | | 2690 | 358 | 2.54 | 1.445E+001 | 3.580E-001 | 0.4233 | | 1.498E+004pCi/L | 8.022E+002 | 2.869E+002 | 1.606E+002 | 8.233E+001 | 802.2152 |
| 160-33680-A-1-B | 160-33680-A-1-B | 1.000E+000mL | | 0.0522 | g | Blue5 | 4/19/19 13:16 | | 200.00 | 1000.00 | 1.00 | 1.00 | | |
| Gross Beta | | 3111 | 355 | 1.52 | 1.556E+001 | 3.550E-001 | 0.4273 | | 1.602E+004pCi/L | 8.533E+002 | 2.947E+002 | 1.773E+002 | 8.075E+001 | 853.3396 |
| 160-33680-A-1-C | 160-33680-A-1-C | 1.000E+000mL | | 0.0654 | g | Blue6 | 4/19/19 13:16 | | 200.00 | 1000.00 | 1.00 | 1.00 | | |
| Gross Beta | | 3065 | 329 | 1.54 | 1.532E+001 | 3.290E-001 | 0.4227 | | 1.587E+004pCi/L | 8.517E+002 | 2.957E+002 | 1.733E+002 | 7.865E+001 | 851.6561 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

4/25/2019 10:43:19AM Page 1 of 1 RadCapture, version 5.2.11, released 4/23/2019

# Reagent

# Th-230_00015

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

92523

Th-230 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2502650, Item 2 Product Code: 8230-5FSA-4kBq

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty* , % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Th-230 | 2.753E+07 | 3.979E+03 | 0.1 | 0.9 | 1.8 | 11/29/2012 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: α-impurities 1.5915 Bq; γ-impurities (other than decay products)<0.1%.
5.07636 g 0.5M HNO3 solution. Carrier free.

Source Prepared by: MTaskaeva
M. I. Taskaeva, Radiochemist

QA Approved: J.D. McCorvey, Counting Room Manager Date: 27 NOV 12

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958

51464
ID Th-230_00015
Th-230 Ampoule

RAD12-0040
Th-230 Ampoule
hursts
None
Prep/Opened: 11/28/2012
Exp(1): 11/28/2062
Exp(2): 11/28/2062

Single Isotope Certificate Rev 3, 23 August 2012

# Reagent

# Th-230_00016

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404-352-8677
Fax 404-352-2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

92523

Th-230 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica St. Louis
**P.O. No.:** 2502650, Item 2 Product Code: 8230-5FSA-4kBq

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.18, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Th-230 | 2.753E+07 | 3.979E+03 | 0.1 | 0.9 | 1.8 | 11/29/2012 |

*Uncertainty: U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: α-impurities 1.5915 Bq; γ-impurities (other than decay products)<0.1%.
5.07636 g 0.5M HNO3 solution. Carrier free.

Source Prepared by: M. I. Taskaeva, Radiochemist

QA Approved: J.D. McCorvey, Counting Room Manager Date: 27 NOV 12

51464
ID Th-230_00015
Th-230 Ampoule

RAD12-0040
Th-230 Ampoule
hursts
None
Prep/Opened: 11/28/2012
Exp(1): 11/28/2062
Exp(2): 11/28/2062

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1958

Single Isotope Certificate Rev 3, 23 August 2012

Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

# TestAmerica St. Louis

## Standards Preparation Logbook Record

Nov-28-2012

Logbook: \\Qstlmo01\Stdslog\RAD_STD.std

RAD12-0040, Th-230 Ampoule Th-230_00015 # 51464 Analyst: hursts

Vendor: Analytics Lot No.: 92523
Solvent: None
Date Prep./Opened: 11-28-2012 Date Consumed: 11-28-2012
Date Expires(1): 11-28-2062 (50 Years)
Date Expires(2): 11-28-2062 (50 Years)
Cert: 92523 Activity: 3979Bq Reference Date: 11/29/12 Mass: 5.07636

| Component | Initial Conc (dpm/g) | Final Conc (dpm/g) |
|---|---|---|
| Th-230 | 47,030 | 47,030 |

RAD12-0041, Th-230 Calibration Standard Th-230_00016 # 51465 Analyst: hursts

Solvent: 0.5M HNO3 Volume (ml): 100.00
Date Prep./Opened: 11-28-2012
Date Expires(1): 11-29-2062 (50 Years)
Date Expires(2): 11-29-2062 (50 Years)

Parent Std No.: RAD12-0040, Th-230 Ampoule Aliquot Amount (g): 5.0489
Parent Date Expires(1): 11-28-2062 Parent Date Expires(2): 11-28-2062

| Component | Initial Conc (dpm/g) | Final Conc (dpm/mL) |
|---|---|---|
| Th-230 | 47,030 | 2,374.5 |

Reviewed By: SHB

Page 1 of 1

**St. Louis Radiological Standard Reverification Form**

Standard ID Number: Rad12-0041
True Value = 1069.59 pCi/mL
Date Analyzed: 11/30/2012

Radionuclide: Th-230 Gross Alpha

| | Replicates | |
|---|---|---|
| #1 | 1071 | pCi/mL |
| #2 | 1027 | pCi/mL |
| #3 | 1085 | pCi/mL |

Mean = 1061

1 sigma = 30.26549 1.96 sigma = 59.32036

True Value minus 5% = 1016.111 (True Value - 5%)
True Value plus 5% = 1123.07 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DOE QSAS and LANL Statements of Work

Reviewed By/Date: JN 11/30/12

SOP Reference: STL-QA-0002, Current Revision

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## Analysis Report for Gross Alpha/Beta

**Batch:** M122628 **Operator:** 63903

| Sample ID | WRKNO | Aliquot | | Mass | Instr ID | CountTime | | Ts | Tb | Dilution | Sigma | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cs | Cb | XT | CPMs | CPMb | Eff | Activity | UncTot | UncCnt | MDA | DLC |
| verification 1a | NA | 1.000E+000mL | | 0.0546 g | Purple16 | 11/30/12 13:03 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 2528 | 175 | 0.00 | 3.160E+002 | 1.750E-001 | 0.1328 | 1.071E+006pCi/L | 6.469E+004 | 2.132E+004 | 2.807E+003 | 1.167E+003 |
| | Gross Beta | 792 | 485 | 0.00 | 9.900E+001 | 4.850E-001 | 0.4280 | 1.037E+005pCi/L | 6.370E+003 | 3.702E+003 | 1.212E+003 | 6.028E+002 |
| verification 2a | NA | 1.000E+000mL | | 0.0536 g | Purple17 | 11/30/12 13:03 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 2364 | 87 | 0.00 | 2.955E+002 | 8.700E-002 | 0.1295 | 1.027E+006pCi/L | 6.225E+004 | 2.113E+004 | 2.376E+003 | 8.436E+002 |
| | Gross Beta | 764 | 362 | 0.00 | 9.550E+001 | 3.620E-001 | 0.4353 | 9.846E+004pCi/L | 6.084E+003 | 3.576E+003 | 1.078E+003 | 5.121E+002 |
| verification 3a | NA | 1.000E+000mL | | 0.0531 g | Purple18 | 11/30/12 13:04 | | 8.00 | 1000.00 | 1.00 | 1.00 | |
| | Gross Alpha | 2521 | 62 | 0.00 | 3.151E+002 | 6.200E-002 | 0.1308 | 1.085E+006pCi/L | 6.551E+004 | 2.161E+004 | 2.168E+003 | 7.052E+002 |
| | Gross Beta | 788 | 395 | 0.00 | 9.850E+001 | 3.950E-001 | 0.4295 | 1.029E+005pCi/L | 6.325E+003 | 3.680E+003 | 1.125E+003 | 5.421E+002 |

### Laboratory Control Sample Information

| SampID | WRKNO | Analyte | Activity | StdAdded | Recovery % | LCL | UCL | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Sample Duplicate Information

| Sample ID | Dup Sample ID | Analyte | Sample Activity | Dup Activity | RPD | RER | DER | ZFactor |
|---|---|---|---|---|---|---|---|---|

### Matrix Spike Information

| SampID | SampMSID | Analyte | Sample Activity | MS Activity | StdAdded | MSRecovery % | ZFactor |
|---|---|---|---|---|---|---|---|

### Blanks Information

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor |
|---|---|---|---|---|---|

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

## *Prep Report for Gross Alpha/Beta*

**Batch:** M122628 **Prep Analyst:** 250

| SampID | WRKNO | Aliquot | Gross | Tare | Mass | Dilution |
|---|---|---|---|---|---|---|
| verification 1a | NA | 6.500E-001 mL | 8.6982 g | 8.6436 g | 0.0546 g | 1.00 |
| | | orange 5 | protean 14 | | 16 | |
| verification 2a | NA | 6.500E-001 mL | 8.6698 g | 8.6162 g | 0.0536 g | 1.00 |
| | | 7 | 15 | | 17 | |
| verification 3a | NA | 6.500E-001 mL | 8.6466 g | 8.5935 g | 0.0531 g | 1.00 |
| | | 8 | | | 18 | |

### *Spike Information*

| Sample ID | Standard ID | Analyte | Std Conc | Aliquot | Ref Date | StdAdded |
|---|---|---|---|---|---|---|
| | Rad12-0041 | Th-230 | 2374.5 dpm/mL | 1.00 mL | 11-29-12 | |

MS — Spiked By
LM per MS — Spike Verified By
11-28-12 — Spike Date

### *Standard Operating Procedures*

| SOPNumber | Title | Revision |
|---|---|---|
| ☐ | | |

Reviewed By: [signature] — Review Date: 11/30/12

Analyst/Relenquished By: MS — Release Date: 11-28-12 — Received By: [signature] — Receipt Date: 11/28/12

1123433897/MS/11-28-12
Balance ID / Initials / Date

# Reagent

# Th-230_00019

# TestAmerica St. Louis

## Standards Preparation Logbook Record

Aug-13-2013

Logbook: \\Qstlmo01\Stdslog\RAD_STD.std

RAD13-0028, Th-230 Ampoule — Analyst: marrss

Vendor: Analytics — Lot No.: 92776
Solvent: None
Date Prep./Opened: 08-13-2013
Date Expires(1): 08-08-2063 (50 Years)
Date Expires(2): 08-08-2063 (50 Years)
Activity: 3.728 E+03 Bq, Ref date: 08/08/2013, Solution mass: 5.09261g, Source ID: 92776

| Component | Initial Conc (dpm/g) | Final Conc (dpm/g) |
|---|---|---|
| Th-230 | 43,922 | 43,922 |

Th-230-00019
#181198

RAD13-0029, Th-230 Parent — Analyst: marrss

Solvent: ~~None~~ 1M HNO3 SUB 8/13/13 — Volume (ml): 100.00
Date Prep./Opened: 08-13-2013
Date Expires(1): 08-08-2063 (50 Years)
Date Expires(2): 08-08-2063 (50 Years)

Parent Std No.: RAD13-0028, Th-230 Ampoule — Aliquot Amount (g): 5.0731
Parent Date Expires(1): 08-08-2063 — Parent Date Expires(2): 08-08-2063

| Component | Initial Conc (dpm/g) | Final Conc (dpm/mL) |
|---|---|---|
| Th-230 | 43,922 | 2,228.2 |

Reviewed By: SUB

Th-230 Parent

Page 1 of 1

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THE LEADER IN ENVIRONMENTAL TESTING

Th-230_00019

## Reagent ID: Th-230_00019

| | | | |
|---|---|---|---|
| | | Expiration Date: | 08/08/2063 |
| Description: | Th-230 Parent | Laboratory: | TestAmerica St. Louis |
| No. of Bottles: | 1 | Prepared By: | Bernsen, Sarah C |
| Storage Location: | RAD Actinide STDs | Solvent: | 1M HNO3 |
| Reagent Volume: | 100.000 mL | Solvent Lot: | n/a |
| Creation Date: | 08/13/2013 | | |
| Container(s): | 181198 | | |
| Comment: | | | |

### Reagent Analyte Information

| Analyte | Source ID | Source Expiration Date | Source Conc. | Source Conc. Units | Final Conc. | Final Conc. Units |
|---|---|---|---|---|---|---|
| Th-230 | Th-230_00018 | 08/08/2063 | 43922.46 | dpm/g | 2228.23072 | dpm/mL |

### Source Reagents

| Reagent | Description | Type | Expiration | Vendor | Vendor Lot # | Vendor Cat Lot # | Volume Used | Volume Units |
|---|---|---|---|---|---|---|---|---|
| Th-230_00018 | Th-230 Ampoule | ASTD | 08/08/63 | Eckert & Ziegler | 92776 | | 5.07310 | mL |

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

92776

Th-230 5 mL Liquid in Flame Sealed Vial

**Customer:** TestAmerica
**P.O. No.:** 2532686, Item 1 Product Code: 8230-5FSA-4kBq

This standard radionuclide source was prepared gravimetrically from a master solution, calibrated by Eckert & Ziegler Analytics. The master solution was calibrated by liquid scintillation counting. Radionuclide calibration and purity were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Isotope | Half-Life, Days | Activity (Bq) | Uncertainty*, % Type $u_A$ | $u_B$ | U | Reference Date (12:00 PM EST) |
|---|---|---|---|---|---|---|
| Th-230 | 2.753E+07 | 3.728E+03 | 0.1 | 0.9 | 1.8 | 08/08/2013 |

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

**Comments:**
Impurities: α-impurities 0.04%; γ-impurities (other than decay products)<0.1%.
5.09261 g 0.5M HNO3 solution. Carrier free.

Source Prepared by: R. Ormsby
R. Ormsby, Radiochemist

QA Approved:
J.D. McCorvey, Counting Room Manager

Date: 6 AUG 13

RAD13-0029
Th-230 Parent
marrss
None
Prep/Opened: 8/13/2013
Exp(1): 8/8/2063
Exp(2): 8/8/2063

181198
ID: Th-230_00019
Exp: 08/08/63 Prpd: SH Crl. 08/13/13
Th-230 Parent

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

Single Isotope Certificate Rev 3, 23 August 2012



Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

# Reagent

# Tuna Can LCS_00009

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 9/17/2019 12:40 PM

Standard ID Number: 1798543
True Value = 27.51 pCi/L or g
Date Analyzed: 9/13/2019

Radionuclide: Cs-137

Tuna can LCS-00009

| | Replicates | |
|---|---|---|
| #1 | 28.54 | pCi/L or g |
| #2 | 26.76 | pCi/L or g |
| #3 | 26.73 | pCi/L or g |

Mean = 27.343333

1 sigma = 1.0364523 1.96 sigma = 2.031446

True Value minus 5% = 26.1345 (True Value - 5%)
True Value plus 5% = 28.8855 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: CMM 9/17/19

2nd Reviewed By/Date: CAP 9/17/19

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 9/17/2019 12:43 PM

Standard ID Number: 1798543
True Value = 11.16 pCi/L or g
Date Analyzed: 9/13/2019

Radionuclide: Co-60

| | Replicates | |
|---|---|---|
| #1 | 11 | pCi/L or g |
| #2 | 10.57 | pCi/L or g |
| #3 | 10.6 | pCi/L or g |

Mean = 10.723333

1 sigma = 0.2400694 1.96 sigma = 0.470536

True Value minus 5% = 10.602 (True Value - 5%)
True Value plus 5% = 11.718 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: umm 9/17/19

2nd Reviewed By/Date: [illegible] 9/17/19

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

St. Louis Radiological Standard Verification

Printed: 9/17/2019 12:44 PM

Standard ID Number: 1796543
True Value = 96.62 pCi/L or g
Date Analyzed: 9/13/2019

Radionuclide: Am-241

| | Replicates | |
|---|---|---|
| #1 | 101.7 | pCi/L or g |
| #2 | 96.41 | pCi/L or g |
| #3 | 95.48 | pCi/L or g |

Mean = 97.863333

1 sigma = 3.355031 1.96 sigma = 6.575861

True Value minus 5% = 91.789 (True Value - 5%)
True Value plus 5% = 101.451 (True Value + 5%)

**Accuracy:**
**Mean value within 5% of Certified (True) Value?** Yes **(Acceptance Criteria)**

**Precision:**
**1.96 sigma Value Within 10% of Mean Value?** Yes **(Acceptance Criteria)**

**Standard Reverification Acceptable?** Yes

Note: Criteria for reverification of radiological standards is taken from the DoD/DOE Consolidated QSM and LANL Statements of Work

1st Reviewed By/Date: CMM 9/17/19

2nd Reviewed By/Date: GJO 9/17/19

eurofins
Environment Testing
TestAmerica

**Analysis Report for Gamma Spectroscopy**

**Batch:** 442821 **Operator:**

MOO

| SampID | WRKNO | Aliquot | Sigma | Instrument | Detector | CountDateTime | CountDuration |
|---|---|---|---|---|---|---|---|
| LCS 160-442821-2- | LCS | 341.90g | 1.00 | GammaVision | GV05 | 9/13/19 11:44 | 30 |

| Analyte | CountID | Activity | TotalUnc | CountUnc | MDA | MLCC | Act/MDA | |
|---|---|---|---|---|---|---|---|---|
| AC-228 | 11138 | 4.863E-001pCi/g | 3.032E-001 | 3.026E-001 | 1.192E+000 | 5.669E-001 | 0.34 | 0.3032 |
| AG-108M | 10982 | 1.185E-001pCi/g | 7.877E-002 | 7.853E-002 | 3.100E-001 | 1.503E-001 | 0.38 | 0.0788 |
| AG-110M | 10973 | 2.693E-001pCi/g | 9.003E-002 | 8.945E-002 | 5.914E-001 | 2.852E-001 | 0.34 | 0.0900 |
| AM-241 | 10618 | 1.017E+002pCi/g | 5.329E+000 | 7.416E-001 | 8.130E-001 | 4.030E-001 | 125.08 | 5.3292 |
| BA-133 | 10489 | 1.514E-001pCi/g | 1.488E-001 | 1.485E-001 | 4.938E-001 | 2.411E-001 | 0.31 | 0.1488 |
| BA-140 | 10463 | 2.083E-001pCi/g | 2.262E-001 | 2.258E-001 | 9.621E-001 | 4.604E-001 | 0.22 | 0.2262 |
| BE-7 | 10435 | 1.114E+000pCi/g | 1.027E+000 | 1.025E+000 | 3.407E+000 | 1.650E+000 | 0.33 | 1.0267 |
| BI-207 | 10195 | -2.063E-001pCi/g | 2.010E-001 | 2.004E-001 | 5.293E-001 | 2.527E-001 | -0.54 | 0.2010 |
| BI-210M | 10173 | -1.381E-001pCi/g | 2.131E-001 | 2.129E-001 | 4.978E-001 | 2.433E-001 | -0.32 | 0.2131 |
| BI-212 | 10160 | 9.310E-001pCi/g | 1.149E+000 | 1.148E+000 | 3.868E+000 | 1.848E+000 | 0.24 | 1.1488 |
| BI-214 | 10154 | 2.328E-001pCi/g | 2.064E-001 | 2.062E-001 | 1.071E+000 | 5.232E-001 | 0.22 | 0.2064 |
| CD-109 | 9254 | 1.444E+000pCi/g | 2.035E+000 | 2.031E+000 | 6.744E+000 | 3.327E+000 | 0.21 | 2.0327 |
| CD-113M | 17462 | 8.913E+002pCi/g | 1.147E+003 | 1.145E+003 | 3.822E+003 | 1.865E+003 | 0.23 | 1,146.6892 |
| CE-139 | 9241 | 4.620E-002pCi/g | 7.074E-002 | 7.060E-002 | 2.355E-001 | 1.154E-001 | 0.20 | 0.0707 |
| CE-141 | 9235 | -8.939E-002pCi/g | 1.309E-001 | 1.305E-001 | 4.344E-001 | 2.135E-001 | -0.21 | 0.1306 |
| CE-144 | 9221 | -3.028E-002pCi/g | 5.116E-001 | 5.116E-001 | 1.716E+000 | 8.424E-001 | -0.02 | 0.5116 |
| CF-249 | 9215 | 5.341E-002pCi/g | 1.575E-001 | 1.574E-001 | 5.640E-001 | 2.762E-001 | 0.17 | 0.1575 |
| CF-251 | 13690 | 2.026E-002pCi/g | 3.341E-001 | 3.341E-001 | 8.977E-001 | 4.371E-001 | 0.02 | 0.3341 |
| CO-55 | 8704 | -5.180E-002pCi/g | 6.396E-002 | 6.391E-002 | 3.155E-001 | 1.604E-001 | -0.16 | 0.0640 |
| CO-57 | 13594 | 5.023E-002pCi/g | 6.294E-002 | 6.288E-002 | 2.192E-001 | 1.077E-001 | 0.23 | 0.0629 |
| CO-58 | 8698 | 1.213E-001pCi/g | 1.166E-001 | 1.164E-001 | 3.987E-001 | 1.872E-001 | 0.31 | 0.1166 |
| CO-60 | 8692 | 1.106E+001pCi/g | 5.892E-001 | 2.056E-001 | 5.871E-002 | 1.858E-002 | 187.32 | 0.5892 |
| CR-51 | 8604 | 8.324E-001pCi/g | 8.498E-001 | 8.485E-001 | 2.823E+000 | 1.378E+000 | 0.29 | 0.8498 |
| CS-134 | 8553 | 1.015E-001pCi/g | 1.246E-001 | 1.244E-001 | 4.184E-001 | 2.010E-001 | 0.24 | 0.1246 |
| CS-136 | 8546 | -1.528E-001pCi/g | 1.378E-001 | 1.376E-001 | 4.578E-001 | 2.217E-001 | -0.33 | 0.1378 |
| CS-137 | 8539 | 2.894E+001pCi/g | 1.538E+000 | 4.012E-001 | 2.446E-001 | 1.153E-001 | 116.89 | 1.5381 |
| EU-152 | 7145 | 3.028E-001pCi/g | 2.418E-001 | 2.413E-001 | 8.436E-001 | 3.180E-001 | 0.47 | 0.2418 |
| EU-154 | 7138 | 2.298E-001pCi/g | 2.544E-001 | 2.542E-001 | 4.328E-001 | 2.123E-001 | 0.53 | 0.2544 |
| EU-155 | 7131 | -2.454E-001pCi/g | 3.675E-001 | 3.673E-001 | 1.219E+000 | 6.019E-001 | -0.20 | 0.3675 |
| FE-59 | 7073 | -3.237E-001pCi/g | 3.238E-001 | 3.234E-001 | 7.052E-001 | 3.384E-001 | -0.46 | 0.3238 |
| GA-68 | 18005 | -8.467E-001pCi/g | 6.188E+000 | 6.188E+000 | 1.372E+001 | 6.536E+000 | -0.07 | 6.1878 |
| GD-153 | 6624 | 1.957E-001pCi/g | 1.591E-001 | 1.586E-001 | 6.377E-001 | 3.133E-001 | 0.31 | 0.1591 |
| HF-181 | 6496 | -1.709E-001pCi/g | 1.588E-001 | 1.583E-001 | 6.263E-001 | 2.574E-001 | -0.32 | 0.1588 |
| HG-203 | 6466 | 4.960E-002pCi/g | 9.570E-002 | 9.567E-002 | 2.441E-001 | 1.184E-001 | 0.17 | 0.0957 |
| I-131 | 6380 | 1.133E-001pCi/g | 1.081E-001 | 1.079E-001 | 2.735E-001 | 1.323E-001 | 0.41 | 0.1081 |
| IR-192 | 6303 | -1.012E-001pCi/g | 1.012E-001 | 1.010E-001 | 3.367E-001 | 1.641E-001 | -0.30 | 0.1012 |
| K-40 | 6148 | 8.589E-001pCi/g | 3.415E-001 | 3.367E-001 | 9.590E-001 | 3.452E-001 | 0.84 | 0.3415 |
| KR-85 | 6111 | 9.026E+000pCi/g | 2.409E+001 | 2.409E+001 | 8.100E+001 | 3.937E+001 | 0.11 | 24.0589 |
| LA-140 | 6096 | 7.687E-002pCi/g | 2.802E-002 | 2.772E-002 | 7.164E-002 | 2.265E-002 | 1.07 | 0.0280 |
| MN-54 | 5362 | 1.261E-001pCi/g | 1.134E-001 | 1.132E-001 | 2.567E-001 | 1.210E-001 | 0.49 | 0.1134 |
| NA-22 | 5201 | -5.117E-003pCi/g | 3.600E-002 | 3.600E-002 | 1.378E-001 | 5.841E-002 | -0.04 | 0.0360 |
| NB-94 | 5160 | 1.661E-002pCi/g | 9.748E-002 | 9.747E-002 | 2.349E-001 | 1.110E-001 | 0.07 | 0.0975 |
| NB-95 | 5154 | 1.187E-001pCi/g | 9.088E-002 | 9.067E-002 | 3.014E-001 | 1.439E-001 | 0.39 | 0.0909 |
| ND-147 | 5063 | 3.185E-001pCi/g | 3.061E-001 | 3.045E-001 | 1.867E+000 | 8.952E-001 | 0.17 | 0.3061 |
| NP-237 | 4757 | -4.197E-001pCi/g | 6.528E-001 | 6.524E-001 | 2.166E+000 | 1.070E+000 | -0.19 | 0.6528 |
| NP-239 | 4751 | 2.244E-001pCi/g | 3.296E-001 | 3.293E-001 | 1.094E+000 | 5.396E-001 | 0.21 | 0.3296 |
| PA-231 | 4541 | 1.018E+000pCi/g | 4.359E+000 | 4.358E+000 | 1.455E+001 | 7.166E+000 | 0.07 | 4.3590 |
| PA-233 | 4535 | 2.171E-001pCi/g | 3.533E-001 | 3.532E-001 | 1.175E+000 | 5.785E-001 | 0.18 | 0.3533 |
| PA-234 | 4528 | 2.721E-001pCi/g | 3.471E-001 | 3.468E-001 | 1.153E+000 | 5.665E-001 | 0.24 | 0.3471 |

MOO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PA-234M | 19453 | -2.323E-001pCi/g | 1.952E-001 | 1.948E-001 | 5.495E-001 | 3.146E-001 | -0.36 | 19.5182 |
| PB-210 | 4467 | 7.535E-002pCi/g | 4.494E-001 | 7.890E-000 | 1.443E-001 | 7.124E-000 | 62.31 | 44.9442 |
| PB-212 | 4454 | 5.468E-001pCi/g | 1.148E-001 | 1.090E-001 | 3.328E-001 | 1.606E-001 | 1.64 | 0.1146 |
| PB-214 | 4448 | 4.716E-001pCi/g | 1.908E-001 | 1.892E-001 | 8.029E-001 | 3.920E-001 | 0.59 | 0.1908 |
| PM-144 | 19565 | 1.355E-002pCi/g | 9.547E-002 | 9.547E-002 | 2.297E-001 | 1.083E-001 | 0.07 | 0.0965 |
| PM-146 | 2464 | 5.132E-002pCi/g | 8.496E-002 | 8.492E-002 | 4.790E-001 | 2.327E-001 | 0.11 | 0.0850 |
| RH-106 | 1862 | 6.982E-001pCi/g | 1.483E+000 | 1.482E+000 | 4.967E+000 | 2.426E+000 | 0.14 | 1.4829 |
| RU-103 | 1828 | -3.450E-002pCi/g | 1.159E-001 | 1.159E-001 | 2.848E-001 | 1.372E-001 | -0.12 | 0.1159 |
| SB-124 | 1784 | 1.827E-001pCi/g | 1.472E-001 | 1.469E-001 | 4.788E-001 | 2.337E-001 | 0.38 | 0.1472 |
| SB-125 | 1777 | 2.430E-001pCi/g | 3.275E-001 | 3.273E-001 | 9.103E-001 | 4.411E-001 | 0.27 | 0.3275 |
| SC-46 | 1739 | -1.702E-001pCi/g | 1.569E-001 | 1.567E-001 | 5.219E-001 | 2.531E-001 | -0.33 | 0.1569 |
| SN-113 | 1570 | 1.532E-001pCi/g | 1.719E-001 | 1.717E-001 | 5.714E-001 | 2.766E-001 | 0.27 | 0.1718 |
| SN-126 | 17459 | 7.612E-001pCi/g | 7.746E-001 | 7.736E-001 | 2.587E+000 | 1.261E+000 | 0.30 | 0.7746 |
| TA-182 | 1301 | 7.726E-002pCi/g | 1.583E-001 | 1.582E-001 | 9.973E-001 | 4.719E-001 | 0.08 | 0.1583 |
| TC-99M | 17412 | 5.631E-002pCi/g | 7.110E-002 | 7.103E-002 | 2.361E-001 | 1.161E-001 | 0.24 | 0.0711 |
| TH-227 | 1058 | 4.902E-001pCi/g | 6.613E-001 | 6.608E-001 | 2.759E+000 | 1.330E+000 | 0.18 | 0.6613 |
| TH-229 | 1046 | 9.186E-001pCi/g | 1.499E+000 | 1.498E+000 | 4.004E+000 | 1.953E+000 | 0.13 | 1.4985 |
| TH-234 | 1027 | 4.812E-001pCi/g | 1.366E+000 | 1.366E+000 | 4.548E+000 | 2.244E+000 | 0.11 | 1.3664 |
| TL-208 | 929 | 1.257E-001pCi/g | 1.203E-001 | 1.201E-001 | 2.658E-001 | 1.285E-001 | 0.47 | 0.1203 |
| TL-210 | 20881 | 4.217E-002pCi/g | 6.801E-002 | 6.798E-002 | 3.680E-001 | 1.768E-001 | 0.11 | 0.0680 |
| U-235 | 281 | 5.621E-001pCi/g | 5.410E-001 | 5.402E-001 | 1.916E+000 | 9.431E-001 | 0.29 | 0.5410 |
| Y-88 | 74 | 3.754E-002pCi/g | 6.236E-002 | 6.233E-002 | 1.503E-001 | 6.088E-002 | 0.25 | 0.0624 |
| ZN-65 | 31 | 9.258E-003pCi/g | 2.828E-001 | 2.828E-001 | 9.078E-001 | 4.655E-001 | 0.01 | 0.2828 |
| ZR-95 | 7 | -1.121E-001pCi/g | 1.959E-001 | 1.958E-001 | 4.656E-001 | 2.205E-001 | -0.24 | 0.1959 |

*Laboratory Control Sample Information*

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | ZFactor |
|---|---|---|---|---|---|---|
| LCS 160-442821-2-A | LCS 160-442821-2-A | CS-137 | 2.854E-001 pCi/g | 2.751E-001 | 103.76% | 0.6435 |
| | | CO-60 | 1.100E+001 pCi/g | 1.116E+001 | 98.53% | -0.2636 |
| | | AM-241 | 1.017E+002 pCi/g | 9.662E+001 | 105.24% | 0.9035 |

*Sample Duplicate Information*

| Sample ID | Dup Sample ID | Analyte | Samp Activity | Dup Activity | RPD | RER | DER | Flag | ZFactor |
|---|---|---|---|---|---|---|---|---|---|

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*Blanks Information*

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor | |
|---|---|---|---|---|---|---|
| MB 160-442821~1-A | MB | AC-228 | 4.342E-002 | 4.965E-002 | 0.8746 | |
| MB 160-442821~1-A | MB | AG-108M | 1.099E-003 | 9.817E-004 | 1.1182 | |
| MB 160-442821~1-A | MB | AG-110M | 2.340E-002 | 1.797E-002 | 1.3022 | |
| MB 160-442821~1-A | MB | AM-241 | -5.731E-002 | 8.274E-002 | -0.6926 | |
| MB 160-442821~1-A | MB | BA-133 | 2.852E-002 | 3.243E-002 | 0.8794 | |
| MB 160-442821~1-A | MB | BA-140 | 5.953E-002 | 6.662E-002 | 0.8937 | |
| MB 160-442821~1-A | MB | BE-7 | -2.994E-001 | 3.208E-001 | -0.9335 | |
| MB 160-442821~1-A | MB | BI-207 | -1.018E-002 | 4.105E-002 | -0.2481 | |
| MB 160-442821~1-A | MB | BI-210M | -9.908E-003 | 3.572E-002 | -0.2774 | |
| MB 160-442821~1-A | MB | BI-212 | 1.756E-001 | 3.078E-001 | 0.5704 | |
| MB 160-442821~1-A | MB | BI-214 | 1.393E-001 | 5.312E-002 | 2.6221 | B |
| MB 160-442821~1-A | MB | CD-109 | 0.000E+000 | 1.699E-001 | 0.0000 | |
| MB 160-442821~1-A | MB | CD-113M | 2.503E+002 | 2.082E+002 | 1.2023 | |
| MB 160-442821~1-A | MB | CE-139 | -2.124E-002 | 2.417E-002 | -0.8787 | |
| MB 160-442821~1-A | MB | CE-141 | -2.884E-002 | 3.258E-002 | -0.8852 | |
| MB 160-442821~1-A | MB | CE-144 | 1.170E-001 | 2.066E-001 | 0.5664 | |
| MB 160-442821~1-A | MB | CF-249 | 1.170E-002 | 1.645E-002 | 0.7112 | |
| MB 160-442821~1-A | MB | CF-251 | 1.837E-002 | 8.164E-002 | 0.2250 | |
| MB 160-442821~1-A | MB | CO-56 | -4.823E-002 | 4.988E-002 | -0.9671 | |
| MB 160-442821~1-A | MB | CO-57 | 5.510E-003 | 2.192E-002 | 0.2514 | |
| MB 160-442821~1-A | MB | CO-58 | 4.697E-003 | 2.933E-002 | 0.1601 | |
| MB 160-442821~1-A | MB | CO-60 | 1.531E-002 | 6.888E-003 | 2.2223 | |
| MB 160-442821~1-A | MB | CR-51 | -3.047E-001 | 5.786E-001 | -0.5267 | |
| MB 160-442821~1-A | MB | CS-134 | 3.841E-002 | 1.494E-002 | 2.5710 | |
| MB 160-442821~1-A | MB | CS-136 | 1.257E-002 | 3.856E-003 | 3.2593 | B |
| MB 160-442821~1-A | MB | CS-137 | 2.393E-002 | 2.558E-002 | 0.9358 | |
| MB 160-442821~1-A | MB | EU-152 | 6.044E-002 | 2.721E-002 | 2.2212 | |
| MB 160-442821~1-A | MB | EU-154 | 7.072E-002 | 5.279E-002 | 1.3396 | |
| MB 160-442821~1-A | MB | EU-155 | 2.661E-002 | 4.693E-002 | 0.5670 | |
| MB 160-442821~1-A | MB | FE-59 | 2.751E-002 | 5.674E-002 | 0.4849 | |
| MB 160-442821~1-A | MB | GA-68 | -6.817E-002 | 1.080E+000 | -0.0631 | |
| MB 160-442821~1-A | MB | GD-153 | -4.201E-002 | 6.752E-002 | -0.6221 | |
| MB 160-442821~1-A | MB | HF-181 | 5.102E-003 | 8.664E-003 | 0.5889 | |
| MB 160-442821~1-A | MB | HG-203 | -1.208E-002 | 2.101E-002 | -0.5742 | |
| MB 160-442821~1-A | MB | I-131 | 3.155E-003 | 2.491E-002 | 0.1267 | |
| MB 160-442821~1-A | MB | IR-192 | 3.111E-002 | 6.103E-002 | 0.5098 | |
| MB 160-442821~1-A | MB | K-40 | -5.436E-001 | 7.228E-001 | -0.7520 | |
| MB 160-442821~1-A | MB | KR-85 | -4.929E+000 | 1.024E+001 | -0.4813 | |
| MB 160-442821~1-A | MB | LA-140 | 1.338E-002 | 1.479E-002 | 0.9047 | |
| MB 160-442821~1-A | MB | MN-54 | -1.909E-002 | 3.907E-002 | -0.4886 | |
| MB 160-442821~1-A | MB | NA-22 | 1.521E-002 | 2.411E-002 | 0.6309 | |
| MB 160-442821~1-A | MB | NB-94 | 5.593E-002 | 1.577E-002 | 3.5459 | B |
| MB 160-442821~1-A | MB | NB-95 | 7.234E-003 | 2.219E-002 | 0.3260 | |
| MB 160-442821~1-A | MB | ND-147 | -1.671E-001 | 2.340E-001 | -0.7140 | |
| MB 160-442821~1-A | MB | NP-237 | 1.084E-001 | 1.795E-001 | 0.6038 | |
| MB 160-442821~1-A | MB | NP-239 | 4.730E-002 | 7.053E-002 | 0.6706 | |
| MB 160-442821~1-A | MB | PA-231 | -9.465E-001 | 1.811E+000 | -0.5226 | |
| MB 160-442821~1-A | MB | PA-233 | 0.000E+000 | 2.543E-002 | 0.0000 | |
| MB 160-442821~1-A | MB | PA-234 | 1.397E-001 | 4.096E-002 | 3.4108 | B |
| MB 160-442821~1-A | MB | PA-234M | 0.000E+000 | 1.839E+000 | 0.0000 | |
| MB 160-442821~1-A | MB | PB-210 | -1.447E+000 | 8.300E-001 | -1.7435 | |

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|---|---|---|---|---|---|
| MB 160-442821~1-A | MB | PB-212 | -4.364E-002 | 5.625E-002 | -0.7757 |
| MB 160-442821~1-A | MB | PB-214 | -1.562E-002 | 5.292E-002 | -0.2952 |
| MB 160-442821~1-A | MB | PM-144 | -4.228E-003 | 3.382E-002 | -0.1250 |
| MB 160-442821~1-A | MB | PM-146 | 1.686E-002 | 2.497E-002 | 0.6753 |
| MB 160-442821~1-A | MB | RH-106 | -3.312E-001 | 5.169E-001 | -0.6409 |
| MB 160-442821~1-A | MB | RU-103 | -2.513E-002 | 3.575E-002 | -0.7031 |
| MB 160-442821~1-A | MB | SB-124 | 5.135E-002 | 2.113E-002 | 2.4307 |
| MB 160-442821~1-A | MB | SB-125 | 5.517E-002 | 4.524E-002 | 1.2193 |
| MB 160-442821~1-A | MB | SC-46 | 0.000E+000 | 7.064E-003 | 0.0000 |
| MB 160-442821~1-A | MB | SN-113 | 3.065E-002 | 3.577E-002 | 0.8568 |
| MB 160-442821~1-A | MB | SN-126 | 1.684E-001 | 2.381E-001 | 0.7074 |
| MB 160-442821~1-A | MB | TA-182 | -1.911E-001 | 1.577E-001 | -1.2114 |
| MB 160-442821~1-A | MB | TC-99M | 1.568E-009 | 2.393E-002 | 0.0000 |
| MB 160-442821~1-A | MB | TH-227 | 1.868E-001 | 1.347E-001 | 1.3870 |
| MB 160-442821~1-A | MB | TH-229 | 8.086E-001 | 3.483E-001 | 2.3215 |
| MB 160-442821~1-A | MB | TH-234 | 2.642E-001 | 3.173E-001 | 0.8327 |
| MB 160-442821~1-A | MB | TL-208 | 1.480E-002 | 1.817E-002 | 0.8144 |
| MB 160-442821~1-A | MB | TL-210 | 3.150E-002 | 2.108E-002 | 1.4946 |
| MB 160-442821~1-A | MB | U-235 | -2.885E-002 | 2.377E-002 | -1.2138 |
| MB 160-442821~1-A | MB | Y-88 | -3.249E-002 | 6.078E-002 | -0.5346 |
| MB 160-442821~1-A | MB | ZN-65 | 0.000E+000 | 1.165E-002 | 0.0000 |
| MB 160-442821~1-A | MB | ZR-95 | 3.349E-002 | 2.726E-002 | 1.2286 |

eurofins
Environment Testing
TestAmerica

**Analysis Report for Gamma Spectroscopy**

**Batch:** 442120 **Operator:**

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| SampID | WRKNO | Aliquot | Sigma | Instrument | Detector | CountDateTime | CountDuration |
|---|---|---|---|---|---|---|---|
| LCS 180-442120-2- | LCS | 341.90g | 1.00 | GammaVision | GV08 | 9/14/19 8:40 | 60 |

| Analyte | CurrentID | Activity | TotalUnc | CountUnc | MDA | MLCC | Act/MDA | |
|---|---|---|---|---|---|---|---|---|
| AC-228 | 11136 | 7.871E-001pCi/g | 1.503E-001 | 1.447E-001 | 4.118E-001 | 1.986E-001 | 1.94 | 0.1503 |
| AG-108M | 10982 | 3.273E-002pCi/g | 4.460E-002 | 4.457E-002 | 1.527E-001 | 7.603E-002 | 0.21 | 0.0446 |
| AG-110M | 10973 | 5.611E-002pCi/g | 3.263E-002 | 3.250E-002 | 2.682E-001 | 1.403E-001 | 0.20 | 0.0326 |
| AM-241 | 10818 | 9.641E+001pCi/g | 5.030E+000 | 5.158E-001 | 7.182E-001 | 3.563E-001 | 134.81 | 5.0300 |
| BA-133 | 10469 | 2.162E-002pCi/g | 7.888E-002 | 7.887E-002 | 2.627E-001 | 1.287E-001 | 0.08 | 0.0789 |
| BA-140 | 10463 | -1.914E-001pCi/g | 1.490E-001 | 1.486E-001 | 4.960E-001 | 2.422E-001 | -0.39 | 0.1490 |
| BE-7 | 10435 | -7.246E-001pCi/g | 6.106E-001 | 6.094E-001 | 2.407E+000 | 1.191E+000 | -0.30 | 0.6106 |
| BI-207 | 10195 | 5.167E-002pCi/g | 2.096E-002 | 2.083E-002 | 2.146E-001 | 1.041E-001 | 0.24 | 0.0210 |
| BI-210M | 10173 | -6.857E-002pCi/g | 5.753E-002 | 5.736E-002 | 2.573E-001 | 1.289E-001 | -0.27 | 0.0575 |
| BI-212 | 10160 | -5.523E-002pCi/g | 5.326E-001 | 5.326E-001 | 1.865E+000 | 9.040E-001 | -0.03 | 0.5326 |
| BI-214 | 10154 | 3.852E-001pCi/g | 9.766E-002 | 9.556E-002 | 1.944E-001 | 9.385E-002 | 1.98 | 0.0977 |
| CD-109 | 9254 | -1.750E-007pCi/g | 1.700E+000 | 1.700E+000 | 5.534E+000 | 2.802E+000 | 0.00 | 1.7000 |
| CD-113M | 17462 | -3.881E+002pCi/g | 6.515E+002 | 6.511E+002 | 2.163E+003 | 1.087E+003 | -0.18 | 651.5354 |
| CE-139 | 9241 | 3.894E-002pCi/g | 2.479E-002 | 2.452E-002 | 8.082E-002 | 3.962E-002 | 0.48 | 0.0248 |
| CE-141 | 9235 | -1.547E-002pCi/g | 6.406E-002 | 6.405E-002 | 1.753E-001 | 8.643E-002 | -0.09 | 0.0641 |
| CE-144 | 9221 | -3.154E-001pCi/g | 4.496E-001 | 4.496E-001 | 1.487E+000 | 7.388E-001 | -0.21 | 0.4496 |
| CF-249 | 9215 | 1.781E-001pCi/g | 7.734E-002 | 7.680E-002 | 1.477E-001 | 7.216E-002 | 1.21 | 0.0773 |
| CF-251 | 13690 | 4.070E-002pCi/g | 1.991E-001 | 1.991E-001 | 5.029E-001 | 2.476E-001 | 0.08 | 0.1991 |
| CO-56 | 6704 | 4.653E-002pCi/g | 2.373E-002 | 2.361E-002 | 1.308E-001 | 6.340E-002 | 0.36 | 0.0237 |
| CO-57 | 13694 | -7.288E-003pCi/g | 3.710E-002 | 3.710E-002 | 1.234E-001 | 6.105E-002 | -0.06 | 0.0371 |
| CO-58 | 8696 | -1.897E-003pCi/g | 4.758E-002 | 4.758E-002 | 1.605E-001 | 7.634E-002 | -0.01 | 0.0476 |
| CO-60 | 9892 | 1.057E+001pCi/g | 5.418E-001 | 1.102E-001 | 6.743E-002 | 3.087E-002 | 156.79 | 0.5418 |
| CR-51 | 8604 | -4.284E-001pCi/g | 4.158E-001 | 4.152E-001 | 1.418E+000 | 6.993E-001 | -0.30 | 0.4158 |
| CS-134 | 8553 | 1.120E-001pCi/g | 6.138E-002 | 6.111E-002 | 1.766E-001 | 8.610E-002 | 0.63 | 0.0614 |
| CS-136 | 8546 | 5.864E-002pCi/g | 5.382E-002 | 5.381E-002 | 1.583E-001 | 7.721E-002 | 0.37 | 0.0539 |
| CS-137 | 8539 | 2.876E+001pCi/g | 1.407E+000 | 2.042E-001 | 1.233E-001 | 6.972E-002 | 217.06 | 1.4070 |
| EU-152 | 7145 | 2.923E-003pCi/g | 2.591E-003 | 2.588E-003 | 3.641E-001 | 1.801E-001 | 0.01 | 0.0026 |
| EU-154 | 7138 | 1.735E-001pCi/g | 1.133E-001 | 1.130E-001 | 2.371E-001 | 1.172E-001 | 0.73 | 0.1133 |
| EU-155 | 7131 | -1.792E-001pCi/g | 9.195E-002 | 9.143E-002 | 8.405E-001 | 4.176E-001 | -0.21 | 0.0920 |
| FE-59 | 7073 | 6.888E-002pCi/g | 1.334E-001 | 1.333E-001 | 2.797E-001 | 1.356E-001 | 0.32 | 0.1334 |
| GA-68 | 18003 | 1.010E+000pCi/g | 2.873E+000 | 2.873E+000 | 6.059E+000 | 2.932E+000 | 0.17 | 2.8732 |
| GD-153 | 6824 | -1.271E-001pCi/g | 1.790E-001 | 1.788E-001 | 5.913E-001 | 2.938E-001 | -0.21 | 0.1790 |
| HF-181 | 6495 | 2.184E-001pCi/g | 6.810E-002 | 6.717E-002 | 1.318E-001 | 6.420E-002 | 1.66 | 0.0681 |
| HG-203 | 6486 | -6.342E-002pCi/g | 4.983E-002 | 4.970E-002 | 1.642E-001 | 8.104E-002 | -0.39 | 0.0498 |
| I-131 | 6380 | -7.256E-002pCi/g | 6.388E-002 | 6.377E-002 | 1.531E-001 | 7.523E-002 | -0.47 | 0.0639 |
| IR-192 | 6303 | 5.827E-002pCi/g | 8.760E-002 | 8.753E-002 | 2.897E-001 | 1.438E-001 | 0.20 | 0.0876 |
| K-40 | 6148 | -4.085E-001pCi/g | 2.930E-001 | 2.922E-001 | 8.645E-001 | 4.037E-001 | -0.47 | 0.2930 |
| KR-85 | 6111 | 0.000E+000pCi/g | 5.958E+000 | 5.958E+000 | 3.921E+001 | 1.928E+001 | 0.00 | 5.9582 |
| LA-140 | 6096 | 4.473E-002pCi/g | 5.970E-002 | 5.966E-002 | 5.482E-002 | 2.897E-002 | 0.69 | 0.0597 |
| MN-54 | 5382 | -7.301E-002pCi/g | 4.126E-002 | 4.109E-002 | 1.409E-001 | 6.860E-002 | -0.52 | 0.0413 |
| NA-22 | 5201 | 2.624E-002pCi/g | 2.165E-002 | 2.165E-002 | 7.265E-002 | 3.366E-002 | 0.36 | 0.0217 |
| NB-94 | 5160 | 6.374E-002pCi/g | 3.242E-002 | 3.225E-002 | 1.519E-001 | 7.421E-002 | 0.42 | 0.0324 |
| NB-95 | 5154 | 1.983E-003pCi/g | 3.822E-002 | 3.822E-002 | 1.266E-001 | 6.292E-002 | 0.02 | 0.0382 |
| ND-147 | 5083 | 3.119E-001pCi/g | 3.848E-001 | 3.844E-001 | 8.917E-001 | 4.351E-001 | 0.35 | 0.3848 |
| NP-237 | 4757 | -2.962E-001pCi/g | 4.987E-001 | 4.984E-001 | 1.548E+000 | 8.195E-001 | -0.18 | 0.4987 |
| NP-239 | 4751 | 1.640E-001pCi/g | 2.323E-001 | 2.321E-001 | 7.677E-001 | 3.814E-001 | 0.21 | 0.2323 |
| PA-231 | 4541 | 0.000E+000pCi/g | 8.169E-001 | 8.169E-001 | 8.598E+000 | 4.269E+000 | 0.00 | 0.8169 |
| PA-233 | 4535 | -1.500E-003pCi/g | 1.125E-001 | 1.125E-001 | 7.025E-001 | 3.466E-001 | 0.00 | 0.1125 |
| PA-234 | 4528 | -1.929E-001pCi/g | 2.743E-001 | 2.742E-001 | 9.070E-001 | 4.503E-001 | -0.21 | 0.2743 |

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|---|---|---|---|---|---|---|---|---|
| PA-234M | 19453 | -6.978E-002pCi/g | 7.541E+000 | 7.541E+000 | 2.802E+001 | 1.304E+001 | 0.00 | 7.5414 |
| PB-210 | 4467 | 7.539E+002pCi/g | 4.451E+001 | 4.652E+000 | 8.528E+000 | 4.237E+000 | 68.39 | 44.5104 |
| PB-212 | 4464 | 4.619E-001pCi/g | 8.838E-002 | 6.146E-002 | 1.884E-001 | 9.237E-002 | 2.45 | 0.0684 |
| PB-214 | 4448 | 5.844E-001pCi/g | 1.236E-001 | 1.168E-001 | 2.710E-001 | 1.327E-001 | 2.18 | 0.1236 |
| PM-144 | 19585 | -6.206E-002pCi/g | 4.852E-002 | 4.841E-002 | 1.603E-001 | 7.840E-002 | -0.39 | 0.0485 |
| PM-146 | 2464 | -6.084E-002pCi/g | 1.020E-001 | 1.019E-001 | 2.356E-001 | 1.150E-001 | -0.28 | 0.1020 |
| RH-106 | 1882 | -5.563E-001pCi/g | 4.539E-001 | 4.529E-001 | 1.500E+000 | 7.343E-001 | -0.37 | 0.4539 |
| RU-103 | 1828 | 1.549E-002pCi/g | 6.206E-002 | 6.206E-002 | 1.443E-001 | 7.070E-002 | 0.11 | 0.0621 |
| SB-124 | 1764 | 1.087E-001pCi/g | 7.463E-002 | 7.434E-002 | 2.350E-001 | 1.180E-001 | 0.43 | 0.0746 |
| SB-125 | 1777 | 3.494E-002pCi/g | 3.567E-002 | 3.553E-002 | 4.848E-001 | 2.384E-001 | 0.07 | 0.0356 |
| SC-46 | 1739 | -8.328E-002pCi/g | 6.719E-002 | 6.705E-002 | 2.219E-001 | 1.089E-001 | -0.38 | 0.0672 |
| SN-113 | 1570 | 2.746E-002pCi/g | 8.897E-002 | 8.896E-002 | 2.960E-001 | 1.462E-001 | 0.09 | 0.0890 |
| SN-126 | 17459 | -9.609E-001pCi/g | 2.197E+000 | 2.197E+000 | 7.250E+000 | 3.817E+000 | -0.13 | 2.1975 |
| TA-182 | 1301 | 1.183E-001pCi/g | 1.129E-001 | 1.128E-001 | 6.531E-001 | 3.195E-001 | 0.17 | 0.1129 |
| TC-99M | 17412 | 0.000E+000pCi/g | 2.204E-002 | 2.204E-002 | 2.009E-001 | 9.974E-002 | 0.00 | 0.0220 |
| TH-227 | 1058 | 1.587E-001pCi/g | 6.160E-001 | 6.159E-001 | 1.487E+000 | 7.316E-001 | 0.11 | 0.6160 |
| TH-229 | 1046 | 8.150E-002pCi/g | 9.665E-001 | 9.665E-001 | 2.331E+000 | 1.150E+000 | 0.03 | 0.9665 |
| TH-234 | 1027 | -8.906E-001pCi/g | 9.853E-001 | 9.846E-001 | 3.256E+000 | 1.618E+000 | -0.21 | 0.9853 |
| TL-208 | 929 | 2.594E-001pCi/g | 5.669E-002 | 5.507E-002 | 1.124E-001 | 5.442E-002 | 2.31 | 0.0567 |
| TL-210 | 20861 | 6.163E-002pCi/g | 4.864E-002 | 4.851E-002 | 1.807E-001 | 7.843E-002 | 0.38 | 0.0486 |
| U-235 | 281 | -7.846E-003pCi/g | 2.801E-001 | 2.801E-001 | 1.559E+000 | 7.744E-001 | 0.00 | 0.2801 |
| Y-88 | 74 | -2.679E-002pCi/g | 3.451E-002 | 3.447E-002 | 7.939E-002 | 3.598E-002 | -0.34 | 0.0345 |
| ZN-65 | 31 | 0.000E+000pCi/g | 5.246E-002 | 5.246E-002 | 4.458E-001 | 2.180E-001 | 0.00 | 0.0525 |
| ZR-95 | 7 | -4.438E-002pCi/g | 9.905E-002 | 9.902E-002 | 2.154E-001 | 1.044E-001 | -0.21 | 0.0990 |

*Laboratory Control Sample Information*

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | ZFactor |
|---|---|---|---|---|---|---|
| LCS 160-442120-2-A | LCS 160-442120-2-A | CS-137 | 2.679E+001 pCi/g | 2.751E+001 | 97.29% | -0.5032 |
| | | CO-60 | 1.057E+001 pCi/g | 1.116E+001 | 94.72% | -1.0238 |
| | | AM-241 | 9.641E+001 pCi/g | 9.662E+001 | 99.78% | -0.0397 |

*Sample Duplicate Information*

| Sample ID | Dup Sample ID | Analyte | Samp Activity | Dup Activity | RPD | RER | DER | Flag | ZFactor |
|---|---|---|---|---|---|---|---|---|---|

MQO

*Blanks Information*

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor | |
|---|---|---|---|---|---|---|
| MB 160-442120~1-A | MB | AC-228 | 5.038E-002 | 8.932E-002 | 0.7269 | |
| MB 160-442120~1-A | MB | AG-108M | -2.019E-003 | 1.779E-002 | -0.1135 | |
| MB 160-442120~1-A | MB | AG-110M | 1.355E-002 | 8.550E-003 | 1.5843 | |
| MB 160-442120~1-A | MB | AM-241 | 8.122E-002 | 3.041E-002 | 2.6706 | B |
| MB 160-442120~1-A | MB | BA-133 | 3.808E-002 | 3.757E-002 | 1.0134 | |
| MB 160-442120~1-A | MB | BA-140 | 5.589E-002 | 6.413E-002 | 0.8716 | |
| MB 160-442120~1-A | MB | BE-7 | -2.362E-001 | 2.241E-001 | -1.0541 | |
| MB 160-442120~1-A | MB | BI-207 | -3.482E-002 | 3.785E-002 | -0.9199 | |
| MB 160-442120~1-A | MB | BI-210M | 2.544E-002 | 3.260E-002 | 0.7805 | |
| MB 160-442120~1-A | MB | BI-212 | -8.612E-002 | 2.928E-001 | -0.2941 | |
| MB 160-442120~1-A | MB | BI-214 | 5.043E-002 | 2.960E-002 | 1.7036 | |
| MB 160-442120~1-A | MB | CD-109 | 0.000E+000 | 5.558E-002 | 0.0000 | |
| MB 160-442120~1-A | MB | CD-113M | -2.718E+002 | 2.332E+002 | -1.1655 | |
| MB 160-442120~1-A | MB | CE-139 | 8.248E-003 | 1.261E-002 | 0.6540 | |
| MB 160-442120~1-A | MB | CE-141 | 1.554E-002 | 2.028E-002 | 0.7666 | |
| MB 160-442120~1-A | MB | CE-144 | -8.111E-002 | 1.145E-001 | -0.7084 | |
| MB 160-442120~1-A | MB | CF-249 | -1.188E-002 | 1.048E-002 | -1.1341 | |
| MB 160-442120~1-A | MB | CF-251 | 5.139E-002 | 5.501E-002 | 0.9341 | |
| MB 160-442120~1-A | MB | CO-56 | -2.889E-002 | 2.222E-002 | -1.3004 | |
| MB 160-442120~1-A | MB | CO-57 | 0.000E+000 | 3.364E-003 | 0.0000 | |
| MB 160-442120~1-A | MB | CO-58 | -3.584E-002 | 3.227E-002 | -1.1107 | |
| MB 160-442120~1-A | MB | CO-60 | 4.012E-002 | 1.616E-002 | 2.4828 | |
| MB 160-442120~1-A | MB | CR-51 | -1.270E-001 | 1.698E-001 | -0.7477 | |
| MB 160-442120~1-A | MB | CS-134 | -1.612E-002 | 1.891E-002 | -0.8523 | |
| MB 160-442120~1-A | MB | CS-136 | -3.609E-002 | 3.421E-002 | -1.0549 | |
| MB 160-442120~1-A | MB | CS-137 | -1.037E-002 | 2.149E-002 | -0.4826 | |
| MB 160-442120~1-A | MB | EU-152 | 3.567E-002 | 4.750E-002 | 0.7510 | |
| MB 160-442120~1-A | MB | EU-154 | -2.863E-003 | 3.819E-003 | -0.7498 | |
| MB 160-442120~1-A | MB | EU-155 | 3.121E-002 | 5.034E-002 | 0.6200 | |
| MB 160-442120~1-A | MB | FE-59 | 0.000E+000 | 1.408E-002 | 0.0000 | |
| MB 160-442120~1-A | MB | GA-68 | -3.205E-001 | 1.137E+000 | -0.2819 | |
| MB 160-442120~1-A | MB | GD-153 | -8.809E-003 | 2.630E-002 | -0.3350 | |
| MB 160-442120~1-A | MB | HF-181 | -7.435E-003 | 1.632E-002 | -0.4555 | |
| MB 160-442120~1-A | MB | HG-203 | -3.647E-003 | 1.563E-002 | -0.2334 | |
| MB 160-442120~1-A | MB | I-131 | 1.087E-002 | 2.227E-002 | 0.4882 | |
| MB 160-442120~1-A | MB | IR-192 | 1.725E-002 | 1.795E-002 | 0.9608 | |
| MB 160-442120~1-A | MB | K-40 | -3.512E-001 | 2.481E-001 | -1.4153 | |
| MB 160-442120~1-A | MB | KR-85 | 4.077E-001 | 7.276E+000 | 0.0560 | |
| MB 160-442120~1-A | MB | LA-140 | 2.570E-002 | 3.839E-002 | 0.6695 | |
| MB 160-442120~1-A | MB | MN-54 | 3.578E-002 | 1.805E-002 | 1.9827 | |
| MB 160-442120~1-A | MB | NA-22 | 2.253E-002 | 1.014E-002 | 2.2222 | |
| MB 160-442120~1-A | MB | NB-94 | 6.478E-003 | 2.167E-002 | 0.2990 | |
| MB 160-442120~1-A | MB | NB-95 | 1.486E-002 | 1.298E-002 | 1.1450 | |
| MB 160-442120~1-A | MB | ND-147 | -6.652E-002 | 1.630E-001 | -0.4081 | |
| MB 160-442120~1-A | MB | NP-237 | -6.577E-002 | 1.185E-001 | -0.5549 | |
| MB 160-442120~1-A | MB | NP-239 | 2.935E-002 | 4.639E-002 | 0.6326 | |
| MB 160-442120~1-A | MB | PA-231 | 4.500E-001 | 7.725E-001 | 0.5825 | |
| MB 160-442120~1-A | MB | PA-233 | -3.527E-003 | 4.296E-003 | -0.8211 | |
| MB 160-442120~1-A | MB | PA-234 | 7.125E-002 | 2.403E-002 | 2.9648 | B |
| MB 160-442120~1-A | MB | PA-234M | -3.788E-001 | 3.085E+000 | -0.1228 | |
| MB 160-442120~1-A | MB | PB-210 | 4.436E-001 | 4.168E-001 | 1.0644 | |

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| | | | | | |
|---|---|---|---|---|---|
| MB 160-442120~1-A | MB | PB-212 | 2.139E-002 | 3.051E-002 | 0.7012 |
| MB 160-442120~1-A | MB | PB-214 | -8.911E-002 | 4.874E-002 | -1.8281 |
| MB 160-442120~1-A | MB | PM-144 | -1.187E-002 | 2.398E-002 | -0.4951 |
| MB 160-442120~1-A | MB | PM-146 | 2.447E-002 | 2.423E-002 | 1.0103 |
| MB 160-442120~1-A | MB | RH-106 | 1.992E-001 | 2.993E-001 | 0.6655 |
| MB 160-442120~1-A | MB | RU-103 | 1.656E-002 | 1.646E-002 | 1.0059 |
| MB 160-442120~1-A | MB | SB-124 | 0.000E+000 | 2.446E-003 | 0.0000 |
| MB 160-442120~1-A | MB | SB-125 | -2.440E-002 | 6.866E-002 | -0.3554 |
| MB 160-442120~1-A | MB | SC-46 | 3.218E-002 | 3.784E-002 | 0.8503 |
| MB 160-442120~1-A | MB | SN-113 | 2.292E-002 | 3.145E-002 | 0.7289 |
| MB 160-442120~1-A | MB | SN-126 | -8.506E-002 | 1.236E-001 | -0.6861 |
| MB 160-442120~1-A | MB | TA-182 | 3.492E-002 | 3.263E-002 | 1.0702 |
| MB 160-442120~1-A | MB | TC-99M | 8.082E-003 | 1.222E-002 | 0.6612 |
| MB 160-442120~1-A | MB | TH-227 | 9.868E-002 | 7.124E-002 | 1.3853 |
| MB 160-442120~1-A | MB | TH-229 | -1.062E-001 | 2.439E-001 | -0.4355 |
| MB 160-442120~1-A | MB | TH-234 | 3.187E-001 | 1.473E-001 | 2.1643 |
| MB 160-442120~1-A | MB | TL-208 | 2.143E-002 | 2.075E-002 | 1.0326 |
| MB 160-442120~1-A | MB | TL-210 | 0.000E+000 | 6.153E-003 | 0.0000 |
| MB 160-442120~1-A | MB | U-235 | 0.000E+000 | 6.083E-002 | 0.0000 |
| MB 160-442120~1-A | MB | Y-88 | -8.251E-003 | 3.405E-002 | -0.2423 |
| MB 160-442120~1-A | MB | ZN-65 | 0.000E+000 | 1.591E-002 | 0.0000 |
| MB 160-442120~1-A | MB | ZR-95 | -5.364E-002 | 4.860E-002 | -1.1050 |

eurofins
Environment Testing
TestAmerica

**Analysis Report for Gamma Spectroscopy**

**Batch:** 442823 **Operator:**

MOQ

| SampID | WRKNO | Aliquot | Sigma | Instrument | Detector | CountDateTime | CountDuration |
|---|---|---|---|---|---|---|---|
| LCS 160-442823-2- | LCS | 341.90g | 1.00 | GammaVision | GV09 | 9/16/19 12:14 | 30 |

| Analyte | CaseID | Activity | TotalUnc | CountUnc | MDA | MLCC | Act/MDA | |
|---|---|---|---|---|---|---|---|---|
| AC-228 | 11136 | 8.724E-001pCi/g | 2.591E-001 | 2.588E-001 | 7.430E-001 | 3.570E-001 | 0.91 | 0.2591 |
| AG-108M | 10982 | -1.190E-001pCi/g | 9.958E-002 | 9.939E-002 | 2.499E-001 | 1.223E-001 | -0.48 | 0.0996 |
| AG-110M | 10973 | 1.853E-001pCi/g | 9.375E-002 | 9.326E-002 | 2.066E-001 | 9.777E-002 | 0.90 | 0.0937 |
| AM-241 | 10818 | 9.548E+001pCi/g | 5.006E+000 | 7.231E-001 | 1.000E+000 | 4.956E-001 | 95.46 | 5.0076 |
| BA-133 | 10469 | -1.290E-001pCi/g | 1.142E-001 | 1.140E-001 | 3.776E-001 | 1.864E-001 | -0.34 | 0.1142 |
| BA-140 | 10463 | 1.555E-001pCi/g | 2.786E-001 | 2.784E-001 | 6.644E-001 | 3.207E-001 | 0.29 | 0.2786 |
| BE-7 | 10435 | -9.489E-001pCi/g | 9.176E-001 | 9.163E-001 | 3.134E+000 | 1.542E+000 | -0.30 | 0.9176 |
| BI-207 | 10195 | 2.594E-001pCi/g | 1.265E-001 | 1.258E-001 | 2.603E-001 | 1.238E-001 | 1.02 | 0.1265 |
| BI-210M | 10173 | 1.661E-001pCi/g | 1.132E-001 | 1.127E-001 | 3.306E-001 | 1.619E-001 | 0.50 | 0.1132 |
| BI-212 | 10150 | 2.393E-001pCi/g | 7.710E-001 | 7.709E-001 | 2.616E+000 | 1.261E+000 | 0.09 | 0.7710 |
| BI-214 | 10154 | 7.375E-001pCi/g | 1.497E-001 | 1.447E-001 | 3.057E-001 | 1.462E-001 | 2.41 | 0.1497 |
| CD-109 | 9254 | 0.000E+000pCi/g | 2.460E+000 | 2.460E+000 | 8.144E+000 | 4.041E+000 | 0.00 | 2.4597 |
| CD-113M | 17462 | 8.783E+002pCi/g | 7.899E+002 | 7.887E+002 | 2.626E+003 | 1.285E+003 | 0.26 | 789.9314 |
| CE-139 | 9241 | 1.721E-002pCi/g | 5.608E-002 | 5.606E-002 | 1.973E-001 | 9.206E-002 | 0.09 | 0.0561 |
| CE-141 | 9235 | 1.948E-001pCi/g | 1.449E-001 | 1.448E-001 | 4.799E-001 | 2.375E-001 | 0.22 | 0.1449 |
| CE-144 | 9221 | -4.470E-001pCi/g | 6.207E-001 | 6.203E-001 | 2.058E+000 | 1.017E+000 | -0.22 | 0.6207 |
| CF-249 | 9215 | 1.160E-001pCi/g | 1.282E-001 | 1.280E-001 | 4.248E-001 | 2.090E-001 | 0.27 | 0.1282 |
| CF-251 | 13690 | 5.286E-001pCi/g | 2.747E-001 | 2.708E-001 | 6.761E-001 | 3.304E-001 | 0.77 | 0.2747 |
| CO-56 | 8704 | -8.547E-002pCi/g | 1.448E-002 | 1.380E-002 | 2.127E-001 | 1.024E-001 | -0.40 | 0.0145 |
| CO-57 | 13694 | 2.886E-002pCi/g | 4.359E-002 | 4.363E-002 | 1.450E-001 | 7.119E-002 | 0.20 | 0.0436 |
| CO-58 | 8698 | -9.785E-002pCi/g | 7.729E-002 | 7.712E-002 | 2.558E-001 | 1.241E-001 | -0.38 | 0.0773 |
| CO-60 | 8692 | 1.880E+001pCi/g | 5.540E-001 | 1.547E-001 | 9.301E-002 | 4.064E-002 | 113.91 | 0.5540 |
| CR-51 | 8604 | 7.292E-001pCi/g | 1.114E+000 | 1.113E+000 | 3.580E+000 | 1.828E+000 | 0.20 | 1.1135 |
| CS-134 | 8553 | 7.654E-002pCi/g | 7.075E-002 | 7.064E-002 | 2.842E-001 | 1.277E-001 | 0.29 | 0.0708 |
| CS-136 | 8546 | 6.184E-002pCi/g | 7.324E-002 | 7.315E-002 | 1.602E-001 | 7.624E-002 | 0.39 | 0.0732 |
| CS-137 | 8539 | 2.673E+001pCi/g | 1.418E+000 | 2.785E-001 | 1.324E-001 | 6.236E-002 | 201.85 | 1.4182 |
| EU-152 | 7146 | 2.280E-001pCi/g | 1.711E-001 | 1.706E-001 | 5.106E-001 | 2.513E-001 | 0.44 | 0.1711 |
| EU-154 | 7138 | 2.733E-001pCi/g | 2.123E-001 | 2.119E-001 | 3.319E-001 | 1.629E-001 | 0.82 | 0.2123 |
| EU-155 | 7131 | -7.752E-004pCi/g | 8.424E-001 | 8.424E-001 | 8.424E-001 | 4.859E-001 | 0.00 | 0.8424 |
| FE-59 | 7073 | 1.249E-001pCi/g | 1.787E-001 | 1.786E-001 | 3.787E-001 | 1.908E-001 | 0.33 | 0.1787 |
| GA-68 | 18005 | 2.556E+000pCi/g | 3.616E+000 | 3.610E+000 | 7.614E+000 | 3.637E+000 | 0.47 | 3.6158 |
| GD-153 | 6624 | -1.813E-003pCi/g | 3.058E-001 | 3.058E-001 | 1.015E+000 | 5.038E-001 | 0.00 | 0.3058 |
| HF-181 | 6495 | -5.114E-002pCi/g | 3.197E-002 | 3.186E-002 | 4.147E-001 | 2.041E-001 | -0.12 | 0.0320 |
| HG-203 | 6468 | 0.000E+000pCi/g | 4.588E-002 | 4.586E-002 | 2.137E-001 | 1.047E-001 | 0.00 | 0.0459 |
| I-131 | 6380 | -2.089E-002pCi/g | 8.399E-002 | 8.398E-002 | 2.043E-001 | 9.955E-002 | -0.14 | 0.0840 |
| IR-192 | 6303 | 2.376E-002pCi/g | 2.199E-002 | 2.194E-002 | 4.211E-001 | 2.083E-001 | 0.06 | 0.0220 |
| K-40 | 6146 | 6.048E-001pCi/g | 4.192E-001 | 4.181E-001 | 9.648E-001 | 4.251E-001 | 0.63 | 0.4192 |
| KR-85 | 6111 | 1.569E+001pCi/g | 1.702E+001 | 1.700E+001 | 5.655E+001 | 2.765E+001 | 0.28 | 17.0214 |
| LA-140 | 6096 | 3.176E-002pCi/g | 2.687E-002 | 2.682E-002 | 1.433E-001 | 6.478E-002 | 0.22 | 0.0269 |
| MN-54 | 5382 | 6.473E-002pCi/g | 7.587E-002 | 7.575E-002 | 1.653E-001 | 7.874E-002 | 0.51 | 0.0759 |
| NA-22 | 5201 | 2.692E-002pCi/g | 3.216E-002 | 3.213E-002 | 1.111E-001 | 5.008E-002 | 0.24 | 0.0322 |
| NB-94 | 5160 | 5.878E-002pCi/g | 6.815E-002 | 6.808E-002 | 2.277E-001 | 1.103E-001 | 0.26 | 0.0682 |
| NB-95 | 5154 | -4.254E-002pCi/g | 6.365E-002 | 6.351E-002 | 2.136E-001 | 1.031E-001 | -0.20 | 0.0636 |
| ND-147 | 5063 | 6.142E-001pCi/g | 5.324E-001 | 5.312E-001 | 1.236E+000 | 5.956E-001 | 0.50 | 0.5324 |
| NP-237 | 4757 | 0.000E+000pCi/g | 7.137E-001 | 7.137E-001 | 2.363E+000 | 1.173E+000 | 0.00 | 0.7137 |
| NP-239 | 4751 | 2.218E-001pCi/g | 2.468E-001 | 2.465E-001 | 6.166E-001 | 4.034E-001 | 0.27 | 0.2468 |
| PA-231 | 4541 | 1.832E-007pCi/g | 3.612E+000 | 3.612E+000 | 1.203E+001 | 5.951E+000 | 0.00 | 3.6123 |
| PA-233 | 4535 | -2.668E-001pCi/g | 1.061E-001 | 1.058E-001 | 1.003E+000 | 4.961E-001 | -0.21 | 0.1061 |
| PA-234 | 4528 | 1.581E-001pCi/g | 1.386E-001 | 1.383E-001 | 1.273E+000 | 6.304E-001 | 0.12 | 0.1386 |

| | | | MOQ | | | | | |
|---|---|---|---|---|---|---|---|---|
| PA-234M | 19453 | 1.368E+001pCi/g | 1.117E+001 | 1.115E+001 | 3.699E+001 | 1.796E+001 | 0.37 | 11.1677 |
| PB-210 | 4457 | 7.468E+002pCi/g | 4.435E+001 | 6.598E+000 | 1.224E+001 | 6.065E+000 | 61.01 | 44.3456 |
| PB-212 | 4454 | 1.499E-001pCi/g | 1.416E-001 | 1.412E-001 | 4.680E-001 | 2.303E-001 | 0.31 | 0.1419 |
| PB-214 | 4446 | 3.139E-001pCi/g | 1.033E-001 | 1.020E-001 | 3.489E-001 | 1.689E-001 | 0.50 | 0.1033 |
| PM-144 | 19585 | -7.643E-002pCi/g | 6.127E-002 | 6.114E-002 | 2.031E-001 | 9.608E-002 | -0.38 | 0.0613 |
| PM-146 | 2464 | -1.680E-001pCi/g | 1.637E-001 | 1.635E-001 | 5.415E-001 | 2.669E-001 | -0.31 | 0.1637 |
| RA-226 | 1960 | -6.088E-001pCi/g | 1.720E+000 | 1.719E+000 | 4.352E+000 | 2.139E+000 | -0.14 | 1.7203 |
| RH-106 | 1882 | -4.486E-002pCi/g | 1.004E+000 | 1.004E+000 | 3.371E+000 | 1.654E+000 | 0.00 | 1.0040 |
| RU-103 | 1828 | -7.203E-002pCi/g | 8.998E-002 | 8.990E-002 | 2.081E-001 | 1.015E-001 | -0.34 | 0.0900 |
| SB-124 | 1764 | 9.042E-002pCi/g | 5.935E-002 | 5.926E-002 | 1.536E-001 | 6.235E-002 | 0.39 | 0.0594 |
| SB-125 | 1777 | 6.502E-002pCi/g | 8.885E-002 | 8.883E-002 | 8.829E-001 | 3.334E-001 | 0.10 | 0.0889 |
| SC-46 | 1739 | 9.829E-002pCi/g | 7.906E-002 | 7.890E-002 | 2.619E-001 | 1.268E-001 | 0.38 | 0.0791 |
| SN-113 | 1570 | 1.196E-001pCi/g | 1.325E-001 | 1.324E-001 | 4.393E-001 | 2.181E-001 | 0.27 | 0.1325 |
| SN-126 | 17459 | -1.363E+000pCi/g | 3.097E+000 | 3.097E+000 | 1.023E+001 | 5.098E+000 | -0.13 | 3.0975 |
| TA-182 | 1301 | 9.317E-002pCi/g | 1.172E-001 | 1.171E-001 | 4.831E-001 | 2.120E-001 | 0.20 | 0.1172 |
| TC-99M | 17412 | 9.948E-003pCi/g | 8.246E-002 | 8.246E-002 | 2.742E-001 | 1.356E-001 | 0.04 | 0.0825 |
| TH-227 | 1058 | 4.898E-001pCi/g | 8.725E-001 | 8.721E-001 | 2.114E+000 | 1.033E+000 | 0.19 | 0.8725 |
| TH-229 | 1046 | 2.328E-001pCi/g | 1.336E+000 | 1.336E+000 | 3.738E+000 | 1.587E+000 | 0.07 | 1.3360 |
| TH-234 | 1027 | 1.014E+000pCi/g | 1.182E+000 | 1.181E+000 | 3.911E+000 | 1.935E+000 | 0.26 | 1.1823 |
| TL-208 | 929 | 9.318E-002pCi/g | 9.328E-002 | 9.316E-002 | 2.088E-001 | 1.009E-001 | 0.46 | 0.0933 |
| TL-210 | 20861 | -8.981E-002pCi/g | 8.709E-002 | 8.697E-002 | 2.234E-001 | 1.079E-001 | -0.31 | 0.0871 |
| U-235 | 281 | 2.461E-001pCi/g | 6.522E-001 | 6.520E-001 | 2.163E+000 | 1.072E+000 | 0.11 | 0.6522 |
| Y-88 | 74 | 1.431E-002pCi/g | 3.545E-002 | 3.544E-002 | 7.999E-002 | 3.227E-002 | 0.18 | 0.0355 |
| ZN-65 | 31 | 2.116E-001pCi/g | 1.817E-001 | 1.814E-001 | 6.031E-001 | 2.918E-001 | 0.36 | 0.1817 |
| ZR-95 | 7 | 9.079E-002pCi/g | 6.198E-002 | 6.180E-002 | 3.173E-001 | 1.520E-001 | 0.29 | 0.0620 |

*Laboratory Control Sample Information*

| Sample ID | WRKNO | Analyte | Activity | StdAdded | Recovery | ZFactor |
|---|---|---|---|---|---|---|
| LCS 160-442823-2-A | LCS 160-442823-2-A | CS-137 | 2.673E+001 pCi/g | 2.750E+001 | 97.19% | -0.5172 |
| | | CO-60 | 1.090E+001 pCi/g | 1.115E+001 | 95.04% | -0.9417 |
| | | AM-241 | 9.548E+001 pCi/g | 9.662E+001 | 98.82% | -0.2149 |

*Sample Duplicate Information*

| Sample ID | Dup Sample ID | Analyte | Samp Activity | Dup Activity | RPD | RER | DER | Flag | ZFactor |
|---|---|---|---|---|---|---|---|---|---|

MQO

*Blanks Information*

| SampID | WRKNO | Analyte | Activity | UncTotal | ZFactor | |
|---|---|---|---|---|---|---|
| MB 160-442823-1-A | MB | AC-228 | -2.570E-001 | 1.221E-001 | -2.1868 | |
| MB 160-442823-1-A | MB | AG-108M | 8.076E-003 | 2.308E-002 | 0.3499 | |
| MB 160-442823-1-A | MB | AG-110M | 2.302E-002 | 2.088E-002 | 1.1024 | |
| MB 160-442823-1-A | MB | AM-241 | -9.497E-003 | 4.616E-002 | -0.2058 | |
| MB 160-442823-1-A | MB | BA-133 | 2.048E-002 | 2.342E-002 | 0.8744 | |
| MB 160-442823-1-A | MB | BA-140 | -5.370E-002 | 1.253E-001 | -0.4285 | |
| MB 160-442823-1-A | MB | BE-7 | 4.138E-001 | 1.266E-001 | 3.2697 | B |
| MB 160-442823-1-A | MB | BI-207 | -3.668E-003 | 2.589E-002 | -0.1417 | |
| MB 160-442823-1-A | MB | BI-210M | -1.420E-002 | 3.524E-002 | -0.4029 | |
| MB 160-442823-1-A | MB | BI-212 | -4.888E-002 | 4.215E-001 | -0.1160 | |
| MB 160-442823-1-A | MB | BI-214 | -3.981E-002 | 6.986E-002 | -0.5698 | |
| MB 160-442823-1-A | MB | CD-109 | 1.223E-001 | 5.078E-001 | 0.2408 | |
| MB 160-442823-1-A | MB | CD-113M | 2.431E+002 | 2.488E+002 | 0.9773 | |
| MB 160-442823-1-A | MB | CE-139 | 9.176E-003 | 1.152E-002 | 0.7962 | |
| MB 160-442823-1-A | MB | CE-141 | 1.703E-002 | 1.988E-002 | 0.8563 | |
| MB 160-442823-1-A | MB | CE-144 | 0.000E+000 | 3.266E-002 | 0.0000 | |
| MB 160-442823-1-A | MB | CF-249 | 1.966E-002 | 3.165E-002 | 0.6213 | |
| MB 160-442823-1-A | MB | CF-251 | 4.419E-002 | 7.716E-002 | 0.5727 | |
| MB 160-442823-1-A | MB | CO-56 | 4.158E-002 | 1.830E-002 | 2.2722 | |
| MB 160-442823-1-A | MB | CO-57 | 8.727E-003 | 1.124E-002 | 0.7767 | |
| MB 160-442823-1-A | MB | CO-58 | 2.064E-002 | 2.951E-002 | 0.6997 | |
| MB 160-442823-1-A | MB | CO-60 | -6.800E-004 | 1.850E-003 | -0.3677 | |
| MB 160-442823-1-A | MB | CR-51 | -5.597E-002 | 2.692E-001 | -0.2079 | |
| MB 160-442823-1-A | MB | CS-134 | 5.739E-002 | 2.362E-002 | 2.4301 | |
| MB 160-442823-1-A | MB | CS-136 | 4.922E-003 | 1.775E-002 | 0.2773 | |
| MB 160-442823-1-A | MB | CS-137 | -1.613E-002 | 3.318E-002 | -0.4862 | |
| MB 160-442823-1-A | MB | EU-152 | 2.338E-001 | 7.497E-002 | 3.1193 | B |
| MB 160-442823-1-A | MB | EU-154 | -2.806E-002 | 3.302E-002 | -0.8499 | |
| MB 160-442823-1-A | MB | EU-155 | 2.834E-002 | 4.016E-002 | 0.7056 | |
| MB 160-442823-1-A | MB | FE-59 | 7.038E-002 | 3.167E-002 | 2.2222 | |
| MB 160-442823-1-A | MB | GA-68 | 2.782E-001 | 1.396E+000 | 0.1993 | |
| MB 160-442823-1-A | MB | GD-153 | -3.444E-002 | 4.289E-002 | -0.8028 | |
| MB 160-442823-1-A | MB | HF-181 | -9.881E-003 | 1.492E-002 | -0.6621 | |
| MB 160-442823-1-A | MB | HG-203 | 1.554E-003 | 1.954E-002 | 0.0796 | |
| MB 160-442823-1-A | MB | I-131 | -3.610E-002 | 4.098E-002 | -0.8810 | |
| MB 160-442823-1-A | MB | IR-192 | -4.305E-003 | 2.237E-002 | -0.1924 | |
| MB 160-442823-1-A | MB | K-40 | -3.196E-001 | 3.711E-001 | -0.8614 | |
| MB 160-442823-1-A | MB | KR-85 | -3.262E-001 | 9.021E+000 | -0.0362 | |
| MB 160-442823-1-A | MB | LA-140 | 5.449E-002 | 2.532E-002 | 2.1521 | |
| MB 160-442823-1-A | MB | MN-54 | 2.105E-002 | 3.117E-002 | 0.6753 | |
| MB 160-442823-1-A | MB | NA-22 | 4.506E-002 | 2.028E-002 | 2.2222 | |
| MB 160-442823-1-A | MB | NB-94 | -3.259E-002 | 3.136E-002 | -1.0392 | |
| MB 160-442823-1-A | MB | NB-95 | 3.923E-003 | 2.587E-002 | 0.1516 | |
| MB 160-442823-1-A | MB | ND-147 | -9.977E-002 | 2.329E-001 | -0.4284 | |
| MB 160-442823-1-A | MB | NP-237 | 5.696E-002 | 1.302E-001 | 0.4375 | |
| MB 160-442823-1-A | MB | NP-239 | 1.829E-002 | 6.185E-002 | 0.2957 | |
| MB 160-442823-1-A | MB | PA-231 | 5.165E-001 | 7.402E-001 | 0.6977 | |
| MB 160-442823-1-A | MB | PA-233 | 5.654E-002 | 9.581E-002 | 0.5902 | |
| MB 160-442823-1-A | MB | PA-234 | 5.529E-002 | 7.081E-002 | 0.7808 | |
| MB 160-442823-1-A | MB | PA-234M | -3.788E-001 | 4.634E+000 | -0.0817 | |
| MB 160-442823-1-A | MB | PB-210 | -5.436E-001 | 5.026E-001 | -1.0817 | |

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| | | | | | |
|---|---|---|---|---|---|
| MB 160-442823~1-A | MB | PB-212 | 2.182E-002 | 5.574E-002 | 0.3915 |
| MB 160-442823~1-A | MB | PB-214 | -1.606E-002 | 2.120E-002 | -0.7576 |
| MB 160-442823~1-A | MB | PM-144 | 2.009E-002 | 2.556E-002 | 0.7861 |
| MB 160-442823~1-A | MB | PM-146 | 0.000E+000 | 1.429E-002 | 0.0000 |
| MB 160-442823~1-A | MB | RA-226 | -8.911E-001 | 5.769E-001 | -1.5448 |
| MB 160-442823~1-A | MB | RH-106 | -3.984E-001 | 5.691E-001 | -0.7001 |
| MB 160-442823~1-A | MB | RU-103 | -1.800E-002 | 3.639E-002 | -0.4947 |
| MB 160-442823~1-A | MB | SB-124 | -1.501E-002 | 3.062E-002 | -0.4903 |
| MB 160-442823~1-A | MB | SB-125 | 7.401E-002 | 1.104E-001 | 0.6704 |
| MB 160-442823~1-A | MB | SC-46 | 0.000E+000 | 6.658E-003 | 0.0000 |
| MB 160-442823~1-A | MB | SN-113 | 2.050E-002 | 3.589E-002 | 0.5713 |
| MB 160-442823~1-A | MB | SN-126 | -1.522E-001 | 2.089E-001 | -0.7283 |
| MB 160-442823~1-A | MB | TA-182 | -2.146E-001 | 2.532E-001 | -0.8474 |
| MB 160-442823~1-A | MB | TC-99M | 1.200E-002 | 8.068E-003 | 1.4873 |
| MB 160-442823~1-A | MB | TH-227 | 5.859E-002 | 4.199E-002 | 1.3951 |
| MB 160-442823~1-A | MB | TH-229 | 2.743E-001 | 2.564E-001 | 1.0741 |
| MB 160-442823~1-A | MB | TH-234 | 4.142E-001 | 2.246E-001 | 1.8439 |
| MB 160-442823~1-A | MB | TL-208 | 1.547E-002 | 2.050E-002 | 0.7547 |
| MB 160-442823~1-A | MB | TL-210 | 2.520E-002 | 2.582E-002 | 0.9760 |
| MB 160-442823~1-A | MB | U-235 | -7.543E-003 | 1.229E-001 | -0.0613 |
| MB 160-442823~1-A | MB | Y-88 | -2.074E-003 | 4.226E-002 | -0.0491 |
| MB 160-442823~1-A | MB | ZN-65 | 0.000E+000 | 3.183E-002 | 0.0000 |
| MB 160-442823~1-A | MB | ZR-95 | 0.000E+000 | 1.068E-002 | 0.0000 |

# Reagent

# Tuna Can_00003

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION
## Standard Radionuclide Source

90099

1.0 Liter Sand in 1 Liter Wide Mouth HDPE Silgan Jar

**Customer:** TestAmerica St. Louis / Earth City, MO
**P.O. No.:** 2454150, Item 1
**Reference Date:** 01-Jan-2012 12:00 PM EST **Grams of Master Source:** 0.017180

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Additional radionuclides were added gravimetrically from solutions calibrated by gamma-ray spectrometry, ionization chamber, or liquid scintillation counting. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty*, % Type $u_A$ | $u_B$ | U | Calibration Method* |
|---|---|---|---|---|---|---|---|---|
| Pb-210 | 46.5 | 8.109E+03 | ——— | 3.094E+03 | 0.1 | 2.1 | 4.1 | 4π LS |
| Am-241 | 59.5 | 1.580E+05 | ——— | 2.037E+03 | 0.1 | 1.7 | 3.5 | 4π LS |
| Cd-109 | 88.0 | 4.626E+02 | 1.677E+05 | 2.881E+03 | 0.5 | 2.3 | 4.7 | HPGe |
| Co-57 | 122.1 | 2.718E+02 | 8.795E+04 | 1.511E+03 | 0.4 | 2.0 | 4.1 | HPGe |
| Ce-139 | 165.9 | 1.376E+02 | 1.245E+05 | 2.139E+03 | 0.4 | 1.9 | 3.9 | HPGe |
| Hg-203 | 279.2 | 4.661E+01 | 2.707E+05 | 4.651E+03 | 0.3 | 1.9 | 3.8 | HPGe |
| Sn-113 | 391.7 | 1.151E+02 | 1.755E+05 | 3.015E+03 | 0.4 | 1.9 | 3.9 | HPGe |
| Cs-137 | 661.7 | 1.098E+04 | 1.128E+05 | 1.938E+03 | 0.7 | 1.9 | 4.0 | HPGe |
| Y-88 | 898.0 | 1.066E+02 | 4.228E+05 | 7.264E+03 | 0.5 | 1.9 | 3.9 | HPGe |
| Co-60 | 1173.2 | 1.925E+03 | 2.084E+05 | 3.580E+03 | 0.6 | 1.9 | 4.0 | HPGe |
| Co-60 | 1332.5 | 1.925E+03 | 2.084E+05 | 3.581E+03 | 0.7 | 1.9 | 4.0 | HPGe |
| Y-88 | 1836.1 | 1.066E+02 | 4.476E+05 | 7.690E+03 | 0.7 | 1.9 | 4.0 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

**Comments:**
1550 grams of sand. Homogenous down to 10 grams aliquot.
This standard will expire one year after the reference date.

Source Prepared by: _____
Z. Dimitrova, Radiochemist

QA Approved: _____ Date: 30 JAN 12
J.D. McCorvey, Counting Room Manager

# Reagent

# Tuna Can_00006

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

# CERTIFICATE OF CALIBRATION

## Standard Radionuclide Source

## 83814-334

1.0 Liter Sand in 1 Liter Wide Mouth HDPE Silgan Jar

**Customer:** Test America St. Louis
**P.O. No.:** 2395112, Item 1
**Reference Date:** 01-Jan-2011 12:00 PM EST **Grams of Master Source:** 0.016927

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

| Nuclide | Gamma-Ray Energy (keV) | Half-Life, Days | Master Source* γps/gram | This Source γps | Uncertainty, % Type $u_A$ | $u_B$ | U | Calibration Method |
|---|---|---|---|---|---|---|---|---|
| Pb-210 | 46.5 | 8.120E+03 | ——— | 3.021E+03 | 0.1 | 2.1 | 4.1 | 4π LS |
| Am-241 | 59.5 | 1.580E+05 | ——— | 2.090E+03 | 0.1 | 1.7 | 3.5 | 4π LS |
| Cd-109 | 88.0 | 4.626E+02 | 1.697E+05 | 2.873E+03 | 0.8 | 2.3 | 4.9 | HPGe |
| Co-57 | 122.1 | 2.718E+02 | 8.711E+04 | 1.475E+03 | 0.5 | 2.0 | 4.1 | HPGe |
| Ce-139 | 165.9 | 1.376E+02 | 1.247E+05 | 2.111E+03 | 0.5 | 1.9 | 3.9 | HPGe |
| Hg-203 | 279.2 | 4.661E+01 | 2.753E+05 | 4.660E+03 | 0.4 | 1.9 | 3.9 | HPGe |
| Sn-113 | 391.7 | 1.151E+02 | 1.769E+05 | 2.994E+03 | 0.5 | 1.9 | 3.9 | HPGe |
| Cs-137 | 661.7 | 1.098E+04 | 1.109E+05 | 1.877E+03 | 0.7 | 1.9 | 4.0 | HPGe |
| Y-88 | 898.0 | 1.066E+02 | 4.224E+05 | 7.150E+03 | 0.5 | 1.9 | 3.9 | HPGe |
| Co-60 | 1173.2 | 1.925E+03 | 2.142E+05 | 3.626E+03 | 0.6 | 1.9 | 4.0 | HPGe |
| Co-60 | 1332.5 | 1.925E+03 | 2.143E+05 | 3.627E+03 | 0.6 | 1.9 | 4.0 | HPGe |
| Y-88 | 1836.1 | 1.066E+02 | 4.472E+05 | 7.570E+03 | 0.5 | 1.9 | 3.9 | HPGe |

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

**Calibration Methods:** 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS FOUNDED 1954

**Comments:**
1550 grams of sand. Homogeneous down to 10 gram aliquot.
This standard will expire one year after the reference date.

Source Prepared by: _____
Z. Dimitrova, Radiochemist

QA Approved: _____ Date: 2/11/11
J. D. McCorvey, QA Manager Alternate

# ALPHA SPECTROSCOPY

# Method A-01-R Po

## Isotopic Polonium (Alpha Spectrometry) by Method A-01-R

# Prep Batch: 448621

## Preparation, Digestion & Copper Plating

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 448621

Lab Id: MB 160-448621/1-A | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: | Detector: AV243 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | MB Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.03012 | 0.0318 | 0.0319 | U | pCi/g | 1.00 | 0.0512 | 26 | 14 | | 1 | 0.26758 | 1 | 1 | 450755 |

| Tracer | MB Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.368 | 0.154 | 0.322 | | pCi/g | 0.00530 | 4.82 | 69.9 | 30 - 110 |

Lab Id: LCS 160-448621/2-A | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: | Detector: AV241 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | LCS Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 8.187 | 0.293 | 0.747 | | pCi/g | 1.00 | 0.0399 | 3147 | 7 | | 1 | 0.27373 | 1 | 1 | 450753 |

| Tracer | LCS Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.170 | 0.148 | 0.305 | | pCi/g | 0.0166 | 4.82 | 65.7 | 30 - 110 |

Lab Id: 160-36160-1 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B01-S001 | Detector: AV234 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.643 | 0.104 | 0.117 | | pCi/g | 1.00 | 0.0666 | 181 | 10 | | 1 | 0.22693 | 1 | 1 | 450746 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.63 | 0.149 | 0.267 | | pCi/g | 0.0352 | 4.80 | 54.8 | 30 - 110 |

Lab Id: 160-36160-1 DU | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B01-S001 | Detector: AV233 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | DU Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.5417 | 0.103 | 0.113 | | pCi/g | 1.00 | 0.0774 | 140 | 11 | | 1 | 0.24030 | 1 | 1 | 450745 |

| Tracer | DU Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.216 | 0.132 | 0.228 | | pCi/g | 0.0241 | 4.79 | 46.2 | 30 - 110 |

Lab Id: 160-36160-2 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B04-S001 | Detector: AV232 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.499 | 0.0808 | 0.0911 | | pCi/g | 1.00 | 0.0438 | 170 | 6 | | 1 | 0.26554 | 1 | 1 | 450744 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.77 | 0.141 | 0.272 | | pCi/g | 0.0327 | 4.80 | 57.8 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 448621

Lab Id: 160-36160-3 Analyzed: 11/16/19 13:38 Sigma: 2 Decay Corrected: No Ts: 960
Client ID: F-SU3-B05-S001 Detector: AV230 Dil Fac: 1 Yield Truncated: No Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.547 | 0.0867 | 0.0981 | | pCi/g | 1.00 | 0.0595 | 195 | 13 | | 1 | 0.27444 | 1 | 1 | 450742 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.71 | 0.137 | 0.265 | | pCi/g | 0.0290 | 4.79 | 56.5 | 30 - 110 |

Lab Id: 160-36160-4 Analyzed: 11/16/19 13:38 Sigma: 2 Decay Corrected: No Ts: 960
Client ID: F-SU3-B07-S001 Detector: AV229 Dil Fac: 1 Yield Truncated: No Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.386 | 0.0783 | 0.0847 | | pCi/g | 1.00 | 0.0614 | 127 | 11 | | 1 | 0.27929 | 1 | 1 | 450741 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.41 | 0.128 | 0.239 | | pCi/g | 0.0207 | 4.80 | 50.2 | 30 - 110 |

Lab Id: 160-36160-5 Analyzed: 11/16/19 13:38 Sigma: 2 Decay Corrected: No Ts: 960
Client ID: F-SU3-B09-S001 Detector: AV228 Dil Fac: 1 Yield Truncated: No Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.461 | 0.0782 | 0.0873 | | pCi/g | 1.00 | 0.0551 | 172 | 12 | | 1 | 0.27606 | 1 | 1 | 450740 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.81 | 0.139 | 0.274 | | pCi/g | 0.0228 | 4.79 | 58.6 | 30 - 110 |

Lab Id: 160-36160-6 Analyzed: 11/16/19 13:38 Sigma: 2 Decay Corrected: No Ts: 960
Client ID: F-SU3-B11-S001 Detector: AV227 Dil Fac: 1 Yield Truncated: No Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.508 | 0.0802 | 0.0909 | | pCi/g | 1.00 | 0.0549 | 196 | 13 | | 1 | 0.27418 | 1 | 1 | 450739 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.95 | 0.143 | 0.286 | | pCi/g | 0.0132 | 4.80 | 61.5 | 30 - 110 |

Lab Id: 160-36160-7 Analyzed: 11/16/19 13:38 Sigma: 2 Decay Corrected: No Ts: 960
Client ID: F-SU3-B12-S001 Detector: AV225 Dil Fac: 1 Yield Truncated: No Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.487 | 0.0876 | 0.0967 | | pCi/g | 1.00 | 0.0701 | 166 | 16 | | 1 | 0.27563 | 1 | 1 | 450737 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.48 | 0.130 | 0.246 | | pCi/g | 0.0209 | 4.78 | 52.0 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 448621

Lab Id: 160-36160-8 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B14-S001 | Detector: AV223 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.699 | 0.161 | 0.171 | | pCi/g | 1.00 | 0.127 | 97 | 8 | | 1 | 0.22420 | 1 | 1 | 450735 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 1.26 | 0.104 | 0.148 | Q | pCi/g | 0.0258 | 4.78 | 26.4 | 30 - 110 |

Lab Id: 160-36160-9 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B15-S001 | Detector: AV224 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.488 | 0.0848 | 0.0942 | | pCi/g | 1.00 | 0.0609 | 165 | 12 | | 1 | 0.23506 | 1 | 1 | 450736 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.00 | 0.155 | 0.296 | | pCi/g | 0.0192 | 4.81 | 62.5 | 30 - 110 |

Lab Id: 160-36160-10 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B23-S001 | Detector: AV221 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.378 | 0.0883 | 0.0938 | | pCi/g | 1.00 | 0.0860 | 118 | 18 | | 1 | 0.22537 | 1 | 1 | 450733 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.63 | 0.149 | 0.266 | | pCi/g | 0.0320 | 4.80 | 54.8 | 30 - 110 |

Lab Id: 160-36160-11 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B29-S001 | Detector: AV216 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.371 | 0.0715 | 0.0780 | | pCi/g | 1.00 | 0.0554 | 140 | 12 | | 1 | 0.25340 | 1 | 1 | 450728 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 3.04 | 0.150 | 0.296 | | pCi/g | 0.0205 | 4.79 | 63.4 | 30 - 110 |

Lab Id: 160-36160-12 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU3-B30-S001 | Detector: AV215 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.415 | 0.0953 | 0.102 | | pCi/g | 1.00 | 0.0835 | 107 | 12 | | 1 | 0.26804 | 1 | 1 | 450727 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 1.91 | 0.116 | 0.198 | | pCi/g | 0.0252 | 4.79 | 39.8 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 448621

Lab Id: 160-36160-13 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU4-B04-S001 | Detector: AV214 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.610 | 0.0852 | 0.0994 | | pCi/g | 1.00 | 0.0428 | 225 | 7 | | 1 | 0.27898 | 1 | 1 | 450726 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 2.90 | 0.140 | 0.281 | | pCi/g | 0.0162 | 4.82 | 60.1 | 30 - 110 |

Lab Id: 160-36160-14 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU5-B05-S001 | Detector: AV218 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.639 | 0.123 | 0.135 | | pCi/g | 1.00 | 0.0980 | 142 | 13 | | 1 | 0.24354 | 1 | 1 | 450730 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 1.86 | 0.121 | 0.197 | | pCi/g | 0.0296 | 4.80 | 38.7 | 30 - 110 |

Lab Id: 160-36160-15 | Analyzed: 11/16/19 13:38 | Sigma: 2 | Decay Corrected: No | Ts: 960
Client ID: F-SU5-B10-S001 | Detector: AV217 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | MDC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Polonium-210 | 0.730 | 0.144 | 0.156 | | pCi/g | 1.00 | 0.0873 | 117 | 5 | | 1 | 0.26148 | 1 | 1 | 450729 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | MDC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Polonium-209 | 1.32 | 0.0983 | 0.148 | Q | pCi/g | 0.0242 | 4.81 | 27.5 | 30 - 110 |

## Quality Control Summary

| Method Blank ID: | Analyte | Parent Result | Spike Added | MB Result | Qualifier | Unit | % Rec | % Rec Limits | RPD | RER | DER | RER Limit | Z Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MB 160-448621/1-A | Polonium-210 | | | 0.03012 | U | pCi/g | | | | | | | 1.8914 |
| **Lab Control Sample ID:** | **Analyte** | **Parent Result** | **Spike Added** | **LCS Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| LCS 160-448621/2-A | Polonium-210 | | 8.44 | 8.187 | | pCi/g | 97 | 75 - 113 | | | | | -.6476 |
| **Duplicate ID:** | **Analyte** | **Parent Result** | **Spike Added** | **DU Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| 160-36160-1 | Polonium-210 | 0.643 | | 0.5417 | | pCi/g | | | 17 | 0.44 | 1.24 | 1 | 1.2448 |

# Alpha Spectroscopy Analysis Detail Report
# Prep Batch: 448621

Glossary:

- Ts = Count Duration, Sample
- Tb = Count Duration, Background
- Cs = Total Counts, Sample
- Cb = Total Counts, Background
- X Talk = Crosstalk
- Decay = Decay Factor
- Eff = Efficiency
- I = Ingrowth Factor
- A = Abundance

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-36160-2

SDG No.:

Batch Number: 448621  Batch Start Date: 11/03/19 13:15  Batch Analyst: Geer, Matthew L

Batch Method: Digest/Cu Plate  Batch End Date: 11/12/19 17:38

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | Pb-210 00025 | Po-209 00008 | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 160-448621/1 | | Digest/Cu Plate, A-01-R | | 1 g | | 0.1 mL | | | |
| LCS 160-448621/2 | | Digest/Cu Plate, A-01-R | | 1 g | 0.25 mL | 0.1 mL | | | |
| 160-36160-A-1-A | F-SU3-B01-S001 | Digest/Cu Plate, A-01-R | T | 1.0038 g | | 0.1 mL | | | |
| 160-36160-A-1-A DU | F-SU3-B01-S001 | Digest/Cu Plate, A-01-R | T | 1.0059 g | | 0.1 mL | | | |
| 160-36160-A-2-A | F-SU3-B04-S001 | Digest/Cu Plate, A-01-R | T | 1.0045 g | | 0.1 mL | | | |
| 160-36160-A-3-A | F-SU3-B05-S001 | Digest/Cu Plate, A-01-R | T | 1.0067 g | | 0.1 mL | | | |
| 160-36160-A-4-A | F-SU3-B07-S001 | Digest/Cu Plate, A-01-R | T | 1.0052 g | | 0.1 mL | | | |
| 160-36160-A-5-A | F-SU3-B09-S001 | Digest/Cu Plate, A-01-R | T | 1.0064 g | | 0.1 mL | | | |
| 160-36160-A-6-A | F-SU3-B11-S001 | Digest/Cu Plate, A-01-R | T | 1.0035 g | | 0.1 mL | | | |
| 160-36160-A-7-A | F-SU3-B12-S001 | Digest/Cu Plate, A-01-R | T | 1.0090 g | | 0.1 mL | | | |
| 160-36160-A-8-A | F-SU3-B14-S001 | Digest/Cu Plate, A-01-R | T | 1.0077 g | | 0.1 mL | | | |
| 160-36160-A-9-A | F-SU3-B15-S001 | Digest/Cu Plate, A-01-R | T | 1.0029 g | | 0.1 mL | | | |
| 160-36160-A-10-A | F-SU3-B23-S001 | Digest/Cu Plate, A-01-R | T | 1.0045 g | | 0.1 mL | | | |
| 160-36160-A-11-A | F-SU3-B29-S001 | Digest/Cu Plate, A-01-R | T | 1.0065 g | | 0.1 mL | | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-36160-2

SDG No.:

Batch Number: 448621  Batch Start Date: 11/03/19 13:15  Batch Analyst: Geer, Matthew L

Batch Method: Digest/Cu Plate  Batch End Date: 11/12/19 17:38

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | Pb-210 00025 | Po-209 00008 | | | |
|---|---|---|---|---|---|---|---|---|---|
| 160-36160-A-12-A | F-SU3-B30-S001 | Digest/Cu Plate, A-01-R | T | 1.0066 g | | 0.1 mL | | | |
| 160-36160-A-13-A | F-SU4-B04-S001 | Digest/Cu Plate, A-01-R | T | 1.0001 g | | 0.1 mL | | | |
| 160-36160-A-14-A | F-SU5-B05-S001 | Digest/Cu Plate, A-01-R | T | 1.0045 g | | 0.1 mL | | | |
| 160-36160-A-15-A | F-SU5-B10-S001 | Digest/Cu Plate, A-01-R | T | 1.0025 g | | 0.1 mL | | | |

| Batch Notes | |
|---|---|
| Balance ID | 1123433897 |
| Pipette ID | RAD125, RAD116 |
| Analyst ID - Reagent Drop Witness | MMO per HET |
| Analyst ID - Reagent Drop | MLG per HET |
| SOP Number | ST-RC-0210 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:14:39PM 11/17/2019

## Sample

Sample Name: MB 160-448621/1-A Type: Sample
Spectrum #1 Analysis #1
: MB 160-448621/1-A
Sample Collection Date: 11/12/2019 5:43:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246209
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

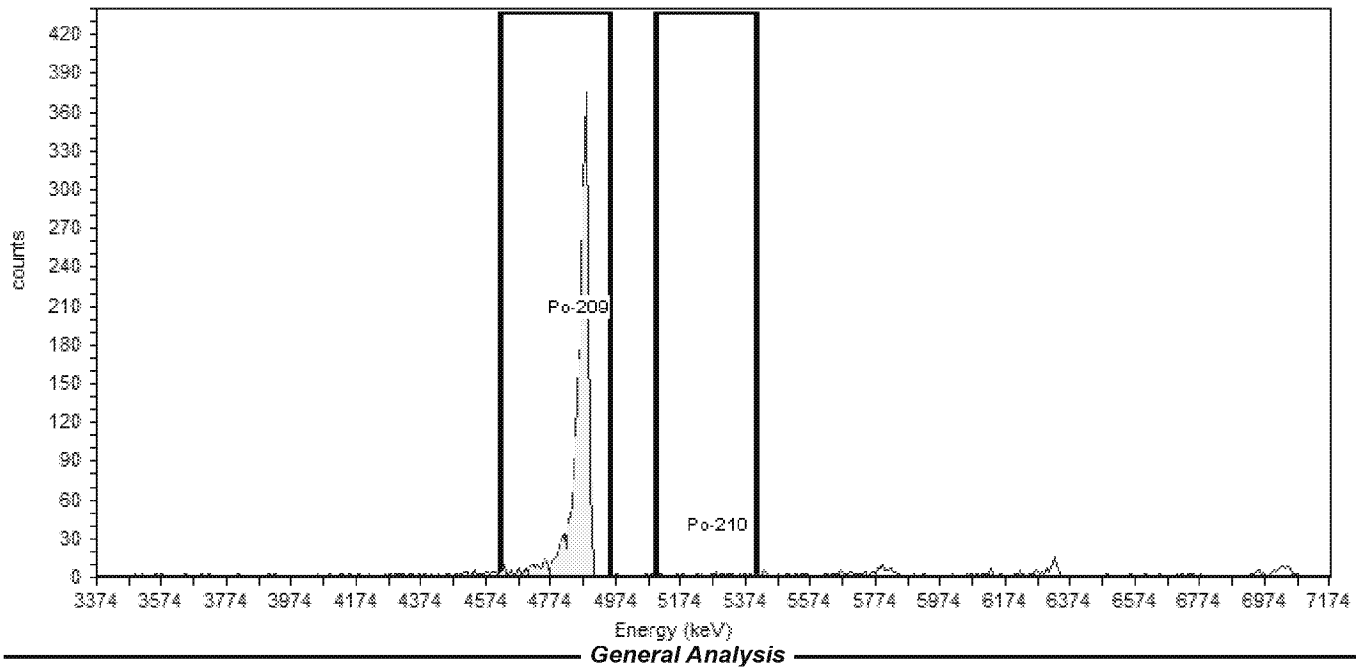
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 69.86%

## Acquisition

Detector: AV243 SN: 51-005P6
Acquisition Start Date: 11/16/2019 1:38:15PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:27PM
Bkgd Info: Sample: ICB;AV243; Det: AV243; Spectrum #1; 11/9/2019 2:31:27 PM

Energy Calibration: IC-1370622;AV243-11152018
Efficiency Calibration:IC-1370622;AV243-11152018
Calibration Date: 11/15/2018 10:58:43PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.76% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:23PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.9 | 99.2 | 1905 | 0.0000 | 1905.00 | 3.391E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 17.6 | 100.0 | 26 | 14.0000 | 12.00 | 3.012E-002 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:14:02PM 11/17/2019

## Sample

Sample Name: LCS 160-448621/2-A Type: Sample
Spectrum #1 Analysis #1
: LCS 160-448621/2-A
Sample Collection Date: 11/12/2019 5:43:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246210
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

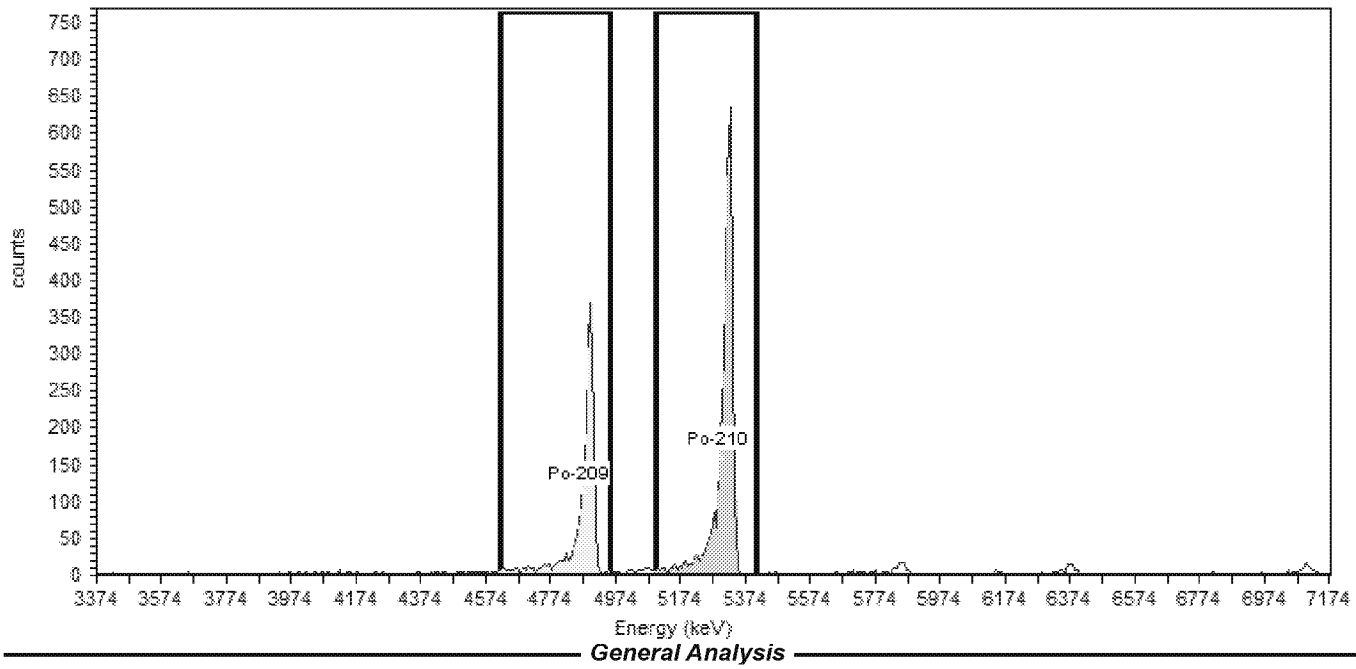
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 65.75%

## Acquisition

Detector: AV241 SN: 52-059DD3
Acquisition Start Date: 11/16/2019 1:38:15PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV241; Det: AV241; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-1368447;AV241-11152018
Efficiency Calibration:IC-1368447;AV241-11152018
Calibration Date: 11/15/2018 10:58:36PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.37% +/- 0.22% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.7 | 99.2 | 1836 | 2.0000 | 1834.00 | 3.192E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.5 | 100.0 | 3147 | 7.0000 | 3140.00 | 3.187E+000 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:08:45PM 11/17/2019

## Sample

Sample Name: 160-36160-A-1-F Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-1-F
Sample Collection Date: 10/24/2019 11:50:00AM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246206
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

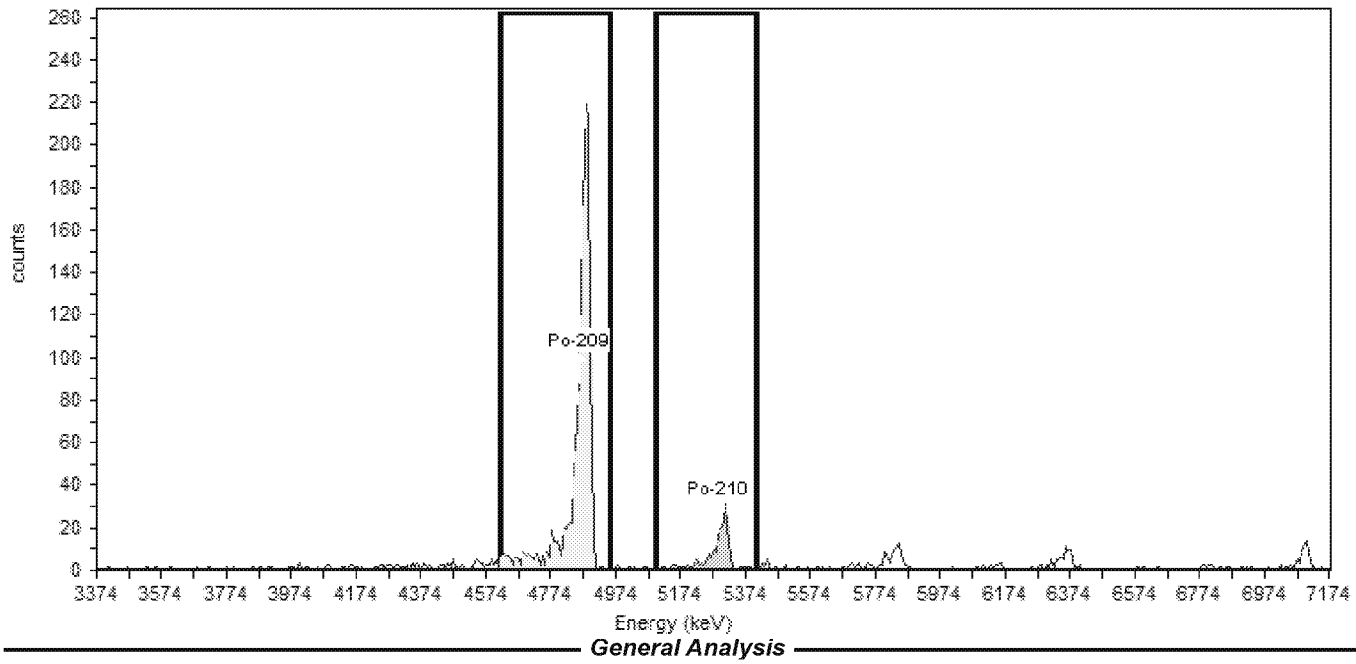
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 54.79%

## Acquisition

Detector: AV234 SN: 51-005P2
Acquisition Start Date: 11/16/2019 1:38:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV234; Det: AV234; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-9520;AV234-11152018
Efficiency Calibration:IC-9520;AV234-11152018
Calibration Date: 11/15/2018 6:58:26PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.69% +/- 0.33% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.8 | 99.2 | 1276 | 9.0000 | 1267.00 | 2.649E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 48.7 | 100.0 | 181 | 10.0000 | 171.00 | 6.429E-001 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:09:20PM 11/17/2019

## Sample

Sample Name: 160-36160-A-1-G DU Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-1-G DU
Sample Collection Date: 10/24/2019 11:50:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246204
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

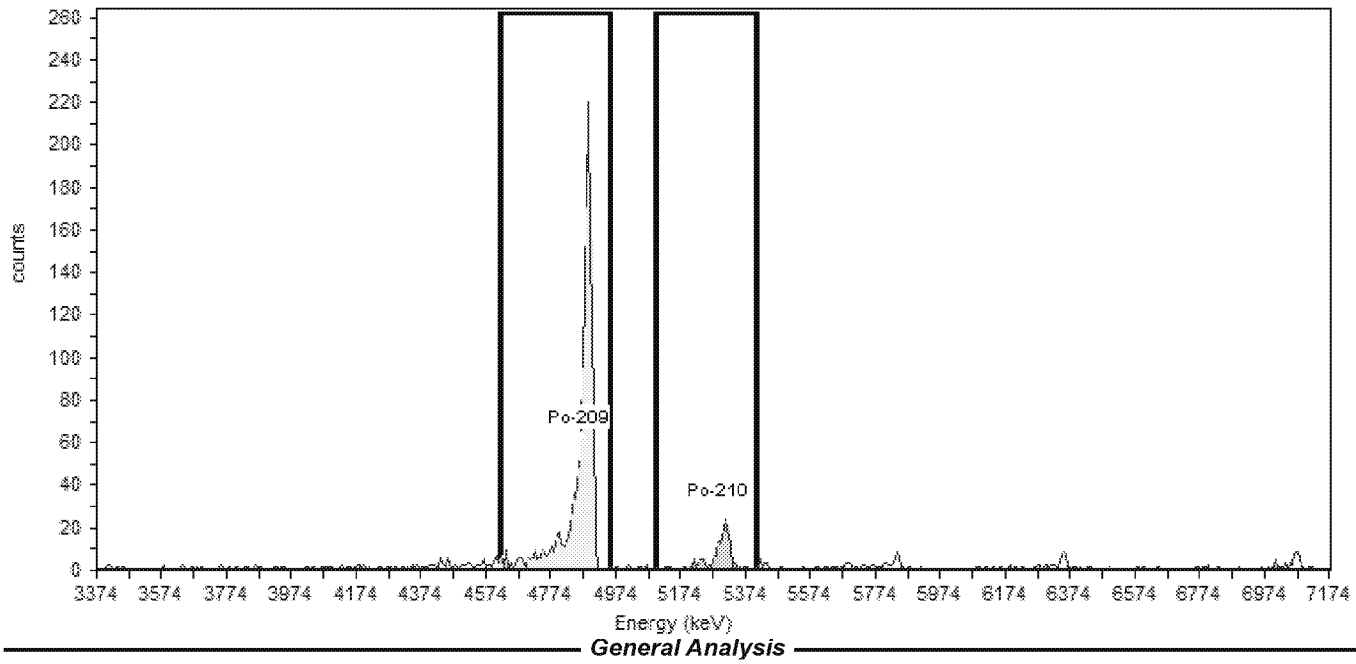
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 46.22%

## Acquisition

Detector: AV233 SN: 51-005Q7
Acquisition Start Date: 11/16/2019 1:38:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV233; Det: AV233; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-8877;AV233-11152018
Efficiency Calibration:IC-8877;AV233-11152018
Calibration Date: 11/15/2018 6:58:23PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.03% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.4 | 99.2 | 1136 | 4.0000 | 1132.00 | 2.231E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 48.6 | 100.0 | 140 | 11.0000 | 129.00 | 5.417E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:09:55PM 11/17/2019

## Sample

Sample Name: 160-36160-A-2-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-2-D
Sample Collection Date: 10/24/2019 10:41:00AM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246202
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

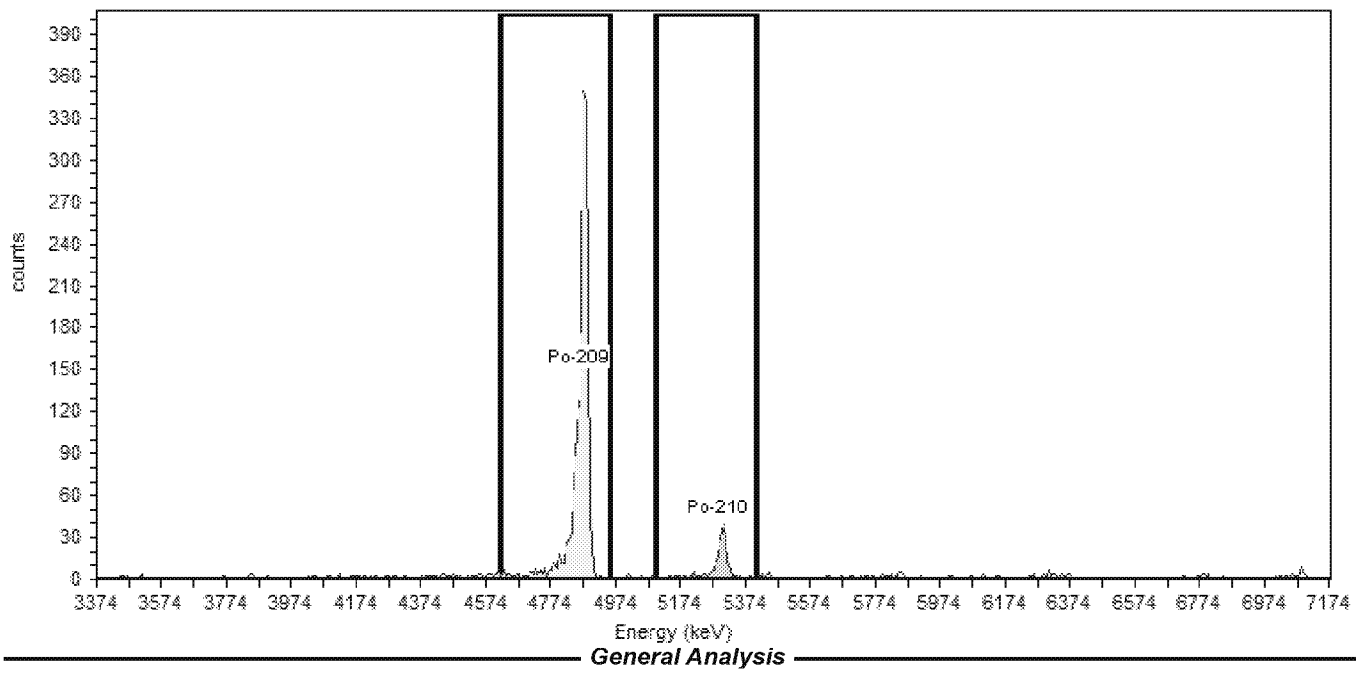
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 57.76%

## Acquisition

Detector: AV232 SN: 46-033p2
Acquisition Start Date: 11/16/2019 1:38:14PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV232; Det: AV232; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-8874;AV232-11152018a
Efficiency Calibration:IC-8874;AV232-11152018a
Calibration Date: 11/15/2018 10:59:14PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$
Efficiency: 26.55% +/- 0.38% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.3 | 99.2 | 1574 | 11.0000 | 1563.00 | 2.791E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.6 | 100.0 | 170 | 6.0000 | 164.00 | 4.995E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:10:30PM 11/17/2019

## Sample

Sample Name: 160-36160-A-3-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-3-D
Sample Collection Date: 10/24/2019 10:08:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246203
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

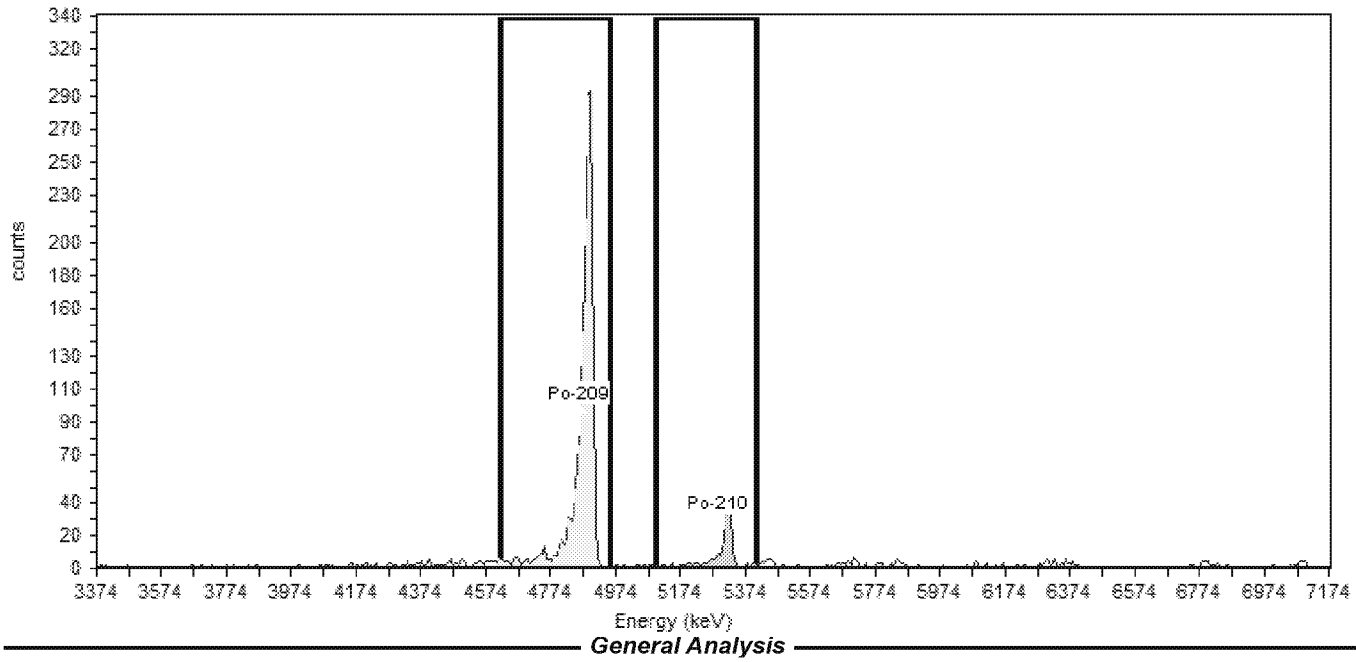
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 56.49%

## Acquisition

Detector: AV230 SN: 49-045J5
Acquisition Start Date: 11/16/2019 1:38:13PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV230; Det: AV230; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-1370620;AV230-11152018
Efficiency Calibration:IC-1370620;AV230-11152018
Calibration Date: 11/15/2018 6:58:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.44% +/- 0.25% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.9 | 99.2 | 1589 | 9.0000 | 1580.00 | 2.724E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.4 | 100.0 | 195 | 13.0000 | 182.00 | 5.471E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:11:05PM 11/17/2019

## Sample

Sample Name: 160-36160-A-4-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-4-D
Sample Collection Date: 10/24/2019 9:40:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246201
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

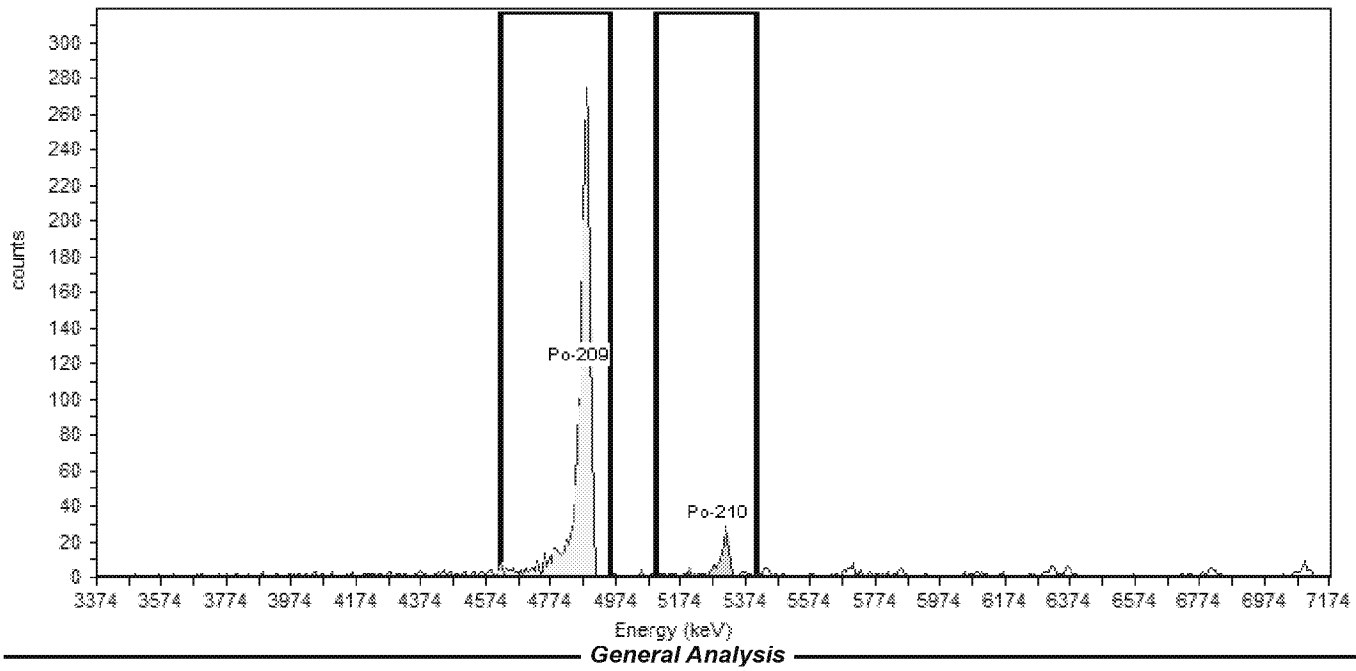
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 50.17%

## Acquisition

Detector: AV229 SN: 51-005EE4
Acquisition Start Date: 11/16/2019 1:38:13PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Background Date: 11/9/2019 2:31:27PM
Bkgd Info: Sample: ICB;AV229; Det: AV229; Spectrum #1; 11/9/2019 2:31:27 PM

Energy Calibration: IC-1370619;AV229-11152018
Efficiency Calibration:IC-1370619;AV229-11152018
Calibration Date: 11/15/2018 6:58:12PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.93% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.1 | 99.2 | 1432 | 4.0000 | 1428.00 | 2.423E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.3 | 100.0 | 127 | 11.0000 | 116.00 | 3.864E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:11:41PM 11/17/2019

## Sample

Sample Name: 160-36160-A-5-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-5-D
Sample Collection Date: 10/24/2019 9:17:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246216
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

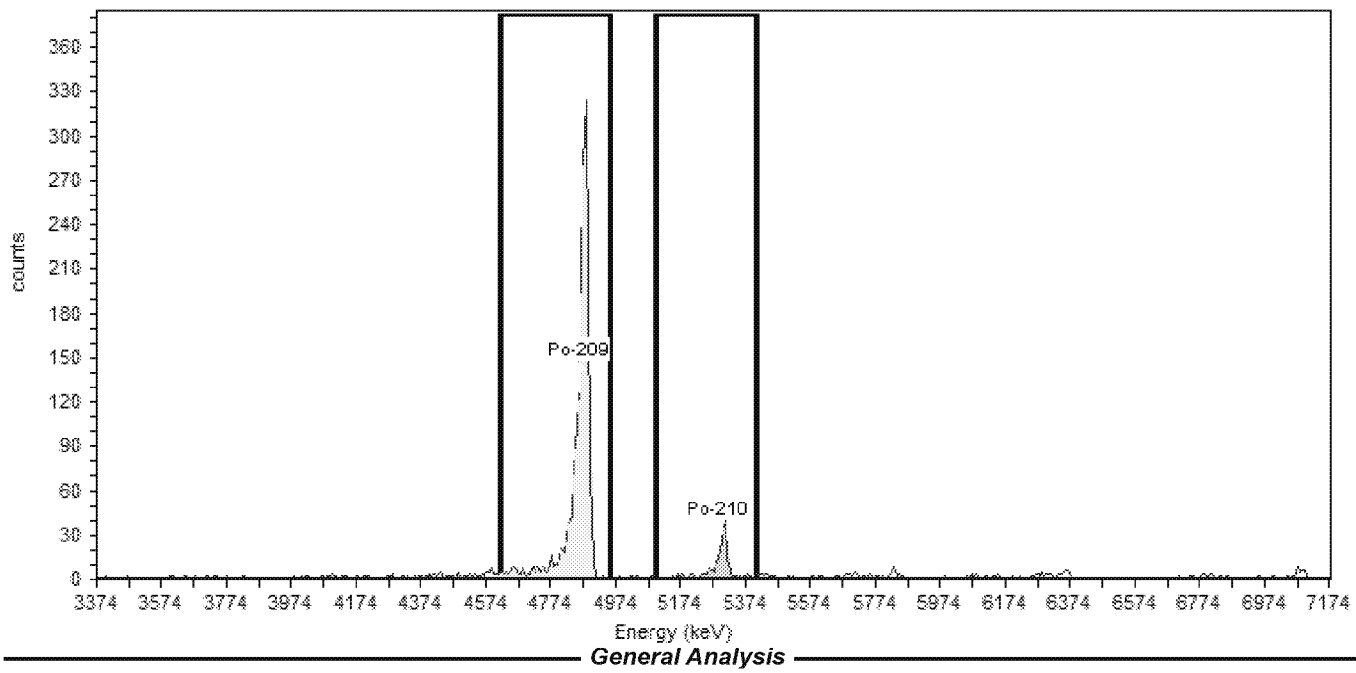
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 58.58%

## Acquisition

Detector: AV228 SN: 51-005Q6
Acquisition Start Date: 11/16/2019 1:38:13PM
Live Time: 960.00 min.
Real Time: 960.04 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV228; Det: AV228; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-1370622;AV228-11152018
Efficiency Calibration:IC-1370622;AV228-11152018
Calibration Date: 11/15/2018 6:58:08PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.61% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 47.3 | 99.2 | 1653 | 5.0000 | 1648.00 | 2.826E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.2 | 100.0 | 172 | 12.0000 | 160.00 | 4.613E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:38:37AM 11/17/2019

## Sample

Sample Name: 160-36160-A-6-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-6-D
Sample Collection Date: 10/24/2019 11:32:00AM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246196
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

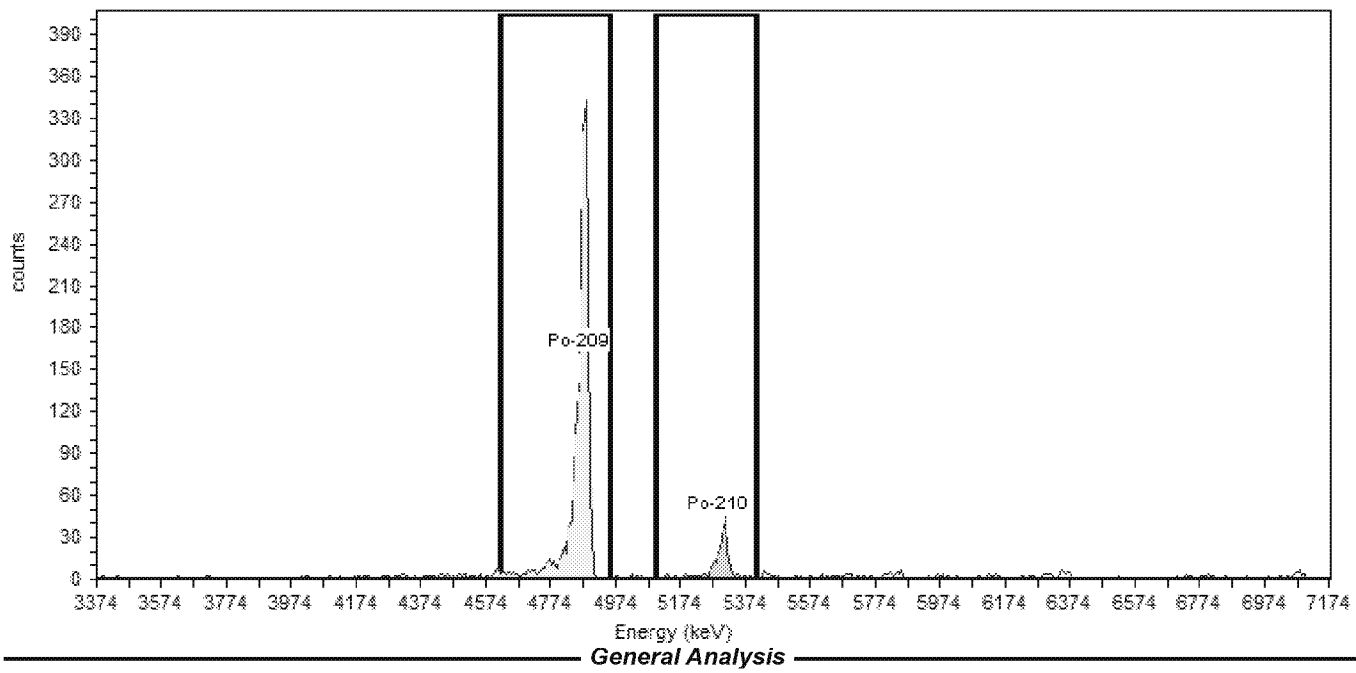
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 61.45%

## Acquisition

Detector: AV227 SN: 50-120DD5
Acquisition Start Date: 11/16/2019 1:38:13PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV227; Det: AV227; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-1370621;AV227-11152018
Efficiency Calibration:IC-1370621;AV227-11152018
Calibration Date: 11/15/2018 6:58:05PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.42% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.9 | 99.2 | 1718 | 1.0000 | 1717.00 | 2.973E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 48.3 | 100.0 | 196 | 13.0000 | 183.00 | 5.079E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:12:16PM 11/17/2019

## Sample

Sample Name: 160-36160-A-7-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-7-D
Sample Collection Date: 10/24/2019 11:00:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246199
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

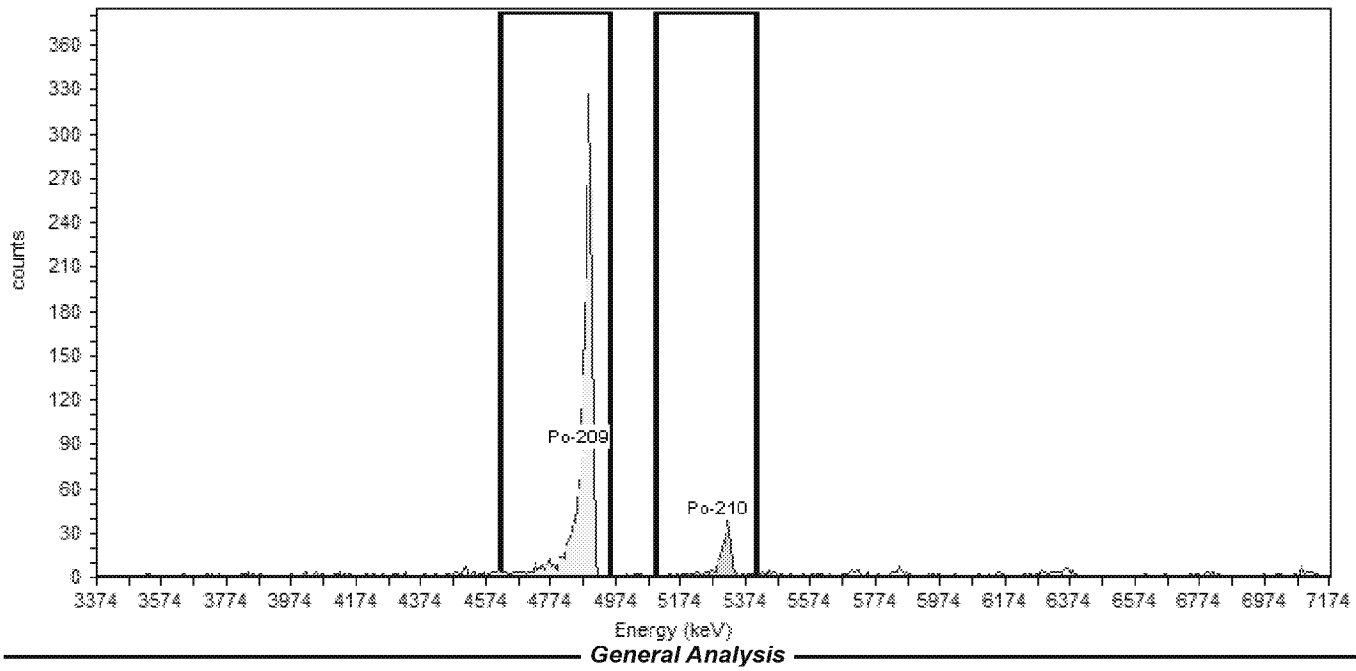
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 51.98%

## Acquisition

Detector: AV225 SN: 50-117J7
Acquisition Start Date: 11/16/2019 1:38:12PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:27PM
Bkgd Info: Sample: ICB;AV225; Det: AV225; Spectrum #1; 11/9/2019 2:31:27 PM

Energy Calibration: IC-1368446;AV225-11152018
Efficiency Calibration:IC-1368446;AV225-11152018
Calibration Date: 11/15/2018 3:59:09PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.56% +/- 0.26% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.1 | 99.2 | 1464 | 4.0000 | 1460.00 | 2.501E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 45.8 | 100.0 | 166 | 16.0000 | 150.00 | 4.869E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:12:51PM 11/17/2019

## Sample

Sample Name: 160-36160-A-8-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-8-D
Sample Collection Date: 10/24/2019 10:23:00AM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246198
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

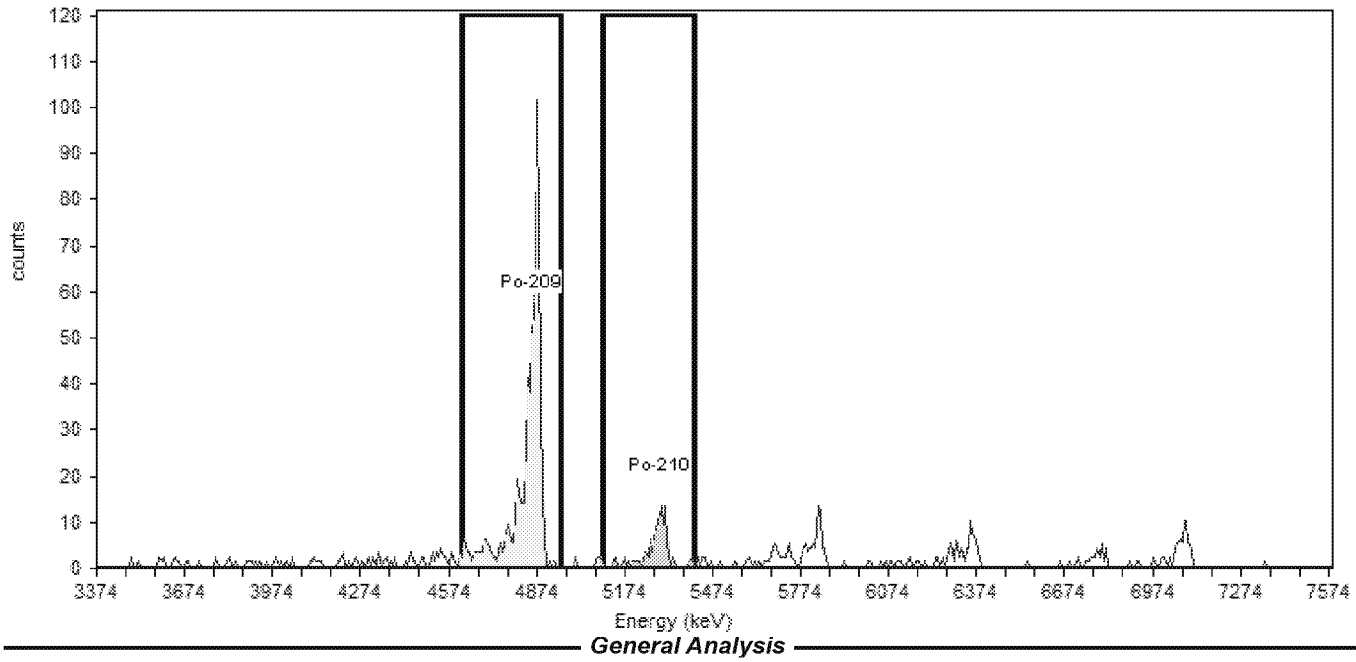
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 26.44%

## Acquisition

Detector: AV223 SN: 49-037X6
Acquisition Start Date: 11/16/2019 1:38:12PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:25PM
Bkgd Info: Sample: ICB;AV223; Det: AV223; Spectrum #1; 11/9/2019 2:31:25 PM

Energy Calibration: IC-9817;AV223-11192018
Efficiency Calibration:IC-9817;AV223-11192018
Calibration Date: 11/19/2018 8:42:38PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.42% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 49.6 | 99.2 | 608 | 4.0000 | 604.00 | 1.273E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 56.3 | 100.0 | 97 | 8.0000 | 89.00 | 6.992E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:13:27PM 11/17/2019

## Sample

Sample Name: 160-36160-A-9-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-9-D
Sample Collection Date: 10/24/2019 9:52:00AM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246200
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

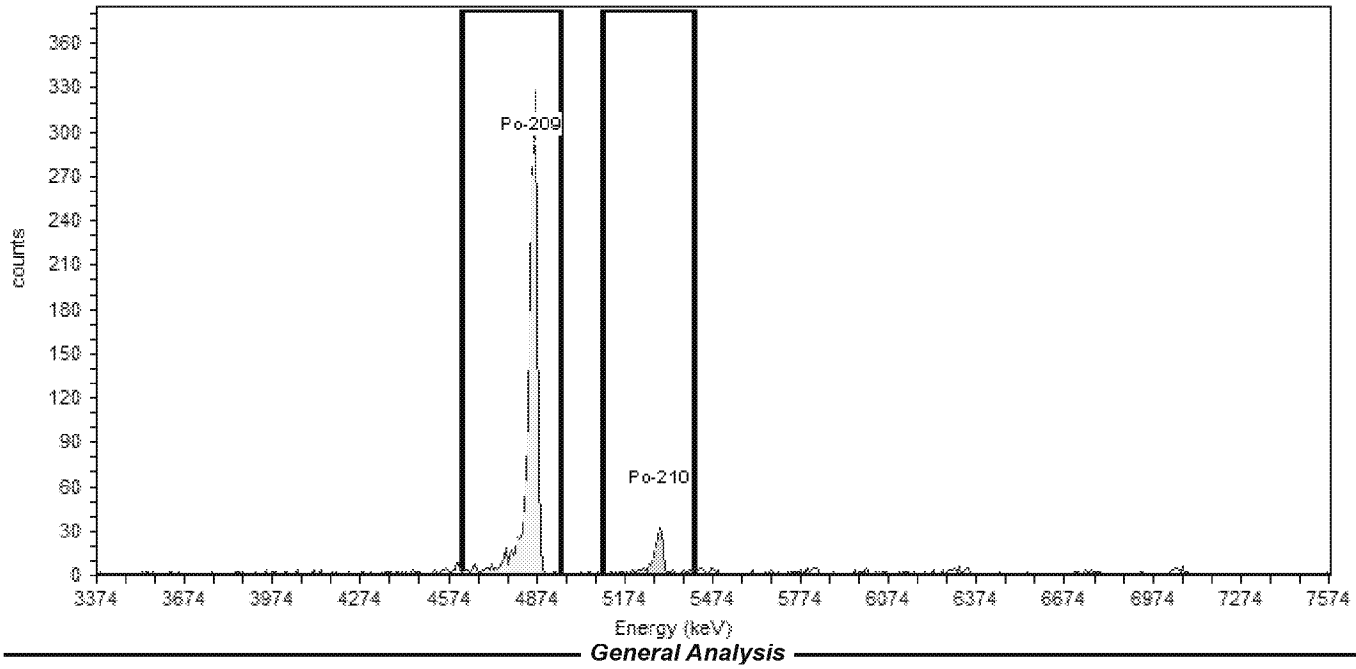
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 62.45%

## Acquisition

Detector: AV224 SN: 50-119AA5
Acquisition Start Date: 11/16/2019 1:38:12PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Background Date: 11/9/2019 2:31:26PM
Bkgd Info: Sample: ICB;AV224; Det: AV224; Spectrum #1; 11/9/2019 2:31:26 PM

Energy Calibration: IC-9885;AV224-11152018
Efficiency Calibration:IC-9885;AV224-11152018
Calibration Date: 11/15/2018 3:59:05PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$
Efficiency: 23.51% +/- 0.35% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:22PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.2 | 99.2 | 1498 | 2.0000 | 1496.00 | 3.023E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.3 | 100.0 | 165 | 12.0000 | 153.00 | 4.876E-001 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:05:17PM 11/17/2019

## Sample

Sample Name: 160-36160-A-10-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-10-D
Sample Collection Date: 10/24/2019 1:46:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246197
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

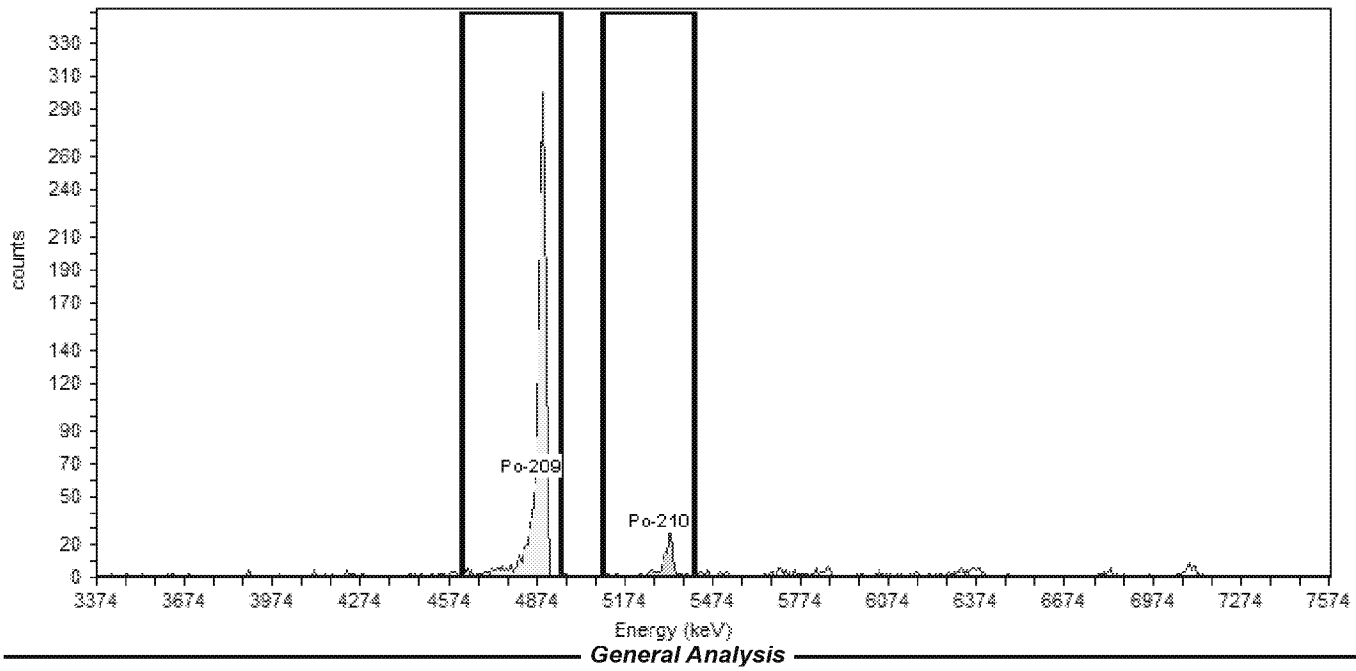
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 54.77%

## Acquisition

Detector: AV221 SN: 50-117H5
Acquisition Start Date: 11/16/2019 1:38:12PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:25PM
Bkgd Info: Sample: ICB;AV221; Det: AV221; Spectrum #1; 11/9/2019 2:31:25 PM

Energy Calibration: IC-9793;AV221-11152018
Efficiency Calibration:IC-9793;AV221-11152018
Calibration Date: 11/15/2018 3:57:25PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.54% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.0 | 99.2 | 1265 | 7.0000 | 1258.00 | 2.647E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 45.3 | 100.0 | 118 | 18.0000 | 100.00 | 3.784E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:05:52PM 11/17/2019

## Sample

Sample Name: 160-36160-A-11-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-11-D
Sample Collection Date: 10/24/2019 2:21:00PM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246215
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

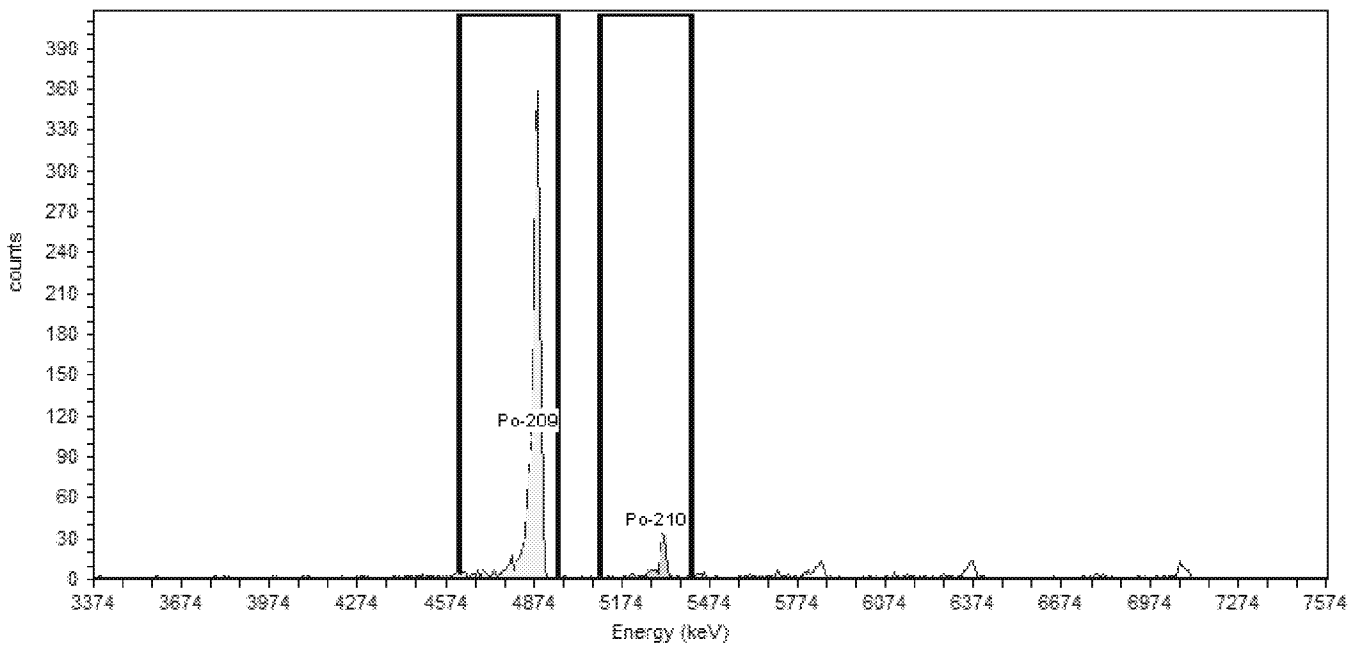
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 63.43%

## Acquisition

Detector: AV216 SN: 50-117J5
Acquisition Start Date: 11/16/2019 1:38:11PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV216; Det: AV216; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-7107;AV216-11152018
Efficiency Calibration:IC-7107;AV216-11152018
Calibration Date: 11/15/2018 3:56:57PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 25.34% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 45.6 | 99.2 | 1641 | 3.0000 | 1638.00 | 3.059E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 48.2 | 100.0 | 140 | 12.0000 | 128.00 | 3.713E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:06:26PM 11/17/2019

## Sample

Sample Name: 160-36160-A-12-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-12-D
Sample Collection Date: 10/24/2019 2:04:00PM
Comment:

Sample Weight : 1.01 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246212
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

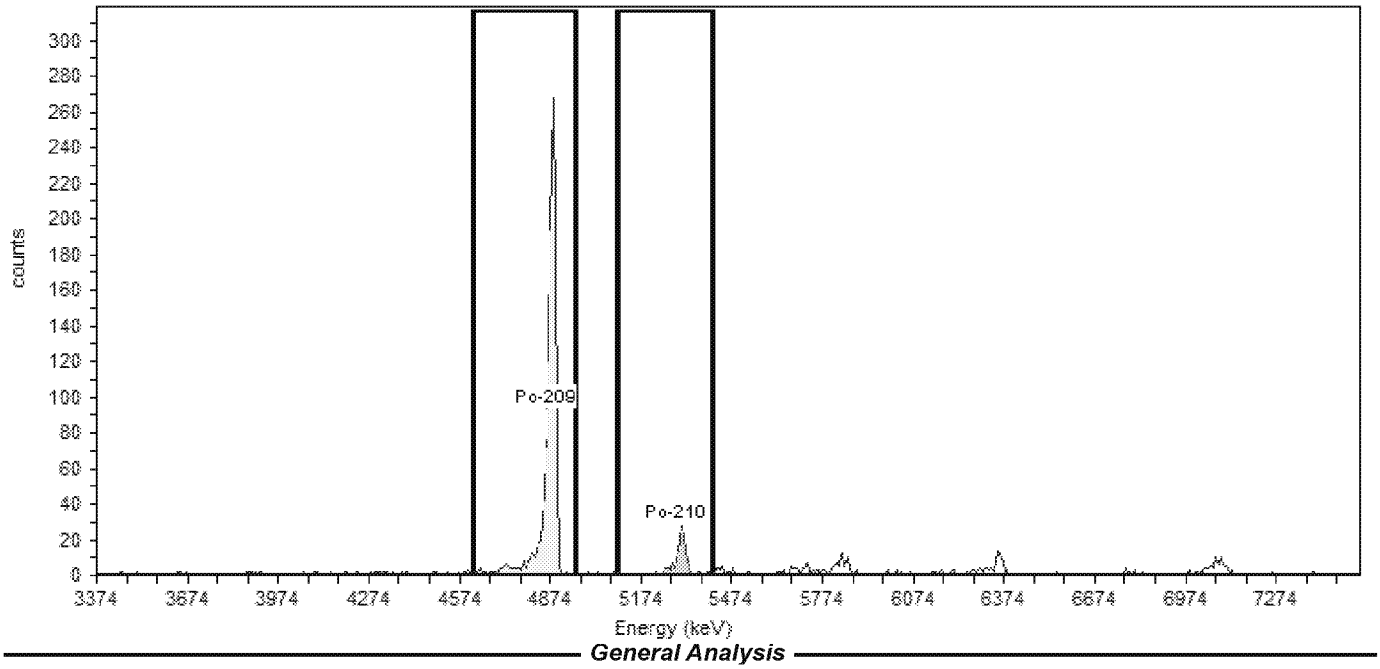
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 39.79%

## Acquisition

Detector: AV215 SN: 50-119J4
Acquisition Start Date: 11/16/2019 1:38:11PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV215; Det: AV215; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-1370620;AV215-11152018
Efficiency Calibration:IC-1370620;AV215-11152018
Calibration Date: 11/15/2018 3:56:53PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.80% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 45.0 | 99.2 | 1093 | 6.0000 | 1087.00 | 1.919E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 47.0 | 100.0 | 107 | 12.0000 | 95.00 | 4.152E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:07:01PM 11/17/2019

## Sample

Sample Name: 160-36160-A-13-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-13-D
Sample Collection Date: 10/24/2019 3:04:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246211
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

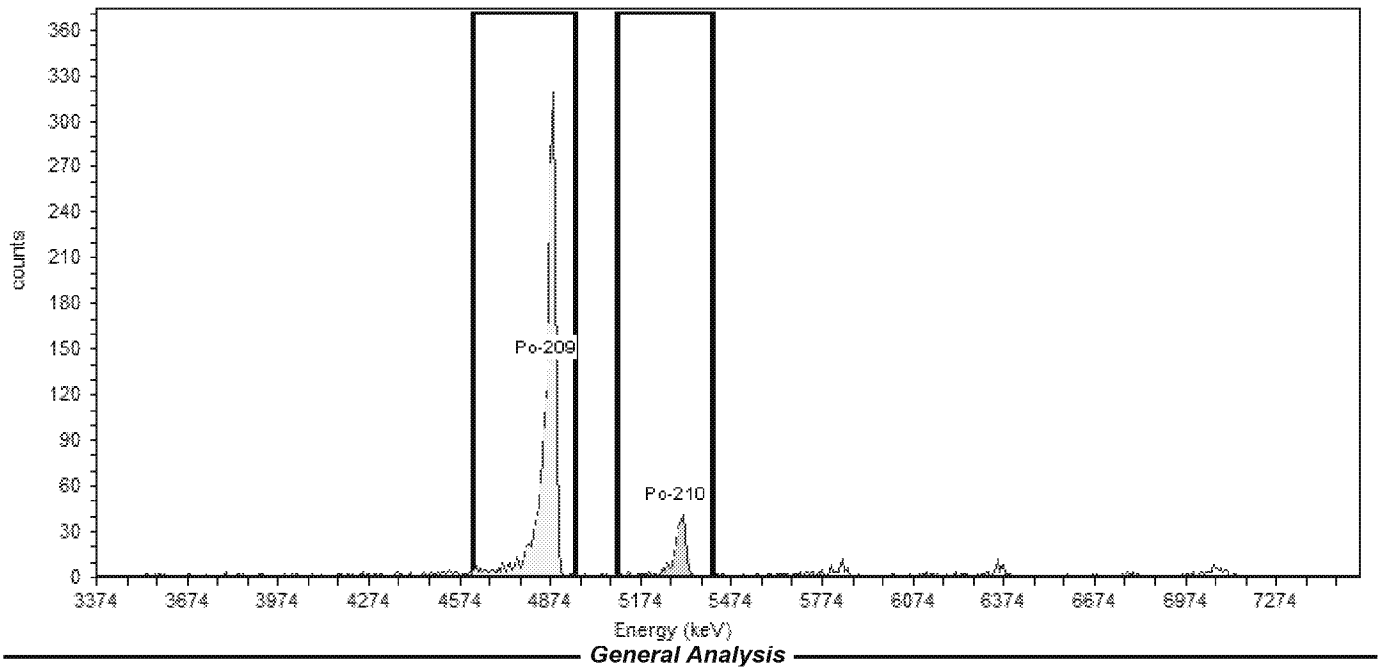
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 60.11%

## Acquisition

Detector: AV214 SN: 5507304
Acquisition Start Date: 11/16/2019 1:38:11PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Background Date: 11/9/2019 2:31:23PM
Bkgd Info: Sample: ICB;AV214; Det: AV214; Spectrum #1; 11/9/2019 2:31:23 PM

Energy Calibration: IC-1370619;AV214-07152019b
Efficiency Calibration:IC-1370619;AV214-07152019b
Calibration Date: 7/15/2019 2:06:28PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.90% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 48.0 | 99.2 | 1711 | 2.0000 | 1709.00 | 2.918E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.9 | 100.0 | 225 | 7.0000 | 218.00 | 6.099E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:07:35PM 11/17/2019

## Sample

Sample Name: 160-36160-A-14-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-14-D
Sample Collection Date: 10/24/2019 3:58:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246213
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

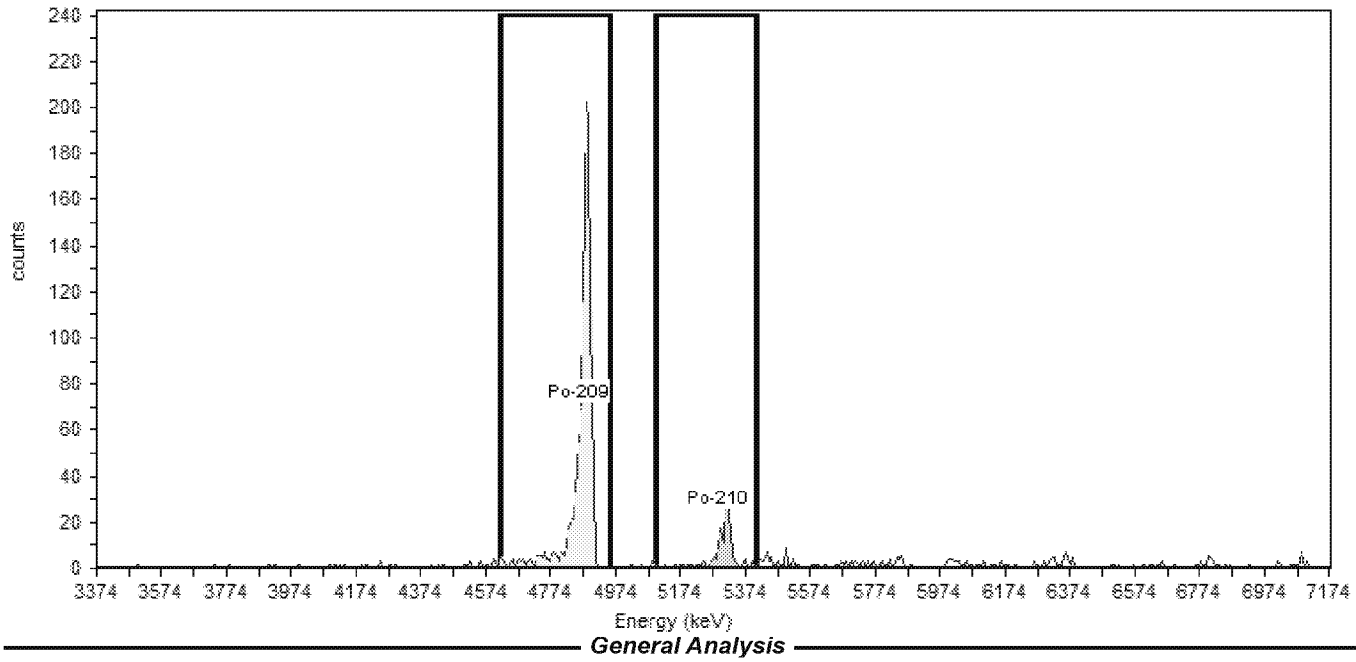
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 38.72%

## Acquisition

Detector: AV218 SN: 50-117Z7
Acquisition Start Date: 11/16/2019 1:38:12PM
Live Time: 960.00 min.
Real Time: 960.00 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV218; Det: AV218; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-8877;AV218-11152018
Efficiency Calibration:IC-8877;AV218-11152018
Calibration Date: 11/15/2018 3:57:00PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.35% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.6 | 99.2 | 968 | 7.0000 | 961.00 | 1.871E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 46.9 | 100.0 | 142 | 13.0000 | 129.00 | 6.390E-001 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:08:10PM 11/17/2019

## Sample

Sample Name: 160-36160-A-15-D Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-15-D
Sample Collection Date: 10/24/2019 3:38:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 448621
AnalysisResultsID: 246214
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

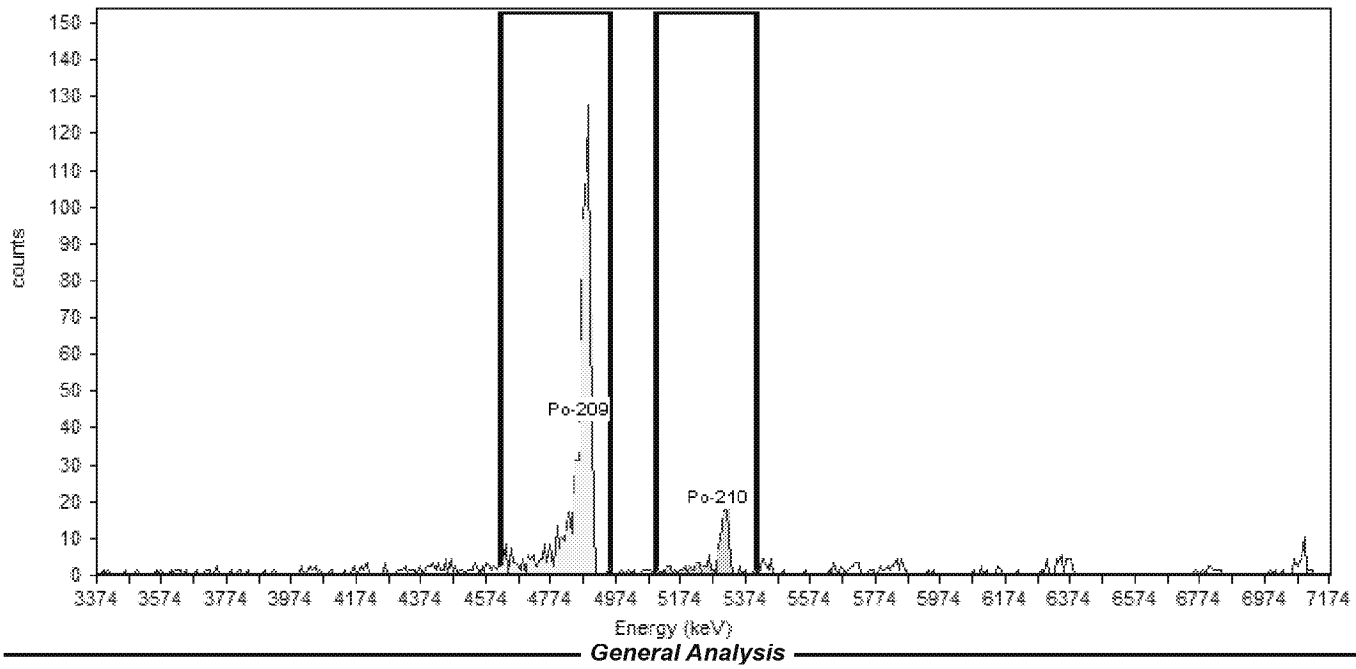
Tracer Name: Po-209_00008
Tracer Activity: 107.77 DPM / mL x (Vol.) 0.10 mL = 10.78 DPM
Tracer Ref. Date: 11/13/2018 3:15:43PM

Tracer Nuclide: Po-209
Tracer Recovery: 27.47%

## Acquisition

Detector: AV217 SN: 50-117I2
Acquisition Start Date: 11/16/2019 1:38:11PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Background Date: 11/9/2019 2:31:24PM
Bkgd Info: Sample: ICB;AV217; Det: AV217; Spectrum #1; 11/9/2019 2:31:24 PM

Energy Calibration: IC-8874;AV217-11152018
Efficiency Calibration:IC-8874;AV217-11152018
Calibration Date: 11/15/2018 6:57:58PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.15% +/- 0.37% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Polonium_Po-209 (T)
Decay Correction:11/16/2019 1:35:21PM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Polonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Po-209** | 4858.5 | 4,882.0 | -23.5 | 4619.8 | 4955.4 | 46.6 | 99.2 | 737 | 5.0000 | 732.00 | 1.330E+000 | pCi/g |
| **Po-210** | 5291.0 | 5,304.5 | -13.5 | 5097.1 | 5410.3 | 44.3 | 100.0 | 117 | 5.0000 | 112.00 | 7.298E-001 | pCi/g |

# Method A-01-R Pu

## Isotopic Plutonium (Alpha Spectrometry) by Method A-01-R

# Prep Batch: 449075

## Preparation, Extraction Chromatography Resin Actinide Separation

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 449075

Lab Id: MB 160-449075/1-A | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: | Detector: AV1 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | MB Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.01299 | 0.0318 | 0.0318 | U | pCi/g | 1.00 | 0.0195 | 3 | 6 | | 1 | 0.24358 | 1 | 1 | 450540 |
| Plutonium-239/240 | -0.002168 | 0.00434 | 0.00434 | U | pCi/g | 1.00 | 0.00797 | 0 | 1 | | 1 | 0.24358 | 1 | 0.99900 001287 4603 | 450540 |

| Tracer | MB Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.467 | 0.411 | 0.617 | | pCi/g | 0.0224 | 6.15 | 88.9 | 30 - 110 |

Lab Id: LCS 160-449075/2-A | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: | Detector: AV3 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | LCS Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 5.177 | 0.399 | 0.590 | | pCi/g | 1.00 | 0.0122 | 676 | 3 | | 1 | 0.24435 | 1 | 1 | 450571 |
| Plutonium-239/240 | 5.268 | 0.402 | 0.598 | | pCi/g | 1.00 | 0.00998 | 687 | 2 | | 1 | 0.24435 | 1 | 0.99900 001287 4603 | 450571 |

| Tracer | LCS Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.158 | 0.436 | 0.677 | | pCi/g | 0.0255 | 6.15 | 100 | 30 - 110 |

Lab Id: 160-36160-1 | Analyzed: 11/14/19 23:56 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B01-S001 | Detector: AV8 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00581 | 0.0236 | 0.0236 | U | pCi/g | 1.00 | 0.0159 | 2 | 5 | | 1 | 0.25960 | 1 | 1 | 450585 |
| Plutonium-239/240 | -0.00776 | 0.00776 | 0.00779 | U | pCi/g | 1.00 | 0.0143 | 0 | 4 | | 1 | 0.25960 | 1 | 0.99900 001287 4603 | 450585 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.74 | 0.408 | 0.632 | | pCi/g | 0.0176 | 6.15 | 93.3 | 30 - 110 |

Lab Id: 160-36160-2 | Analyzed: 11/14/19 23:56 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B04-S001 | Detector: AV11 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0159 | 0.0113 | 0.0114 | U | pCi/g | 1.00 | 0.0207 | 0 | 8 | | 1 | 0.28190 | 1 | 1 | 450544 |
| Plutonium-239/240 | -0.00798 | 0.00798 | 0.00801 | U | pCi/g | 1.00 | 0.0147 | 0 | 4 | | 1 | 0.28190 | 1 | 0.99900 001287 4603 | 450544 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.13 | 0.370 | 0.568 | | pCi/g | 0.0184 | 6.15 | 83.5 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 449075

Lab Id: 160-36160-3 | Analyzed: 11/14/19 23:56 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B05-S001 | Detector: AV12 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.000 | 0.0185 | 0.0185 | U | pCi/g | 1.00 | 0.0152 | 1 | 4 | | 1 | 0.27780 | 1 | 1 | 450551 |
| Plutonium-239/240 | 0.00620 | 0.0170 | 0.0170 | U | pCi/g | 1.00 | 0.00760 | 1 | 1 | | 1 | 0.27780 | 1 | 0.99900001287 4603 | 450551 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.04 | 0.369 | 0.562 | | pCi/g | 0.0124 | 6.15 | 81.9 | 30 - 110 |

Lab Id: 160-36160-4 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B07-S001 | Detector: AV14 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00201 | 0.0251 | 0.0251 | U | pCi/g | 1.00 | 0.0196 | 2 | 7 | | 1 | 0.26398 | 1 | 1 | 450563 |
| Plutonium-239/240 | 0.00604 | 0.0166 | 0.0166 | U | pCi/g | 1.00 | 0.00741 | 1 | 1 | | 1 | 0.26398 | 1 | 0.99900001287 4603 | 450563 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.42 | 0.393 | 0.601 | | pCi/g | 0.0146 | 6.14 | 88.2 | 30 - 110 |

Lab Id: 160-36160-5 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B09-S001 | Detector: AV15 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00887 | 0.00794 | 0.00797 | U | pCi/g | 1.00 | 0.0146 | 0 | 5 | | 1 | 0.27256 | 1 | 1 | 450564 |
| Plutonium-239/240 | -0.00711 | 0.00711 | 0.00713 | U | pCi/g | 1.00 | 0.0131 | 0 | 4 | | 1 | 0.27256 | 1 | 0.99900001287 4603 | 450564 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.94 | 0.405 | 0.643 | | pCi/g | 0.0167 | 6.14 | 96.8 | 30 - 110 |

Lab Id: 160-36160-6 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B11-S001 | Detector: AV16 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00602 | 0.0244 | 0.0244 | U | pCi/g | 1.00 | 0.0165 | 2 | 5 | | 1 | 0.26957 | 1 | 1 | 450565 |
| Plutonium-239/240 | -0.00602 | 0.00696 | 0.00697 | U | pCi/g | 1.00 | 0.0128 | 0 | 3 | | 1 | 0.26957 | 1 | 0.99900001287 4603 | 450565 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.34 | 0.387 | 0.592 | | pCi/g | 0.0192 | 6.15 | 86.9 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 449075

Lab Id: 160-36160-7 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B12-S001 | Detector: AV19 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.00207 | 0.0180 | 0.0180 | U | pCi/g | 1.00 | 0.0132 | 1 | 3 | | 1 | 0.23603 | 1 | 1 | 450566 |
| Plutonium-239/240 | -0.00621 | 0.00717 | 0.00719 | U | pCi/g | 1.00 | 0.0132 | 0 | 3 | | 1 | 0.23603 | 1 | 0.99900001287 4603 | 450566 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.89 | 0.433 | 0.658 | | pCi/g | 0.0146 | 6.14 | 96.0 | 30 - 110 |

Lab Id: 160-36160-8 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B14-S001 | Detector: AV20 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0101 | 0.0202 | 0.0202 | U | pCi/g | 1.00 | 0.0223 | 1 | 9 | | 1 | 0.22147 | 1 | 1 | 450567 |
| Plutonium-239/240 | 0.00405 | 0.0250 | 0.0250 | U | pCi/g | 1.00 | 0.0182 | 2 | 6 | | 1 | 0.22147 | 1 | 0.99900001287 4603 | 450567 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.44 | 0.468 | 0.715 | | pCi/g | 0.0246 | 6.15 | 105 | 30 - 110 |

Lab Id: 160-36160-9 | Analyzed: 11/15/19 09:56 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B15-S001 | Detector: AV249 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.00569 | 0.0249 | 0.0249 | U | pCi/g | 1.00 | 0.0231 | 2 | 11 | | 1 | 0.23809 | 1 | 1 | 450536 |
| Plutonium-239/240 | 0.0266 | 0.0308 | 0.0309 | | pCi/g | 1.00 | 0.00987 | 4 | 2 | | 1 | 0.23809 | 1 | 0.99900001287 4603 | 450536 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.39 | 0.449 | 0.700 | | pCi/g | 0.0162 | 6.15 | 104 | 30 - 110 |

Lab Id: 160-36160-10 | Analyzed: 11/15/19 09:56 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B23-S001 | Detector: AV250 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0359 | 0.0506 | 0.0506 | | pCi/g | 1.00 | 0.0301 | 8 | 15 | | 1 | 0.22656 | 1 | 1 | 450537 |
| Plutonium-239/240 | -0.00212 | 0.00423 | 0.00424 | U | pCi/g | 1.00 | 0.00778 | 0 | 1 | | 1 | 0.22656 | 1 | 0.99900001287 4603 | 450537 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.00 | 0.447 | 0.674 | | pCi/g | 0.0228 | 6.14 | 97.8 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
## Prep Batch: 449075

Lab Id: 160-36160-11 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B29-S001 | Detector: AV24 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0562 | 0.0520 | 0.0523 | U | pCi/g | 1.00 | 0.0553 | 7 | 56 | | 1 | 0.22211 | 1 | 1 | 450570 |
| Plutonium-239/240 | -0.0703 | 0.0431 | 0.0435 | U | pCi/g | 1.00 | 0.0528 | 4 | 51 | | 1 | 0.22211 | 1 | 0.99900001287 4603 | 450570 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 6.47 | 0.472 | 0.720 | | pCi/g | 0.0533 | 6.15 | 105 | 30 - 110 |

Lab Id: 160-36160-12 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU3-B30-S001 | Detector: AV48 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0197 | 0.0449 | 0.0449 | U | pCi/g | 1.00 | 0.0307 | 7 | 18 | | 1 | 0.27058 | 1 | 1 | 450575 |
| Plutonium-239/240 | 0.00788 | 0.0236 | 0.0236 | U | pCi/g | 1.00 | 0.0145 | 2 | 4 | | 1 | 0.27058 | 1 | 0.99900001287 4603 | 450575 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.41 | 0.388 | 0.598 | | pCi/g | 0.0143 | 6.14 | 88.1 | 30 - 110 |

Lab Id: 160-36160-13 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU4-B04-S001 | Detector: AV49 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0164 | 0.0434 | 0.0435 | U | pCi/g | 1.00 | 0.0302 | 6 | 16 | | 1 | 0.26272 | 1 | 1 | 450576 |
| Plutonium-239/240 | -0.00411 | 0.00581 | 0.00582 | U | pCi/g | 1.00 | 0.0107 | 0 | 2 | | 1 | 0.26272 | 1 | 0.99900001287 4603 | 450576 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.35 | 0.391 | 0.596 | | pCi/g | 0.0131 | 6.15 | 87.1 | 30 - 110 |

Lab Id: 160-36160-14 | Analyzed: 11/14/19 23:57 | Sigma: 2 | Decay Corrected: No | Ts: 240
Client ID: F-SU5-B05-S001 | Detector: AV63 | Dil Fac: 1 | Yield Truncated: No | Tb: 960

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | -0.0127 | 0.0512 | 0.0512 | U | pCi/g | 1.00 | 0.0455 | 7 | 34 | | 1 | 0.26797 | 1 | 1 | 450578 |
| Plutonium-239/240 | 0.0233 | 0.0353 | 0.0353 | | pCi/g | 1.00 | 0.0175 | 4 | 5 | | 1 | 0.26797 | 1 | 0.99900001287 4603 | 450578 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.06 | 0.377 | 0.568 | | pCi/g | 0.0158 | 6.14 | 82.4 | 30 - 110 |

# Alpha Spectroscopy Analysis Detail Report
# Prep Batch: 449075

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Id: | 160-36160-15 | Analyzed: | 11/14/19 23:57 | Sigma: | 2 | Decay Corrected: | No | Ts: | 240 |
| Client ID: | F-SU5-B10-S001 | Detector: | AV80 | Dil Fac: | 1 | Yield Truncated: | No | Tb: | 960 |

| Analyte | Result | Count Unc | Total Unc | Qualifier | Unit | LOQ | DLC | Cs | Cb | X Talk | Decay | Eff | I | A | Anly Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plutonium-238 | 0.0157 | 0.0333 | 0.0334 | U | pCi/g | 1.00 | 0.0204 | 4 | 8 | | 1 | 0.26318 | 1 | 1 | 450586 |
| Plutonium-239/240 | -0.00197 | 0.0180 | 0.0180 | U | pCi/g | 1.00 | 0.0162 | 1 | 5 | | 1 | 0.26318 | 1 | 0.99900001287 4603 | 450586 |

| Tracer | Result | Count Unc | Total Unc | Qualifier | Unit | DLC | Spike Added | % Rec | % Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Pu-242 (T) | 5.58 | 0.400 | 0.616 | | pCi/g | 0.0147 | 6.15 | 90.8 | 30 - 110 |

## Quality Control Summary

| Method Blank ID: | Analyte | Parent Result | Spike Added | MB Result | Qualifier | Unit | % Rec | % Rec Limits | RPD | RER | DER | RER Limit | Z Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MB 160-449075/1-A | Plutonium-238 | | | 0.01299 | U | pCi/g | | | | | | | .816 |
| MB 160-449075/1-A | Plutonium-239/240 | | | -0.002168 | U | pCi/g | | | | | | | -.9991 |
| **Lab Control Sample ID:** | **Analyte** | **Parent Result** | **Spike Added** | **LCS Result** | **Qualifier** | **Unit** | **% Rec** | **% Rec Limits** | **RPD** | **RER** | **DER** | **RER Limit** | **Z Factor** |
| LCS 160-449075/2-A | Plutonium-238 | | 5.27 | 5.177 | | pCi/g | 98 | 80 - 125 | | | | | -.3057 |
| LCS 160-449075/2-A | Plutonium-239/240 | | 5.28 | 5.268 | | pCi/g | 100 | 81 - 125 | | | | | -.0436 |

Glossary:

- Ts = Count Duration, Sample
- Tb = Count Duration, Background
- Cs = Total Counts, Sample
- Cb = Total Counts, Background
- X Talk = Crosstalk
- Decay = Decay Factor
- Eff = Efficiency
- I = Ingrowth Factor
- A = Abundance

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-36160-2

SDG No.:

Batch Number: 449075  Batch Start Date: 11/05/19 18:12  Batch Analyst: Harris, Kayla L

Batch Method: ExtChrom  Batch End Date: 11/14/19 19:03

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | Pu-238 00016 | Pu-239 00015 | Pu-242 00036 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 160-449075/1 | | ExtChrom, A-01-R | | 1.0 g | | | 0.2 mL | | |
| LCS 160-449075/2 | | ExtChrom, A-01-R | | 1.0 g | 0.2 mL | 0.2 mL | 0.2 mL | | |
| 160-36160-A-1-A | F-SU3-B01-S001 | ExtChrom, A-01-R | T | 0.9994 g | | | 0.2 mL | | |
| 160-36160-A-2-A | F-SU3-B04-S001 | ExtChrom, A-01-R | T | 1.0000 g | | | 0.2 mL | | |
| 160-36160-A-3-A | F-SU3-B05-S001 | ExtChrom, A-01-R | T | 0.9991 g | | | 0.2 mL | | |
| 160-36160-A-4-A | F-SU3-B07-S001 | ExtChrom, A-01-R | T | 1.0009 g | | | 0.2 mL | | |
| 160-36160-A-5-A | F-SU3-B09-S001 | ExtChrom, A-01-R | T | 1.0017 g | | | 0.2 mL | | |
| 160-36160-A-6-A | F-SU3-B11-S001 | ExtChrom, A-01-R | T | 0.9991 g | | | 0.2 mL | | |
| 160-36160-A-7-A | F-SU3-B12-S001 | ExtChrom, A-01-R | T | 1.0012 g | | | 0.2 mL | | |
| 160-36160-A-8-A | F-SU3-B14-S001 | ExtChrom, A-01-R | T | 1.0000 g | | | 0.2 mL | | |
| 160-36160-A-9-A | F-SU3-B15-S001 | ExtChrom, A-01-R | T | 1.0000 g | | | 0.2 mL | | |
| 160-36160-A-10-A | F-SU3-B23-S001 | ExtChrom, A-01-R | T | 1.0016 g | | | 0.2 mL | | |
| 160-36160-A-11-A | F-SU3-B29-S001 | ExtChrom, A-01-R | T | 1.0001 g | | | 0.2 mL | | |
| 160-36160-A-12-A | F-SU3-B30-S001 | ExtChrom, A-01-R | T | 1.0005 g | | | 0.2 mL | | |
| 160-36160-A-13-A | F-SU4-B04-S001 | ExtChrom, A-01-R | T | 0.9997 g | | | 0.2 mL | | |
| 160-36160-A-14-A | F-SU5-B05-S001 | ExtChrom, A-01-R | T | 1.0017 g | | | 0.2 mL | | |
| 160-36160-A-15-A | F-SU5-B10-S001 | ExtChrom, A-01-R | T | 0.9995 g | | | 0.2 mL | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# ALPHA SPECTROSCOPY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui  Job No.: 160-36160-2

SDG No.:

Batch Number: 449075  Batch Start Date: 11/05/19 18:12  Batch Analyst: Harris, Kayla L

Batch Method: ExtChrom  Batch End Date: 11/14/19 19:03

| Batch Notes | |
|---|---|
| Balance ID | 0034150037 |
| Analyst ID - Column | NMN per CLP |
| Column Date | 11/14/19 |
| Analyst ID - CoPrecipitation | CLP |
| CoPrecipitation Date | 11/14/19 |
| Pipette ID | RAD117 |
| Analyst ID - Reagent Drop Witness | CLP PER KLH |
| Analyst ID - Reagent Drop | KLH |
| SOP Number | ST-RC-0100, ST-RC-0242, ST-RC-0004 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:38AM 11/15/2019

## Sample

Sample Name: MB 160-449075/1-A
SampleType: Blank
: MB 160-449075/1-A
Sample Collection Date: 11/14/2019 7:05:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775216

Analyst: 60040

## Tracer

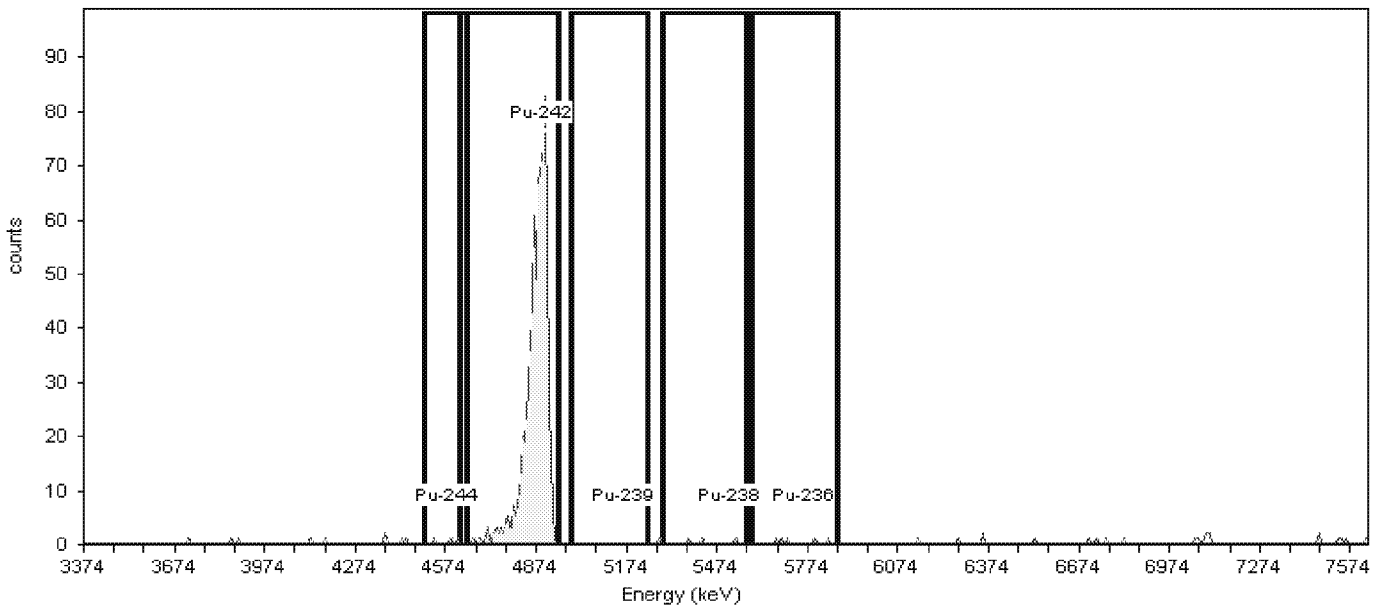
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 88.95%

## Acquisition

Detector: AV1
Serial Number: 49-188 AA4
Acquisition Start Date: 11/14/2019 11:57:17PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:56:34PM
Background Info: Sample: ICB;AV1; Det: AV1; Spectrum #2; Nov-13-2019 13:56

Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:55PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 76.5 | 100.2 | 3 | 1.5000 | 1.50 | 0.013 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 49.4 | 100.0 | 712 | 2.5000 | 709.50 | 5.467 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.2500 | -0.25 | -0.002 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 9.7 | 100.0 | 3 | 1.5000 | 1.50 | 0.013 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 9.5 | 99.9 | 5 | 5.5000 | -0.50 | -0.004 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:57AM 11/15/2019

## Sample

Sample Name: LCS 160-449075/2-A
SampleType: Control
: LCS 160-449075/2-A
Sample Collection Date: 11/14/2019 7:05:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775218

Analyst: 60040

## Tracer

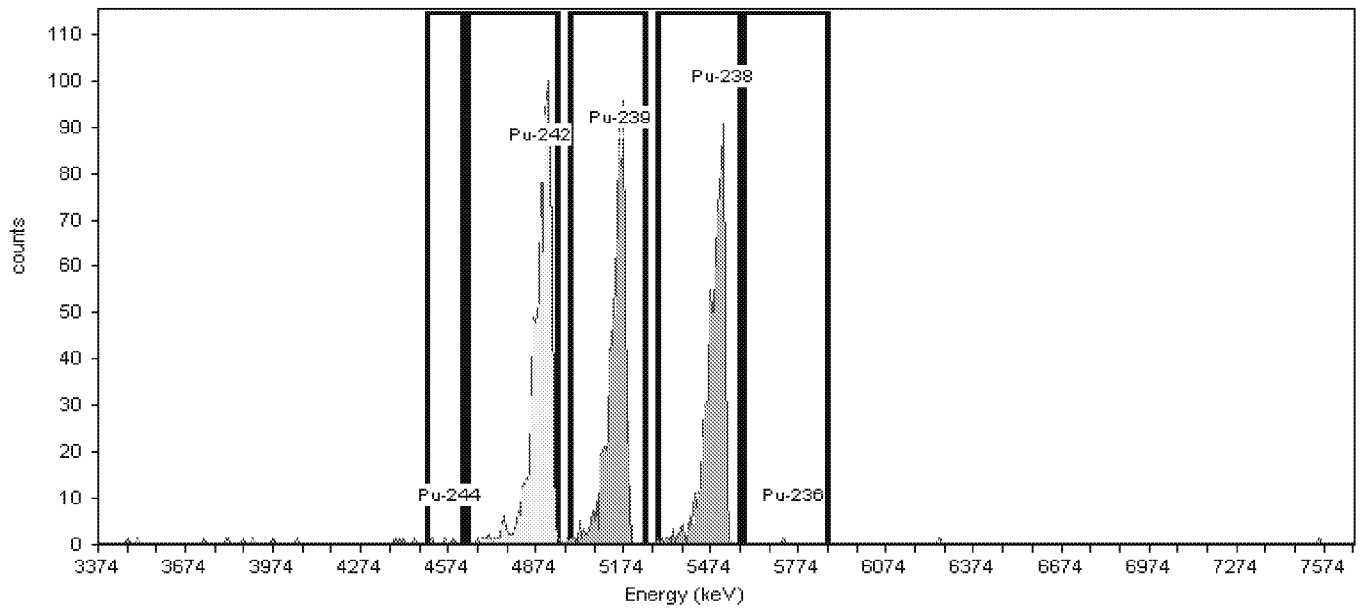
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 100.19%

## Acquisition

Detector: AV3
Serial Number: 49-202 FF7
Acquisition Start Date: 11/14/2019 11:57:18PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:56:37PM
Background Info: Sample: ICB;AV3; Det: AV3; Spectrum #2; Nov-13-2019 13:56

Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 24.44% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 20.4 | 100.2 | 3 | 1.7500 | 1.25 | 0.010 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 24.3 | 100.0 | 805 | 3.2500 | 801.75 | 6.158 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 55.3 | 99.9 | 687 | 0.5000 | 686.50 | 5.268 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 63.6 | 100.0 | 676 | 0.7500 | 675.25 | 5.177 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 44.5 | 99.9 | 1 | 0.5000 | 0.50 | 0.004 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:00:32AM 11/15/2019

## Sample

Sample Name: 160-36160-A-1-I
SampleType: Sample
: 160-36160-A-1-I
Sample Collection Date: 10/24/2019 11:50:00AM

Spectrum #1 Analysis #1
Sample Weight : 0.9994g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775221

Analyst: 60040

## Tracer

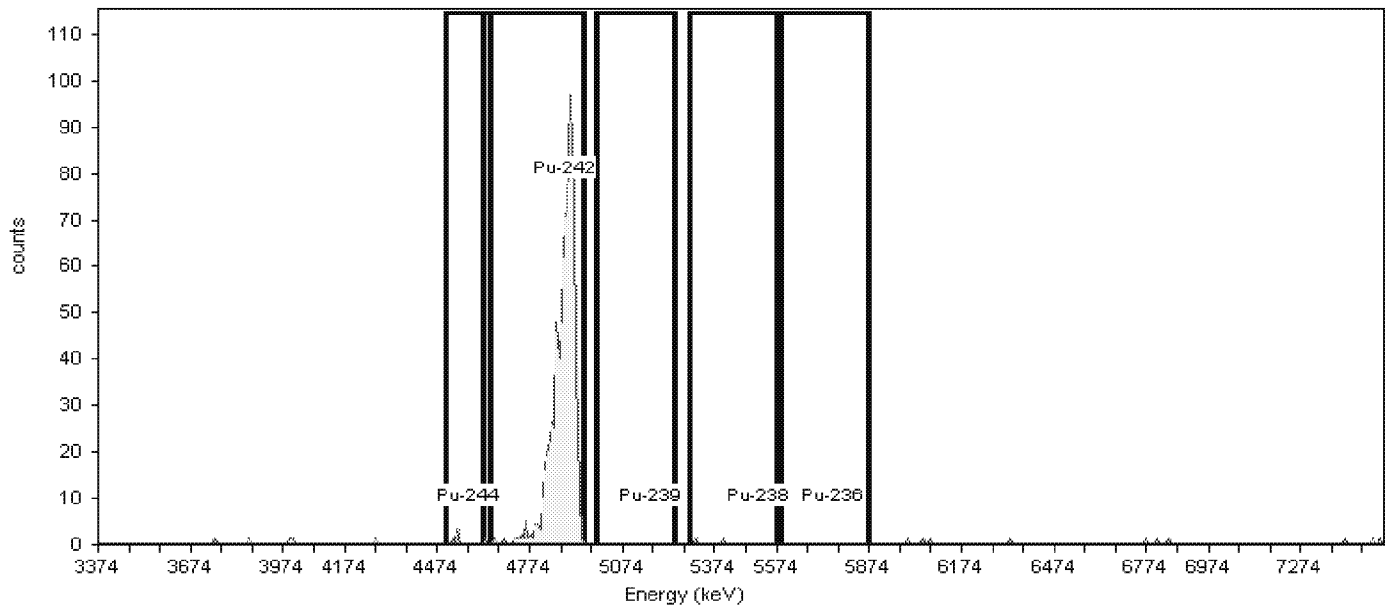
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 93.31%

## Acquisition

Detector: AV8
Serial Number: 41-137Q6
Acquisition Start Date: 11/14/2019 11:56:56PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:28PM
Background Info: Sample: ICB;AV8; Det: AV8; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-9795;AV8-05142018
Calibration Date: 5/14/2018 6:26:27PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 25.96% +/- 0.34% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 20.5 | 100.2 | 5 | 0.7500 | 4.25 | 0.033 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 21.8 | 100.0 | 795 | 1.7500 | 793.25 | 5.739 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 1.0000 | -1.00 | -0.008 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 28.5 | 100.0 | 2 | 1.2500 | 0.75 | 0.006 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | .0 | 99.9 | 0 | 1.2500 | -1.25 | -0.010 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:00:42AM 11/15/2019

## Sample

Sample Name: 160-36160-A-2-F
SampleType: Sample
: 160-36160-A-2-F
Sample Collection Date: 10/24/2019 10:41:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775222

Analyst: 60040

## Tracer

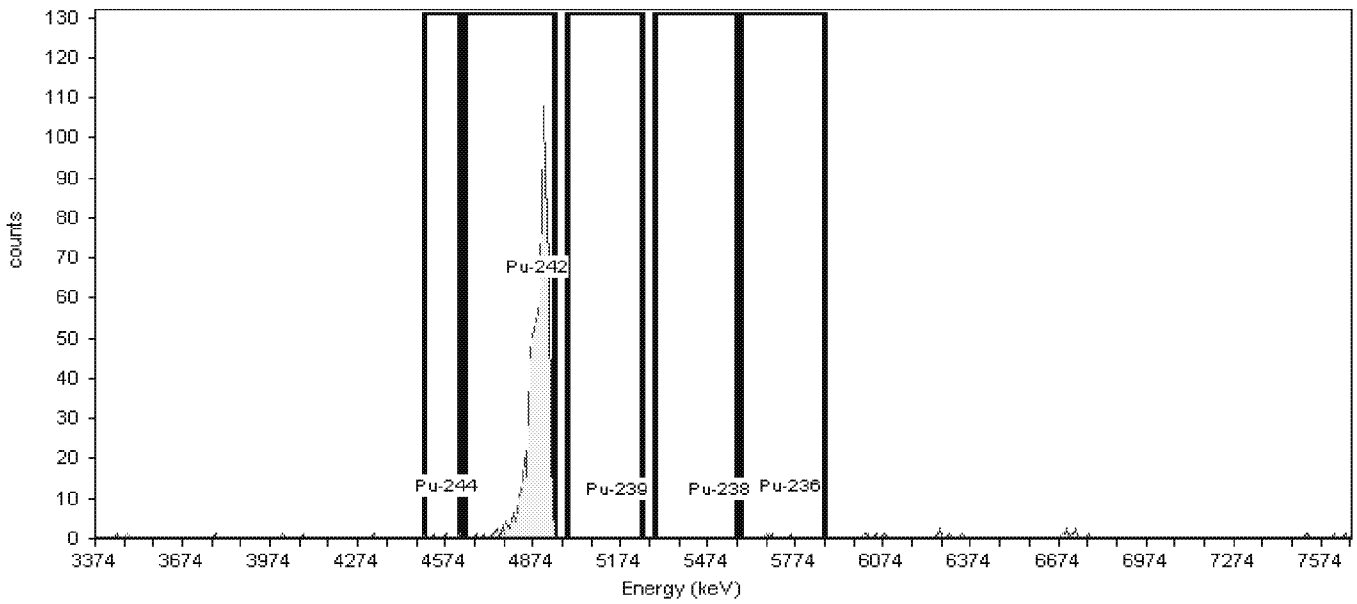
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 83.49%

## Acquisition

Detector: AV11
Serial Number: 49-155dd2
Acquisition Start Date: 11/14/2019 11:56:58PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:32PM
Background Info: Sample: ICB;AV11; Det: AV11; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-1368446;AV11-05142018
Calibration Date: 5/14/2018 6:27:11PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 28.19% +/- 0.26% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .0 | 100.2 | 4 | 1.2500 | 2.75 | 0.022 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 24.5 | 100.0 | 773 | 2.2500 | 770.75 | 5.132 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 1.0000 | -1.00 | -0.008 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | .0 | 100.0 | 0 | 2.0000 | -2.00 | -0.016 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 43.3 | 99.9 | 3 | 1.5000 | 1.50 | 0.012 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:00:51AM 11/15/2019

## Sample

Sample Name: 160-36160-A-3-F
SampleType: Sample
: 160-36160-A-3-F
Sample Collection Date: 10/24/2019 10:08:00AM

Spectrum #1 Analysis #1
Sample Weight : 0.9991g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775223

Analyst: 60040

## Tracer

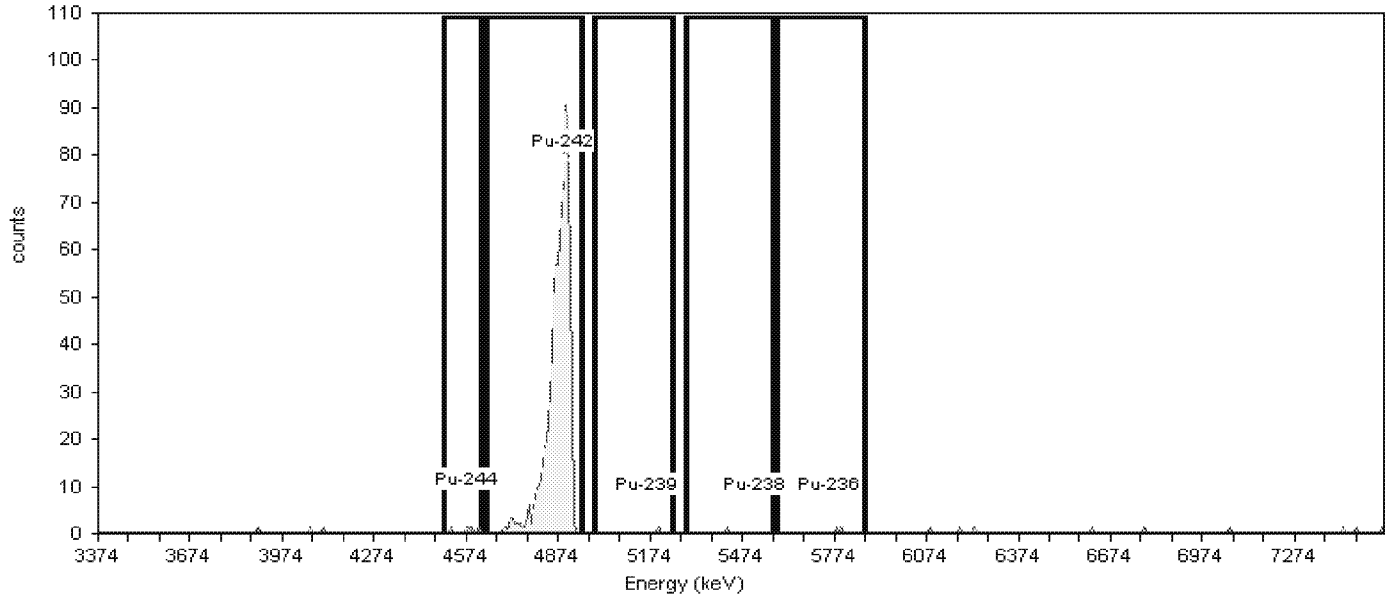
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 81.89%

## Acquisition

Detector: AV12
Serial Number: 51-082B7
Acquisition Start Date: 11/14/2019 11:56:59PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:34PM
Background Info: Sample: ICB;AV12; Det: AV12; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-1368447; AV12-05142018
Calibration Date: 5/14/2018 6:27:24PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.78% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 18.8 | 100.2 | 5 | 0.2500 | 4.75 | 0.039 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 51.1 | 100.0 | 746 | 1.0000 | 745.00 | 5.038 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 39.8 | 99.9 | 1 | 0.2500 | 0.75 | 0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 44.5 | 100.0 | 1 | 1.0000 | 0.00 | 0.000 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 43.4 | 99.9 | 2 | 1.0000 | 1.00 | 0.008 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:01:00AM 11/15/2019

## Sample

Sample Name: 160-36160-A-4-F
SampleType: Sample
: 160-36160-A-4-F
Sample Collection Date: 10/24/2019 9:40:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0009g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775224

Analyst: 60040

## Tracer

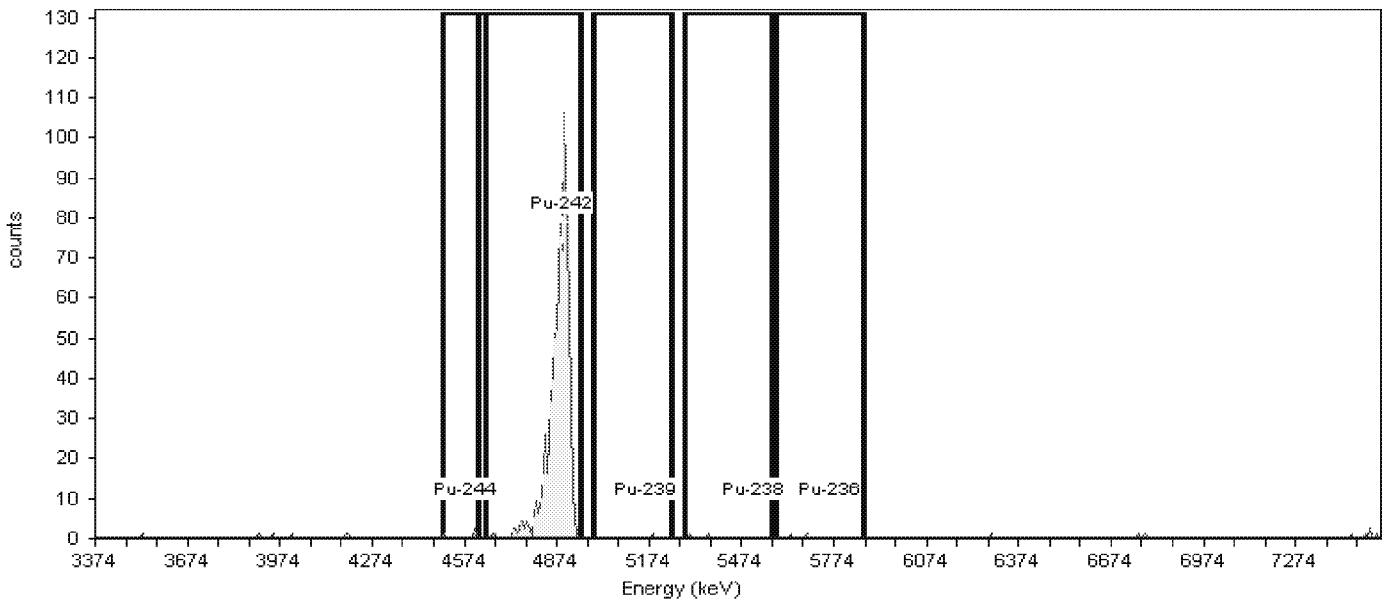
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 88.23%

## Acquisition

Detector: AV14
Serial Number: 50-060W4
Acquisition Start Date: 11/14/2019 11:57:01PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:35PM
Background Info: Sample: ICB;AV14; Det: AV14; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-1370622;AV14-05142018
Calibration Date: 5/14/2018 6:27:53PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.40% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 17.7 | 100.2 | 4 | 0.2500 | 3.75 | 0.030 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 41.1 | 100.0 | 764 | 1.2500 | 762.75 | 5.418 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 44.5 | 99.9 | 1 | 0.2500 | 0.75 | 0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 24.0 | 100.0 | 2 | 1.7500 | 0.25 | 0.002 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 91.2 | 99.9 | 2 | 1.0000 | 1.00 | 0.008 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:57:37AM 11/15/2019

## Sample

Sample Name: 160-36160-A-5-F
SampleType: Sample
: 160-36160-A-5-F
Sample Collection Date: 10/24/2019 9:17:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0017g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775206

Analyst: 60040

## Tracer

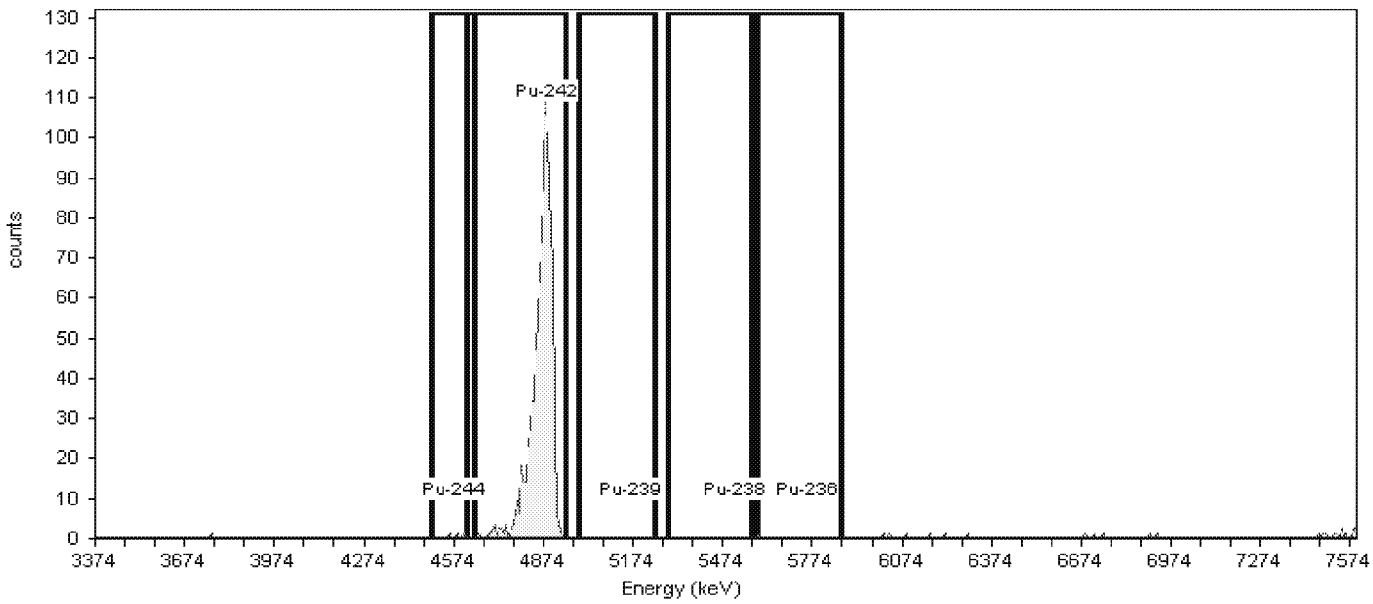
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 96.83%

## Acquisition

Detector: AV15
Serial Number: 41-172C5
Acquisition Start Date: 11/14/2019 11:57:02PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:37PM
Background Info: Sample: ICB;AV15; Det: AV15; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-1370619;AV15-05142018
Calibration Date: 5/14/2018 6:28:04PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.26% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 61.1 | 100.2 | 4 | 1.5000 | 2.50 | 0.018 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 65.0 | 100.0 | 866 | 1.7500 | 864.25 | 5.941 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 1.0000 | -1.00 | -0.007 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | .0 | 100.0 | 0 | 1.2500 | -1.25 | -0.009 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | .0 | 99.9 | 1 | 1.2500 | -0.25 | -0.002 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:14AM 11/15/2019

## Sample

Sample Name: 160-36160-A-6-F
SampleType: Sample
: 160-36160-A-6-F
Sample Collection Date: 10/24/2019 11:32:00AM

Spectrum #1 Analysis #1
Sample Weight : 0.9991g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775207

Analyst: 60040

## Tracer

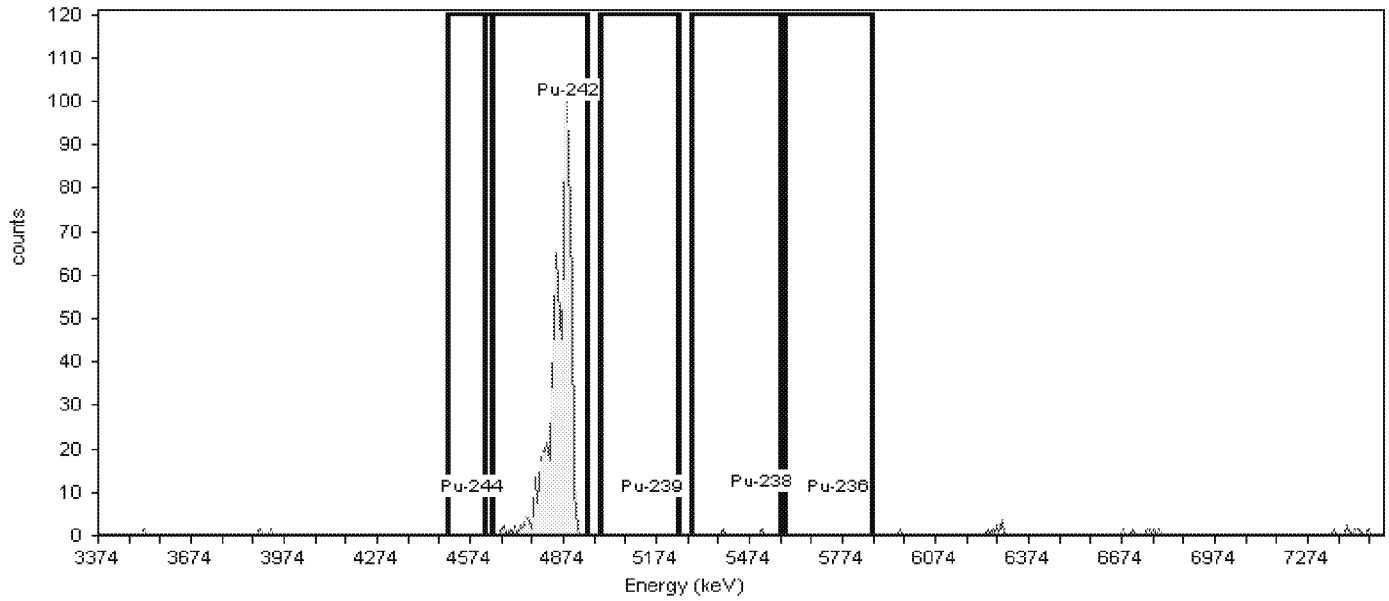
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 86.85%

## Acquisition

Detector: AV16
Serial Number: 51-082B6
Acquisition Start Date: 11/14/2019 11:57:04PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:38PM
Background Info: Sample: ICB;AV16; Det: AV16; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-137620;AV16-05142018
Calibration Date: 5/14/2018 6:28:17PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.96% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .0 | 100.2 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 65.6 | 100.0 | 769 | 2.2500 | 766.75 | 5.343 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 44.5 | 100.0 | 2 | 1.2500 | 0.75 | 0.006 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | .0 | 99.9 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:23AM 11/15/2019

## Sample

Sample Name: 160-36160-A-7-F
SampleType: Sample
: 160-36160-A-7-F
Sample Collection Date: 10/24/2019 11:00:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0012g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775208

Analyst: 60040

## Tracer

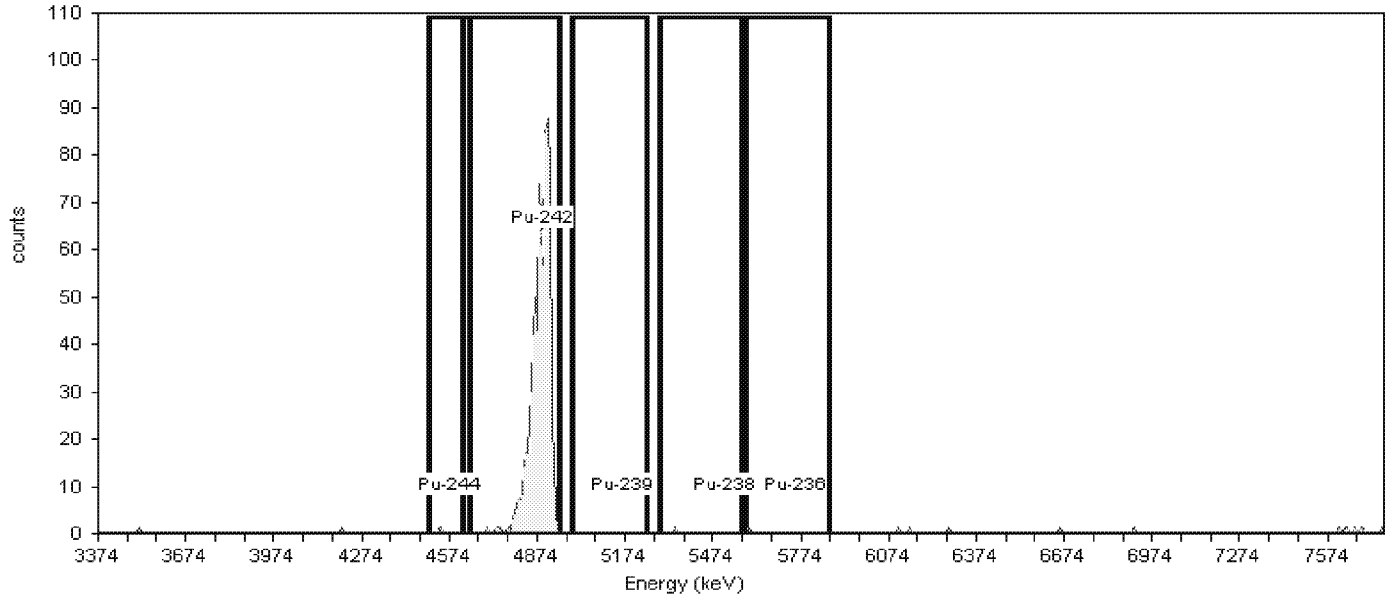
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 95.99%

## Acquisition

Detector: AV19
Serial Number: 50-025FF5
Acquisition Start Date: 11/14/2019 11:57:05PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 11/13/2019 1:54:42PM
Background Info: Sample: ICB;AV19; Det: AV19; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-8877;AV19-05142018
Calibration Date: 5/15/2018 12:27:55PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 23.60% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 18.3 | 100.2 | 1 | 1.2500 | -0.25 | -0.002 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 29.9 | 100.0 | 743 | 1.0000 | 742.00 | 5.893 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.7500 | -0.75 | -0.006 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 42.4 | 100.0 | 1 | 0.7500 | 0.25 | 0.002 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 18.0 | 99.9 | 1 | 0.7500 | 0.25 | 0.002 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:31AM 11/15/2019

## Sample

Sample Name: 160-36160-A-8-F
SampleType: Sample
: 160-36160-A-8-F
Sample Collection Date: 10/24/2019 10:23:00AM

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775209

Analyst: 60040

## Tracer

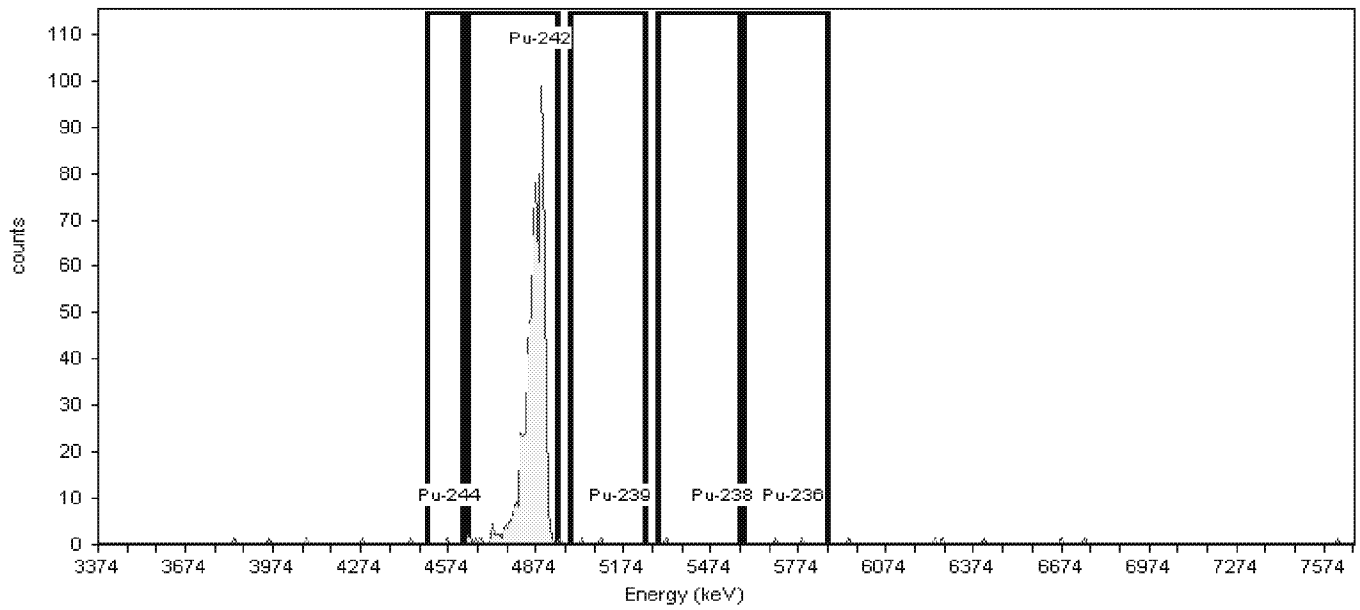
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 104.72%

## Acquisition

Detector: AV20
Serial Number: 48-121A7
Acquisition Start Date: 11/14/2019 11:57:07PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 11/13/2019 1:54:43PM
Background Info: Sample: ICB;AV20; Det: AV20; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-9520;AV20-05142018
Calibration Date: 5/15/2018 12:28:08PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.15% +/- 0.32% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .3 | 100.2 | 3 | 0.5000 | 2.50 | 0.020 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 71.5 | 100.0 | 762 | 2.5000 | 759.50 | 6.437 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 37.7 | 99.9 | 2 | 1.5000 | 0.50 | 0.004 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 34.6 | 100.0 | 1 | 2.2500 | -1.25 | -0.010 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 44.5 | 99.9 | 2 | 1.2500 | 0.75 | 0.006 | pCi/g |

TestAmerica
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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:00:12PM 11/15/2019

## Sample

Sample Name: 160-36160-A-9-F Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-9-F
Sample Collection Date: 10/24/2019 9:52:00AM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 449075
AnalysisResultsID: 246115
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

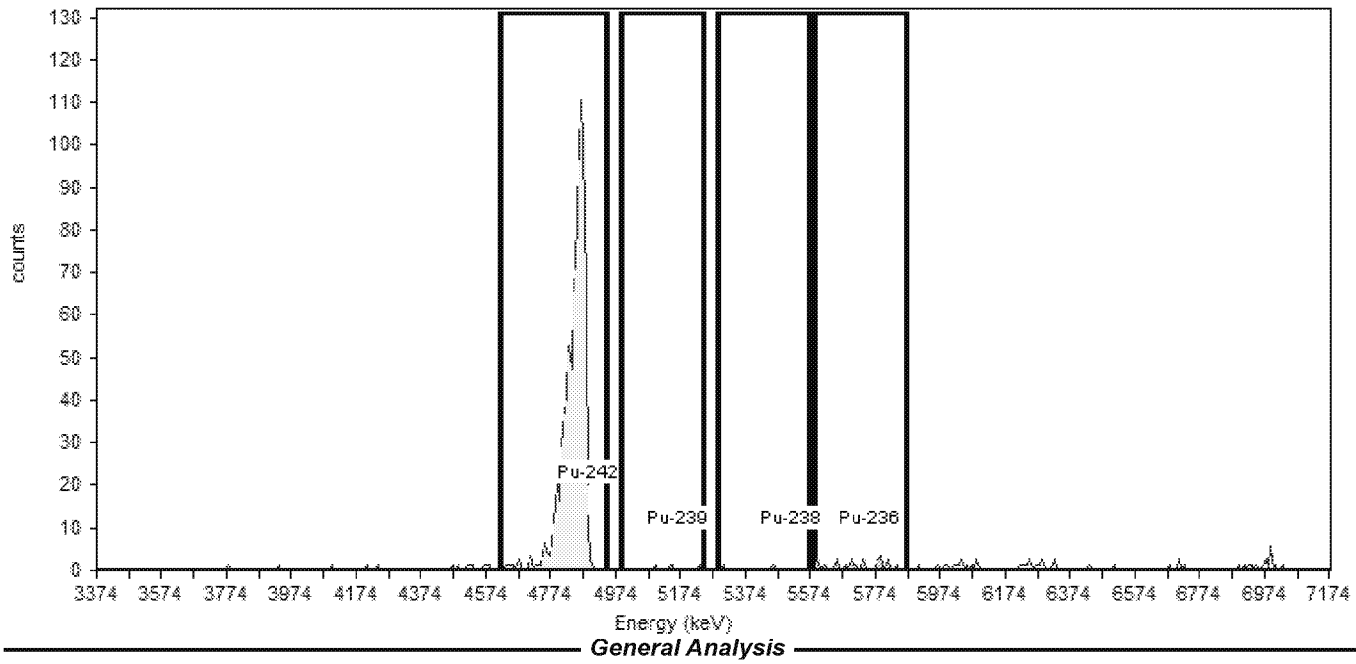
Tracer Name: Pu-242-00036
Tracer Activity: 68.23 DPM / mL x (Vol.) 0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 9:43:17AM

Tracer Nuclide: Pu-242
Tracer Recovery: 103.98%

## Acquisition

Detector: AV249 SN: 51-005EE5
Acquisition Start Date: 11/15/2019 9:56:59AM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/9/2019 2:31:28PM
Bkgd Info: Sample: ICB;AV249; Det: AV249; Spectrum #1; 11/9/2019 2:31:28 PM

Energy Calibration: IC-9520;AV249-11152018
Efficiency Calibration:IC-9520;AV249-11152018
Calibration Date: 11/15/2018 10:59:03PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 23.81% +/- 0.34% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction:11/15/2019 9:55:20AM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 57.5 | 100.0 | 812 | 1.2500 | 810.75 | 6.391E+000 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 10.7 | 99.9 | 4 | 0.5000 | 3.50 | 2.656E-002 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 23.6 | 100.0 | 2 | 2.7500 | -0.75 | -5.686E-003 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 221.8 | 99.9 | 21 | 17.5000 | 3.50 | 2.656E-002 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:59:43PM 11/15/2019

## Sample

Sample Name: 160-36160-A-10-F Type: Sample
Spectrum #1 Analysis #1
: 160-36160-A-10-F
Sample Collection Date: 10/24/2019 1:46:00PM
Comment:

Sample Weight : 1.00 Sample Units: g
First Stage Dilution: N/A
Aliquot: N/A Aliquot Fraction: N/A
Dilution 2: N/A
Lab Preparation:

## Batch

Batch Name: 449075
AnalysisResultsID: 246114
Description:

Client Name: Undefined
Client Contact:
Analyst: 60040

## Tracer

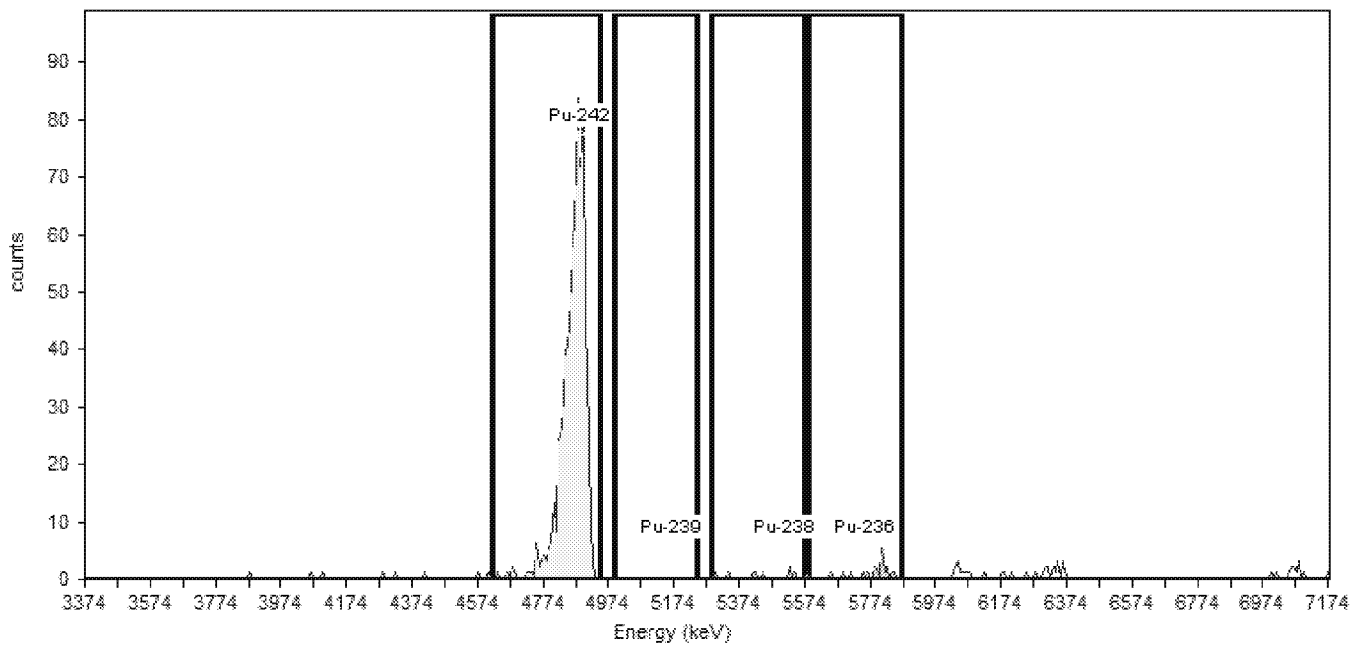
Tracer Name: Pu-242-00036
Tracer Activity: 68.23 DPM / mL x (Vol.) 0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 9:43:17AM

Tracer Nuclide: Pu-242
Tracer Recovery: 97.82%

## Acquisition

Detector: AV250 SN: 47-052x7
Acquisition Start Date: 11/15/2019 9:56:59AM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/9/2019 2:31:28PM
Bkgd Info: Sample: ICB;AV250; Det: AV250; Spectrum #1; 11/9/2019 2:31:28 PM

Energy Calibration: IC-9792;AV250-11152018
Efficiency Calibration:IC-9792;AV250-11152018
Calibration Date: 11/15/2018 10:59:07PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.66% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction:11/15/2019 9:55:20AM
MDA Constants: Kα = 1.64 , Kβ = 1.64

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 72.2 | 100.0 | 728 | 2.2500 | 725.75 | 6.003E+000 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.2500 | -0.25 | -2.116E-003 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 11.2 | 100.0 | 8 | 3.7500 | 4.25 | 3.594E-002 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 64.1 | 99.9 | 18 | 21.5000 | -3.50 | -2.962E-002 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:58AM 11/15/2019

## Sample

Sample Name: 160-36160-A-11-F
SampleType: Sample
: 160-36160-A-11-F
Sample Collection Date: 10/24/2019 2:21:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0001g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775212

Analyst: 60040

## Tracer

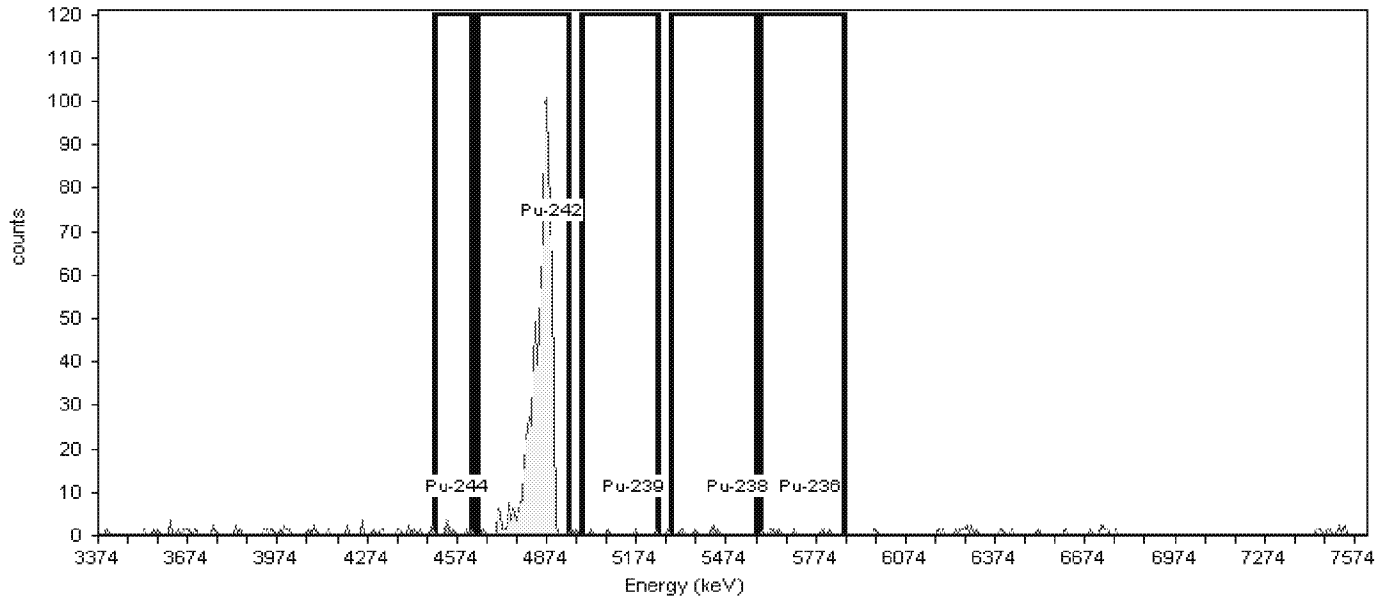
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 105.21%

## Acquisition

Detector: AV24
Serial Number: 47-137Q4
Acquisition Start Date: 11/14/2019 11:57:12PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 11/13/2019 1:54:50PM
Background Info: Sample: ICB;AV24; Det: AV24; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-9817;AV24-05142018
Calibration Date: 5/15/2018 12:28:57PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 22.21% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 18.6 | 100.2 | 7 | 7.0000 | 0.00 | 0.000 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 57.0 | 100.0 | 777 | 11.7500 | 765.25 | 6.466 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 10.3 | 99.9 | 4 | 12.7500 | -8.75 | -0.070 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 140.8 | 100.0 | 7 | 14.0000 | -7.00 | -0.056 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 45.8 | 99.9 | 8 | 5.0000 | 3.00 | 0.024 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:08AM 11/15/2019

## Sample

Sample Name: 160-36160-A-12-F
SampleType: Sample
: 160-36160-A-12-F
Sample Collection Date: 10/24/2019 2:04:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0005g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775213

Analyst: 60040

## Tracer

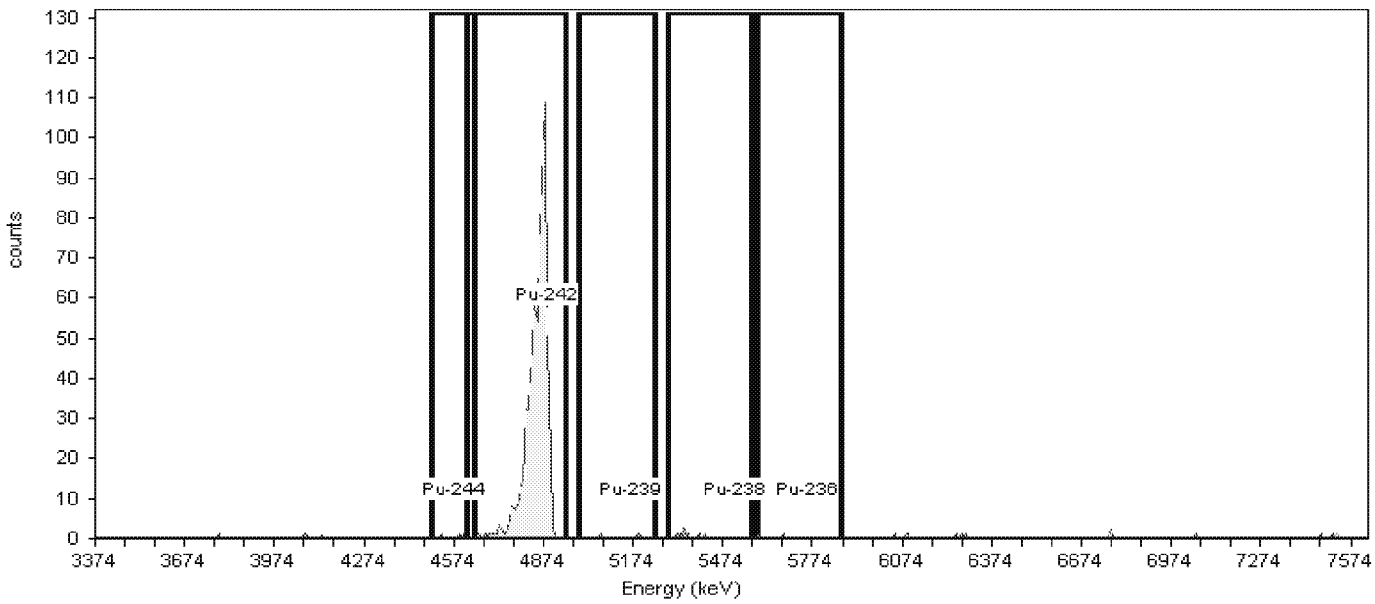
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 88.11%

## Acquisition

Detector: AV48
Serial Number: 46-033P6
Acquisition Start Date: 11/14/2019 11:57:13PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:55:00PM
Background Info: Sample: ICB;AV48; Det: AV48; Spectrum #2; Nov-13-2019 13:55

Calibration Name: IC-1370619;AV48-05142018
Calibration Date: 5/15/2018 12:27:25PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 27.06% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | 89.5 | 100.2 | 3 | 0.0000 | 3.00 | 0.024 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 59.8 | 100.0 | 782 | 1.2500 | 780.75 | 5.413 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 44.5 | 99.9 | 2 | 1.0000 | 1.00 | 0.008 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 38.3 | 100.0 | 7 | 4.5000 | 2.50 | 0.020 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | .0 | 99.9 | 2 | 4.0000 | -2.00 | -0.016 | pCi/g |

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# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:21AM 11/15/2019

## Sample

Sample Name: 160-36160-A-13-F
SampleType: Sample
: 160-36160-A-13-F
Sample Collection Date: 10/24/2019 3:04:00PM

Spectrum #1 Analysis #1
Sample Weight : 0.9997g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775214

Analyst: 60040

## Tracer

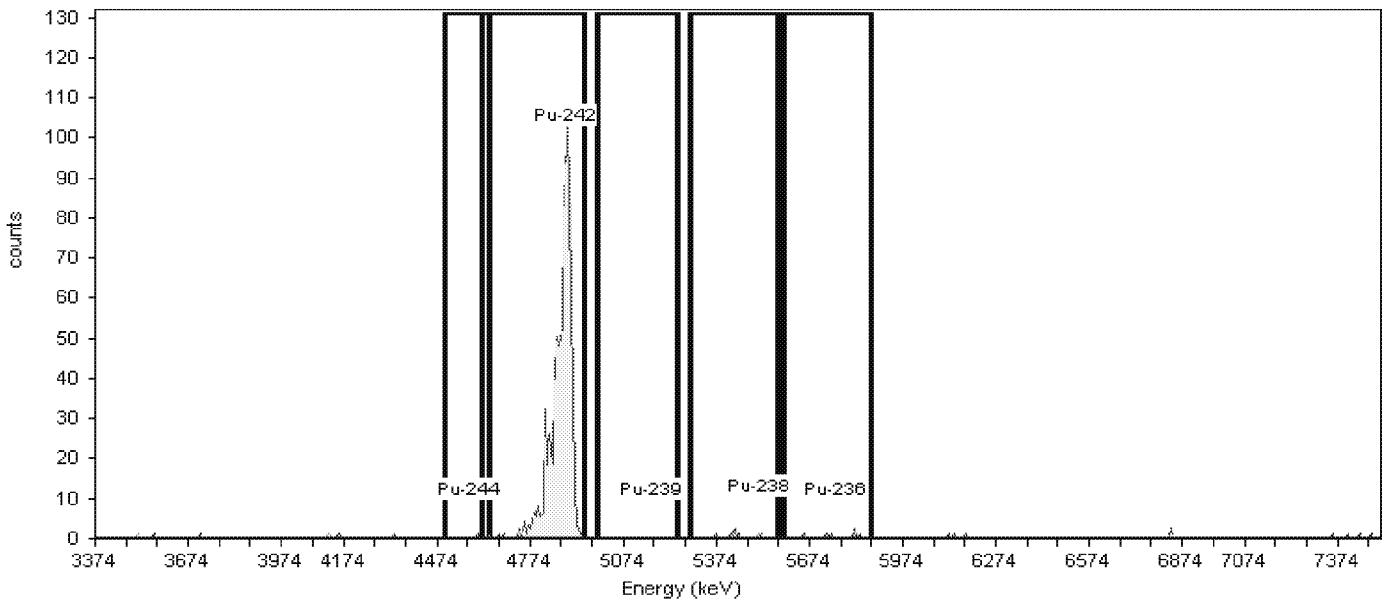
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 87.06%

## Acquisition

Detector: AV49
Serial Number: 47-043hh4
Acquisition Start Date: 11/14/2019 11:57:14PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:55:02PM
Background Info: Sample: ICB;AV49; Det: AV49; Spectrum #2; Nov-13-2019 13:55

Calibration Name: IC-1370620;AV49-05142018
Calibration Date: 5/15/2018 12:27:36PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.27% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .3 | 100.2 | 2 | 0.0000 | 2.00 | 0.016 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 57.1 | 100.0 | 750 | 1.0000 | 749.00 | 5.353 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | .0 | 99.9 | 0 | 0.5000 | -0.50 | -0.004 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 41.2 | 100.0 | 6 | 4.0000 | 2.00 | 0.016 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 11.4 | 99.9 | 6 | 2.7500 | 3.25 | 0.027 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:30AM 11/15/2019

## Sample

Sample Name: 160-36160-A-14-F
SampleType: Sample
: 160-36160-A-14-F
Sample Collection Date: 10/24/2019 3:58:00PM

Spectrum #1 Analysis #1
Sample Weight : 1.0017g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775215

Analyst: 60040

## Tracer

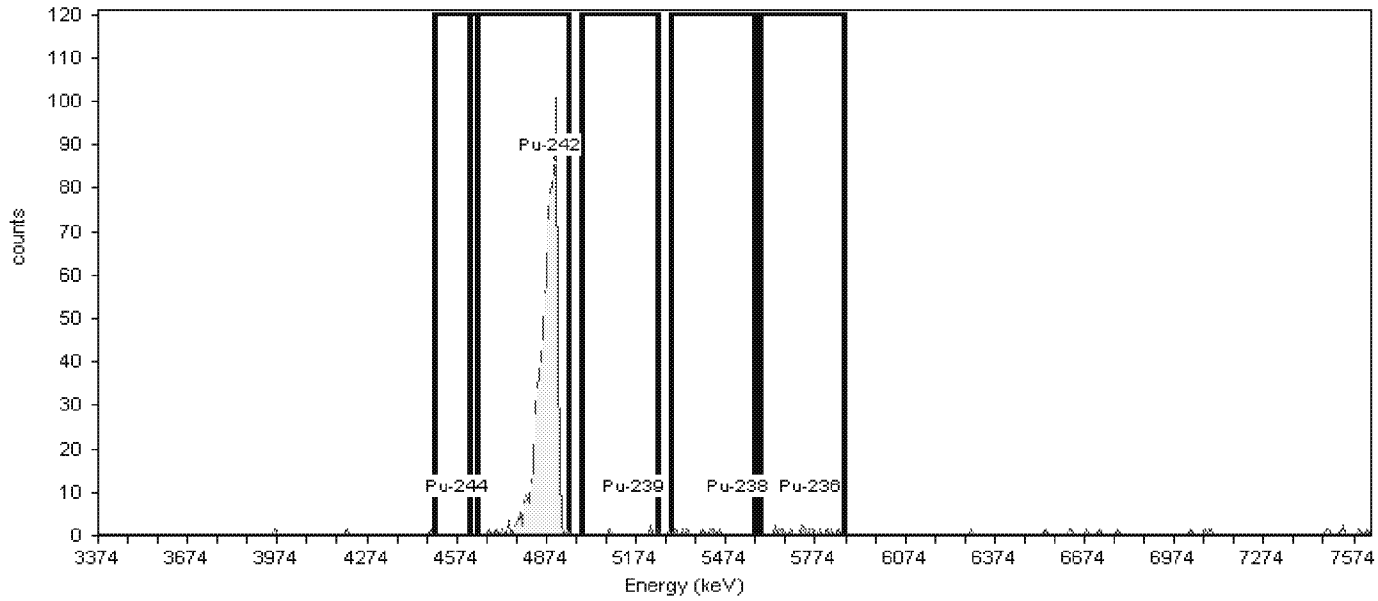
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 82.45%

## Acquisition

Detector: AV63
Serial Number: 47-029ff2
Acquisition Start Date: 11/14/2019 11:57:15PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:55:10PM
Background Info: Sample: ICB;AV63; Det: AV63; Spectrum #2; Nov-13-2019 13:55

Calibration Name: IC-1370621;AV63-05152018
Calibration Date: 5/15/2018 3:39:32PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.80% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .0 | 100.2 | 0 | 0.0000 | 0.00 | 0.000 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 60.6 | 100.0 | 725 | 1.5000 | 723.50 | 5.059 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 10.0 | 99.9 | 4 | 1.2500 | 2.75 | 0.023 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 158.1 | 100.0 | 7 | 8.5000 | -1.50 | -0.013 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 214.5 | 99.9 | 14 | 8.2500 | 5.75 | 0.049 | pCi/g |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Analysis Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:47AM 11/15/2019

## Sample

Sample Name: 160-36160-A-15-F
SampleType: Sample
: 160-36160-A-15-F
Sample Collection Date: 10/24/2019 3:38:00PM

Spectrum #1 Analysis #1
Sample Weight : 0.9995g
Aliquot: N/A Aliquot Fraction: N/A

## Batch

Batch Name: 449075
AnalysisID: 775217

Analyst: 60040

## Tracer

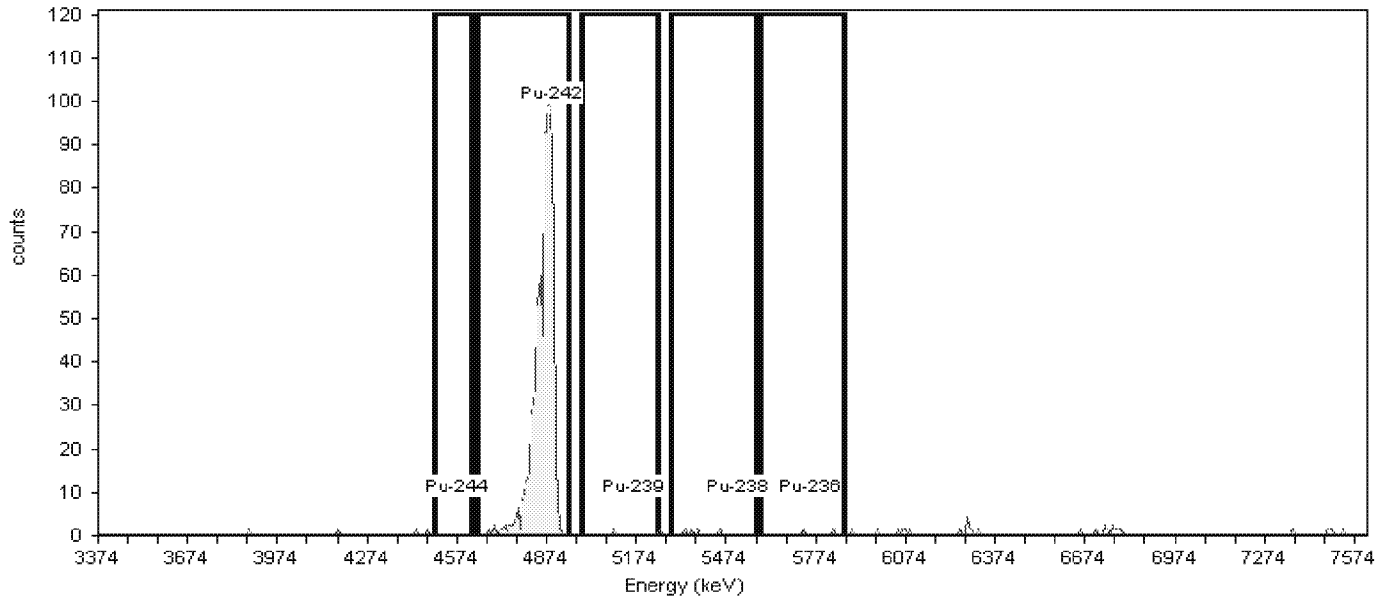
Tracer Name: Pu-242_00036
Tracer Activity: 68.23 DPM/mL x (Vol.)0.20 mL = 13.65 DPM
Tracer Ref. Date: 8/9/2017 12:00:01PM

Tracer Nuclide: Pu-242
Tracer Recovery: 90.82%

## Acquisition

Detector: AV80
Serial Number: 46-03305
Acquisition Start Date: 11/14/2019 11:57:16PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 11/13/2019 1:54:40PM
Background Info: Sample: ICB;AV80; Det: AV80; Spectrum #2; Nov-13-2019 13:54

Calibration Name: IC-1370622;AV80-05152018
Calibration Date: 5/15/2018 6:38:17PM
Energy Cal: Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$
Efficiency: 26.32% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: ROI Analysis, Set Name = Plutonium_Pu-242 (T)
Decay Correction: 11/14/2019 11:52:54PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

## Nuclide Summary (ROI)

| Nuclide | Peak Energy keV | Peak Expected keV | Peak Diff keV | ROI Start keV | ROI End keV | FWHM keV | B.R. % | Gross Counts | Bkgd Counts | Net Counts | Activity | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pu-244** | 4575.1 | 4,589.0 | -13.9 | 4500.5 | 4642.2 | .0 | 100.2 | 0 | 0.0000 | 0.00 | 0.000 | pCi/g |
| **Pu-242** | 4888.3 | 4,900.6 | -12.3 | 4619.8 | 4948.0 | 57.7 | 100.0 | 784 | 1.2500 | 782.75 | 5.585 | pCi/g |
| **Pu-239** | 5164.2 | 5,155.4 | 8.8 | 4992.7 | 5246.3 | 44.5 | 99.9 | 1 | 1.2500 | -0.25 | -0.002 | pCi/g |
| **Pu-238** | 5514.7 | 5,499.2 | 15.5 | 5291.0 | 5574.4 | 60.7 | 100.0 | 4 | 2.0000 | 2.00 | 0.016 | pCi/g |
| **Pu-236** | 5760.8 | 5,770.1 | -9.3 | 5589.3 | 5872.7 | 9.7 | 99.9 | 2 | 3.5000 | -1.50 | -0.012 | pCi/g |

# Daily Checks

# Alpha Spectroscopy Daily Pulser Check

## Analysis Date: 11/14/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV1 | 11/14/19 07:08 | 7066 | 6961-7694 | Pass | 12.8 | 10.0-20.0 | Pass | 224.1 | 218.5-228.5 | Pass | 5038 | 4994-5074 | Pass |
| AV3 | 11/14/19 07:07 | 7235 | 6900-7627 | Pass | 12.5 | 10.0-20.0 | Pass | 226.0 | 220.0-230.0 | Pass | 5052 | 5005-5085 | Pass |
| AV8 | 11/14/19 07:07 | 7351 | 7015-7754 | Pass | 15.1 | 10.0-20.0 | Pass | 223.8 | 219.0-229.0 | Pass | 5036 | 4997-5077 | Pass |
| AV11 | 11/14/19 07:07 | 7628 | 7316-8087 | Pass | 13.9 | 10.0-20.0 | Pass | 221.0 | 217.1-227.1 | Pass | 5015 | 4983-5063 | Pass |
| AV12 | 11/14/19 07:08 | 7626 | 7311-8080 | Pass | 13.5 | 10.0-20.0 | Pass | 221.0 | 215.4-225.4 | Pass | 5015 | 4971-5051 | Pass |
| AV14 | 11/14/19 07:08 | 7345 | 7116-7865 | Pass | 12.7 | 10.0-20.0 | Pass | 224.1 | 219.1-229.1 | Pass | 5038 | 4998-5078 | Pass |
| AV15 | 11/14/19 07:07 | 7618 | 7304-8073 | Pass | 14.1 | 10.0-20.0 | Pass | 224.0 | 219.4-229.4 | Pass | 5037 | 5000-5080 | Pass |
| AV16 | 11/14/19 07:07 | 7208 | 7062-7805 | Pass | 13.2 | 10.0-20.0 | Pass | 217.9 | 216.7-226.7 | Pass | 4992 | 4980-5060 | Pass |
| AV19 | 11/14/19 07:07 | 7575 | 7146-7898 | Pass | 11.5 | 10.0-20.0 | Pass | 224.0 | 219.0-229.0 | Pass | 5037 | 4998-5078 | Pass |
| AV20 | 11/14/19 07:07 | 7624 | 7320-8090 | Pass | 15.0 | 10.0-20.0 | Pass | 222.0 | 218.0-228.0 | Pass | 5022 | 4990-5070 | Pass |
| AV24 | 11/14/19 07:08 | 7577 | 7290-8057 | Pass | 14.7 | 10.0-20.0 | Pass | 219.9 | 214.6-224.6 | Pass | 5007 | 4964-5044 | Pass |
| AV48 | 11/14/19 11:26 | 7543 | 7259-8023 | Pass | 15.5 | 10.0-20.0 | Pass | 203.1 | 216.0-226.0 | **Fail** | 4881 | 4975-5055 | **Fail** |
| AV49 | 11/14/19 11:26 | 7516 | 7235-7996 | Pass | 17.0 | 10.0-20.0 | Pass | 219.0 | 215.0-225.0 | Pass | 5000 | 4968-5048 | Pass |
| AV63 | 11/14/19 11:27 | 7132 | 6821-7539 | Pass | 16.3 | 10.0-20.0 | Pass | 218.0 | 214.0-224.0 | Pass | 4993 | 4960-5040 | Pass |
| AV80 | 11/14/19 11:31 | 7428 | 7170-7924 | Pass | 14.0 | 10.0-20.0 | Pass | 220.0 | 216.1-226.1 | Pass | 5007 | 4975-5055 | Pass |

## Analysis Date: 11/15/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV249 | 11/15/19 00:56 | 6000 | 5482-6059 | Pass | 15.2 | 10.0-20.0 | Pass | 223.0 | 217.5-227.5 | Pass | 5030 | 4986-5066 | Pass |
| AV250 | 11/15/19 00:56 | 5965 | 5681-6279 | Pass | 16.8 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5022 | 4983-5063 | Pass |

# Alpha Spectroscopy Daily Pulser Check

## Analysis Date: 11/16/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV214 | 11/16/19 06:18 | 6005 | 5646-6240 | Pass | 15.3 | 10.0-20.0 | Pass | 225.0 | 219.0-229.0 | Pass | 5045 | 4997-5077 | Pass |
| AV215 | 11/16/19 06:18 | 6022 | 5708-6308 | Pass | 13.8 | 10.0-20.0 | Pass | 223.9 | 219.0-229.0 | Pass | 5037 | 4997-5077 | Pass |
| AV216 | 11/16/19 06:18 | 5996 | 5524-6105 | Pass | 14.8 | 10.0-20.0 | Pass | 224.0 | 219.9-229.9 | Pass | 5038 | 5004-5084 | Pass |
| AV217 | 11/16/19 06:18 | 5900 | 5545-6128 | Pass | 12.0 | 10.0-20.0 | Pass | 218.0 | 212.9-222.9 | Pass | 4993 | 4952-5032 | Pass |
| AV218 | 11/16/19 06:18 | 5998 | 5627-6219 | Pass | 16.2 | 10.0-20.0 | Pass | 224.0 | 219.0-229.0 | Pass | 5037 | 4997-5077 | Pass |
| AV221 | 11/16/19 06:18 | 5886 | 5623-6215 | Pass | 13.1 | 10.0-20.0 | Pass | 224.0 | 219.0-229.0 | Pass | 5038 | 4998-5078 | Pass |
| AV223 | 11/16/19 06:18 | 6009 | 5684-6283 | Pass | 15.5 | 10.0-20.0 | Pass | 222.0 | 217.1-227.1 | Pass | 5023 | 4983-5063 | Pass |
| AV224 | 11/16/19 06:18 | 6007 | 5713-6315 | Pass | 18.4 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5022 | 4982-5062 | Pass |
| AV225 | 11/16/19 06:18 | 5878 | 5588-6176 | Pass | 12.8 | 10.0-20.0 | Pass | 224.0 | 219.0-229.0 | Pass | 5037 | 4997-5077 | Pass |
| AV227 | 11/16/19 06:18 | 6012 | 5638-6231 | Pass | 14.8 | 10.0-20.0 | Pass | 223.1 | 218.0-228.0 | Pass | 5031 | 4990-5070 | Pass |
| AV228 | 11/16/19 06:18 | 6009 | 5641-6235 | Pass | 14.7 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5023 | 4982-5062 | Pass |
| AV229 | 11/16/19 06:18 | 6005 | 5707-6307 | Pass | 15.2 | 10.0-20.0 | Pass | 223.0 | 218.0-228.0 | Pass | 5030 | 4990-5070 | Pass |
| AV230 | 11/16/19 06:18 | 6014 | 5541-6124 | Pass | 14.4 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5023 | 4982-5062 | Pass |
| AV232 | 11/16/19 06:18 | 6008 | 5689-6288 | Pass | 14.4 | 10.0-20.0 | Pass | 223.0 | 218.0-228.0 | Pass | 5030 | 4990-5070 | Pass |
| AV233 | 11/16/19 06:18 | 6001 | 5703-6304 | Pass | 16.0 | 10.0-20.0 | Pass | 224.0 | 218.0-228.0 | Pass | 5038 | 4990-5070 | Pass |
| AV234 | 11/16/19 06:18 | 6026 | 5724-6326 | Pass | 13.8 | 10.0-20.0 | Pass | 222.9 | 218.0-228.0 | Pass | 5029 | 4990-5070 | Pass |
| AV241 | 11/16/19 06:18 | 6004 | 5707-6308 | Pass | 15.3 | 10.0-20.0 | Pass | 223.1 | 217.9-227.9 | Pass | 5030 | 4990-5070 | Pass |
| AV243 | 11/16/19 06:18 | 5863 | 5628-6220 | Pass | 12.9 | 10.0-20.0 | Pass | 222.0 | 217.0-227.0 | Pass | 5023 | 4983-5063 | Pass |

## Analysis Date: 11/19/19

| | | Gross Counts | | | FWHM (keV) | | | Pulser Center | | | Energy (keV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector | Analysis Date | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F | Result | Criteria | P/F |
| AV244 | 11/19/19 10:05 | 5793 | 5549-6133 | Pass | 12.9 | 10.0-20.0 | Pass | 224.0 | 218.6-228.6 | Pass | 5038 | 4994-5074 | Pass |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:11:46AM 11/14/2019

## Sample

Sample Name: Pulser;AV1
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

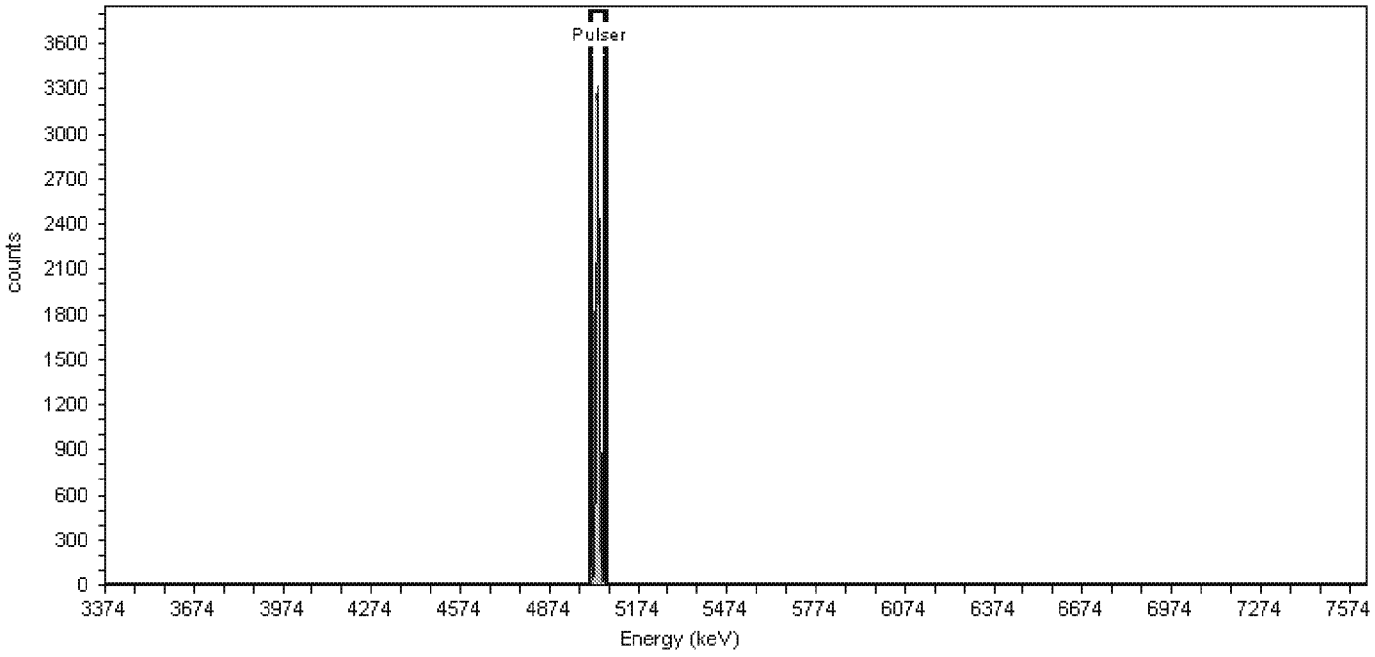
Analyst: 60040

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 11/14/2019 7:08:12AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-7107;AV1-05142018
Calibration Date: 5/14/2018 6:23:45PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.36% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5038.405 | 5016.642 | 5060.168 | 12.79 | 6,077.98 | 7,066.49 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:11:54AM 11/14/2019

## Sample

Sample Name: Pulser;AV3
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

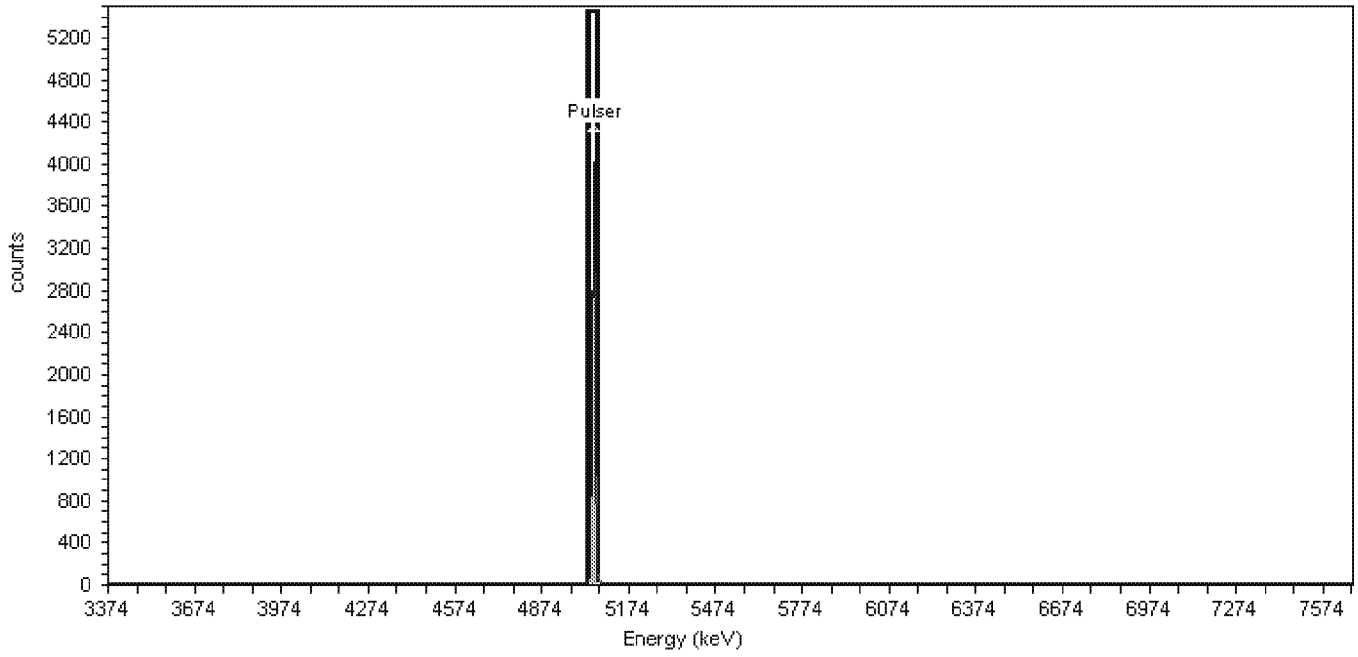
Analyst: 60040

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 11/14/2019 7:07:50AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-8877;AV3-05142018
Calibration Date: 5/14/2018 6:25:15PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.44% +/- 0.30% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5052.211 | 5030.878 | 5073.543 | 12.53 | 7,215.70 | 7,235.34 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:12:33AM 11/14/2019

## Sample

Sample Name: Pulser;AV8
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

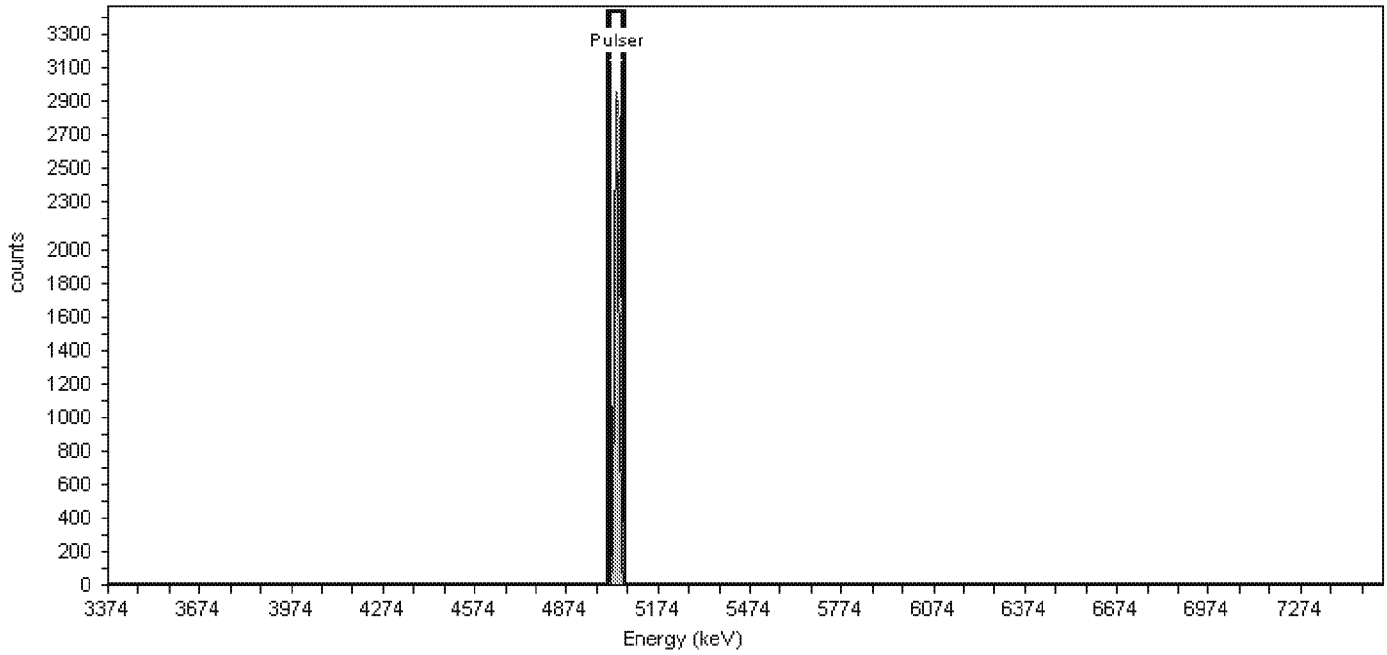
Analyst: 60040

## Acquisition

Detector: AV8 , SN: 41-137Q6
Acquisition Start Date: 11/14/2019 7:07:56AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9795;AV8-05142018
Calibration Date: 5/14/2018 6:26:27PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 25.96% +/- 0.34% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5036.304 | 5010.539 | 5062.068 | 15.14 | 6,415.96 | 7,351.42 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:12:42AM 11/14/2019

## Sample

Sample Name: Pulser;AV11
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

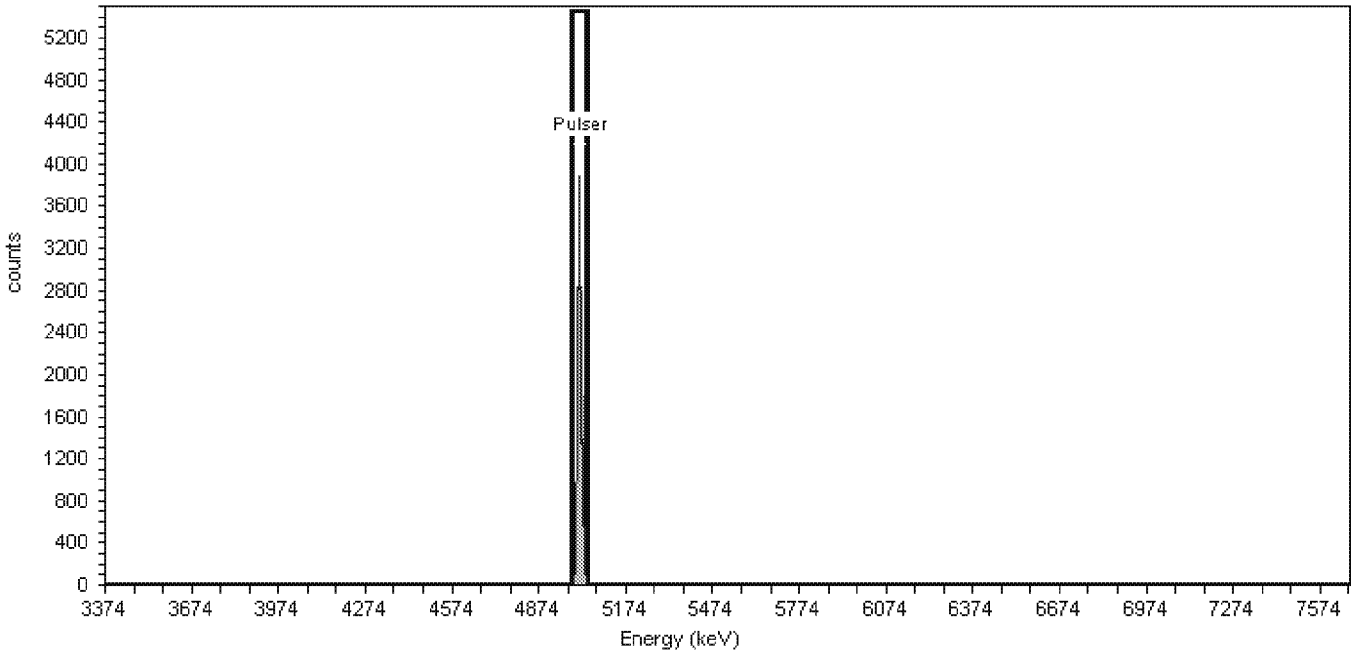
Analyst: 60040

## Acquisition

Detector: AV11 , SN: 49-155dd2
Acquisition Start Date: 11/14/2019 7:07:58AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1368446;AV11-05142018
Calibration Date: 5/14/2018 6:27:11PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 28.19% +/- 0.26% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5014.989 | 4991.377 | 5038.601 | 13.87 | 7,732.84 | 7,627.53 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:12:50AM 11/14/2019

## Sample

Sample Name: Pulser;AV12
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

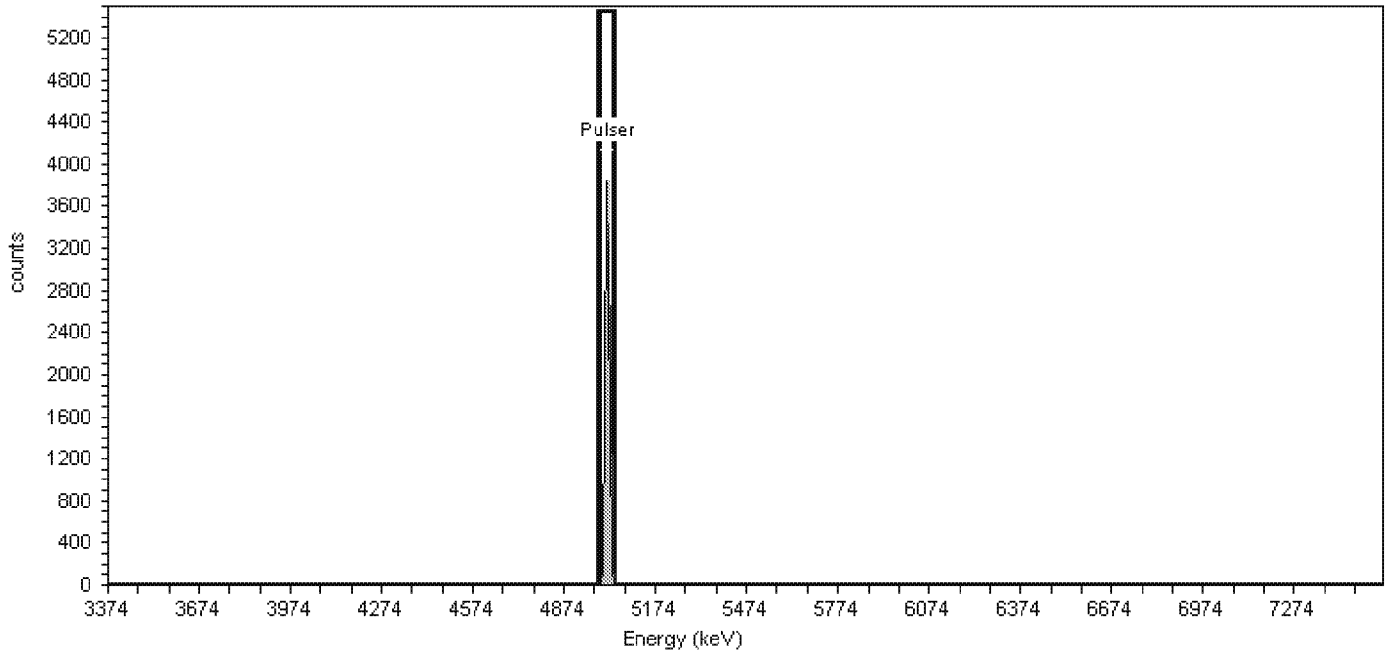
Analyst: 60040

## Acquisition

Detector: AV12 , SN: 51-082B7
Acquisition Start Date: 11/14/2019 7:08:00AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1368447; AV12-05142018
Calibration Date: 5/14/2018 6:27:24PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.78% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5014.813 | 4991.857 | 5037.770 | 13.49 | 7,411.91 | 7,625.91 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:12:59AM 11/14/2019

## Sample

Sample Name: Pulser;AV14
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

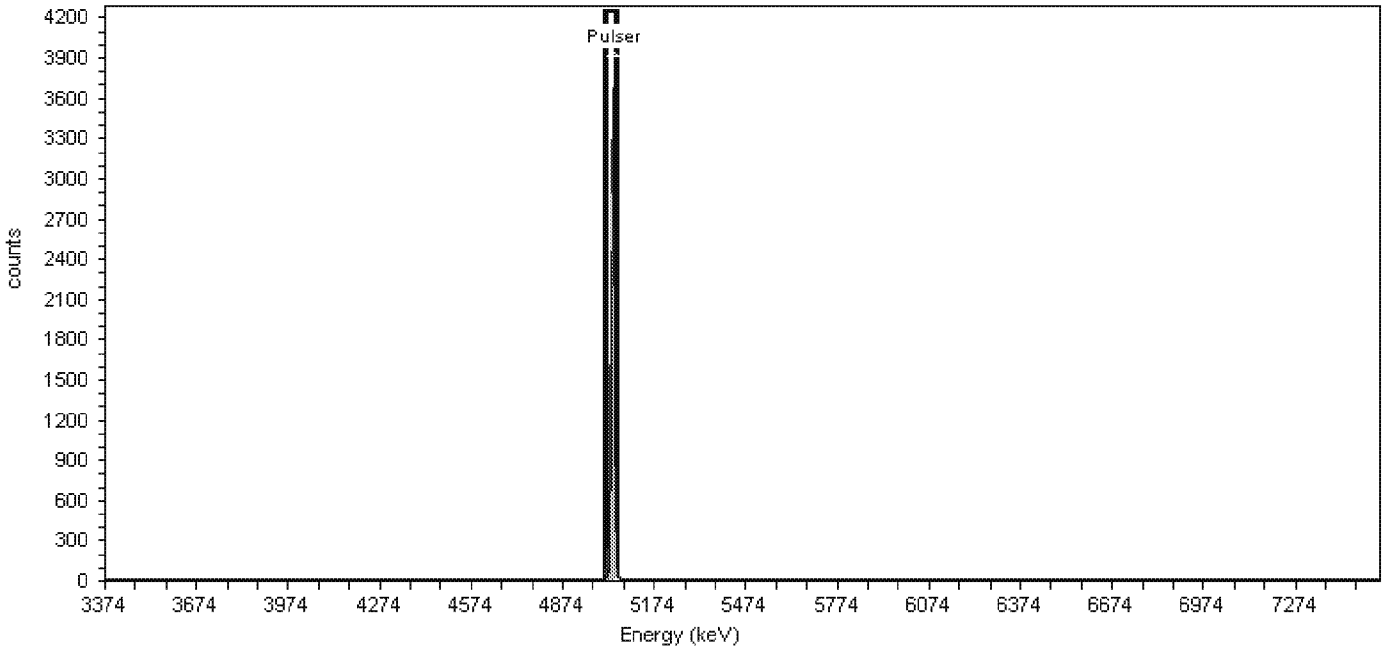
Analyst: 60040

## Acquisition

Detector: AV14 , SN: 50-060W4
Acquisition Start Date: 11/14/2019 7:08:02AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370622;AV14-05142018
Calibration Date: 5/14/2018 6:27:53PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.40% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.912 | 5016.271 | 5059.552 | 12.71 | 6,699.90 | 7,345.27 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:13:11AM 11/14/2019

## Sample

Sample Name: Pulser;AV15
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

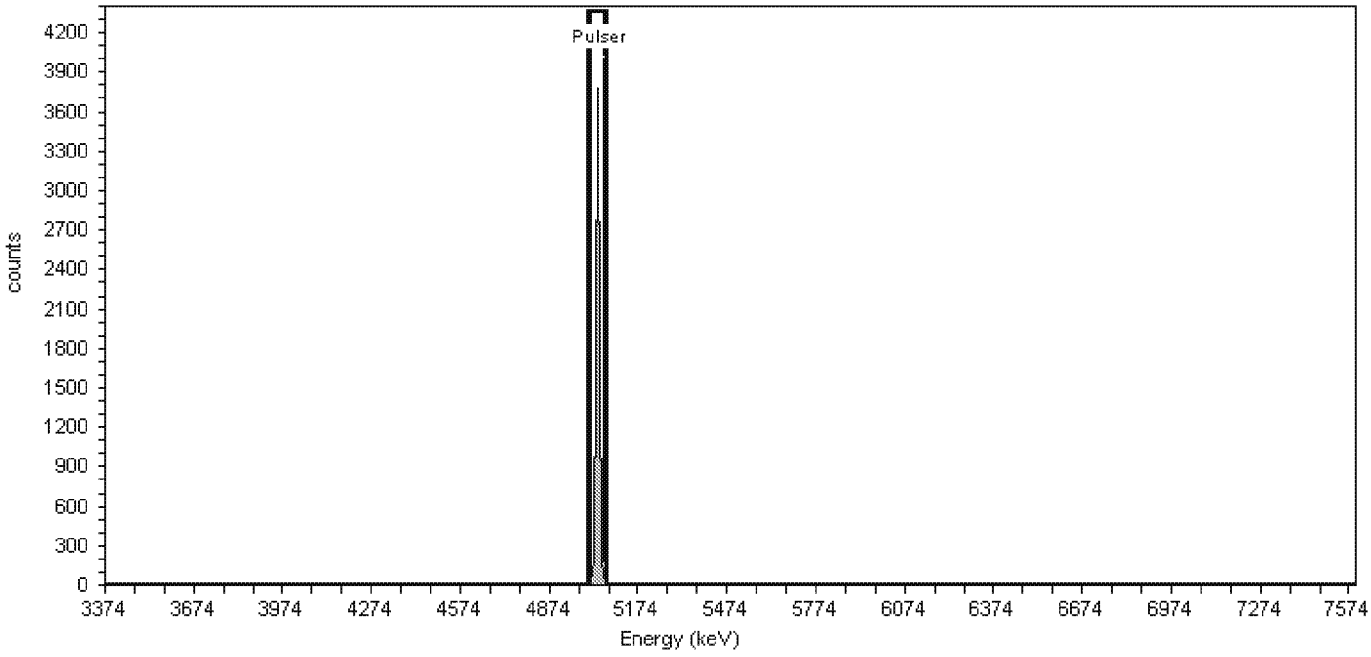
Analyst: 60040

## Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 11/14/2019 7:07:51AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370619;AV15-05142018
Calibration Date: 5/14/2018 6:28:04PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.26% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.429 | 5013.394 | 5061.464 | 14.12 | 7,641.20 | 7,617.99 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:13:29AM 11/14/2019

## Sample

Sample Name: Pulser;AV16
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

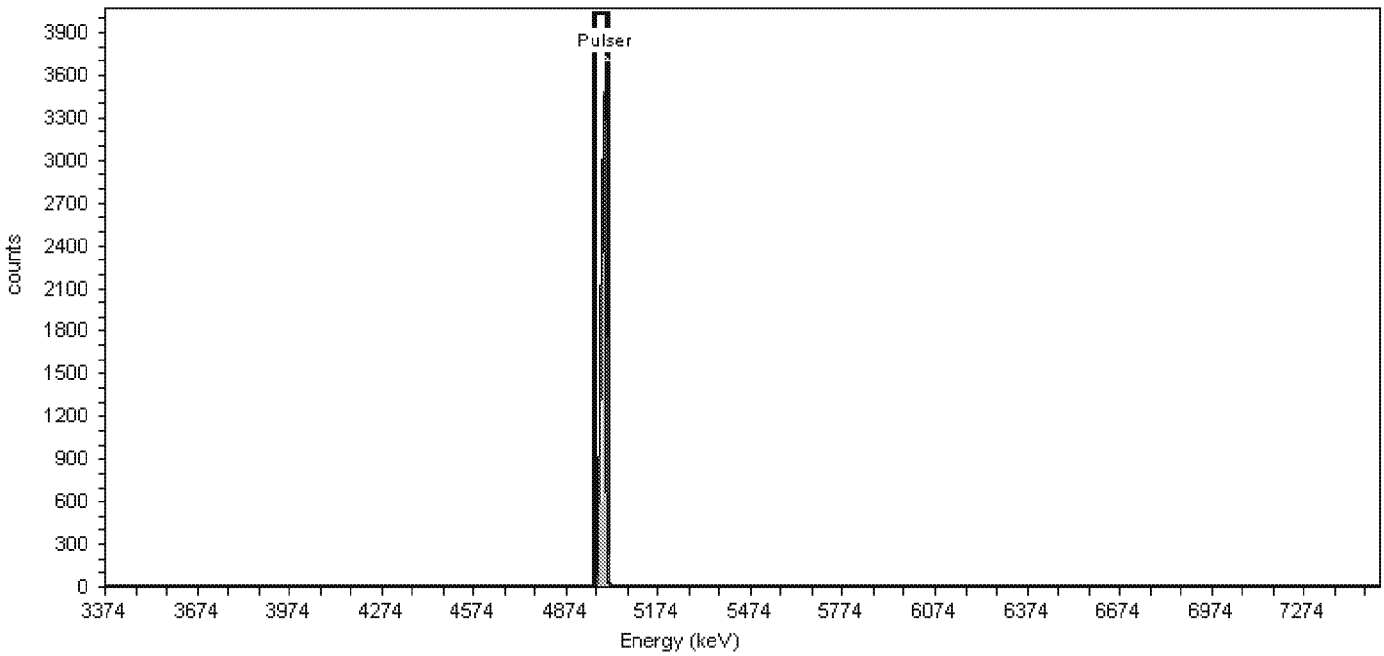
Analyst: 60040

## Acquisition

Detector: AV16 , SN: 51-082B6
Acquisition Start Date: 11/14/2019 7:07:53AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-137620;AV16-05142018
Calibration Date: 5/14/2018 6:28:17PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.96% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 4992.054 | 4969.542 | 5014.566 | 13.23 | 6,599.10 | 7,207.94 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:10:54AM 11/14/2019

## Sample

Sample Name: Pulser;AV19
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

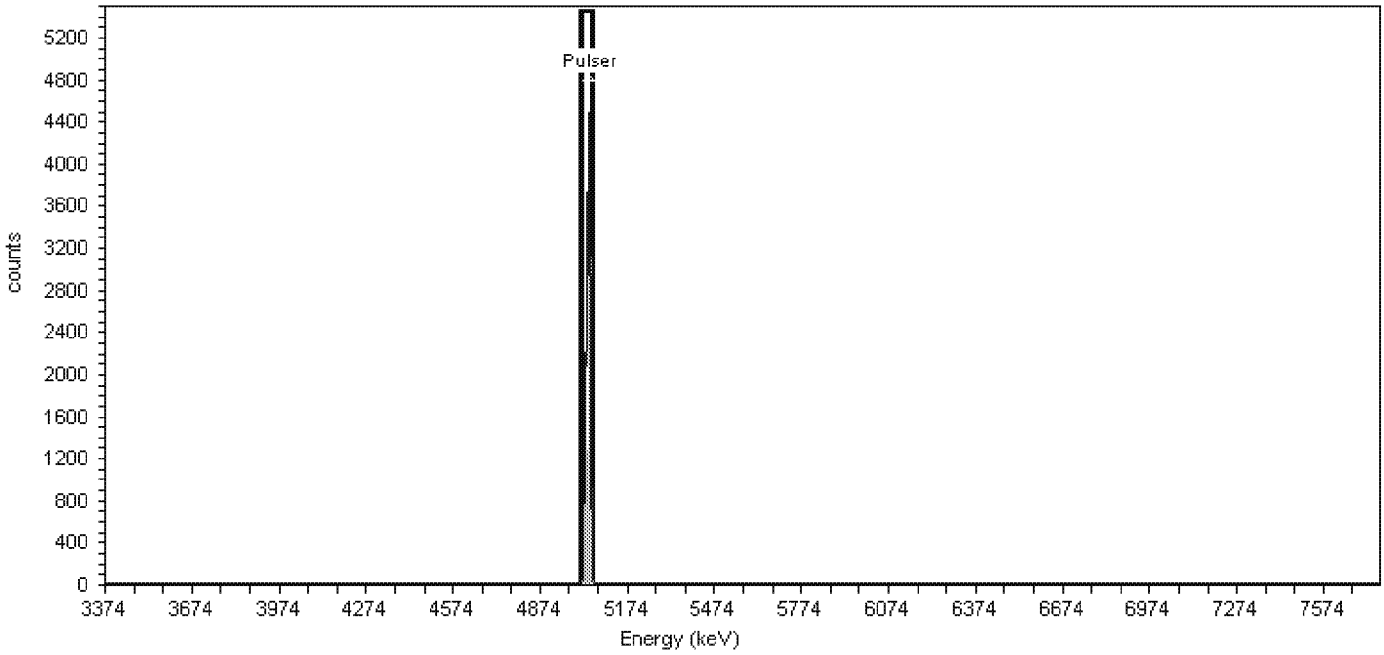
Analyst: 60040

## Acquisition

Detector: AV19 , SN: 50-025FF5
Acquisition Start Date: 11/14/2019 7:07:57AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-8877;AV19-05142018
Calibration Date: 5/15/2018 12:27:55PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.60% +/- 0.29% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.372 | 5017.723 | 5057.021 | 11.54 | 7,432.02 | 7,574.81 |

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:11:20AM 11/14/2019

## Sample

Sample Name: Pulser;AV20
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

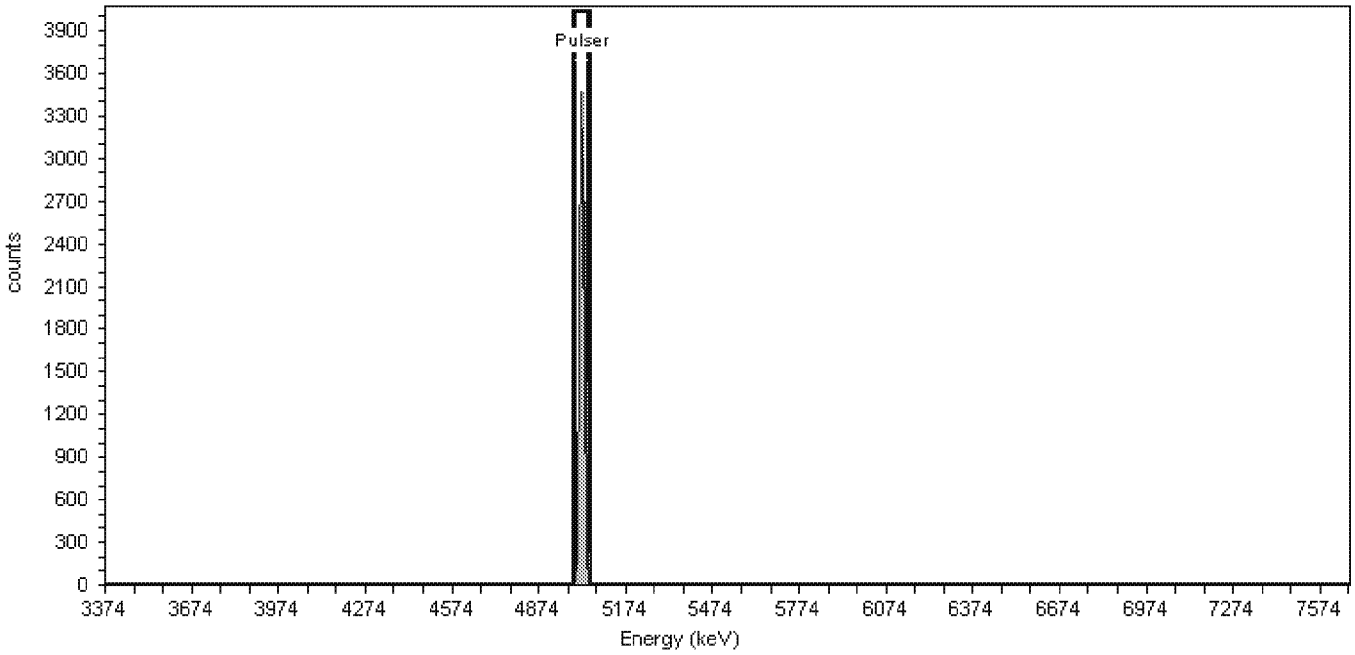
Analyst: 60040

## Acquisition

Detector: AV20 , SN: 48-121A7
Acquisition Start Date: 11/14/2019 7:07:59AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9520;AV20-05142018
Calibration Date: 5/15/2018 12:28:08PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.15% +/- 0.32% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.156 | 4996.632 | 5047.680 | 15.00 | 7,464.81 | 7,624.05 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:11:37AM 11/14/2019

## Sample

Sample Name: Pulser;AV24
Comment:

Spectrum #7 Analysis #1

## Batch

Batch Name: November2019a
Description:

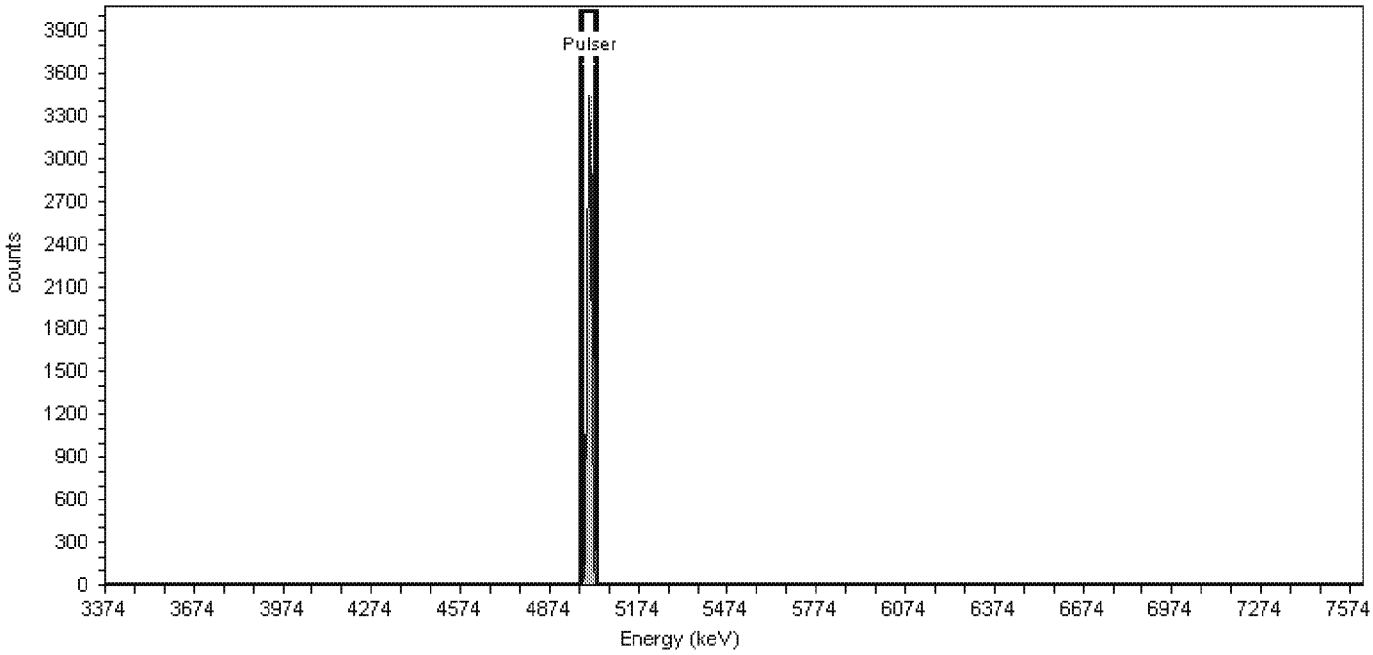
Analyst: 60040

## Acquisition

Detector: AV24 , SN: 47-137Q4
Acquisition Start Date: 11/14/2019 7:08:06AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9817;AV24-05142018
Calibration Date: 5/15/2018 12:28:57PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.21% +/- 0.28% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5007.073 | 4982.123 | 5032.022 | 14.66 | 7,227.73 | 7,576.58 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:30:07AM 11/14/2019

## Sample

Sample Name: Pulser;AV48
Comment:

Spectrum #6 Analysis #1

## Batch

Batch Name: November2019b
Description:

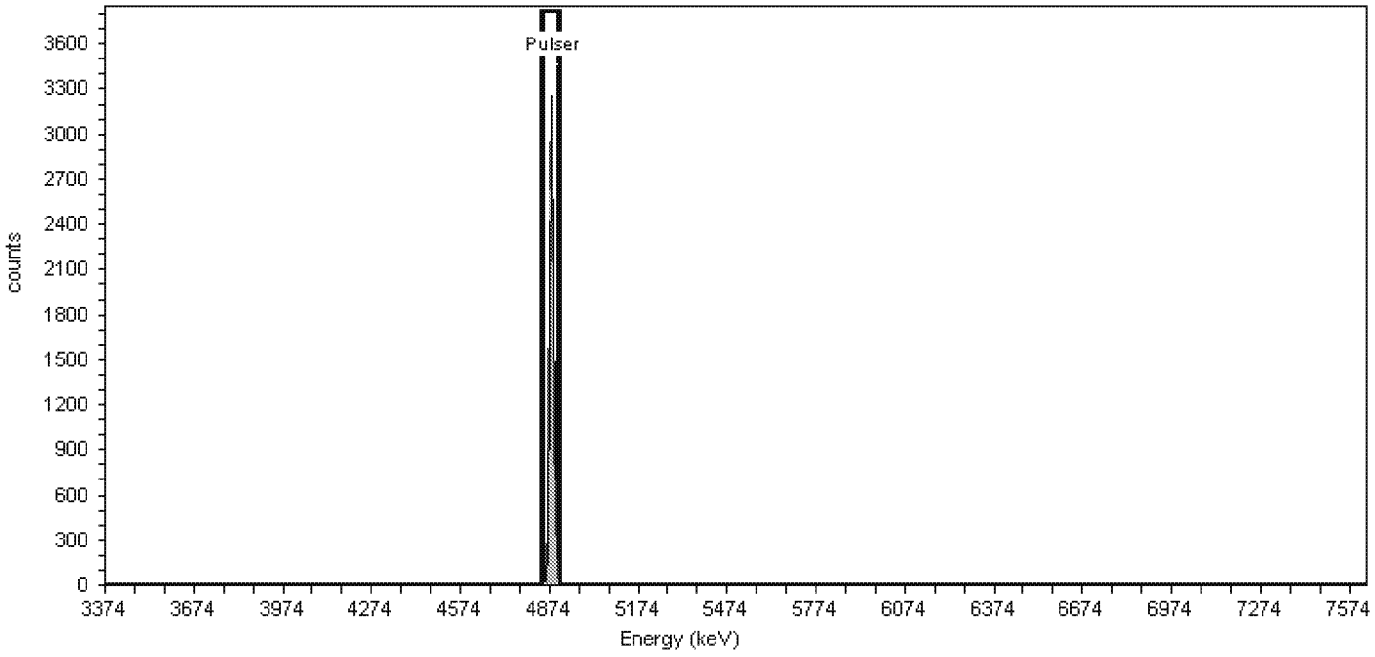
Analyst: 60040

## Acquisition

Detector: AV48 , SN: 46-033P6
Acquisition Start Date: 11/14/2019 11:26:56AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370619;AV48-05142018
Calibration Date: 5/15/2018 12:27:25PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.06% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 4881.371 | 4854.959 | 4907.782 | 15.52 | 7,253.92 | 7,542.91 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:29:58AM 11/14/2019

## Sample

Sample Name: Pulser;AV49
Comment:

Spectrum #6 Analysis #1

## Batch

Batch Name: November2019b
Description:

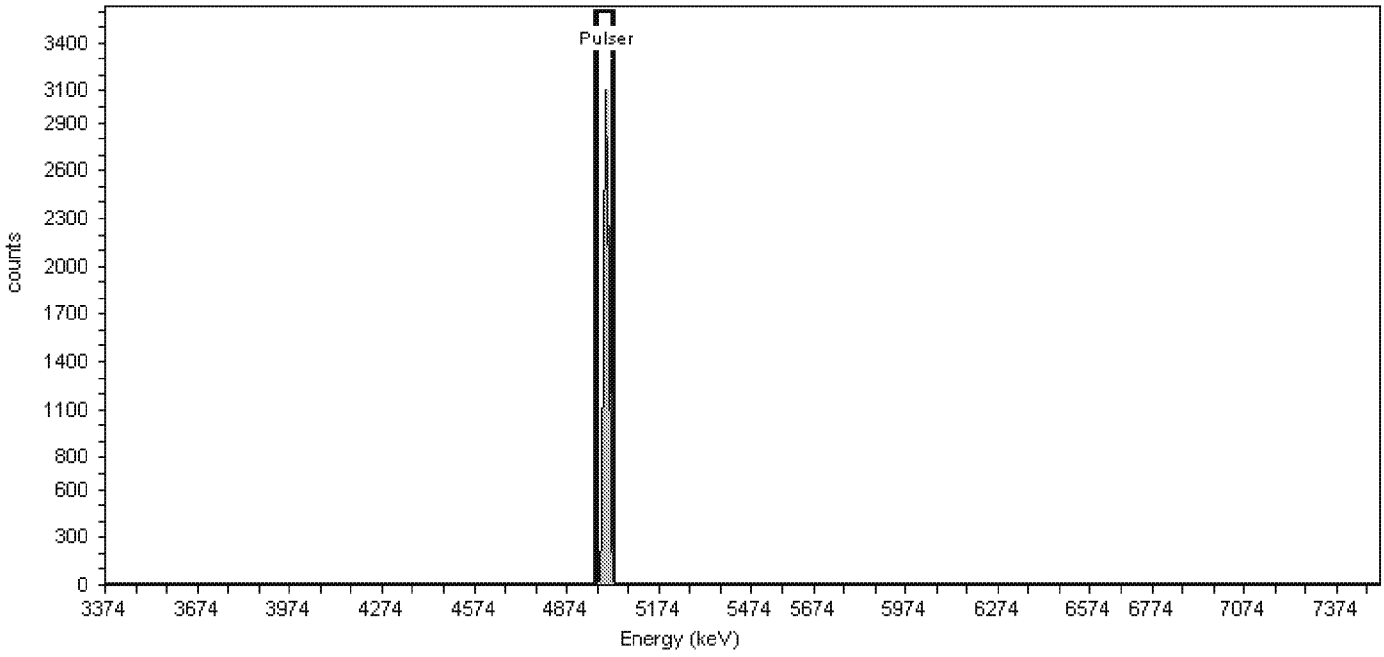
Analyst: 60040

## Acquisition

Detector: AV49 , SN: 47-043hh4
Acquisition Start Date: 11/14/2019 11:26:58AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370620;AV49-05142018
Calibration Date: 5/15/2018 12:27:36PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.27% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5000.083 | 4971.198 | 5028.969 | 16.97 | 7,542.66 | 7,516.22 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:30:16AM 11/14/2019

## Sample

Sample Name: Pulser;AV63
Comment:

Spectrum #6 Analysis #1

## Batch

Batch Name: November2019b
Description:

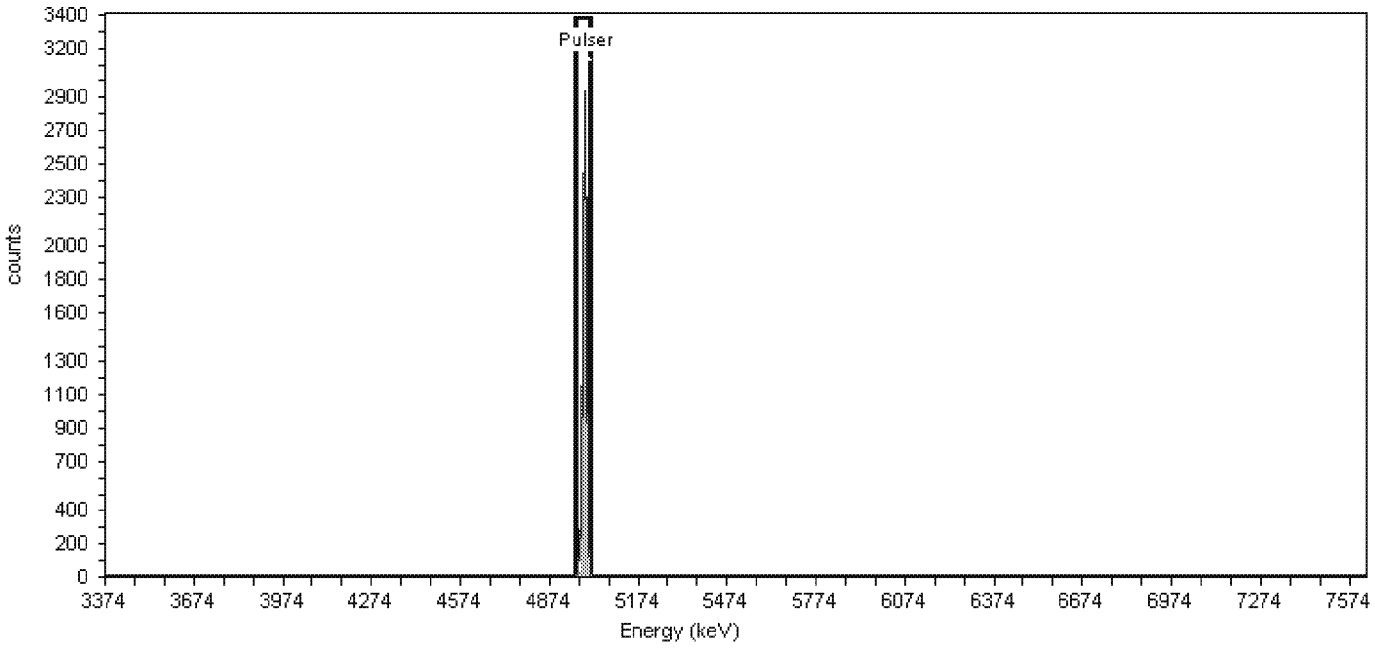
Analyst: 60040

## Acquisition

Detector: AV63 , SN: 47-029ff2
Acquisition Start Date: 11/14/2019 11:27:04AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370621;AV63-05152018
Calibration Date: 5/15/2018 3:39:32PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.80% +/- 0.24% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 4992.765 | 4965.051 | 5020.479 | 16.28 | 6,871.13 | 7,132.34 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:34:18AM 11/14/2019

## Sample

Sample Name: Pulser;AV80
Comment:

Spectrum #6 Analysis #1

## Batch

Batch Name: November2019c
Description:

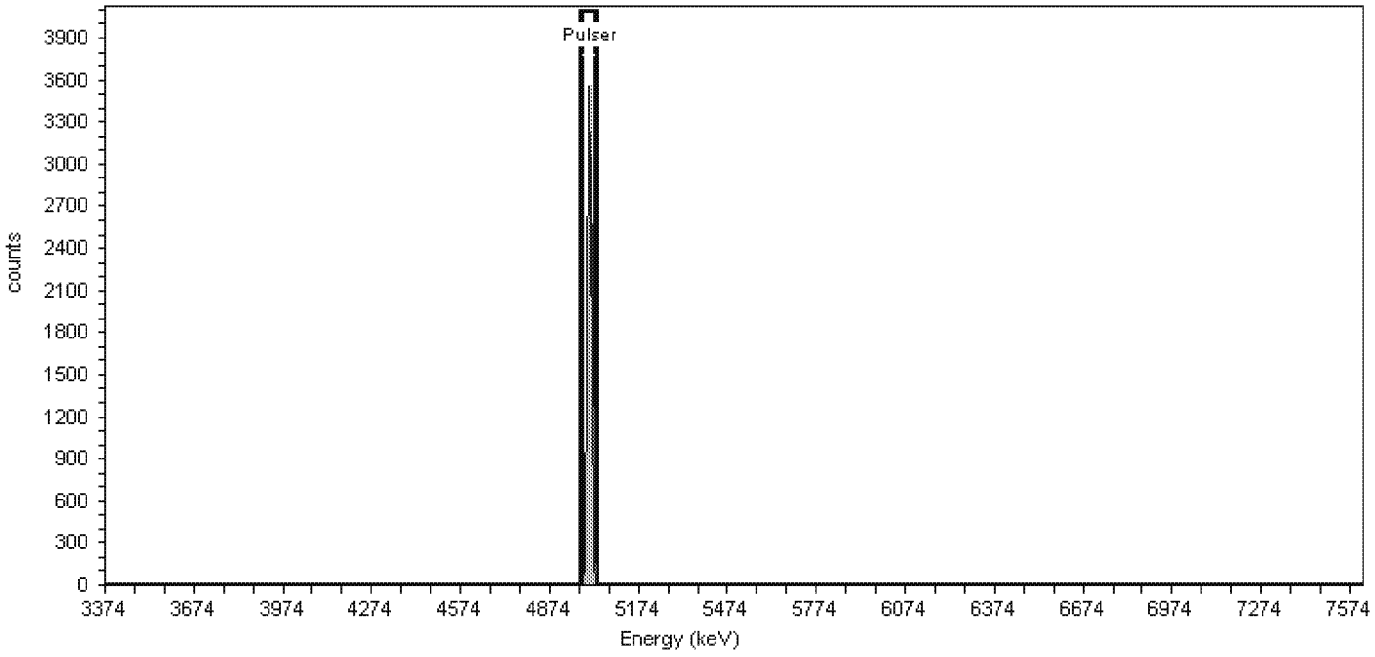
Analyst: 60040

## Acquisition

Detector: AV80 , SN: 46-03305
Acquisition Start Date: 11/14/2019 11:31:37AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-1370622;AV80-05152018
Calibration Date: 5/15/2018 6:38:17PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.32% +/- 0.23% TPU(2 sigma)




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5007.393 | 4983.554 | 5031.231 | 14.01 | 7,150.12 | 7,428.16 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:09AM 11/16/2019

## Sample

Sample Name: Pulser;AV214 Spectrum #7 Analysis #1
Comment:

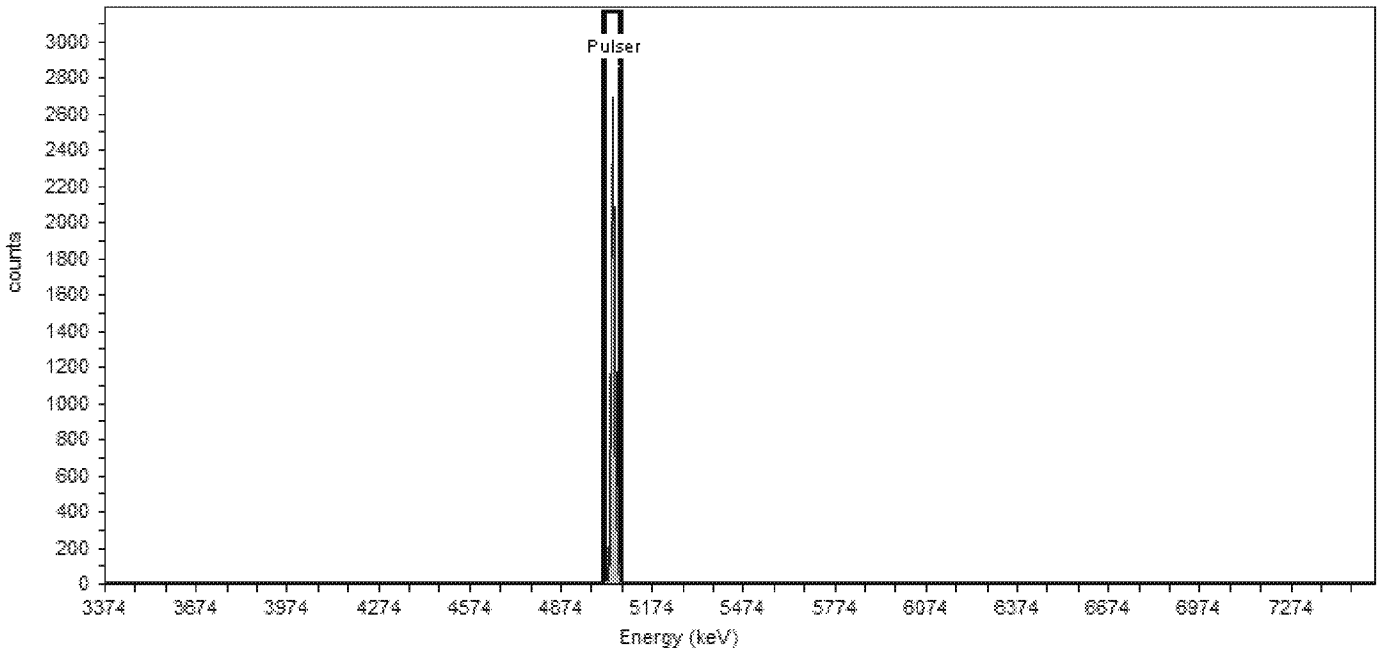
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV214 , SN: 5507304
Acquisition Start Date: 11/16/2019 6:18:49AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370619;AV214-07152019b
Calibration Date: 7/15/2019 2:06:28PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5045.258 | 5019.284 | 5071.232 | 15.26 | 5,889.92 | 6,004.51 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:44AM 11/16/2019

## Sample

Sample Name: Pulser;AV215 Spectrum #7 Analysis #1
Comment:

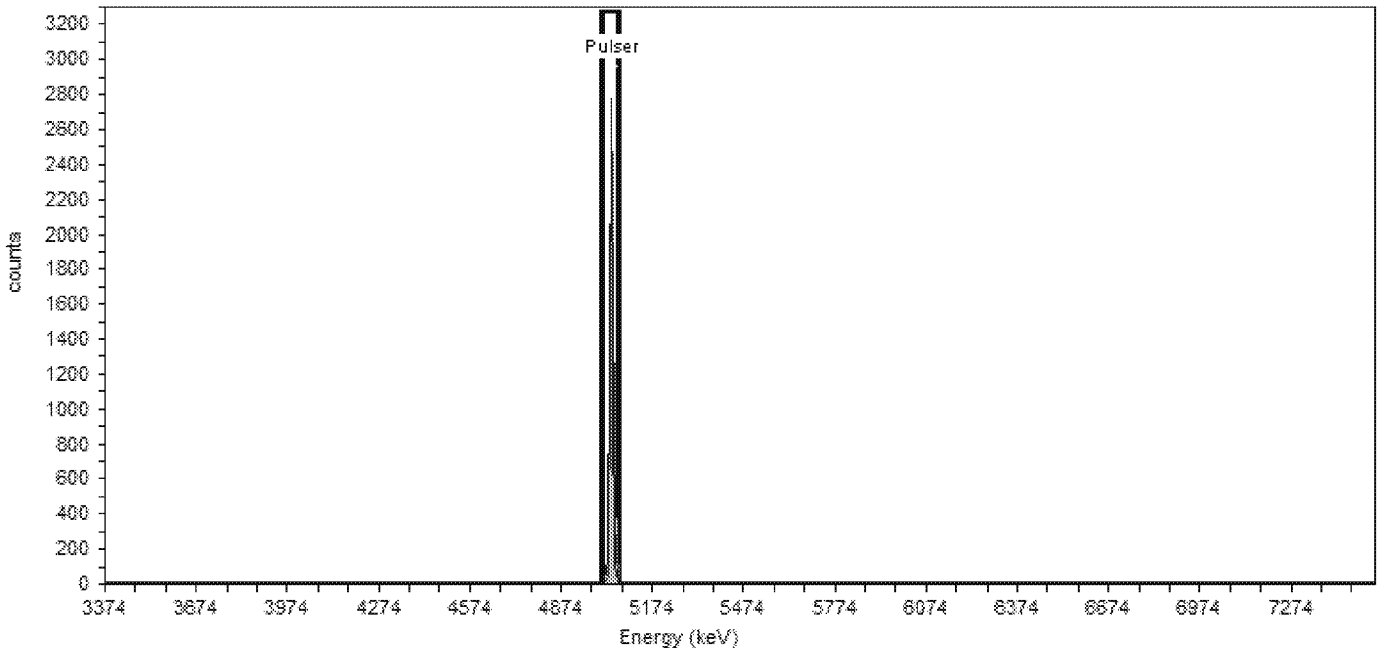
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV215 , SN: 50-119J4
Acquisition Start Date: 11/16/2019 6:18:49AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370620;AV215-11152018
Calibration Date: 11/15/2018 3:56:53PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.061 | 5013.548 | 5060.574 | 13.81 | 5,505.63 | 6,021.68 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:21AM 11/16/2019

## Sample

Sample Name: Pulser;AV216 Spectrum #7 Analysis #1
Comment:

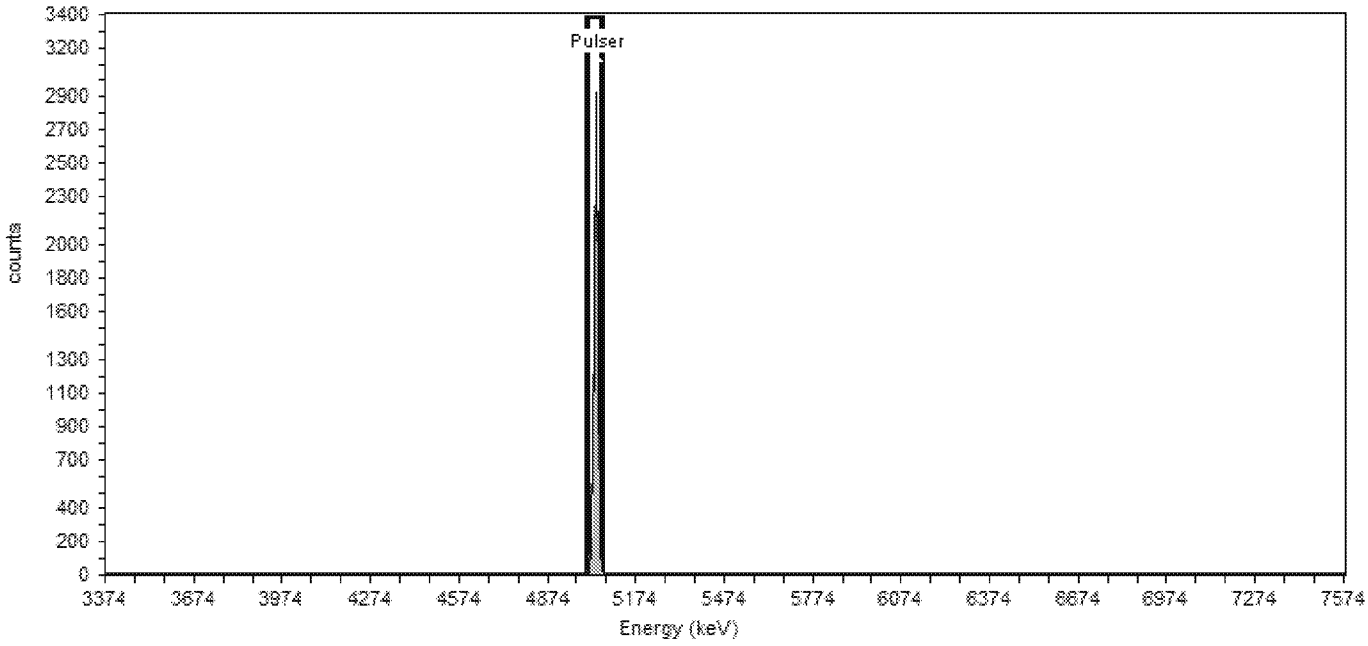
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV216 , SN: 50-117J5
Acquisition Start Date: 11/16/2019 6:18:49AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-7107;AV216-11152018
Calibration Date: 11/15/2018 3:56:57PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.606 | 5012.421 | 5062.792 | 14.80 | 6,218.93 | 5,995.50 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:33AM 11/16/2019

## Sample

Sample Name: Pulser;AV217 Spectrum #7 Analysis #1
Comment:

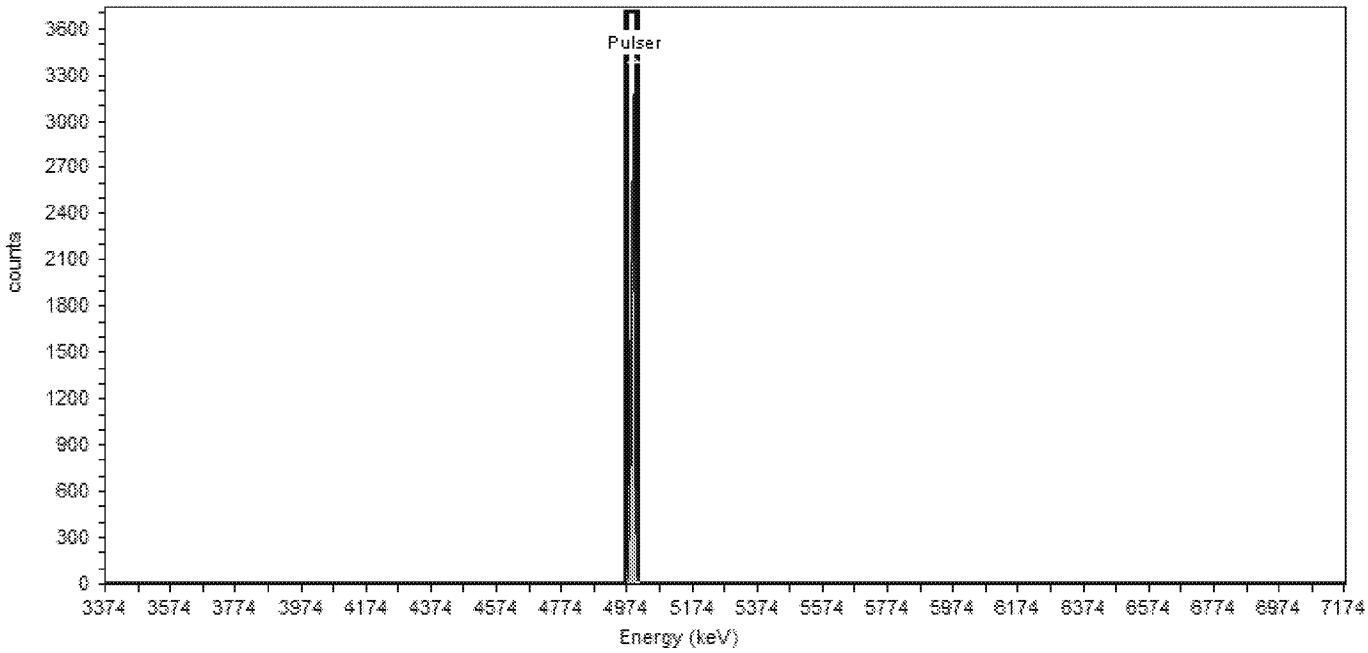
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV217 , SN: 50-117I2
Acquisition Start Date: 11/16/2019 6:18:49AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-8874;AV217-11152018
Calibration Date: 11/15/2018 6:57:58PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 4992.996 | 4972.625 | 5013.368 | 11.97 | 5,441.09 | 5,899.74 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:56AM 11/16/2019

## Sample

Sample Name: Pulser;AV218 Spectrum #7 Analysis #1
Comment:

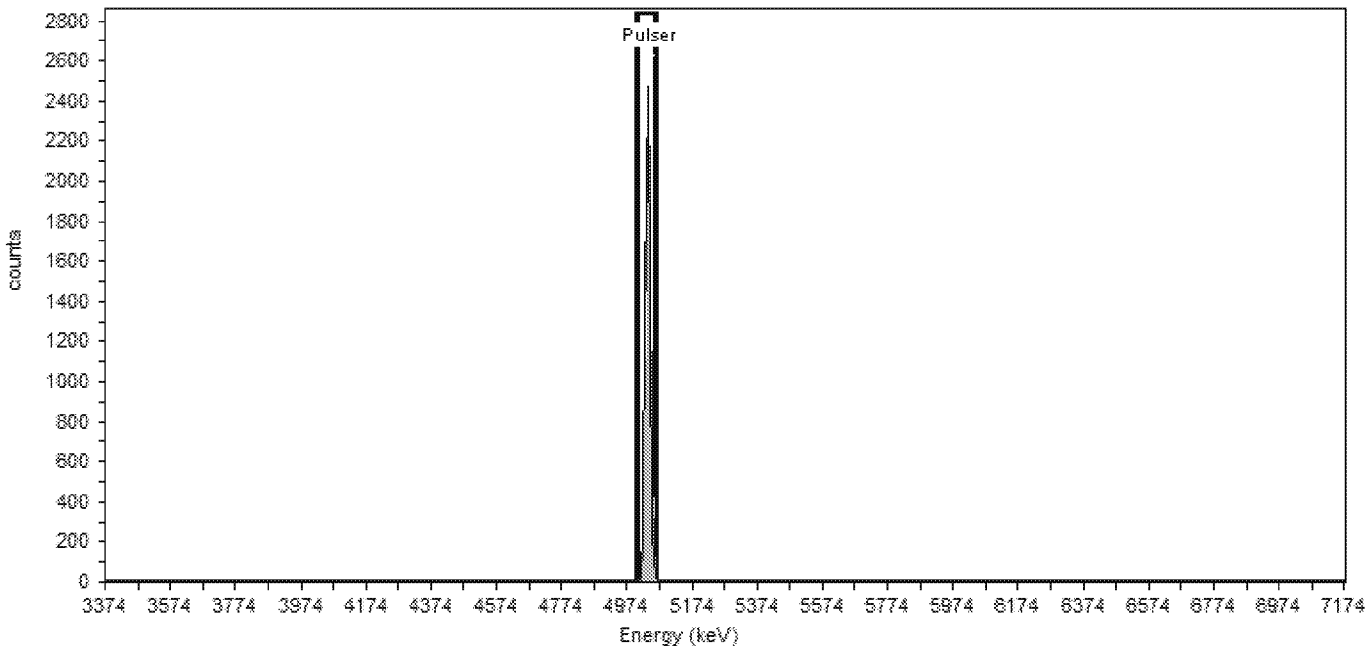
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV218 , SN: 50-117Z7
Acquisition Start Date: 11/16/2019 6:18:49AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-8877;AV218-11152018
Calibration Date: 11/15/2018 3:57:00PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.149 | 5009.509 | 5064.790 | 16.24 | 5,754.45 | 5,998.01 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:28:31AM 11/16/2019

## Sample

Sample Name: Pulser;AV221 Spectrum #8 Analysis #1
Comment:

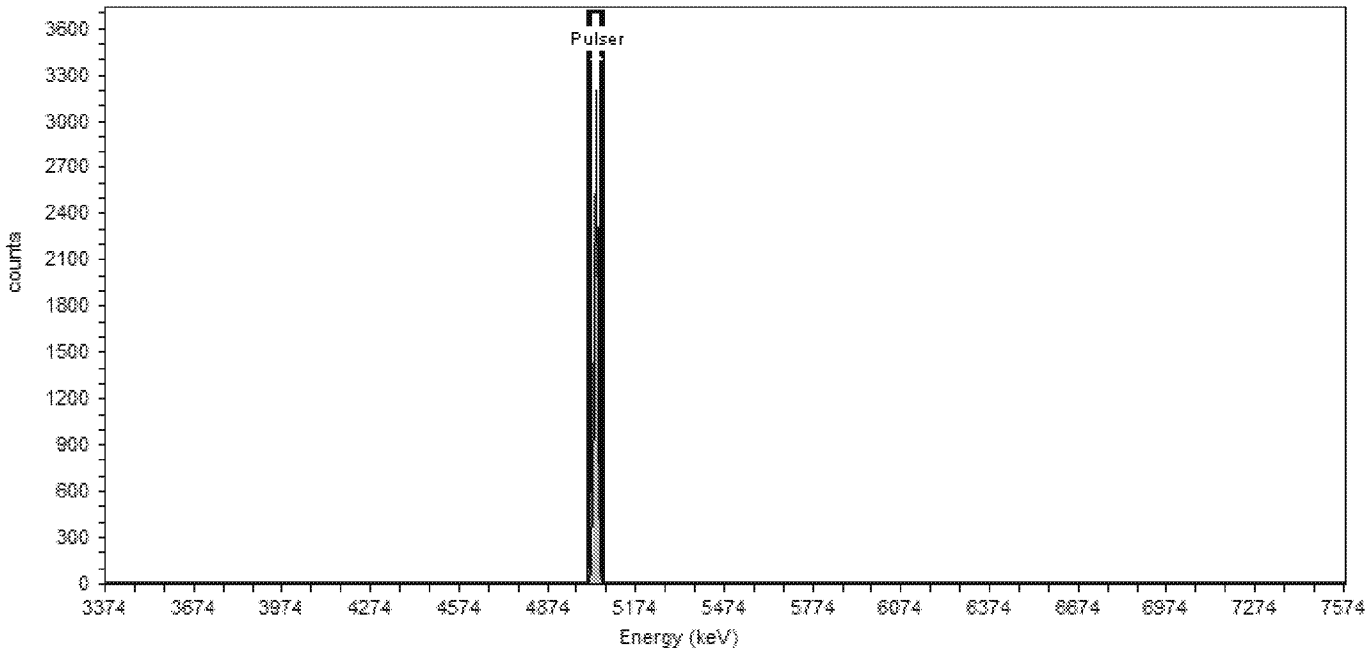
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV221 , SN: 50-117H5
Acquisition Start Date: 11/16/2019 6:18:50AM
Live Time: 1.00 min.
Real Time: 1.01 min.
Calibration Name: IC-9793;AV221-11152018
Calibration Date: 11/15/2018 3:57:25PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.788 | 5015.480 | 5060.096 | 13.11 | 6,014.47 | 5,885.91 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:28:55AM 11/16/2019

## Sample

Sample Name: Pulser;AV223 Spectrum #8 Analysis #1
Comment:

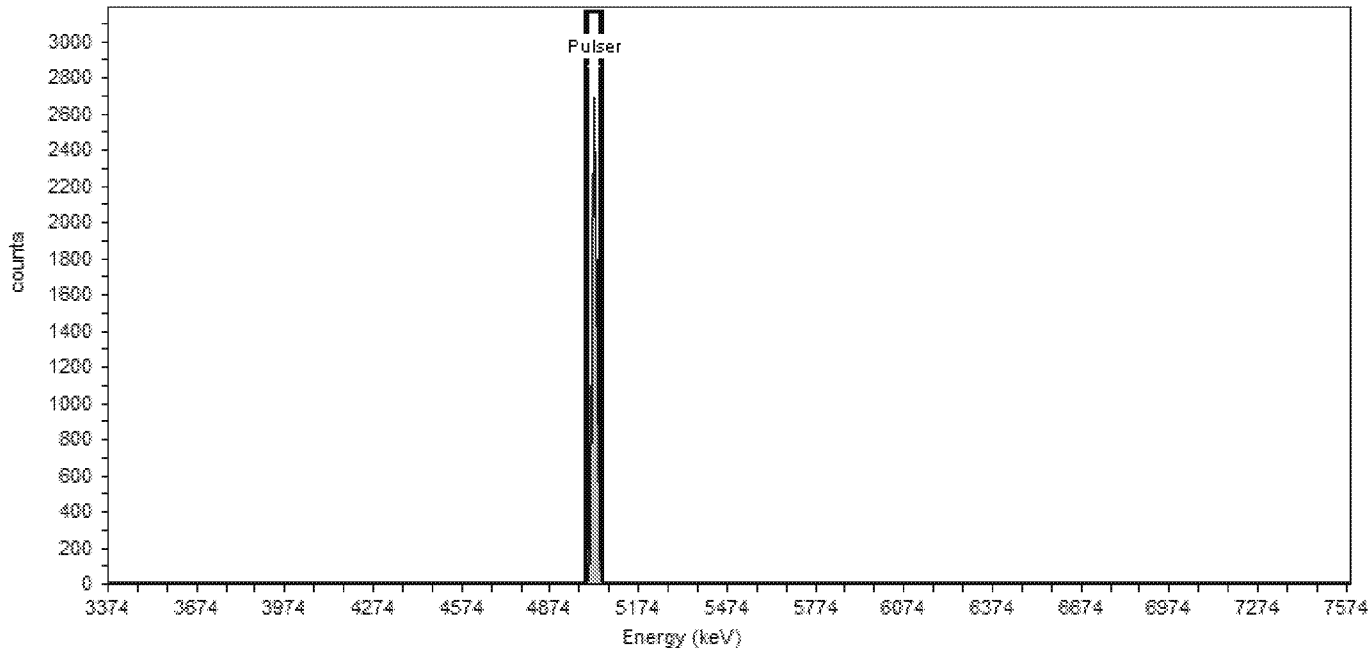
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV223 , SN: 49-037X6
Acquisition Start Date: 11/16/2019 6:18:51AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9817;AV223-11192018
Calibration Date: 11/19/2018 8:42:38PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.853 | 4996.428 | 5049.278 | 15.52 | 5,992.15 | 6,008.65 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:29:41AM 11/16/2019

## Sample

Sample Name: Pulser;AV224 Spectrum #8 Analysis #1
Comment:

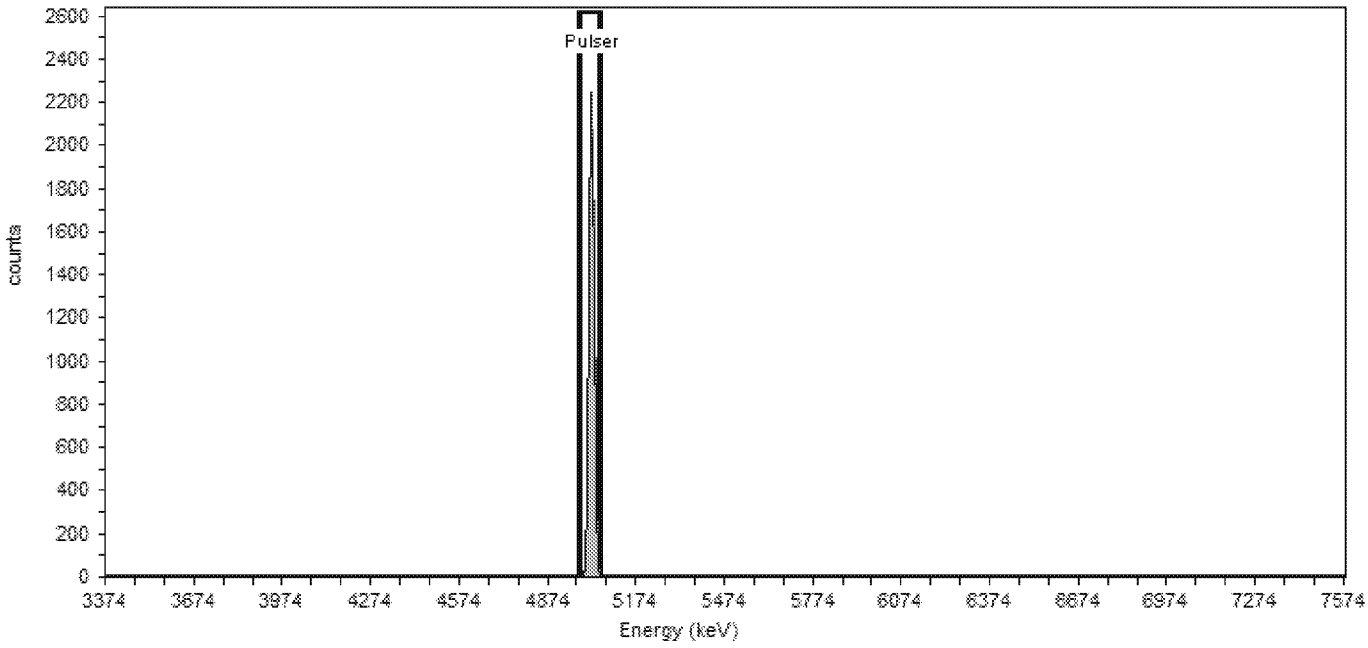
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV224 , SN: 50-119AA5
Acquisition Start Date: 11/16/2019 6:18:51AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9885;AV224-11152018
Calibration Date: 11/15/2018 3:59:05PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.438 | 4991.037 | 5053.839 | 18.45 | 5,943.93 | 6,006.78 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:29:06AM 11/16/2019

## Sample

Sample Name: Pulser;AV225 Spectrum #8 Analysis #1
Comment:

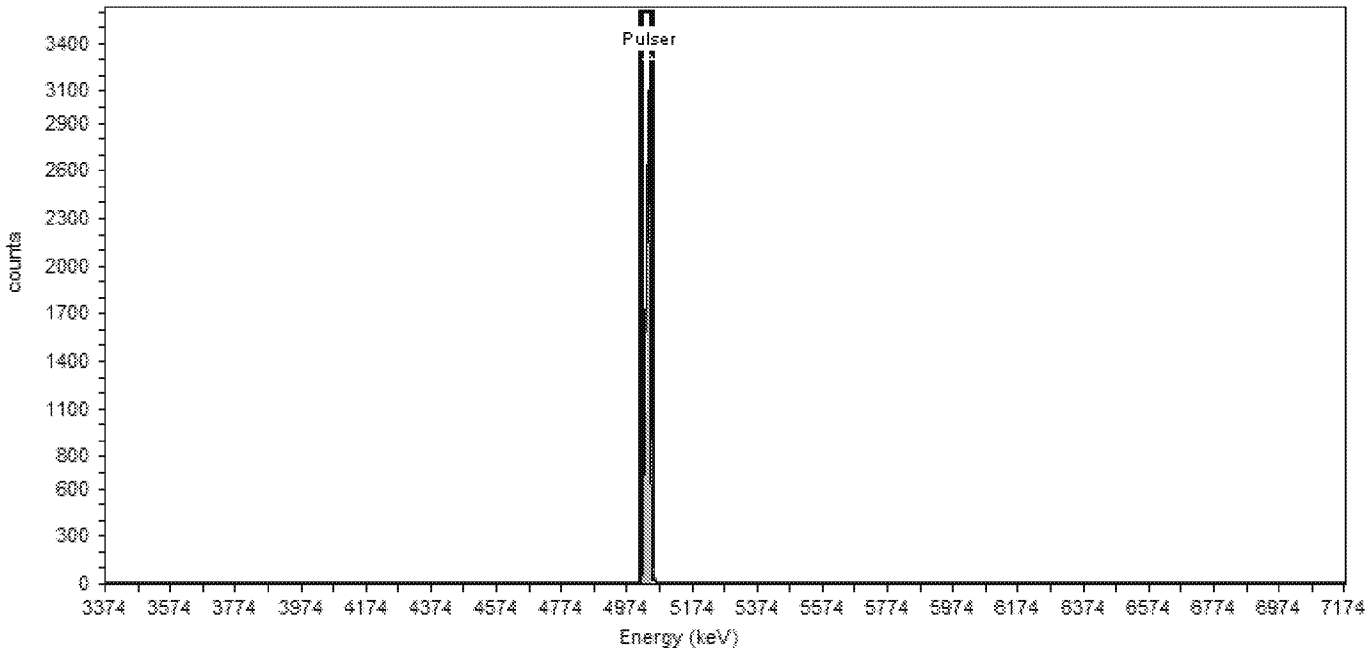
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV225 , SN: 50-117J7
Acquisition Start Date: 11/16/2019 6:18:51AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1368446;AV225-11152018
Calibration Date: 11/15/2018 3:59:09PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.300 | 5015.500 | 5059.101 | 12.81 | 5,705.32 | 5,877.61 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:29:30AM 11/16/2019

## Sample

Sample Name: Pulser;AV227 Spectrum #8 Analysis #1
Comment:

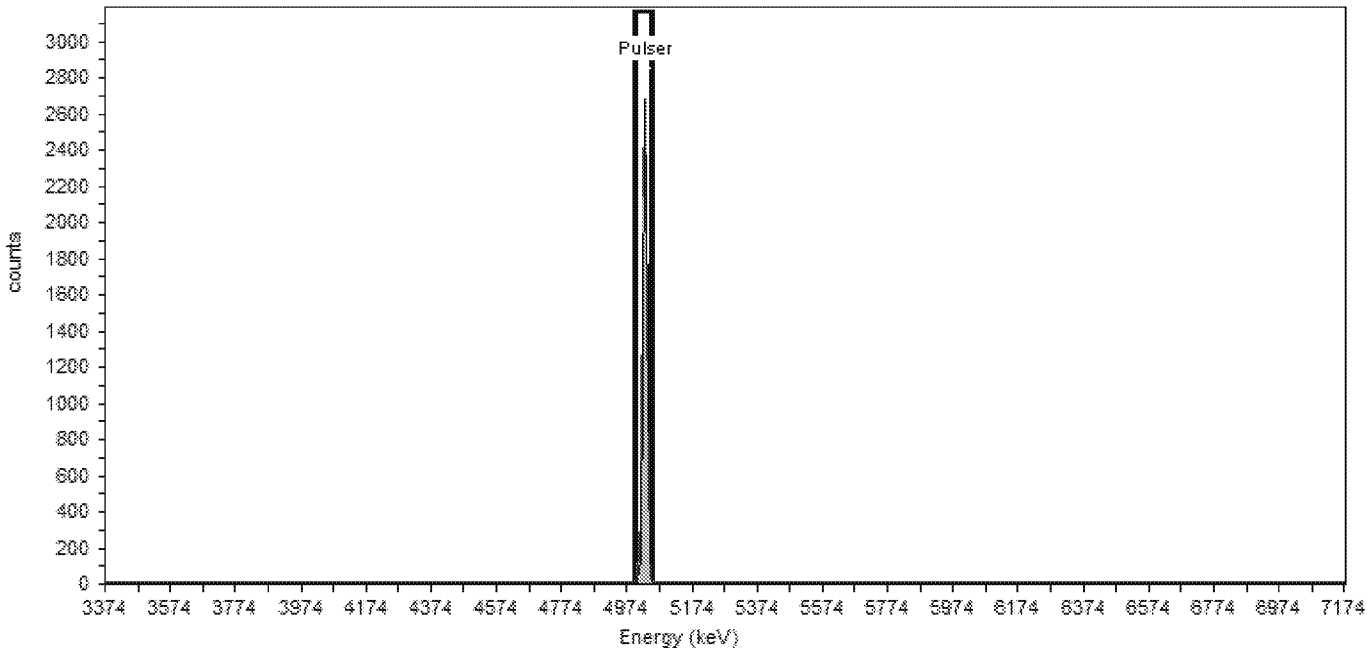
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV227 , SN: 50-120DD5
Acquisition Start Date: 11/16/2019 6:18:51AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370621;AV227-11152018
Calibration Date: 11/15/2018 6:58:05PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5030.500 | 5005.279 | 5055.720 | 14.82 | 5,697.88 | 6,012.15 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:30:27AM 11/16/2019

## Sample

Sample Name: Pulser;AV228 Spectrum #8 Analysis #1
Comment:

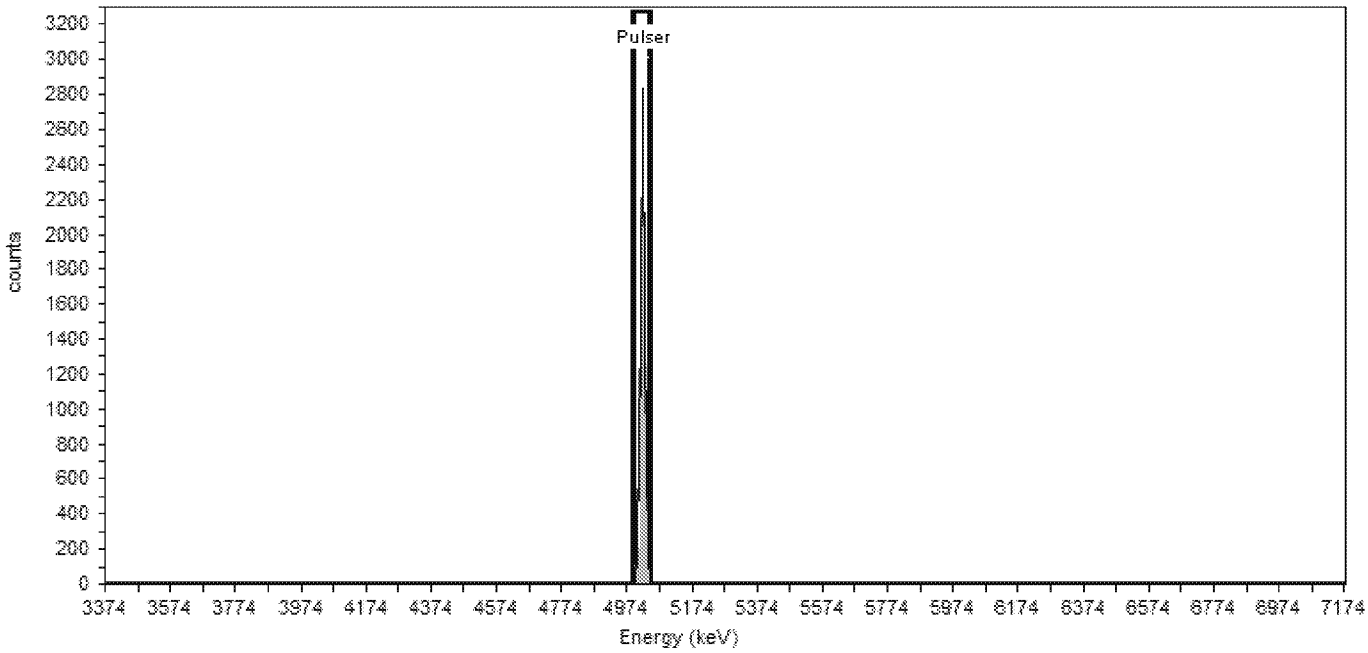
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV228 , SN: 51-005Q6
Acquisition Start Date: 11/16/2019 6:18:52AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370622;AV228-11152018
Calibration Date: 11/15/2018 6:58:08PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.652 | 4997.677 | 5047.626 | 14.67 | 5,959.17 | 6,008.68 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:29:52AM 11/16/2019

## Sample

Sample Name: Pulser;AV229 Spectrum #8 Analysis #1
Comment:

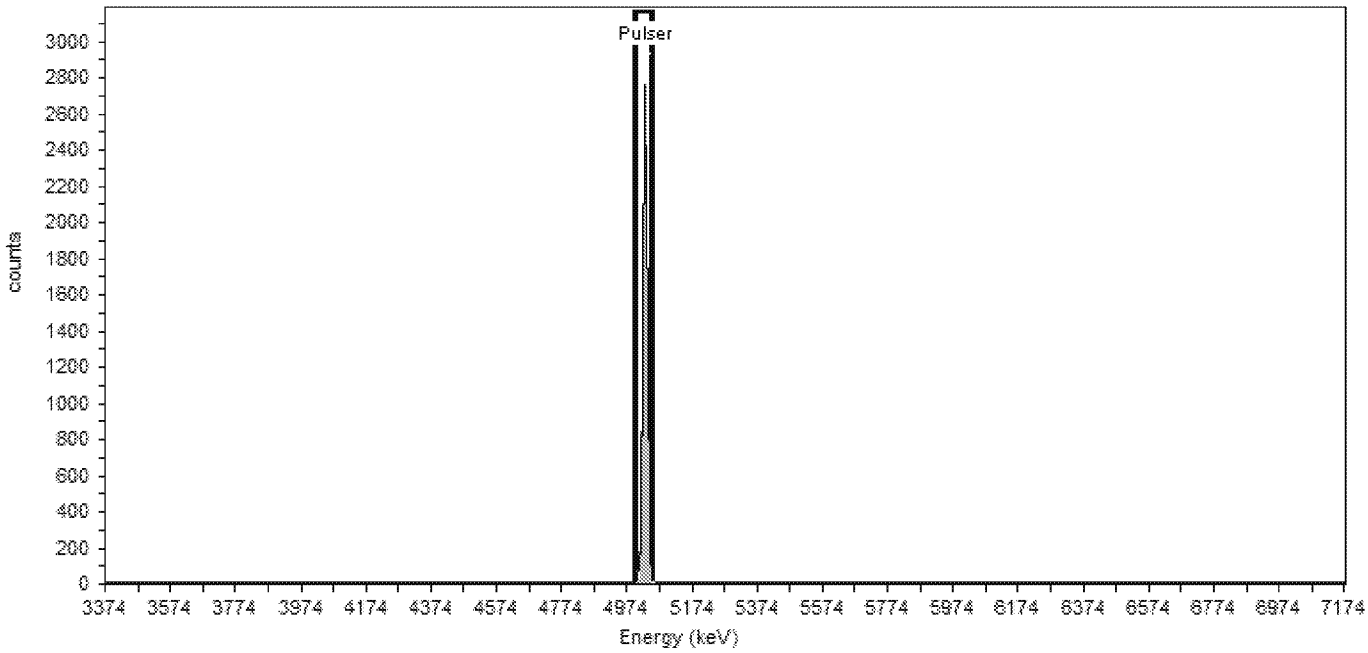
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV229 , SN: 51-005EE4
Acquisition Start Date: 11/16/2019 6:18:52AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370619;AV229-11152018
Calibration Date: 11/15/2018 6:58:12PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5029.981 | 5004.118 | 5055.845 | 15.20 | 6,004.00 | 6,004.91 |

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:30:16AM 11/16/2019

## Sample

Sample Name: Pulser;AV230 Spectrum #8 Analysis #1
Comment:

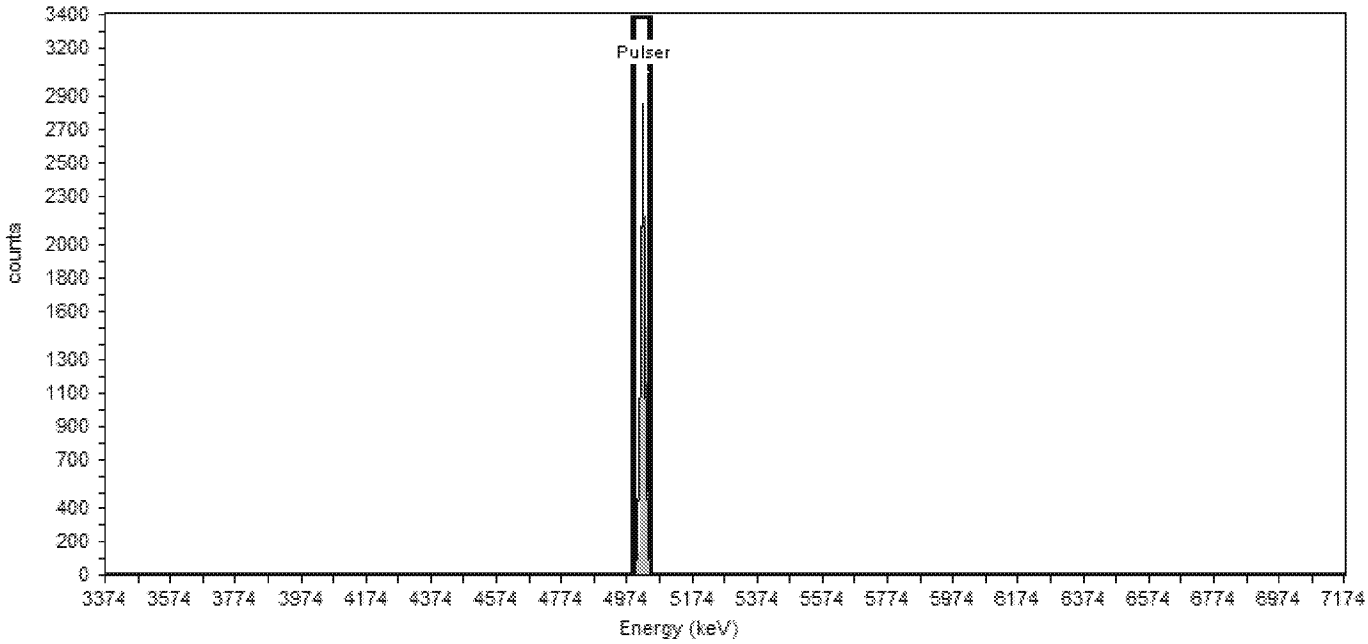
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV230 , SN: 49-045J5
Acquisition Start Date: 11/16/2019 6:18:52AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370620;AV230-11152018
Calibration Date: 11/15/2018 6:58:15PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.515 | 4997.995 | 5047.035 | 14.41 | 5,906.25 | 6,013.56 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:30:04AM 11/16/2019

## Sample

Sample Name: Pulser;AV232 Spectrum #8 Analysis #1
Comment:

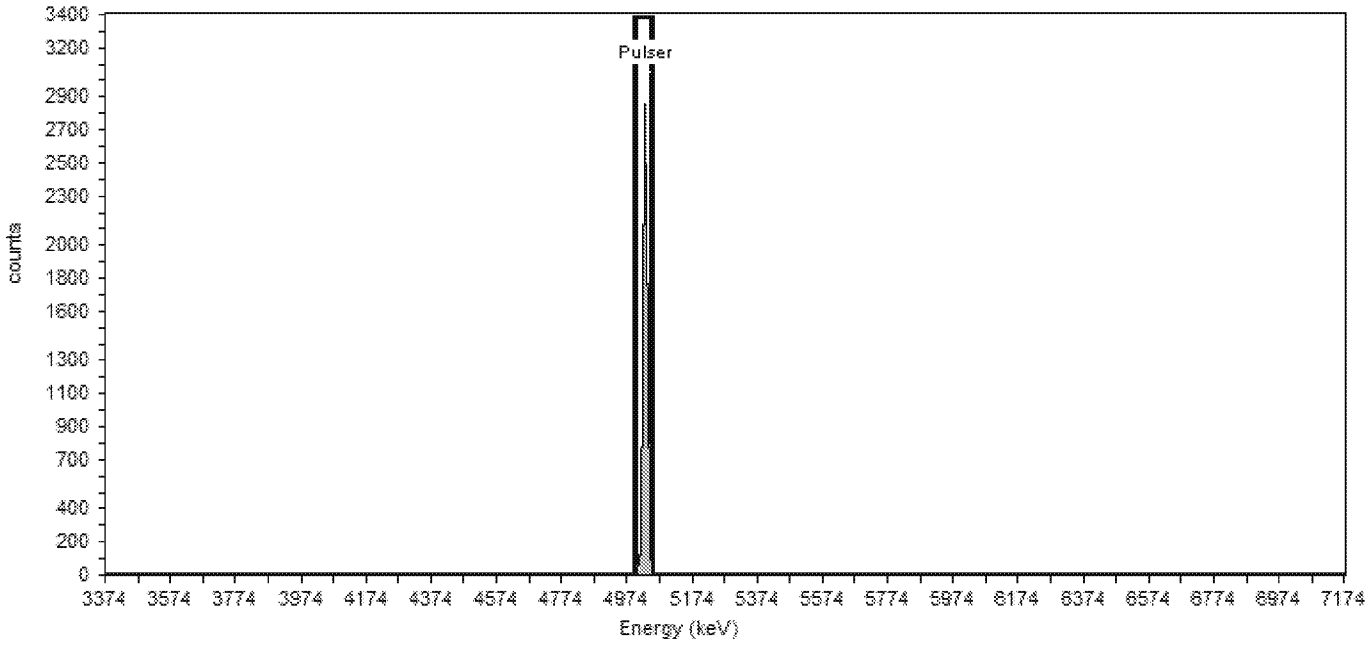
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV232 , SN: 46-033p2
Acquisition Start Date: 11/16/2019 6:18:52AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-8874;AV232-11152018a
Calibration Date: 11/15/2018 10:59:14PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5030.001 | 5005.432 | 5054.570 | 14.43 | 5,926.26 | 6,007.76 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:31:13AM 11/16/2019

## Sample

Sample Name: Pulser;AV233 Spectrum #8 Analysis #1
Comment:

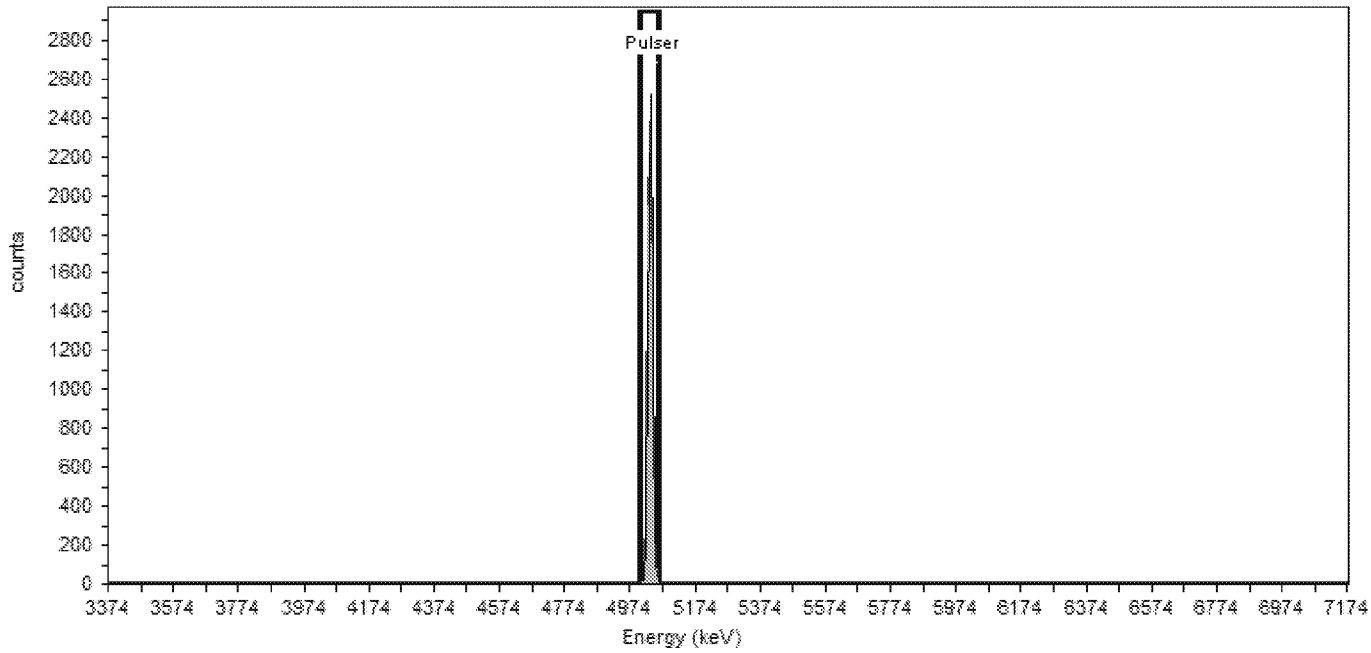
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV233 , SN: 51-005Q7
Acquisition Start Date: 11/16/2019 6:18:53AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-8877;AV233-11152018
Calibration Date: 11/15/2018 6:58:23PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.813 | 5010.621 | 5065.004 | 15.97 | 5,784.46 | 6,000.59 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:30:50AM 11/16/2019

## Sample

Sample Name: Pulser;AV234 Spectrum #8 Analysis #1
Comment:

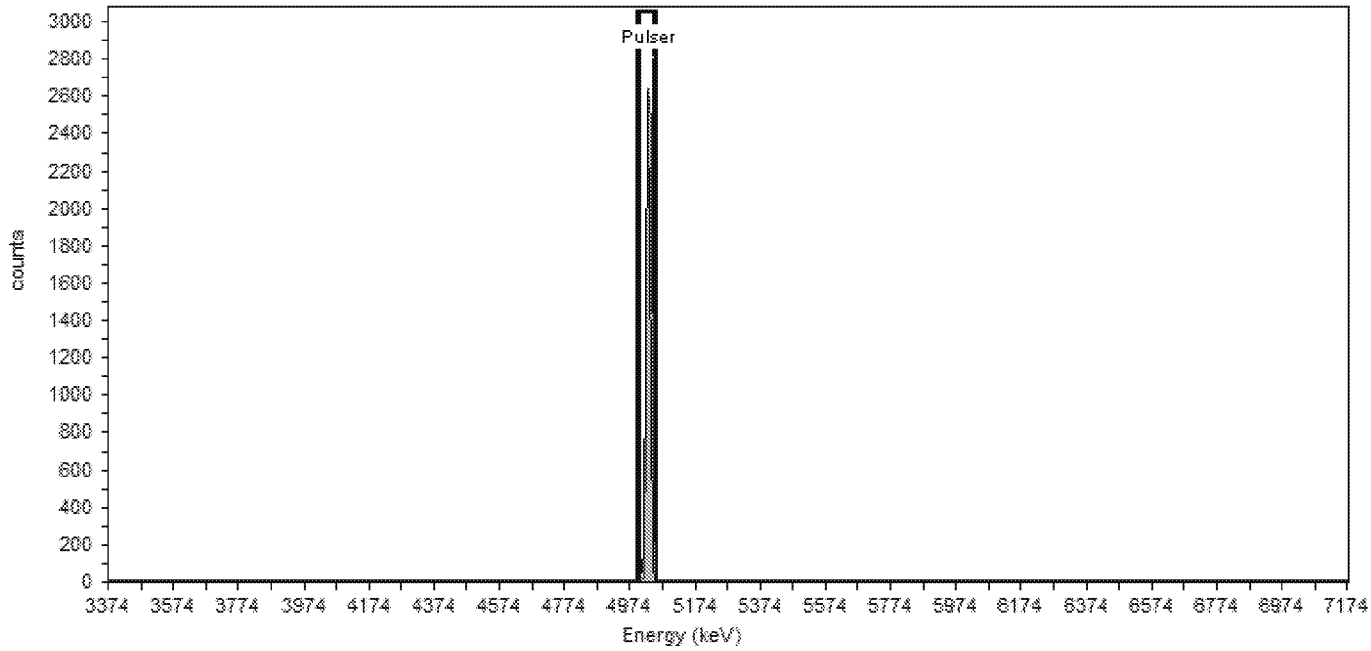
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV234 , SN: 51-005P2
Acquisition Start Date: 11/16/2019 6:18:53AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9520;AV234-11152018
Calibration Date: 11/15/2018 6:58:26PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5029.228 | 5005.708 | 5052.748 | 13.82 | 5,238.57 | 6,025.74 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:24:48AM 11/16/2019

## Sample

Sample Name: Pulser;AV241 Spectrum #8 Analysis #1
Comment:

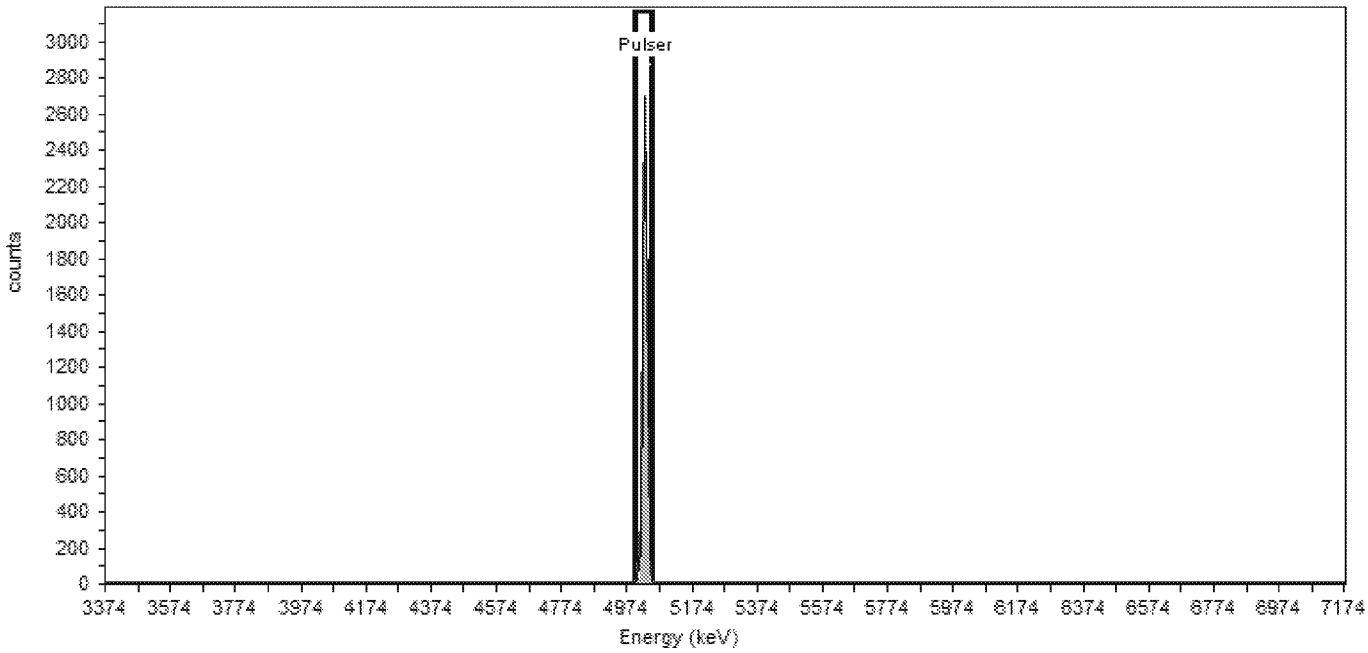
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/16/2019 6:18:54AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1368447;AV241-11152018
Calibration Date: 11/15/2018 10:58:36PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5030.367 | 5004.352 | 5056.383 | 15.28 | 5,921.18 | 6,004.46 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:35AM 11/16/2019

## Sample

Sample Name: Pulser;AV243 Spectrum #8 Analysis #1
Comment:

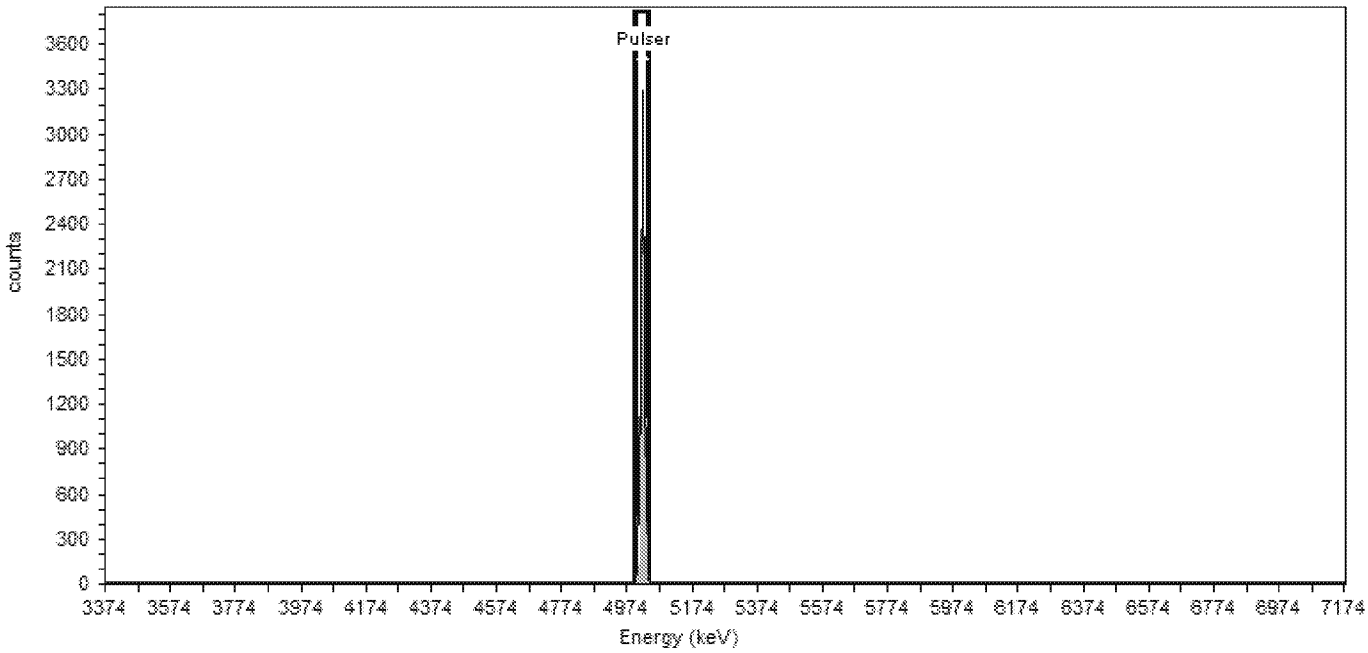
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/16/2019 6:18:55AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370622;AV243-11152018
Calibration Date: 11/15/2018 10:58:43PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.626 | 5000.594 | 5044.658 | 12.94 | 6,121.40 | 5,863.29 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:11:42AM 11/19/2019

## Sample

Sample Name: Pulser;AV244
Comment:

Spectrum #11 Analysis #1

## Batch

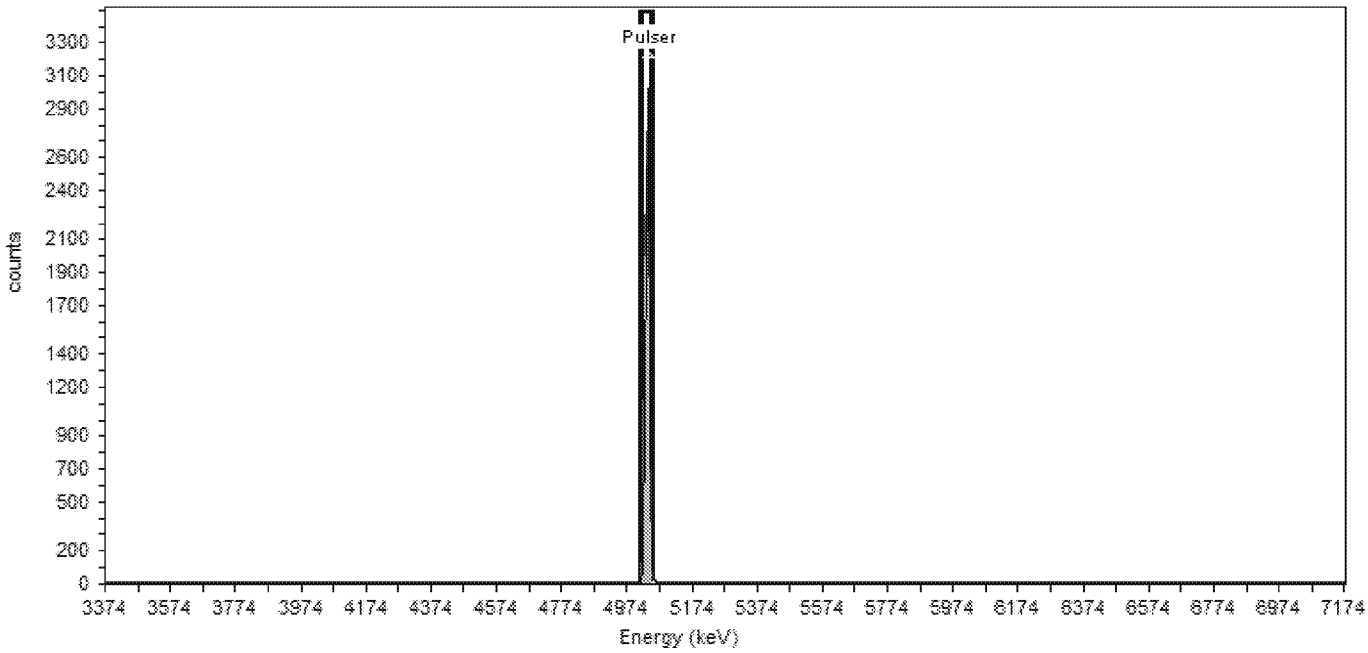
Batch Name: November2019c
Description:

## Acquisition

Detector: AV244 , SN: 51-005EE3
Acquisition Start Date: 11/19/2019 10:05:32AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-1370619;AV244-11152018
Calibration Date: 11/15/2018 10:58:47PM

Energy Calibration Equation:

Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5037.688 | 5015.703 | 5059.675 | 12.92 | 5,606.26 | 5,792.78 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:57:07AM 11/15/2019

## Sample

Sample Name: Pulser;AV249 Spectrum #6 Analysis #1
Comment:

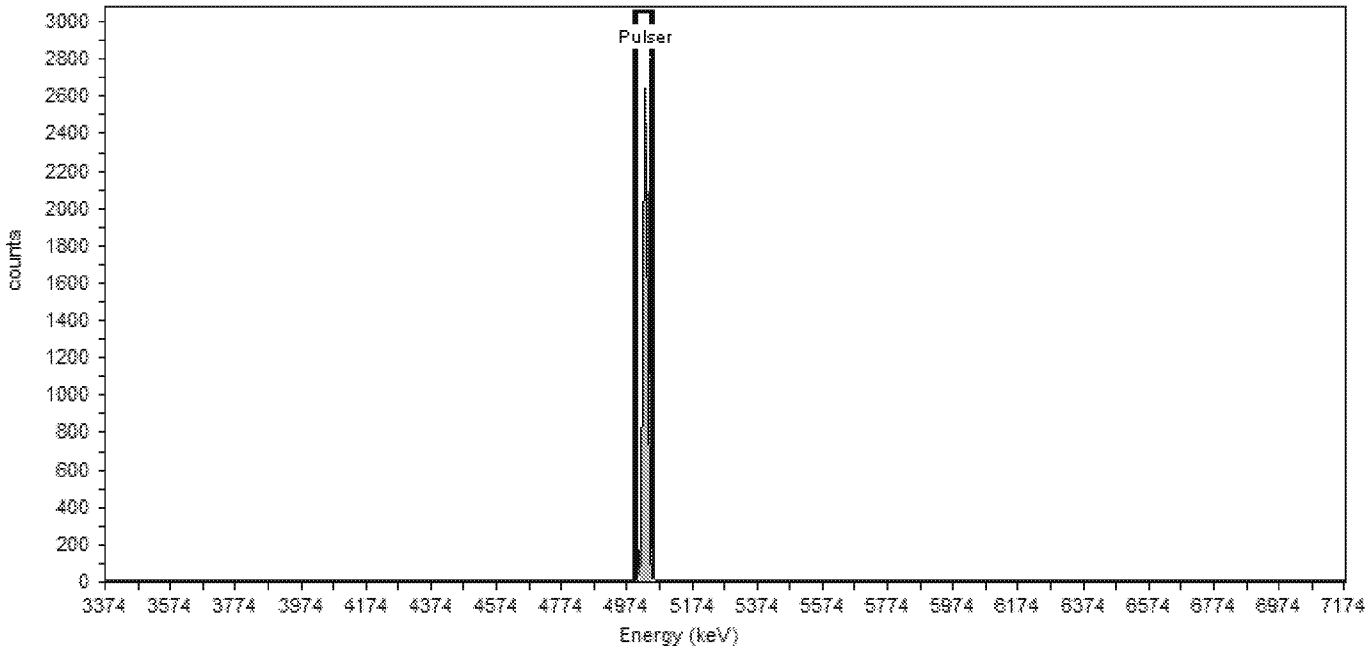
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV249 , SN: 51-005EE5
Acquisition Start Date: 11/15/2019 12:56:01AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9520;AV249-11152018
Calibration Date: 11/15/2018 10:59:03PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5029.691 | 5003.832 | 5055.551 | 15.19 | 5,761.89 | 6,000.07 |

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# Alpha-Spectroscopy Pulser Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:59:28AM 11/15/2019

## Sample

Sample Name: Pulser;AV250 Spectrum #6 Analysis #1
Comment:

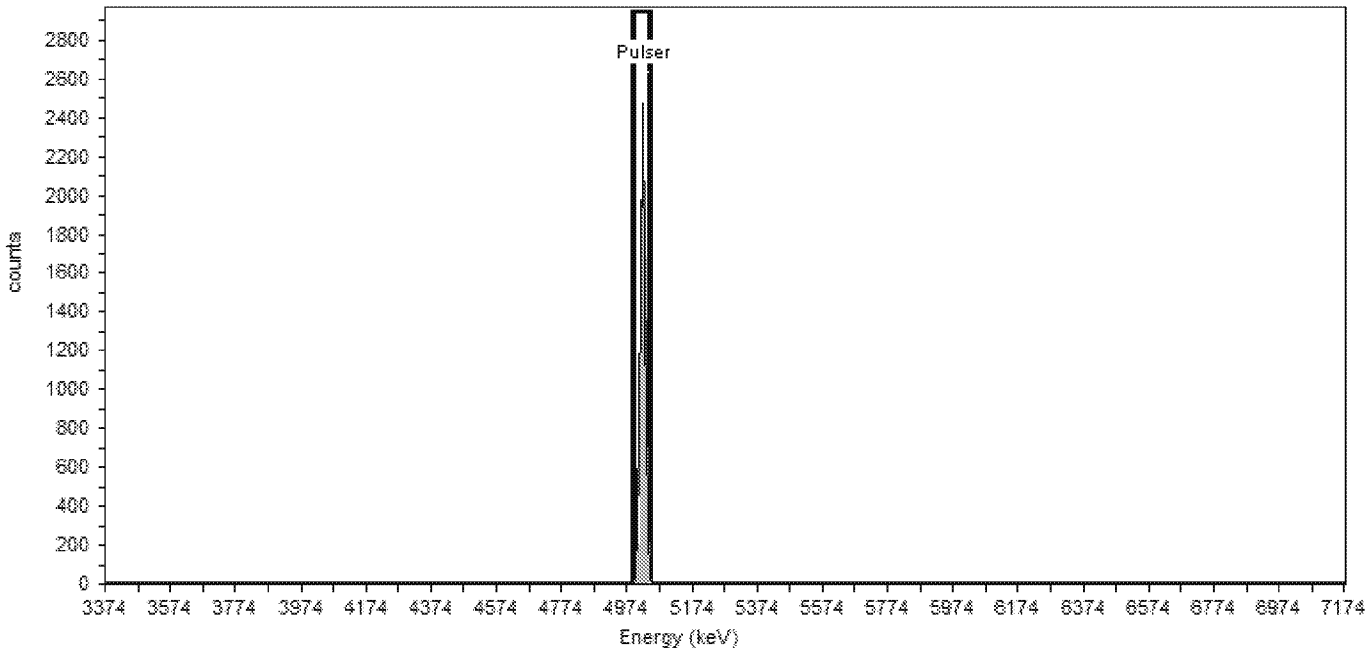
## Batch

Batch Name: November2019c
Description:

## Acquisition

Detector: AV250 , SN: 47-052x7
Acquisition Start Date: 11/15/2019 12:56:01AM
Live Time: 1.00 min.
Real Time: 1.00 min.
Calibration Name: IC-9792;AV250-11152018
Calibration Date: 11/15/2018 10:59:07PM

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Analysis Method: Peak Fit Analysis

## Nuclide Summary (Peak Search)

| Nuclide | Peak Energy keV | Start Energy keV | End Energy keV | FWHM keV | Fit Area | Gross Counts |
|---|---|---|---|---|---|---|
| Pulser | 5022.338 | 4993.729 | 5050.946 | 16.81 | 5,958.53 | 5,964.99 |

# Initial Calibrations

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:23:49PM 5/14/2018

## Calibration

Sample Name: IC-7107;AV1-05142018
Description:
Detector: AV1

Calibration Date: 5/14/2018 6:23:45PM
Analyst: 60040

## Source Info

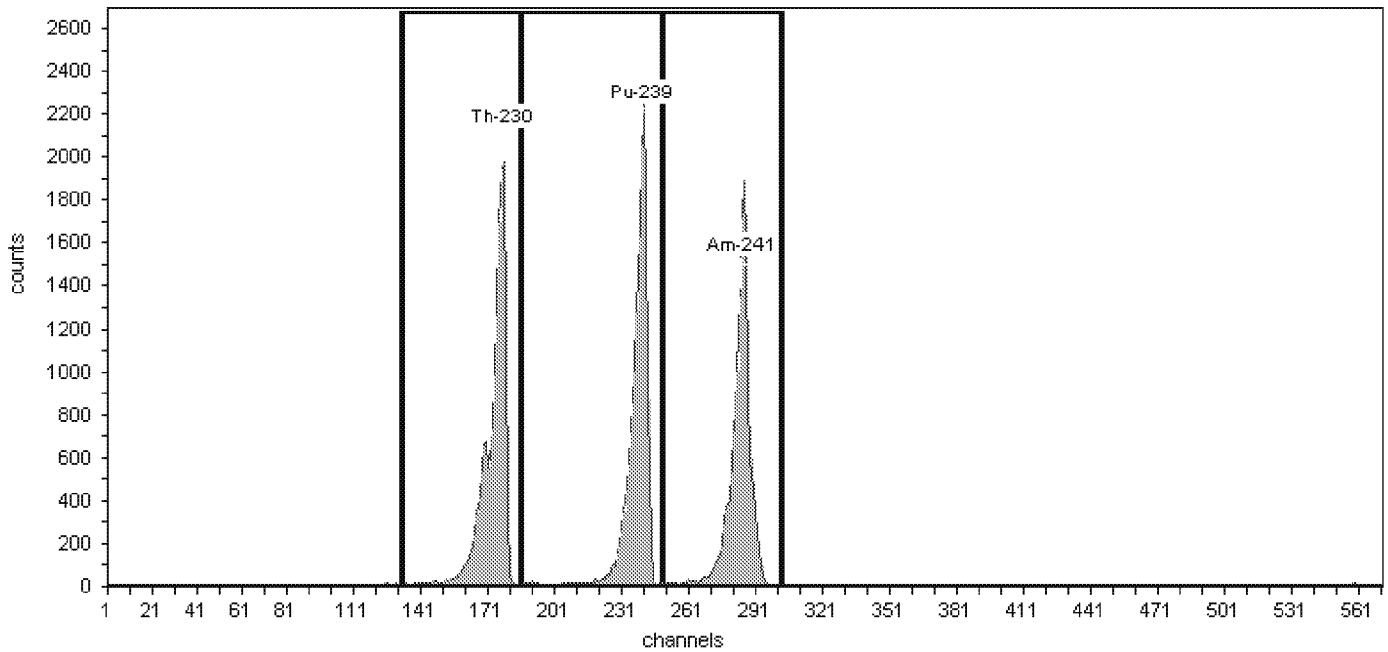
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 5/14/2018 3:44:27PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 24.36% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 15,240.00 | 108.86 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 15,352.00 | 109.66 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 14,427.00 | 103.05 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:25:19PM 5/14/2018

## Calibration

Sample Name: IC-8877;AV3-05142018
Description:
Detector: AV3

Calibration Date: 5/14/2018 6:25:15PM
Analyst: 60040

## Source Info

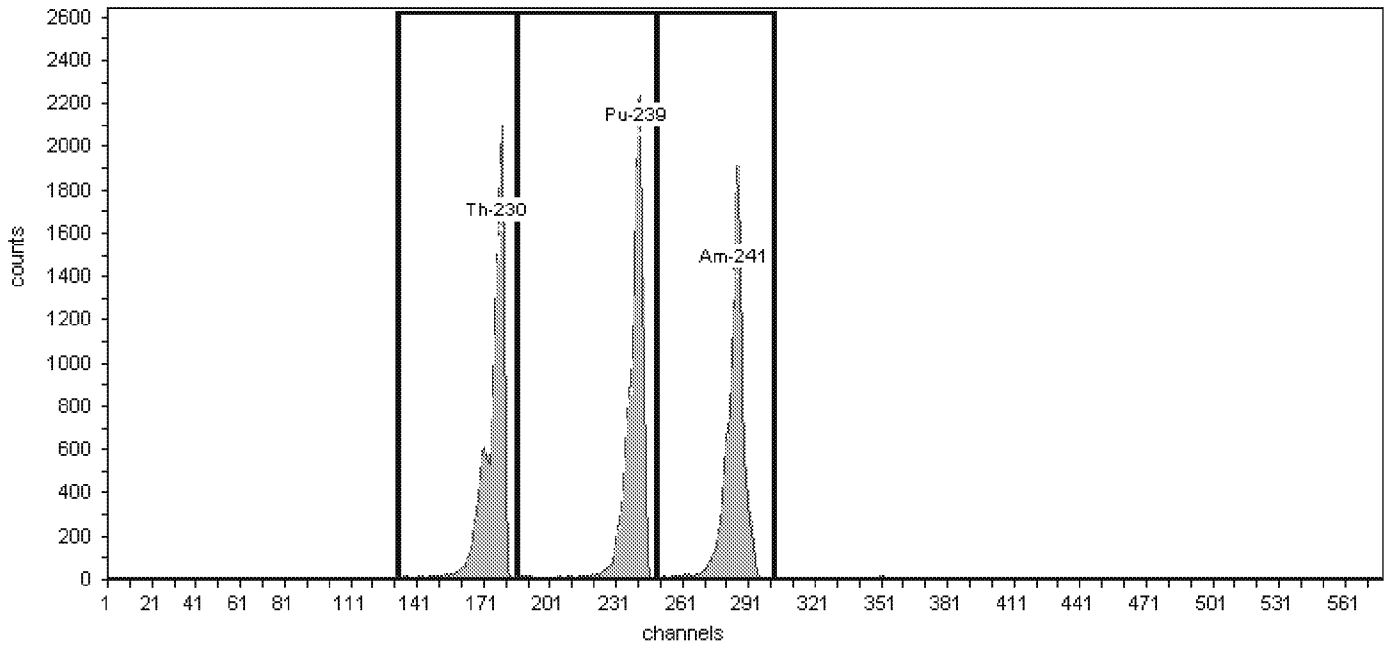
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 5/14/2018 3:46:06PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 24.44% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 14,252.00 | 101.80 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 14,532.00 | 103.80 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 13,591.00 | 97.08 |

FWHM > 100keV
RTM 6/22/2018

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:26:31PM 5/14/2018

## Calibration

Sample Name: IC-9795;AV8-05142018
Description:
Detector: AV8

Calibration Date: 5/14/2018 6:26:27PM
Analyst: 60040

## Source Info

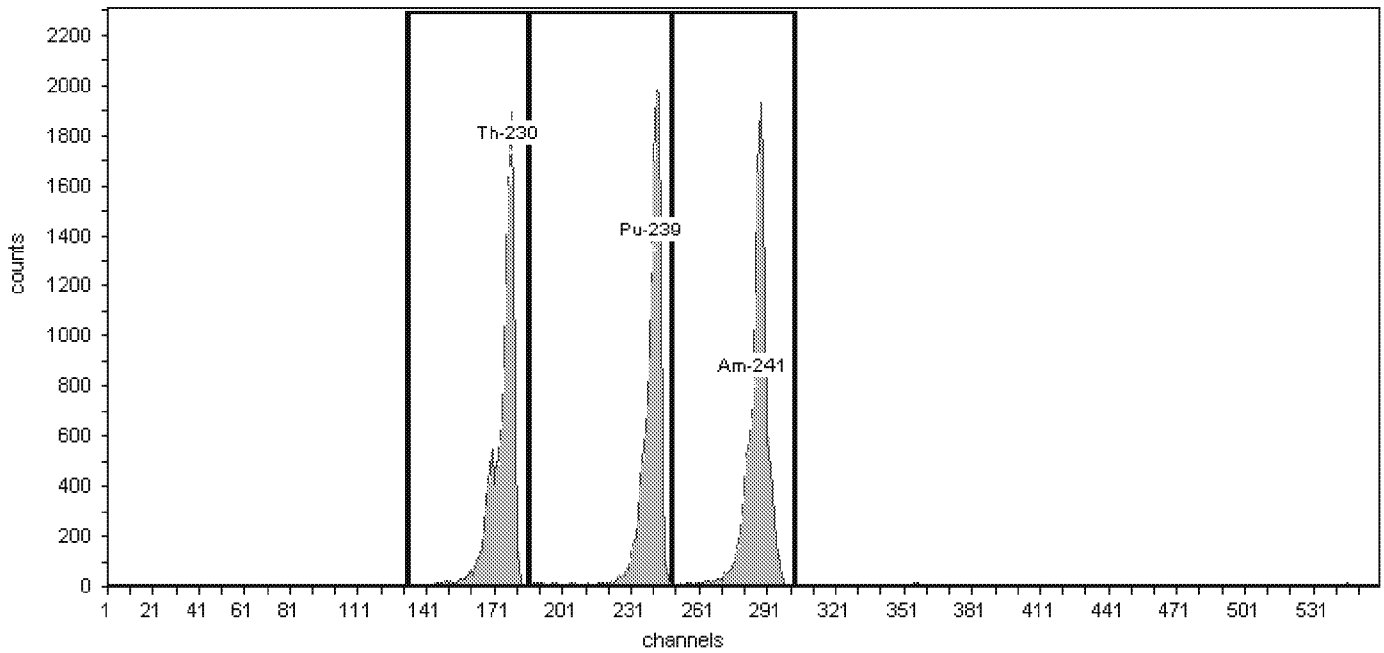
Certificate ID: 82243-334
Prepared by: Analytics

Certification Date: 6/9/2010 12:00:00PM
Description:

## Acquisition

Detector: AV8 , SN: 41-137Q6
Acquisition Start Date: 5/14/2018 3:47:39PM
Live Time: 140.00 min.
Real Time: 140.09 min.
Efficiency: 25.96% +/- 0.34% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 12,786.00 | 91.33 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 13,029.00 | 93.06 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 13,761.00 | 98.29 |

FWHM > 100keV
RTM 6/22/2018

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:15PM 5/14/2018

## Calibration

Sample Name: IC-1368446;AV11-05142018
Description:
Detector: AV11

Calibration Date: 5/14/2018 6:27:11PM
Analyst: 60040

## Source Info

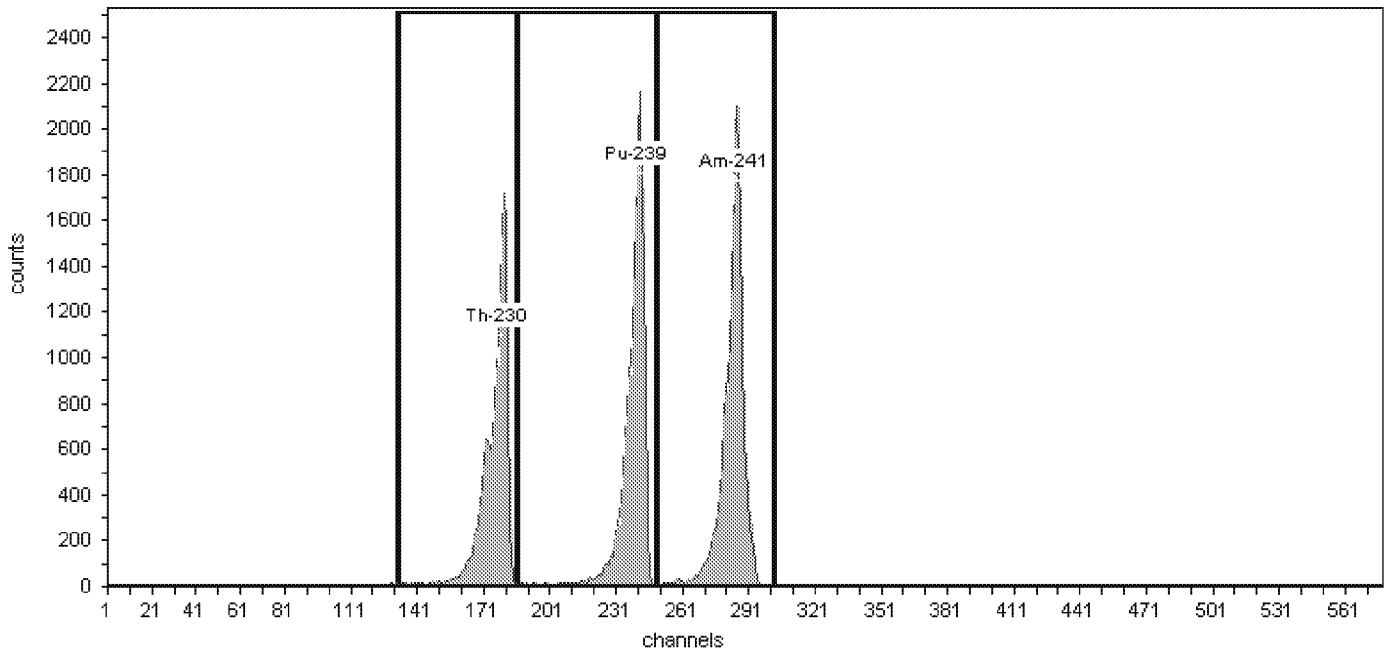
Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler

Certification Date: 12/6/2017 11:00:00AM
Description:

## Acquisition

Detector: AV11 , SN: 49-155dd2
Acquisition Start Date: 5/14/2018 3:50:17PM
Live Time: 140.00 min.
Real Time: 140.12 min.
Efficiency: 28.19% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 14,213.00 | 101.52 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 15,927.00 | 113.76 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 17,089.00 | 122.06 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:28PM 5/14/2018

## Calibration

Sample Name: IC-1368447; AV12-05142018
Description:
Detector: AV12

Calibration Date: 5/14/2018 6:27:24PM
Analyst: 60040

## Source Info

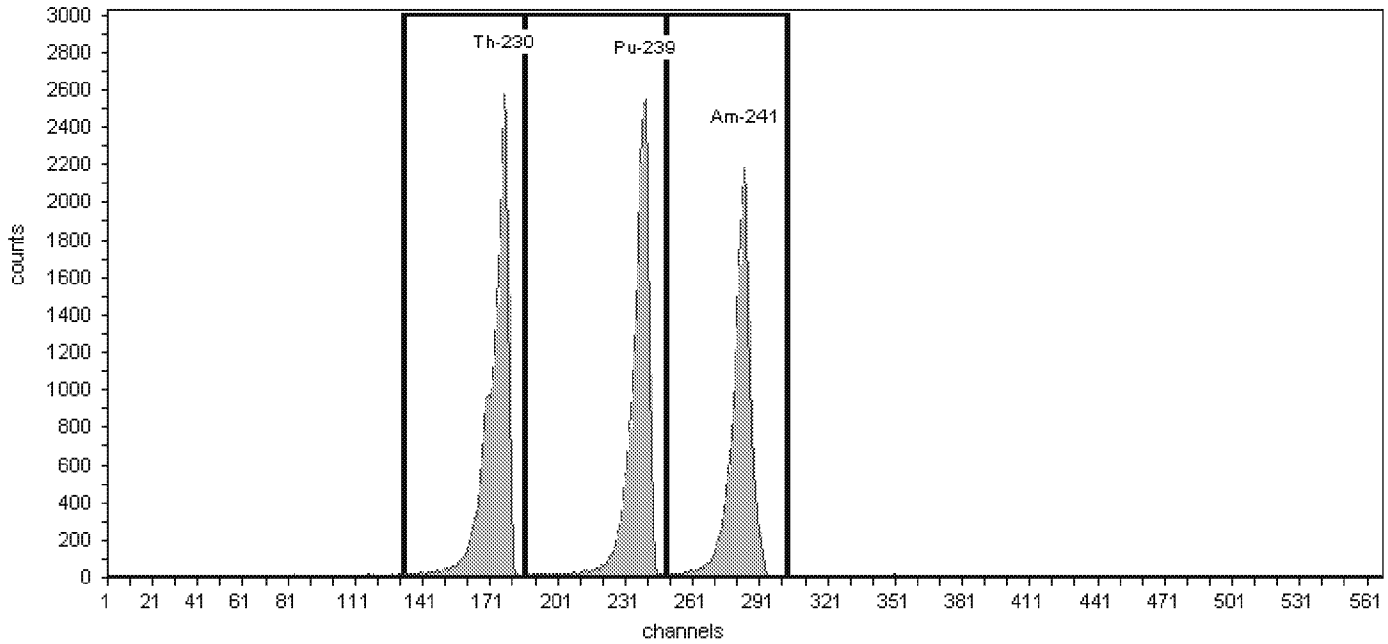
Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler

Certification Date: 12/1/2017 11:00:00AM
Description:

## Acquisition

Detector: AV12 , SN: 51-082B7
Acquisition Start Date: 5/14/2018 3:52:00PM
Live Time: 140.00 min.
Real Time: 140.12 min.
Efficiency: 27.78% +/- 0.23% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 21,819.00 | 155.85 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 20,129.00 | 143.78 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 18,632.00 | 133.09 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:27:56PM 5/14/2018

## Calibration

Sample Name: IC-1370622;AV14-05142018
Description:
Detector: AV14

Calibration Date: 5/14/2018 6:27:53PM
Analyst: 60040

## Source Info

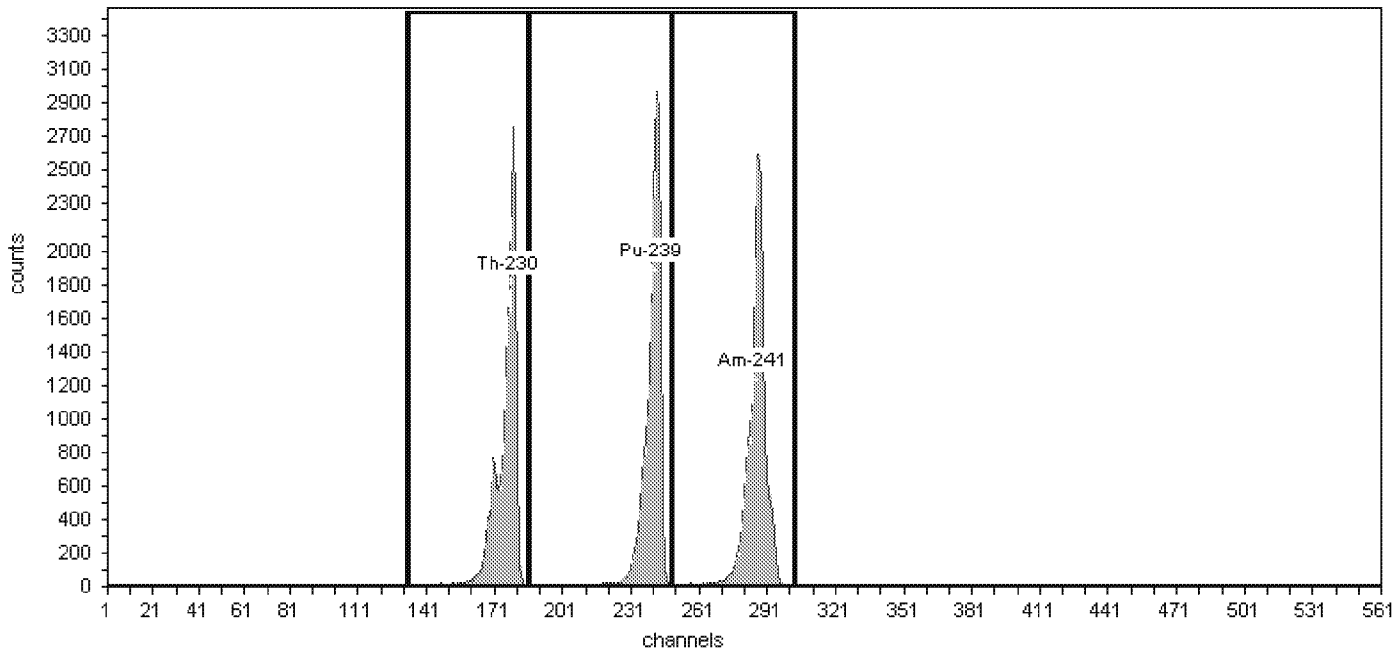
Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV14 , SN: 50-060W4
Acquisition Start Date: 5/14/2018 3:54:06PM
Live Time: 140.00 min.
Real Time: 140.13 min.
Efficiency: 26.40% +/- 0.23% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 16,968.00 | 121.20 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 17,458.00 | 124.70 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 17,506.00 | 125.04 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:28:08PM 5/14/2018

## Calibration

Sample Name: IC-1370619;AV15-05142018
Description:
Detector: AV15

Calibration Date: 5/14/2018 6:28:04PM
Analyst: 60040

## Source Info

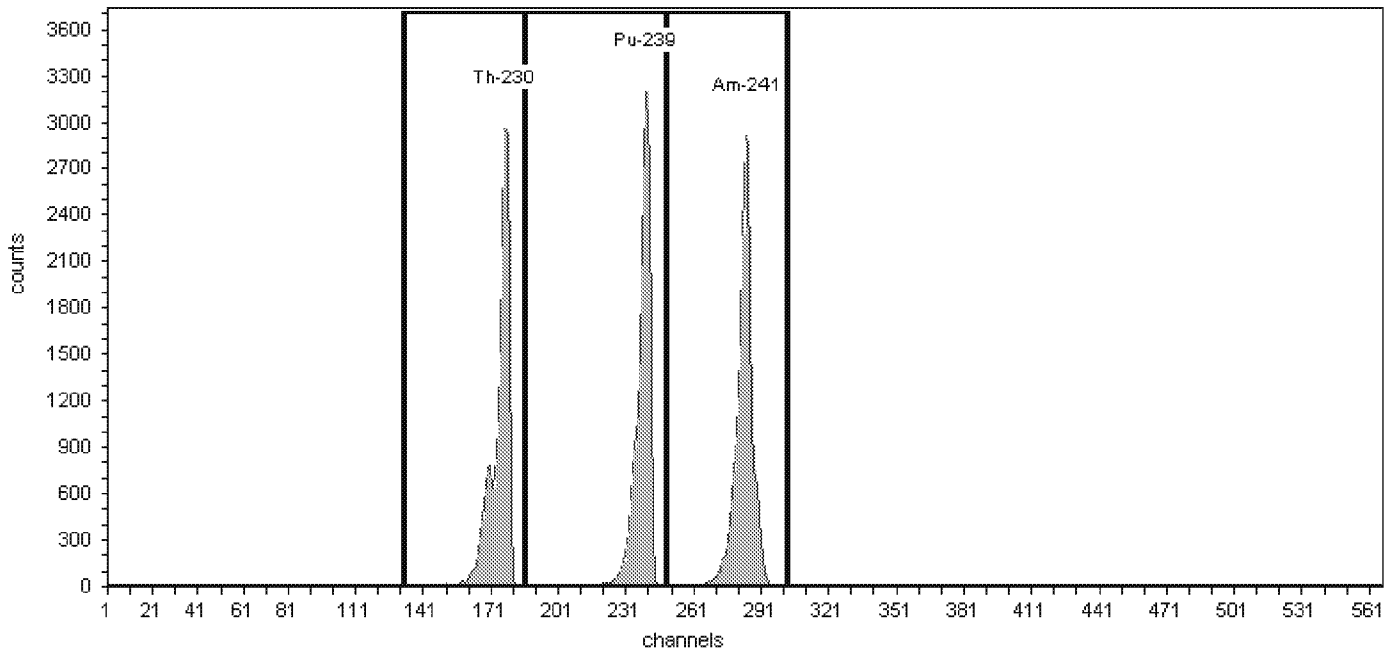
Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00AM
Description:

## Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 5/14/2018 3:57:06PM
Live Time: 140.00 min.
Real Time: 140.13 min.
Efficiency: 27.26% +/- 0.23% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 18,686.00 | 133.47 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 18,291.00 | 130.65 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 19,767.00 | 141.19 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:28:21PM 5/14/2018

## Calibration

Sample Name: IC-137620;AV16-05142018
Description:
Detector: AV16

Calibration Date: 5/14/2018 6:28:17PM
Analyst: 60040

## Source Info

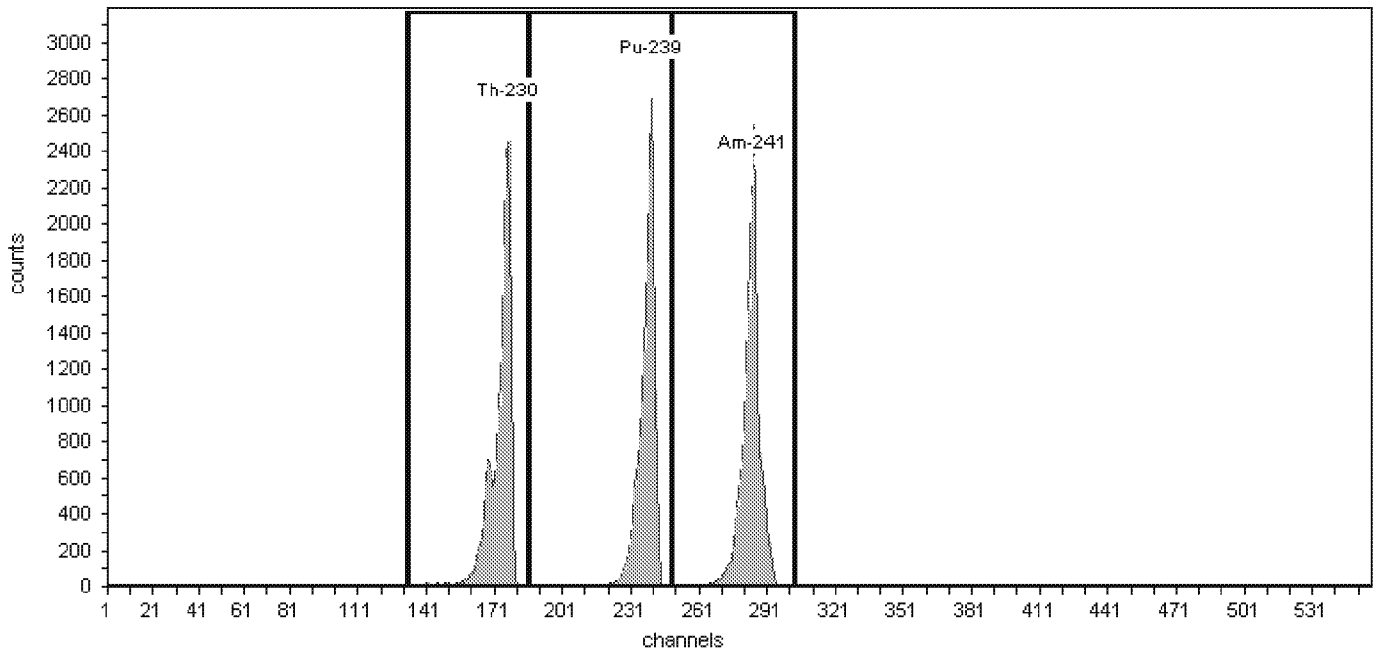
Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00PM
Description:

## Acquisition

Detector: AV16 , SN: 51-082B6
Acquisition Start Date: 5/14/2018 3:59:51PM
Live Time: 140.00 min.
Real Time: 140.13 min.
Efficiency: 26.96% +/- 0.24% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 15,895.00 | 113.54 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 15,960.00 | 114.00 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 16,886.00 | 120.61 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:28:01PM 5/15/2018

## Calibration

Sample Name: IC-8877;AV19-05142018
Description:
Detector: AV19

Calibration Date: 5/15/2018 12:27:55PM
Analyst: 60040

## Source Info

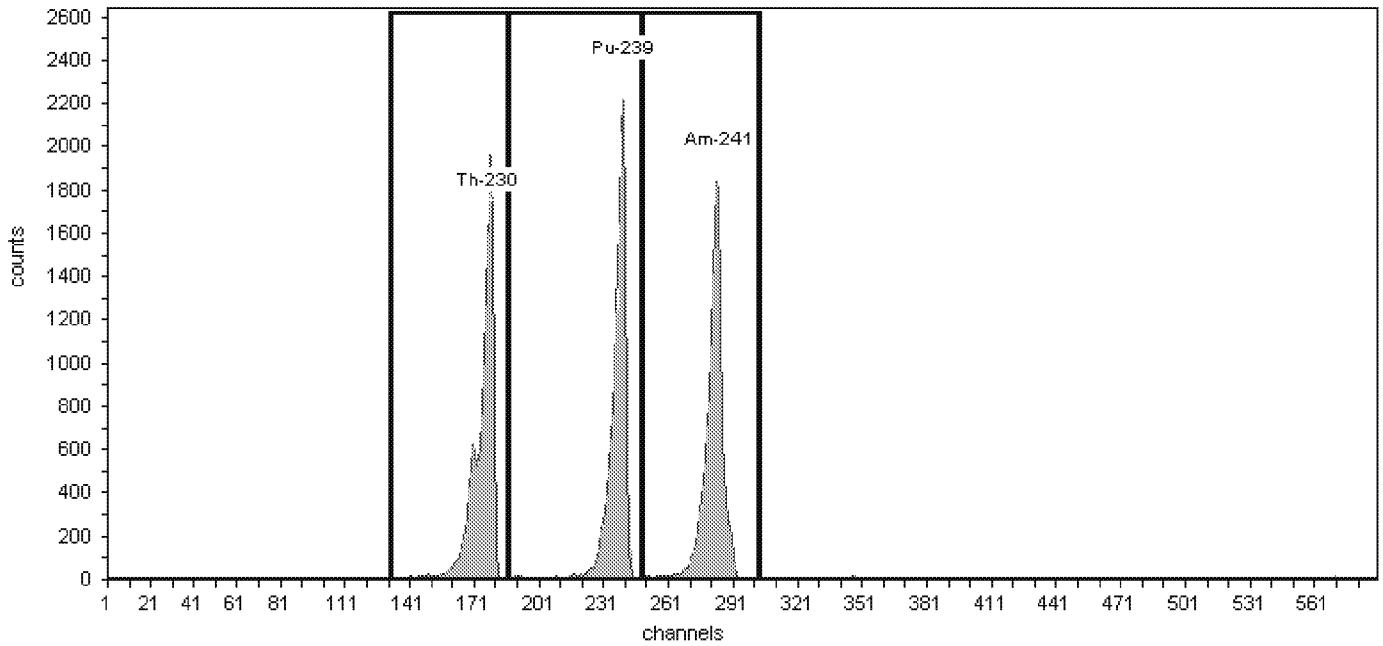
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV19 , SN: 50-025FF5
Acquisition Start Date: 5/14/2018 6:35:50PM
Live Time: 140.00 min.
Real Time: 140.11 min.
Efficiency: 23.60% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 13,623.00 | 97.31 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 13,975.00 | 99.82 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 13,324.00 | 95.17 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:28:13PM 5/15/2018

## Calibration

Sample Name: IC-9520;AV20-05142018
Description:
Detector: AV20

Calibration Date: 5/15/2018 12:28:08PM
Analyst: 60040

## Source Info

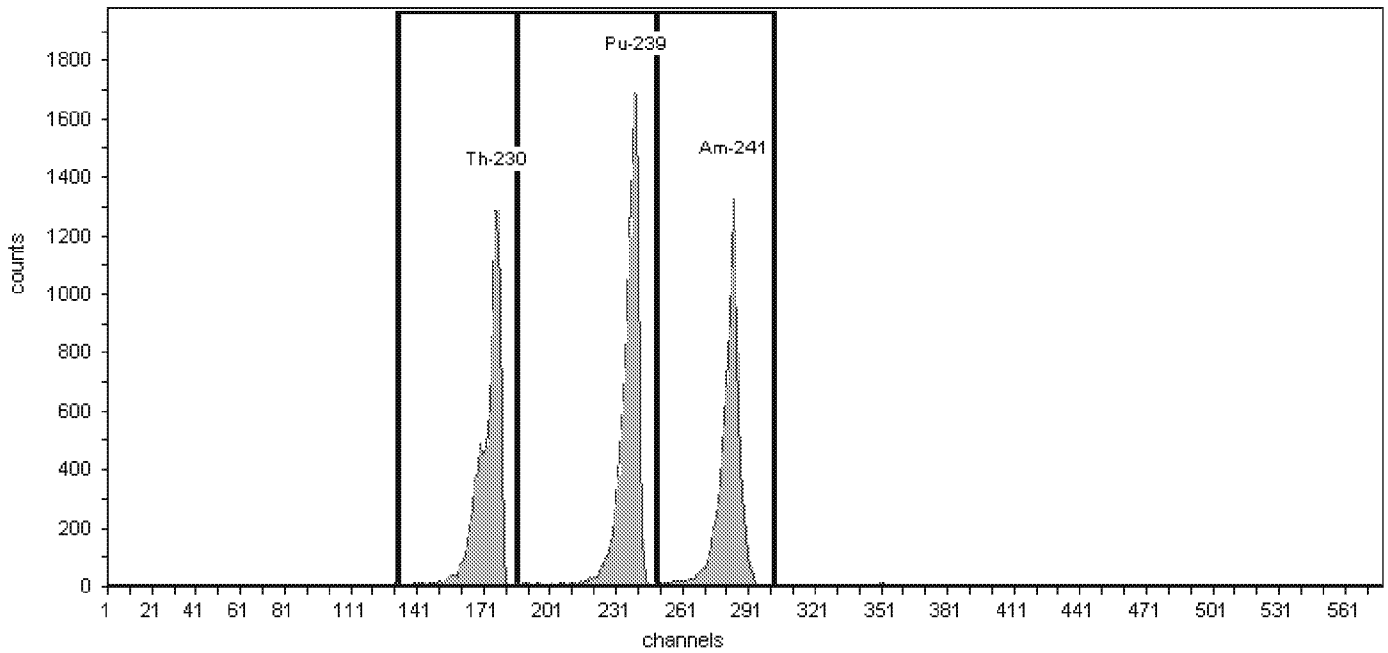
Certificate ID: 82237-334
Prepared by: Analytics

Certification Date: 6/1/2010 12:00:00PM
Description:

## Acquisition

Detector: AV20 , SN: 48-121A7
Acquisition Start Date: 5/14/2018 6:36:08PM
Live Time: 140.00 min.
Real Time: 140.11 min.
Efficiency: 22.15% +/- 0.32% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 10,460.00 | 74.71 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 12,682.00 | 90.59 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 10,037.00 | 71.69 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:29:00PM 5/15/2018

## Calibration

Sample Name: IC-9817;AV24-05142018
Description:
Detector: AV24

Calibration Date: 5/15/2018 12:28:57PM
Analyst: 60040

## Source Info

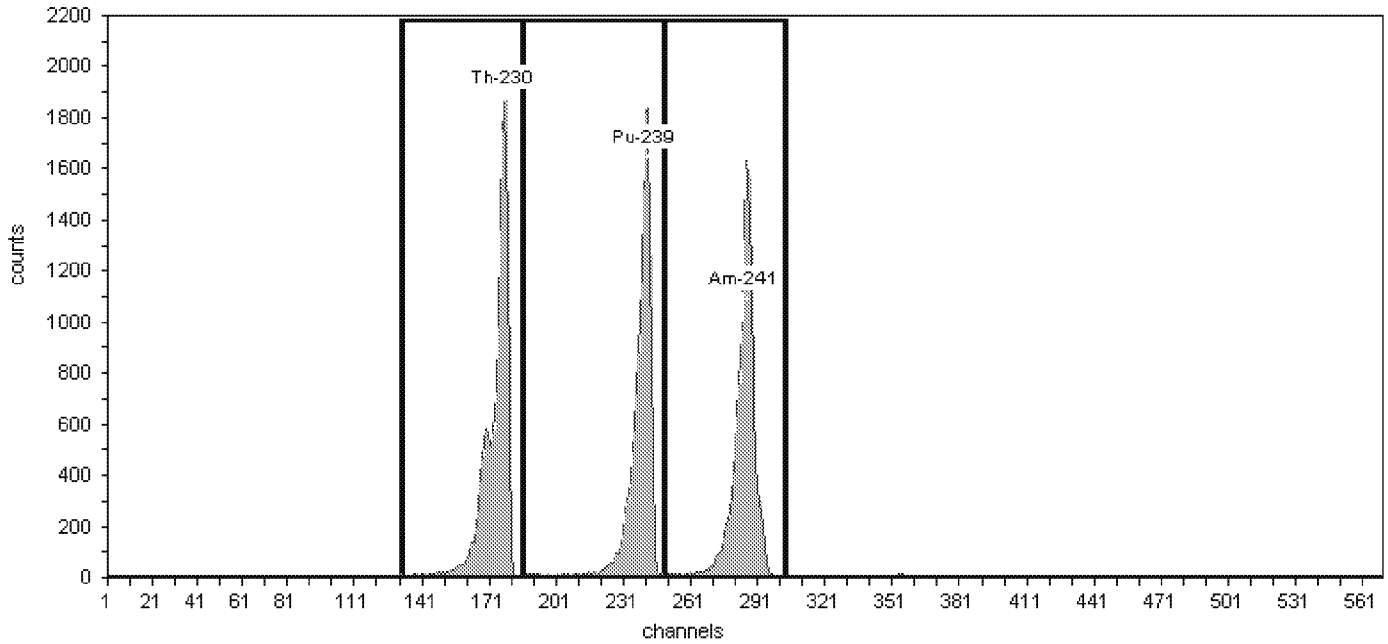
Certificate ID: 82244-334
Prepared by: Analytics

Certification Date: 6/9/2010 12:00:00PM
Description:

## Acquisition

Detector: AV24 , SN: 47-137Q4
Acquisition Start Date: 5/14/2018 6:37:42PM
Live Time: 140.00 min.
Real Time: 140.12 min.
Efficiency: 22.21% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 13,641.00 | 97.43 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 12,687.00 | 90.62 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 12,649.00 | 90.35 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:27:29PM 5/15/2018

## Calibration

Sample Name: IC-1370619;AV48-05142018
Description:
Detector: AV48

Calibration Date: 5/15/2018 12:27:25PM
Analyst: 60040

## Source Info

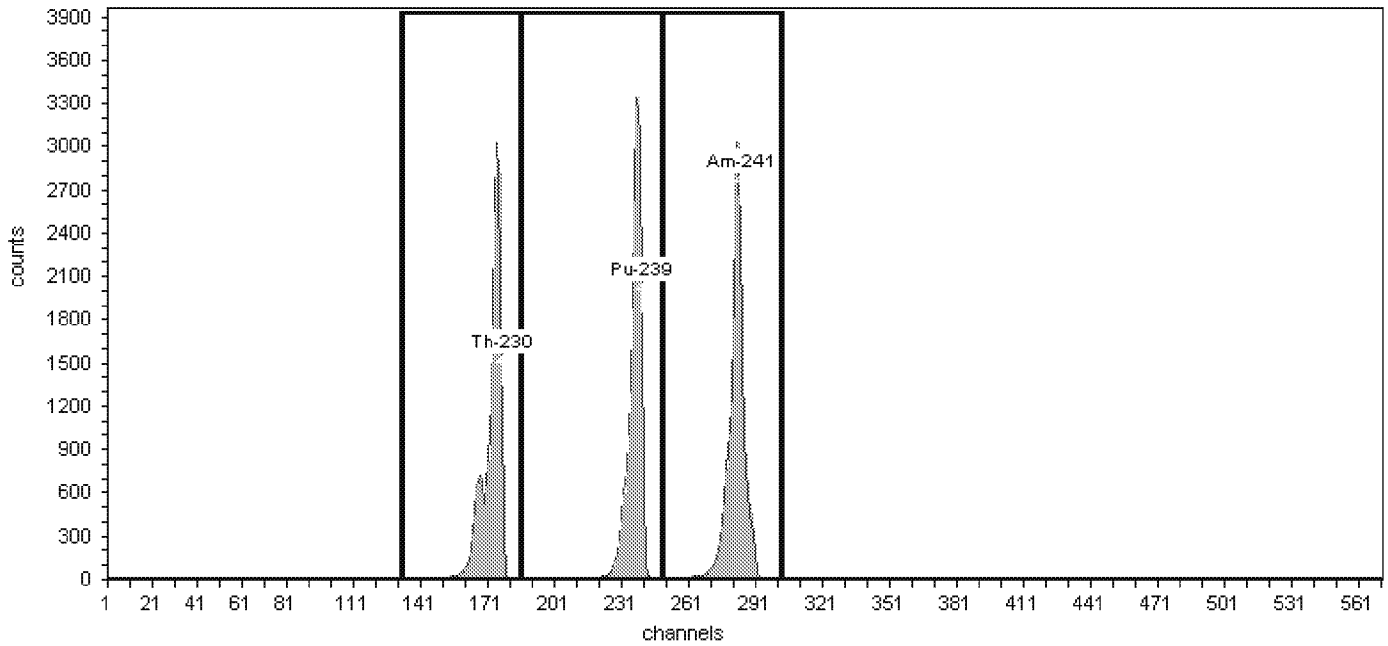
Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00AM
Description:

## Acquisition

Detector: AV48 , SN: 46-033P6
Acquisition Start Date: 5/14/2018 6:40:17PM
Live Time: 140.00 min.
Real Time: 140.11 min.
Efficiency: 27.06% +/- 0.23% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 18,367.00 | 131.19 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 18,273.00 | 130.52 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 19,691.00 | 140.65 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:12:25PM 7/16/2018

## Calibration

Sample Name: IC-1370620;AV49-05142018
Description:
Detector: AV49

Calibration Date: 5/15/2018 12:27:36PM
Analyst: 60040

## Source Info

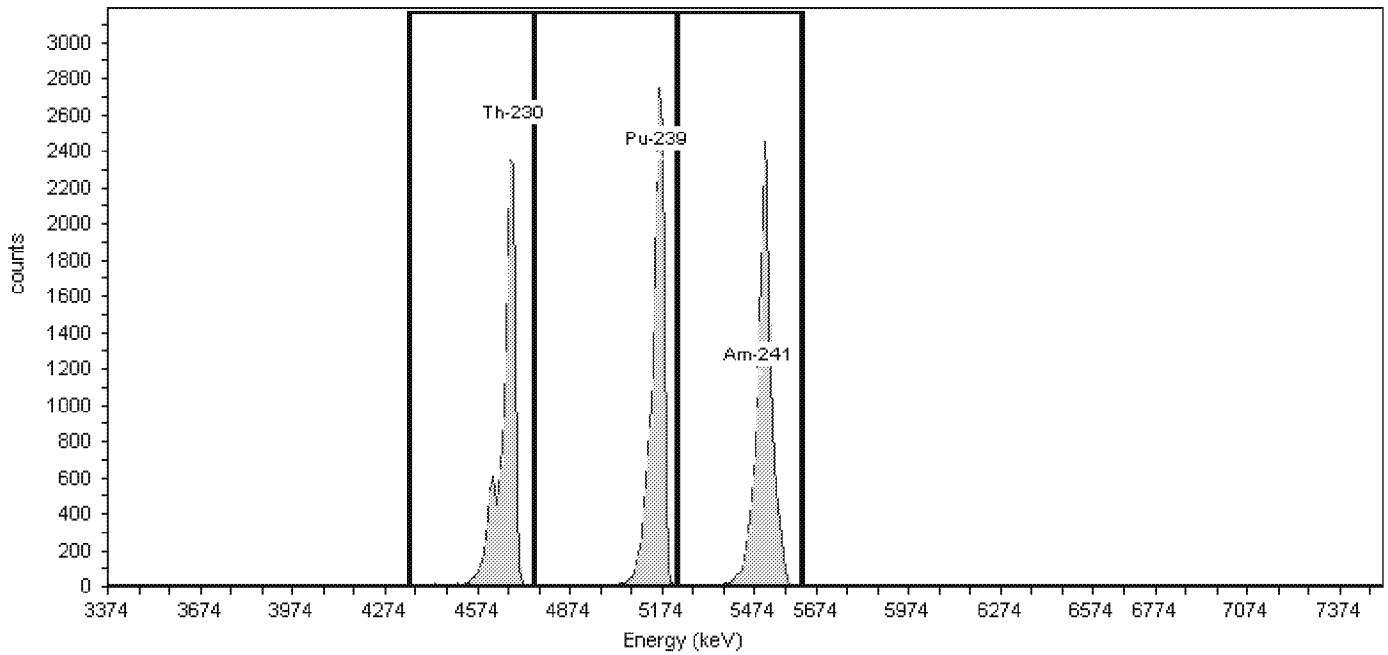
Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00PM
Description:

## Acquisition

Detector: AV49 , SN: 47-043hh4
Acquisition Start Date: 5/14/2018 6:41:18PM
Live Time: 140.00 min.
Real Time: 140.11 min.
Efficiency: 26.27% +/- 0.24% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 15,182.00 | 108.44 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 15,886.00 | 113.47 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 16,440.00 | 117.43 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:39:36PM 5/15/2018

## Calibration

Sample Name: IC-1370621;AV63-05152018
Description:
Detector: AV63

Calibration Date: 5/15/2018 3:39:32PM
Analyst: 60040

## Source Info

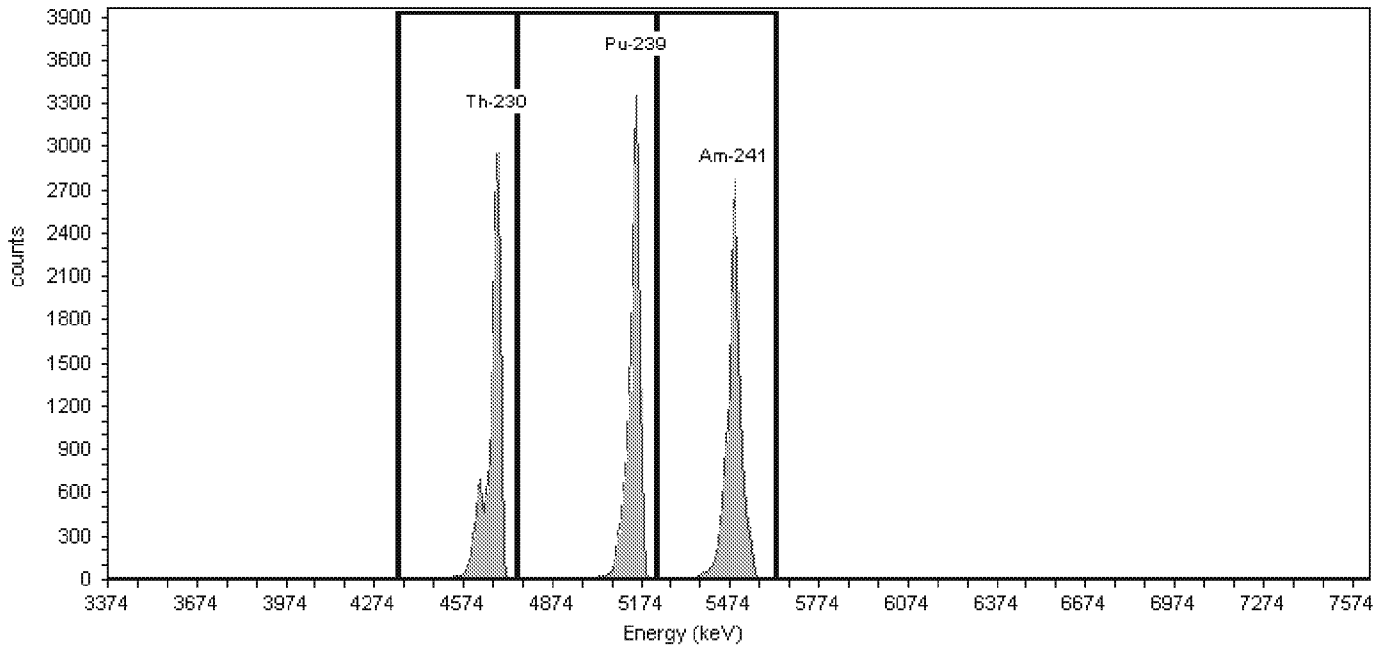
Certificate ID: 108345_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV63 , SN: 47-029ff2
Acquisition Start Date: 5/15/2018 12:40:27PM
Live Time: 140.00 min.
Real Time: 140.11 min.
Efficiency: 26.80% +/- 0.24% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 16,368.00 | 116.91 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 17,390.00 | 124.21 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 17,855.00 | 127.54 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:38:20PM 5/15/2018

## Calibration

Sample Name: IC-1370622;AV80-05152018
Description:
Detector: AV80

Calibration Date: 5/15/2018 6:38:17PM
Analyst: 60040

## Source Info

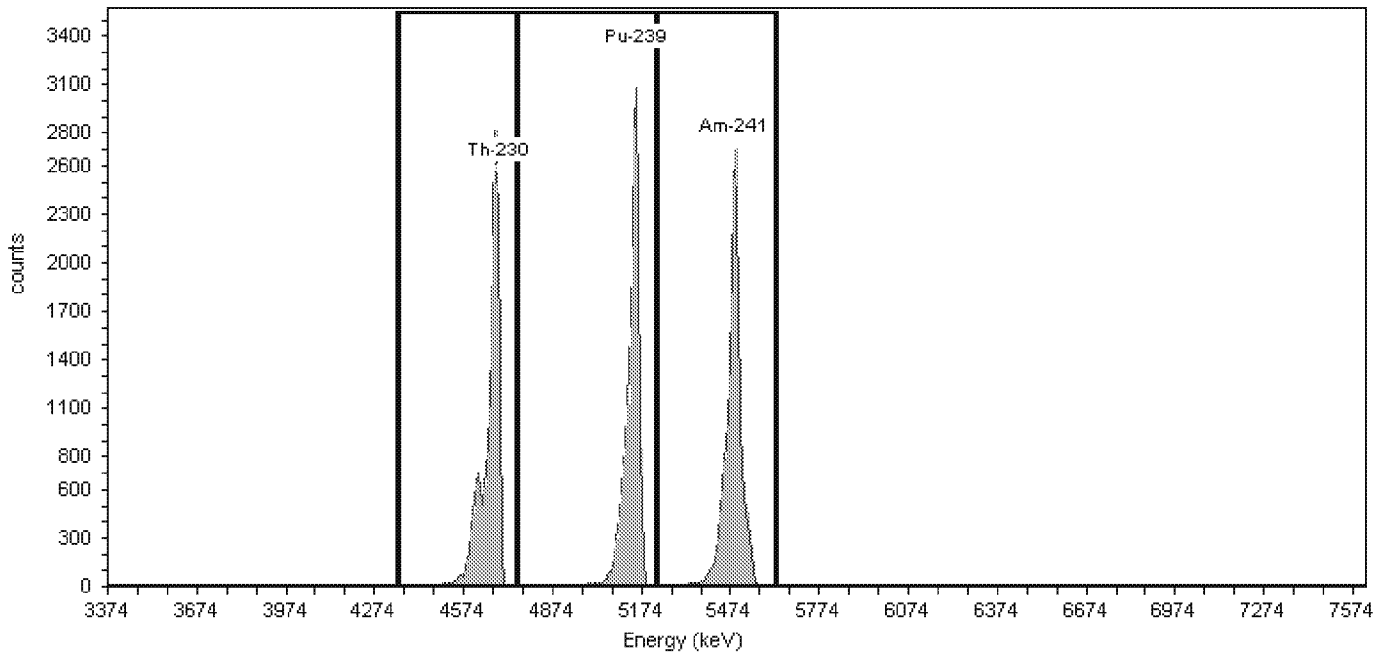
Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV80 , SN: 46-03305
Acquisition Start Date: 5/15/2018 3:50:00PM
Live Time: 140.00 min.
Real Time: 140.13 min.
Efficiency: 26.32% +/- 0.23% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 16,814.00 | 120.10 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 17,558.00 | 125.41 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 17,406.00 | 124.33 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:19:41AM 7/26/2019

## Calibration

Sample Name: IC-1370619;AV214-07152019b
Description:
Detector: AV214

Analyst: 60040
Analysis Date: 7/15/2019 2:06:28PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

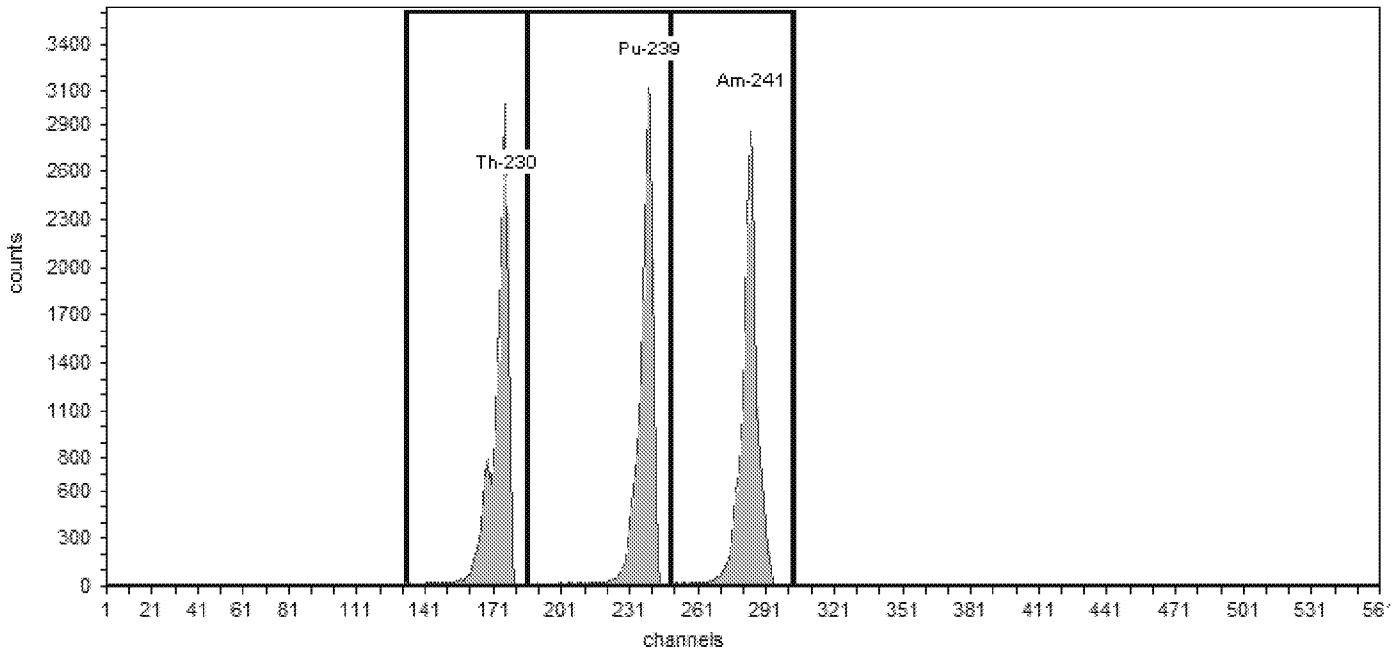
Detector: AV214 , SN: 5507304
Acquisition Start Date: 7/15/2019 11:42:01AM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370619;AV214-07152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.90% +/- 0.23% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 33.09 | 19,064.00 | 136.17 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 35.63 | 18,998.00 | 135.70 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 36.90 | 19,983.00 | 142.74 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:56:54PM 11/15/2018

## Calibration

Sample Name: IC-1370620;AV215-11152018
Description:
Detector: AV215

Analyst: 60040
Analysis Date: 11/15/2018 3:56:53PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

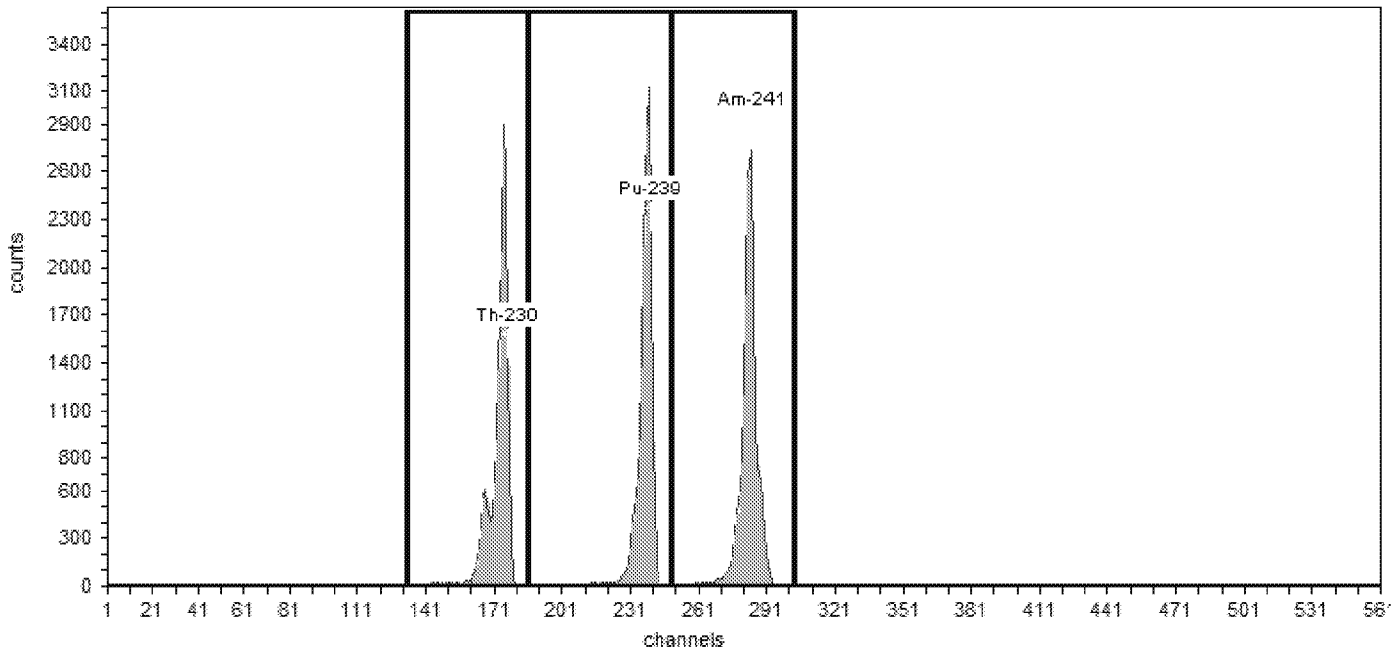
Detector: AV215 , SN: 50-119J4
Acquisition Start Date: 11/15/2018 1:28:24PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370620;AV215-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.80% +/- 0.24% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 28.49 | 15,772.00 | 112.66 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.51 | 16,073.00 | 114.81 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 32.23 | 16,609.00 | 118.64 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:56:58PM 11/15/2018

## Calibration

Sample Name: IC-7107;AV216-11152018
Description:
Detector: AV216

Analyst: 60040
Analysis Date: 11/15/2018 3:56:57PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82232-334
Prepared by: Analytics
Description:

Certification Date: 6/3/2010 12:00:00PM

## Acquisition

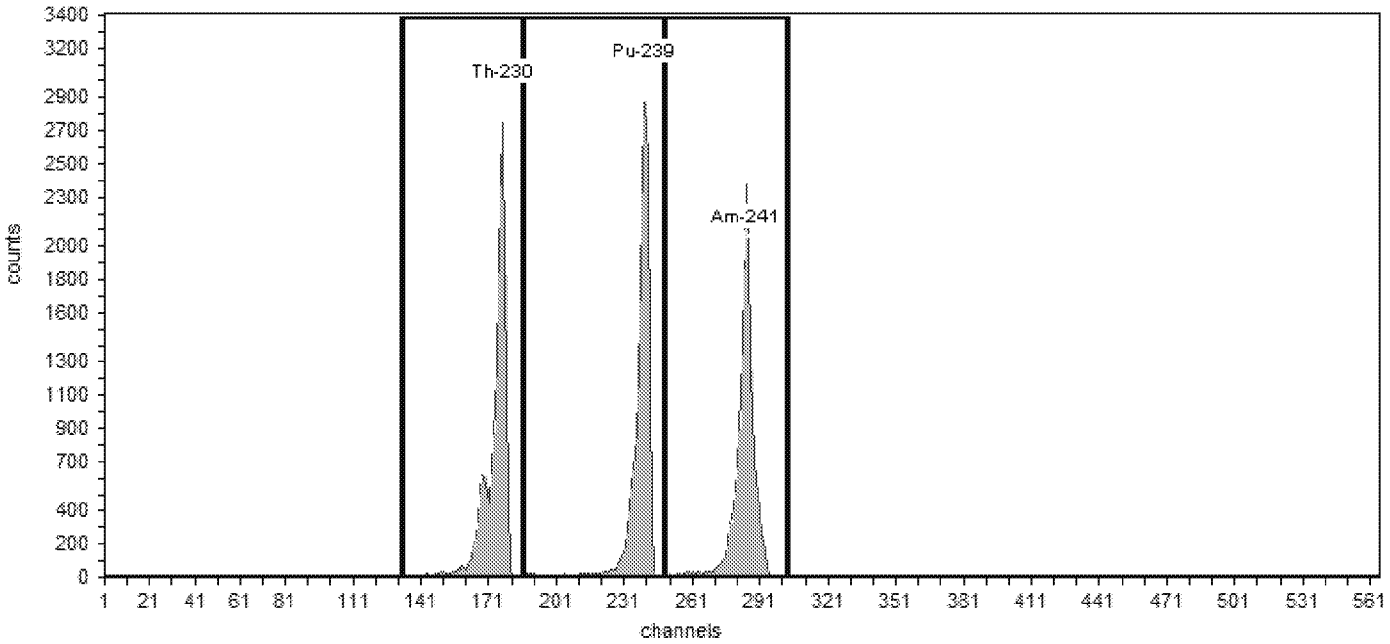
Detector: AV216 , SN: 50-117J5
Acquisition Start Date: 11/15/2018 1:28:50PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-7107;AV216-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 25.34% +/- 0.29% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 30.30 | 15,984.00 | 114.17 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.79 | 15,619.00 | 111.56 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 33.15 | 15,165.00 | 108.32 |

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:57:59PM 11/15/2018

## Calibration

Sample Name: IC-8874;AV217-11152018
Description:
Detector: AV217

Analyst: 60040
Analysis Date: 11/15/2018 6:57:58PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82233-334
Prepared by: Analytics
Description:

Certification Date: 6/3/2010 12:00:00PM

## Acquisition

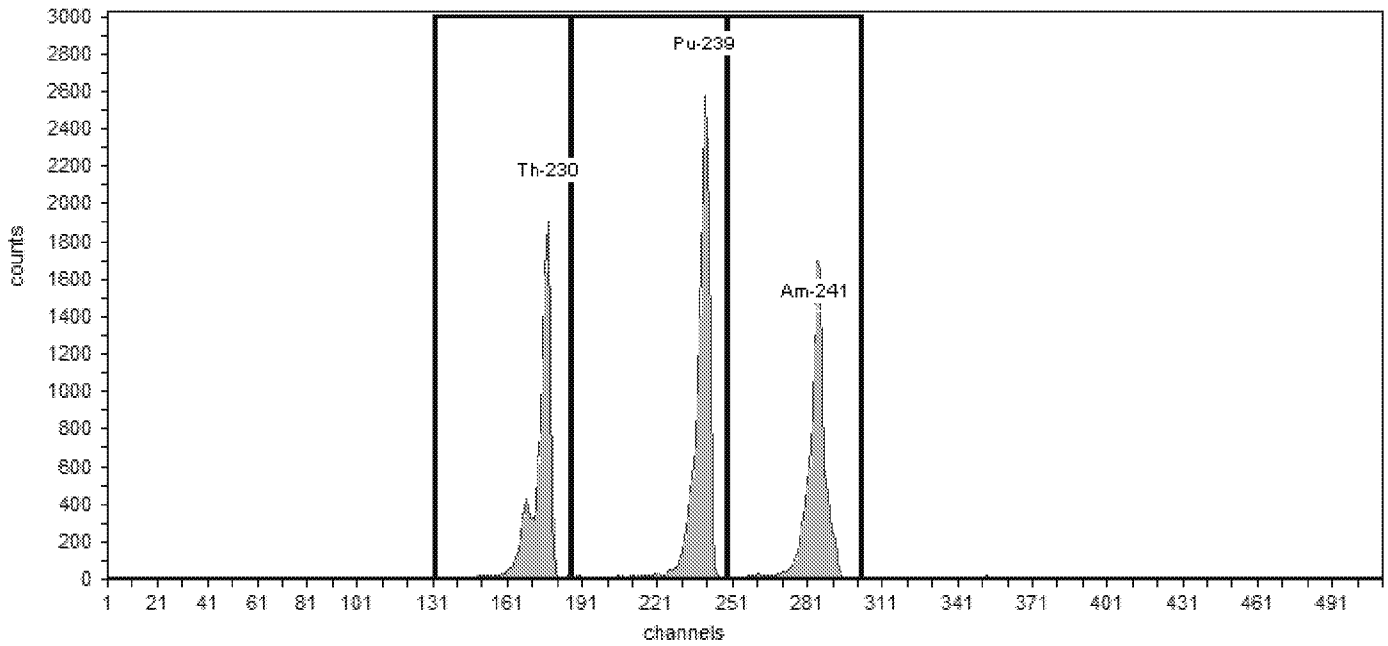
Detector: AV217 , SN: 50-117I2
Acquisition Start Date: 11/15/2018 4:11:45PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-8874;AV217-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.15% +/- 0.37% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 28.67 | 10,546.00 | 75.33 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.43 | 13,781.00 | 98.44 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 32.59 | 10,941.00 | 78.15 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:57:01PM 11/15/2018

## Calibration

Sample Name: IC-8877;AV218-11152018
Description:
Detector: AV218

Analyst: 60040
Analysis Date: 11/15/2018 3:57:00PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82236-334
Prepared by: Analytics
Description:

Certification Date: 6/2/2010 12:00:00PM

## Acquisition

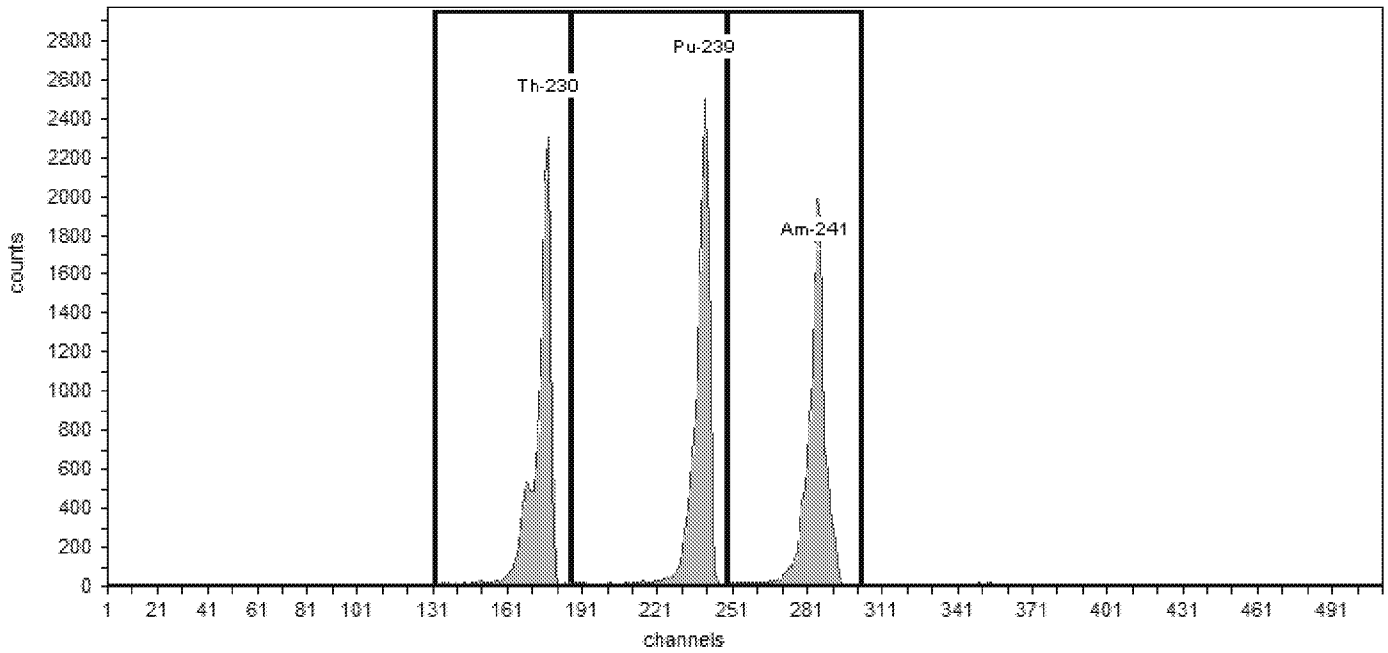
Detector: AV218 , SN: 50-117Z7
Acquisition Start Date: 11/15/2018 1:29:13PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-8877;AV218-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.35% +/- 0.30% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.31 | 13,950.00 | 99.64 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 34.36 | 14,593.00 | 104.24 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 35.91 | 13,717.00 | 97.98 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:57:26PM 11/15/2018

## Calibration

Sample Name: IC-9793;AV221-11152018
Description:
Detector: AV221

Analyst: 60040
Analysis Date: 11/15/2018 3:57:25PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82241-334
Prepared by: Analytics
Description:

Certification Date: 6/8/2010 12:00:00PM

## Acquisition

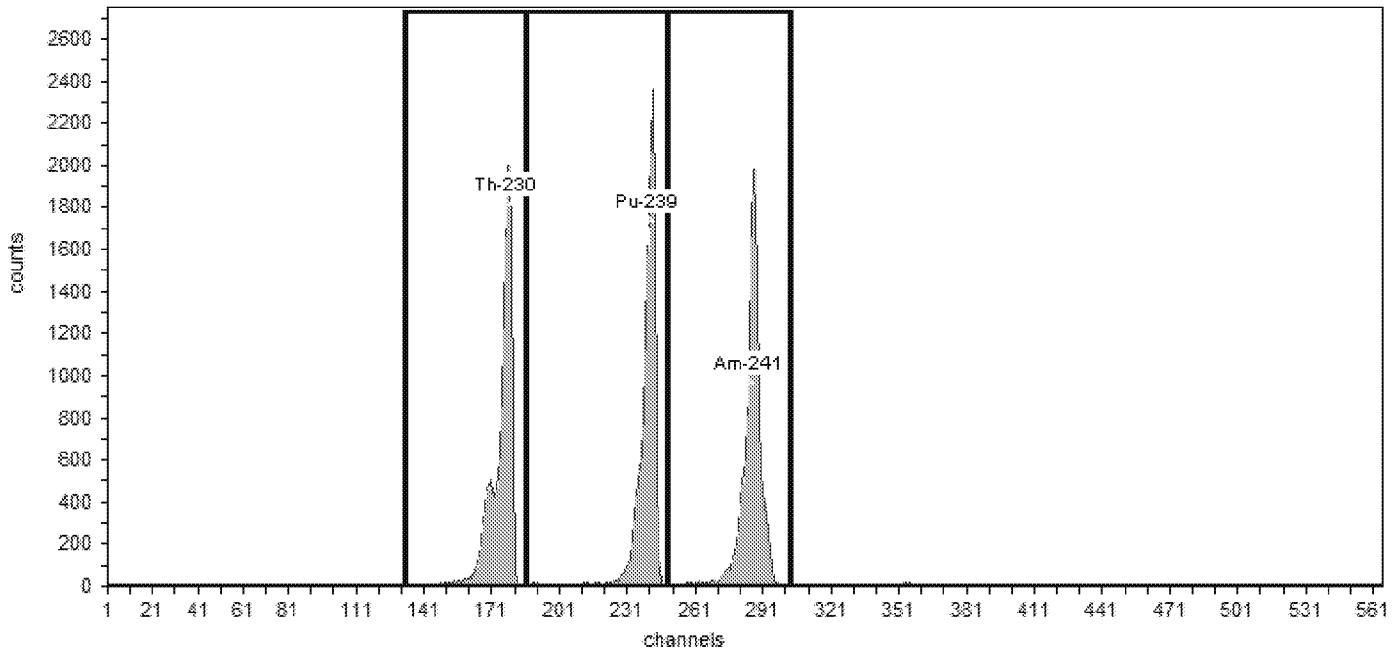
Detector: AV221 , SN: 50-117H5
Acquisition Start Date: 11/15/2018 1:29:56PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9793;AV221-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.54% +/- 0.29% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.76 | 12,429.00 | 88.78 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 32.71 | 13,118.00 | 93.70 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 29.76 | 12,286.00 | 87.76 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:42:40PM 11/19/2018

## Calibration

Sample Name: IC-9817;AV223-11192018
Description:
Detector: AV223

Analyst: 60040
Analysis Date: 11/19/2018 8:42:38PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82244-334
Prepared by: Analytics
Description:

Certification Date: 6/9/2010 12:00:00PM

## Acquisition

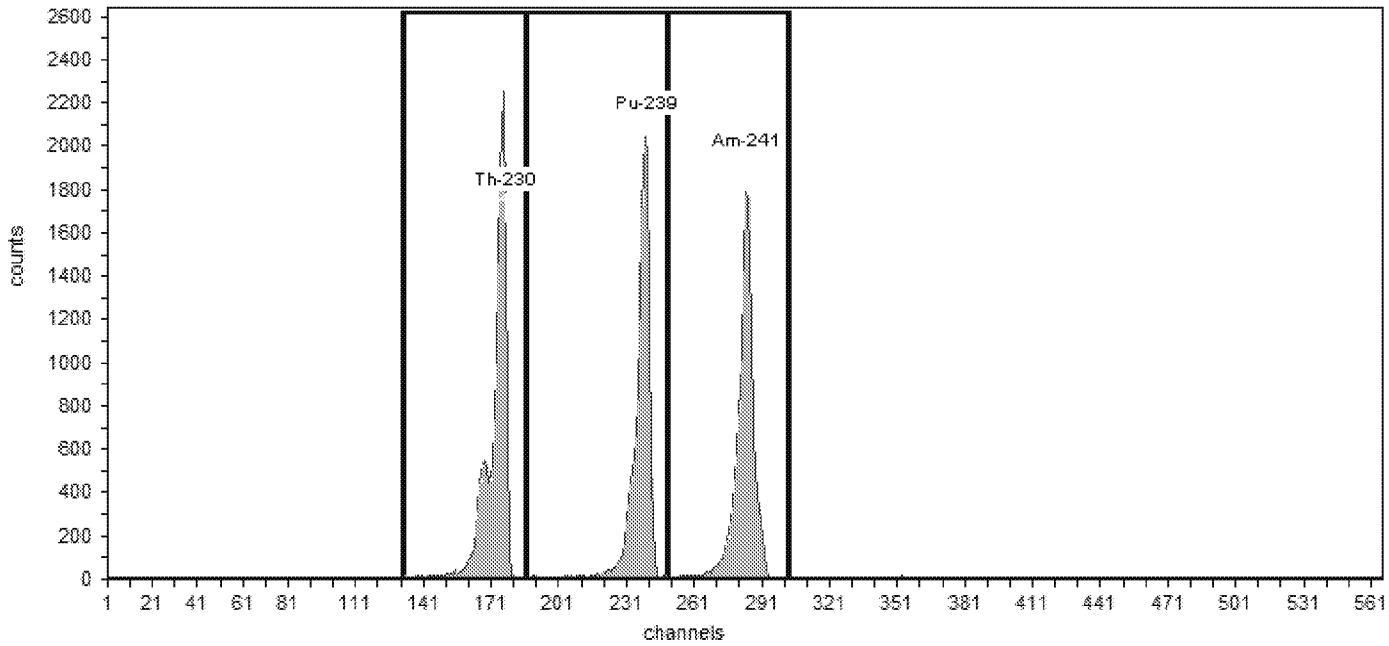
Detector: AV223 , SN: 49-037X6
Acquisition Start Date: 11/19/2018 4:59:50PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9817;AV223-11192018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.42% +/- 0.28% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.62 | 14,033.00 | 100.24 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 35.64 | 12,639.00 | 90.28 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 37.48 | 12,649.00 | 90.35 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:06PM 11/15/2018

## Calibration

Sample Name: IC-9885;AV224-11152018
Description:
Detector: AV224

Analyst: 60040
Analysis Date: 11/15/2018 3:59:05PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82246-334
Prepared by: Analytics
Description:

Certification Date: 6/9/2010 12:00:00PM

## Acquisition

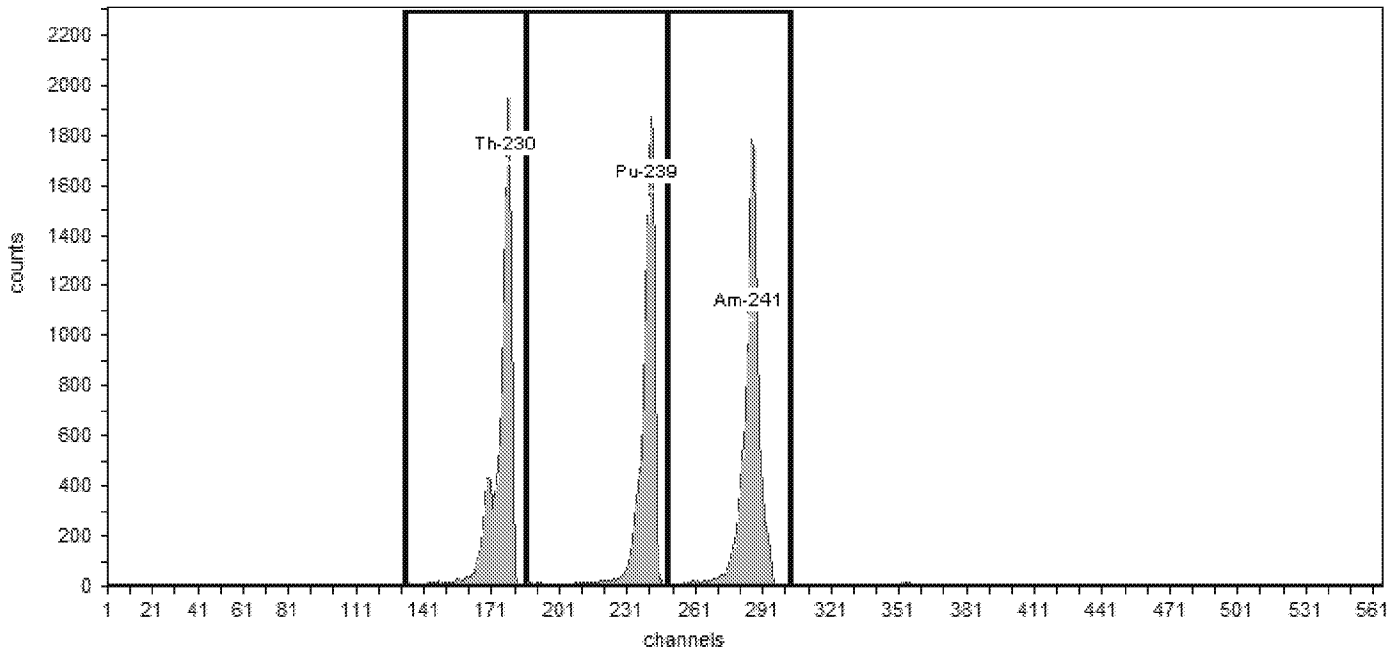
Detector: AV224 , SN: 50-119AA5
Acquisition Start Date: 11/15/2018 1:31:03PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9885;AV224-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.51% +/- 0.35% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 28.72 | 10,964.00 | 78.31 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 33.80 | 10,582.00 | 75.59 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 33.97 | 11,722.00 | 83.73 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:10PM 11/15/2018

## Calibration

Sample Name: IC-1368446;AV225-11152018
Description:
Detector: AV225

Analyst: 60040
Analysis Date: 11/15/2018 3:59:09PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/6/2017 12:00:00PM

## Acquisition

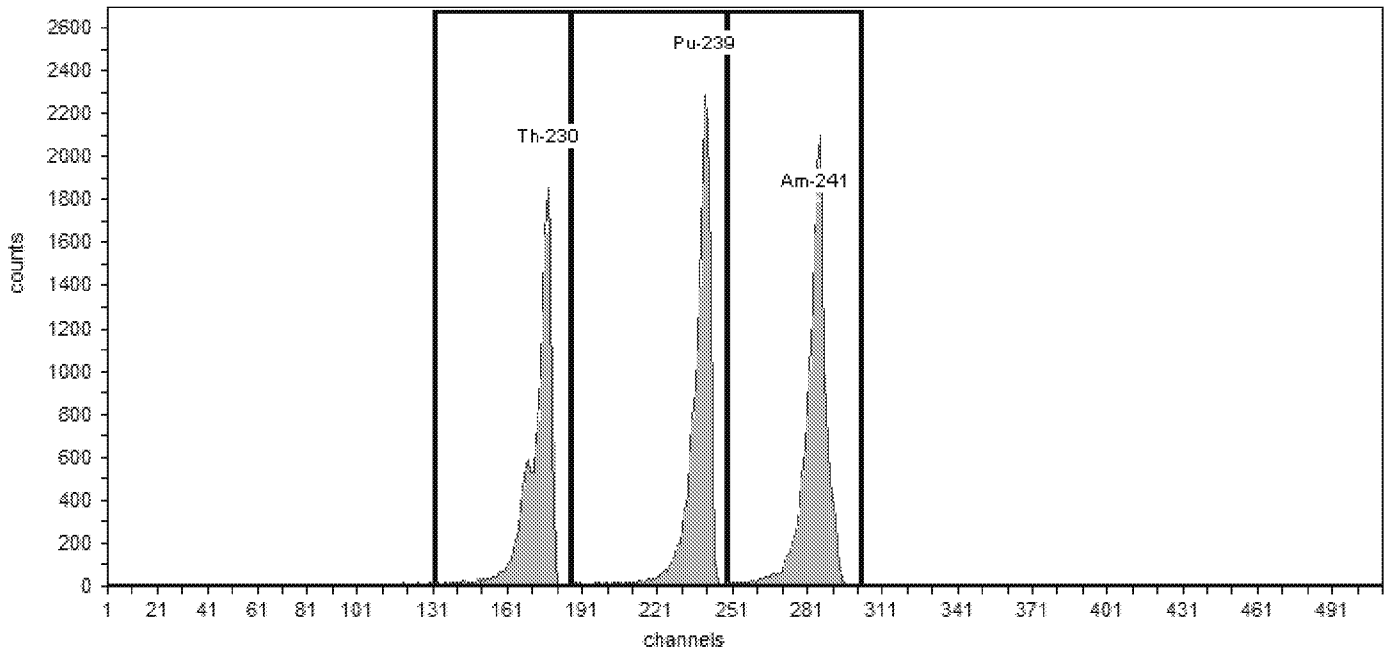
Detector: AV225 , SN: 50-117J7
Acquisition Start Date: 11/15/2018 1:31:25PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1368446;AV225-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.56% +/- 0.26% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 36.63 | 13,886.00 | 99.19 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 38.97 | 15,633.00 | 111.66 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 42.40 | 16,648.00 | 118.91 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:58:06PM 11/15/2018

## Calibration

Sample Name: IC-1370621;AV227-11152018
Description:
Detector: AV227

Analyst: 60040
Analysis Date: 11/15/2018 6:58:05PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108345_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

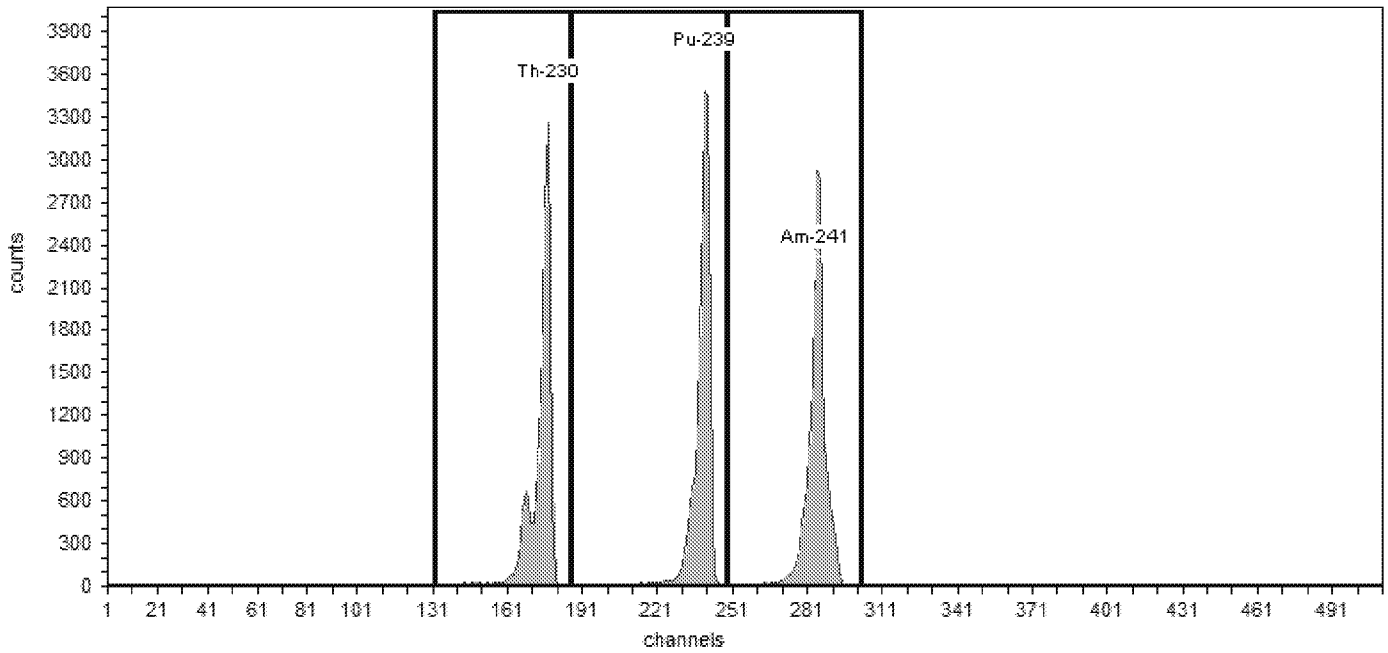
Detector: AV227 , SN: 50-120DD5
Acquisition Start Date: 11/15/2018 4:12:42PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370621;AV227-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.42% +/- 0.24% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 26.96 | 16,839.00 | 120.28 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 30.09 | 17,946.00 | 128.19 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 31.43 | 18,013.00 | 128.66 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:58:09PM 11/15/2018

## Calibration

Sample Name: IC-1370622;AV228-11152018
Description:
Detector: AV228

Analyst: 60040
Analysis Date: 11/15/2018 6:58:08PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

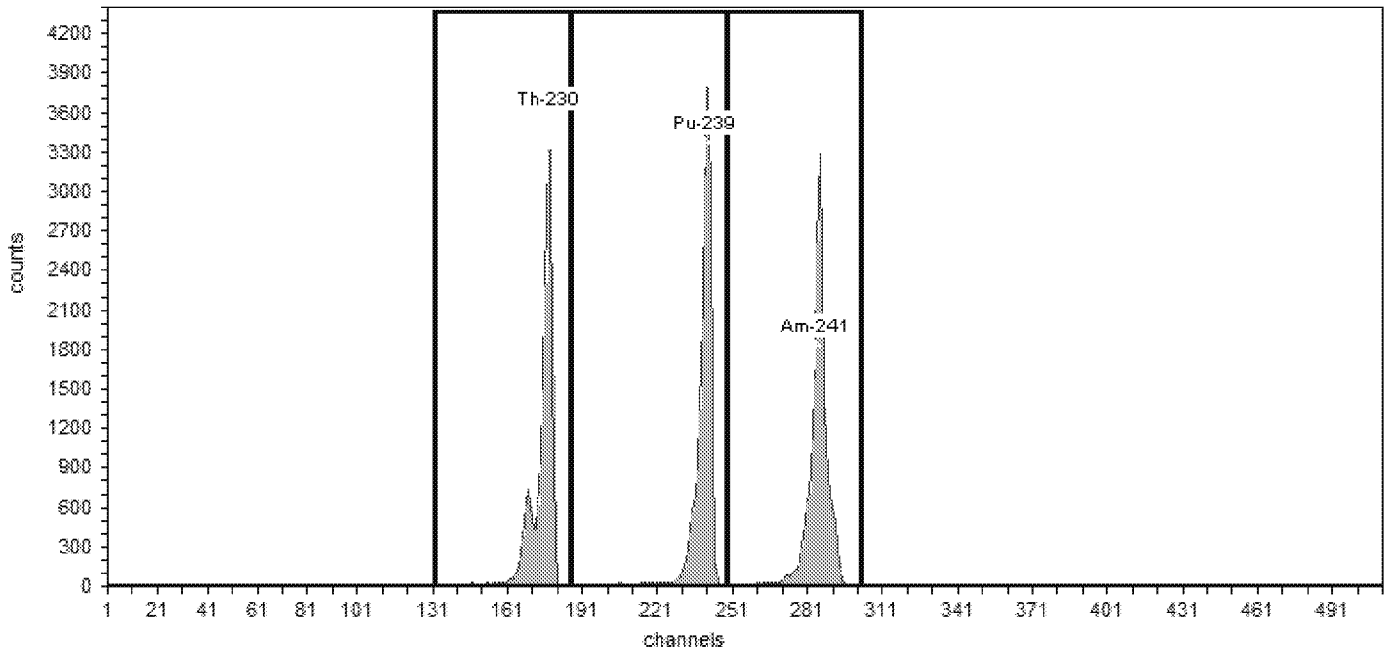
Detector: AV228 , SN: 51-005Q6
Acquisition Start Date: 11/15/2018 4:13:02PM

Live Time: 140.00 min.
Real Time: 140.02 min.

Efficiency Calibration Name: IC-1370622;AV228-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.61% +/- 0.24% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | ~~1,754.71~~* | 17,733.00 | 126.66 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 28.44 | 18,125.00 | 129.46 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 27.40 | 18,432.00 | 131.66 |

*ALS 11/18/2018 FWHM<100

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:58:13PM 11/15/2018

## Calibration

Sample Name: IC-1370619;AV229-11152018
Description:
Detector: AV229

Analyst: 60040
Analysis Date: 11/15/2018 6:58:12PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

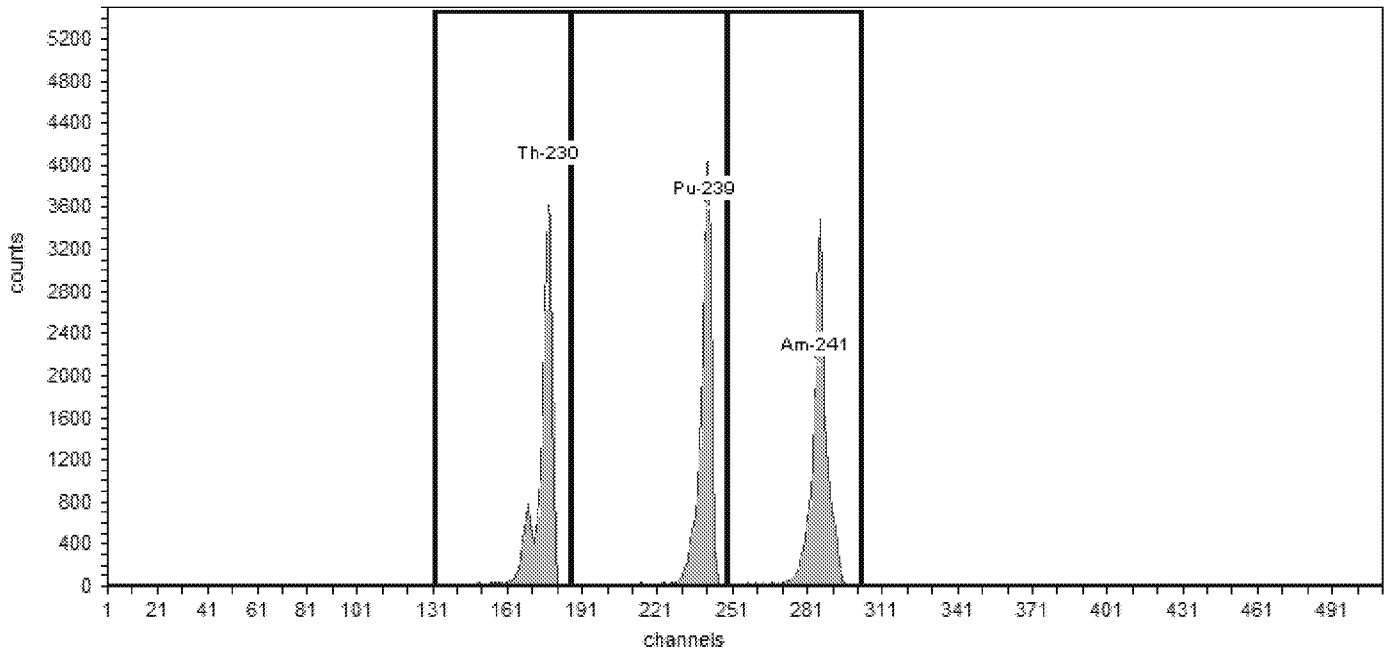
Detector: AV229 , SN: 51-005EE4
Acquisition Start Date: 11/15/2018 4:13:19PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370619;AV229-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.93% +/- 0.23% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 28.03 | 19,086.00 | 136.33 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 27.97 | 18,836.00 | 134.54 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 29.55 | 20,206.00 | 144.33 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:27:58PM 11/16/2018

## Calibration

Sample Name: IC-1370620;AV230-11152018
Description:
Detector: AV230

Analyst: 60040
Analysis Date: 11/15/2018 6:58:15PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

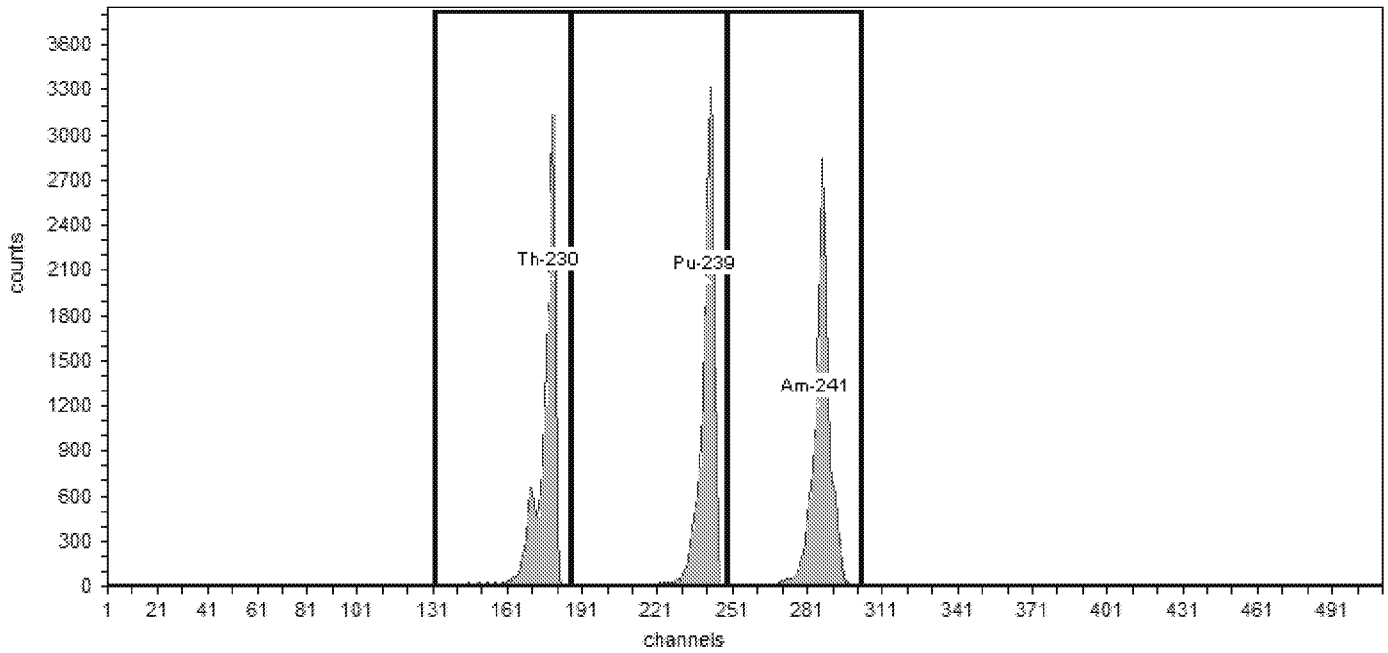
Detector: AV230 , SN: 49-045J5
Acquisition Start Date: 11/15/2018 4:13:38PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370620;AV230-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.44% +/- 0.25% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 26.72 | 16,009.00 | 114.35 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 30.35 | 16,546.00 | 118.19 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 29.96 | 17,057.00 | 121.84 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:59:19PM 11/15/2018

## Calibration

Sample Name: IC-8874;AV232-11152018a
Description:
Detector: AV232

Analyst: 60040
Analysis Date: 11/15/2018 10:59:14PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82233-334
Prepared by: Analytics
Description:

Certification Date: 6/3/2010 12:00:00PM

## Acquisition

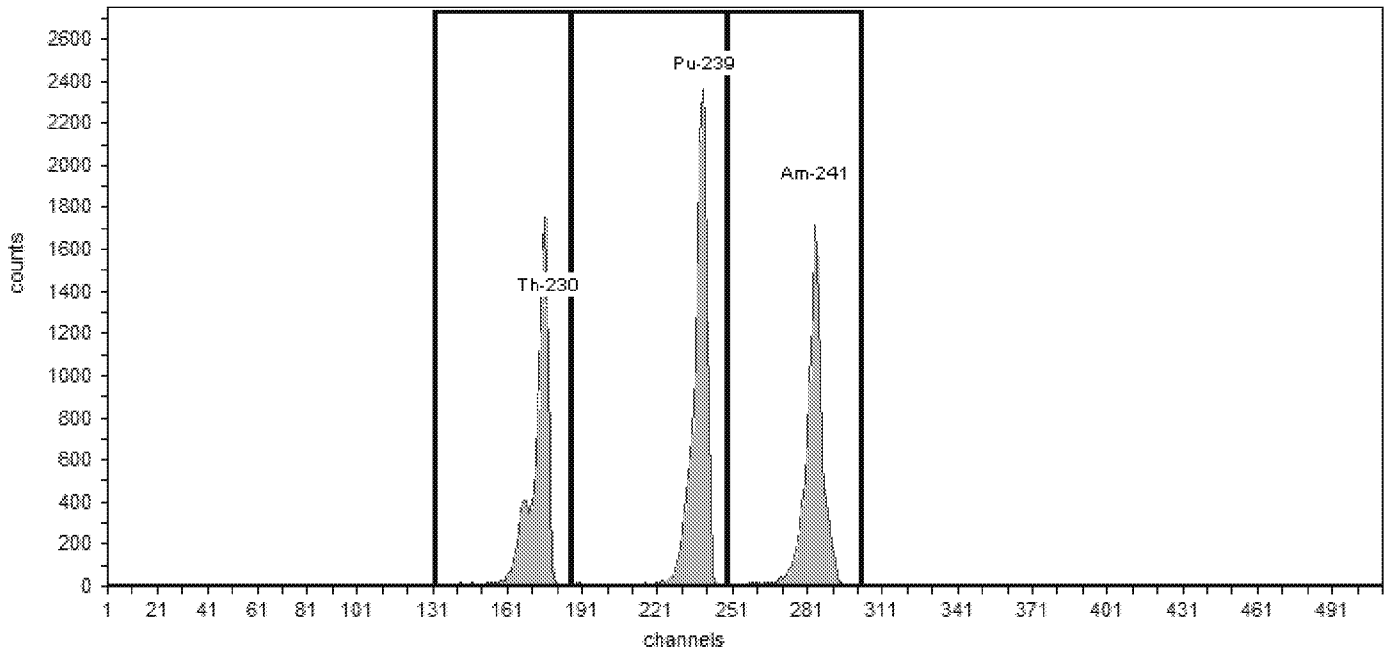
Detector: AV232 , SN: 46-033p2
Acquisition Start Date: 11/15/2018 7:19:11PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-8874;AV232-11152018a

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.55% +/- 0.38% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 32.06 | 10,719.00 | 76.56 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 35.49 | 13,955.00 | 99.68 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 35.69 | 11,140.00 | 79.57 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:58:23PM 11/15/2018

## Calibration

Sample Name: IC-8877;AV233-11152018
Description:
Detector: AV233

Analyst: 60040
Analysis Date: 11/15/2018 6:58:23PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82236-334
Prepared by: Analytics
Description:

Certification Date: 6/2/2010 12:00:00PM

## Acquisition

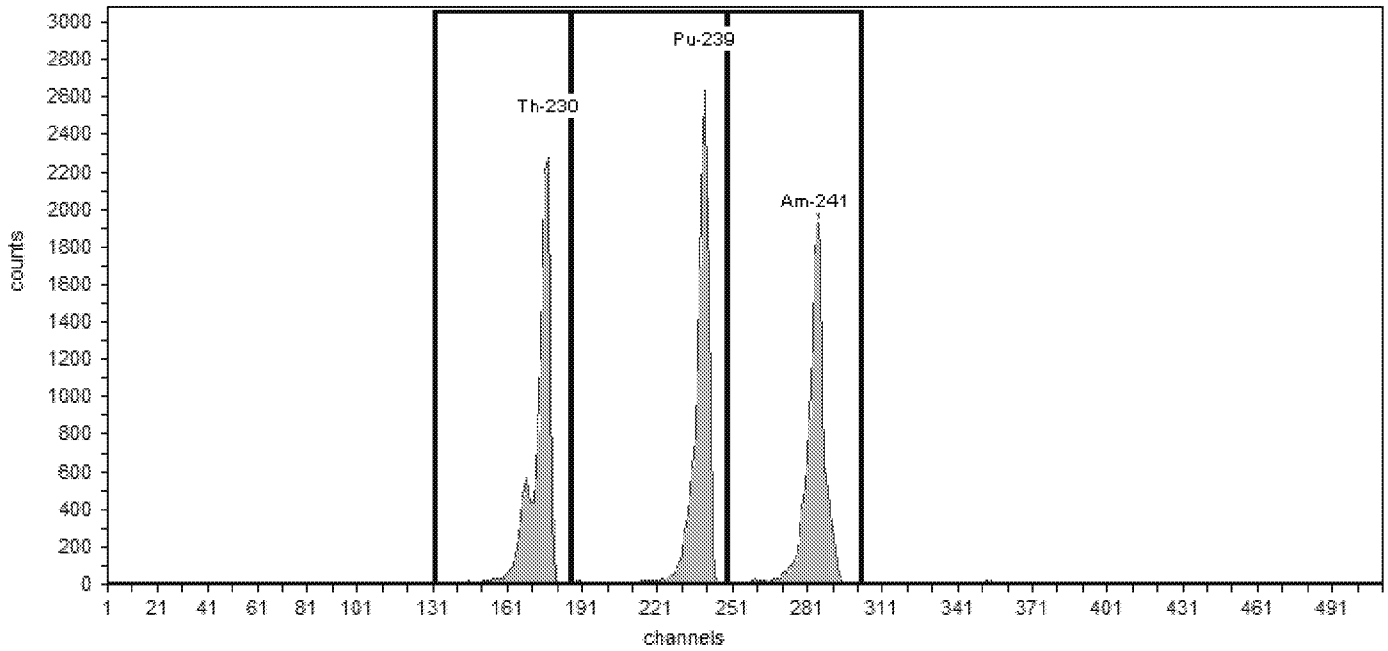
Detector: AV233 , SN: 51-005Q7
Acquisition Start Date: 11/15/2018 4:14:45PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-8877;AV233-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 24.03% +/- 0.29% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.92 | 13,894.00 | 99.24 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 32.40 | 14,294.00 | 102.10 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 34.16 | 13,477.00 | 96.26 |

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:28:04PM 11/16/2018

## Calibration

Sample Name: IC-9520;AV234-11152018
Description:
Detector: AV234

Analyst: 60040
Analysis Date: 11/15/2018 6:58:26PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82237-334
Prepared by: Analytics
Description:

Certification Date: 6/1/2010 12:00:00PM

## Acquisition

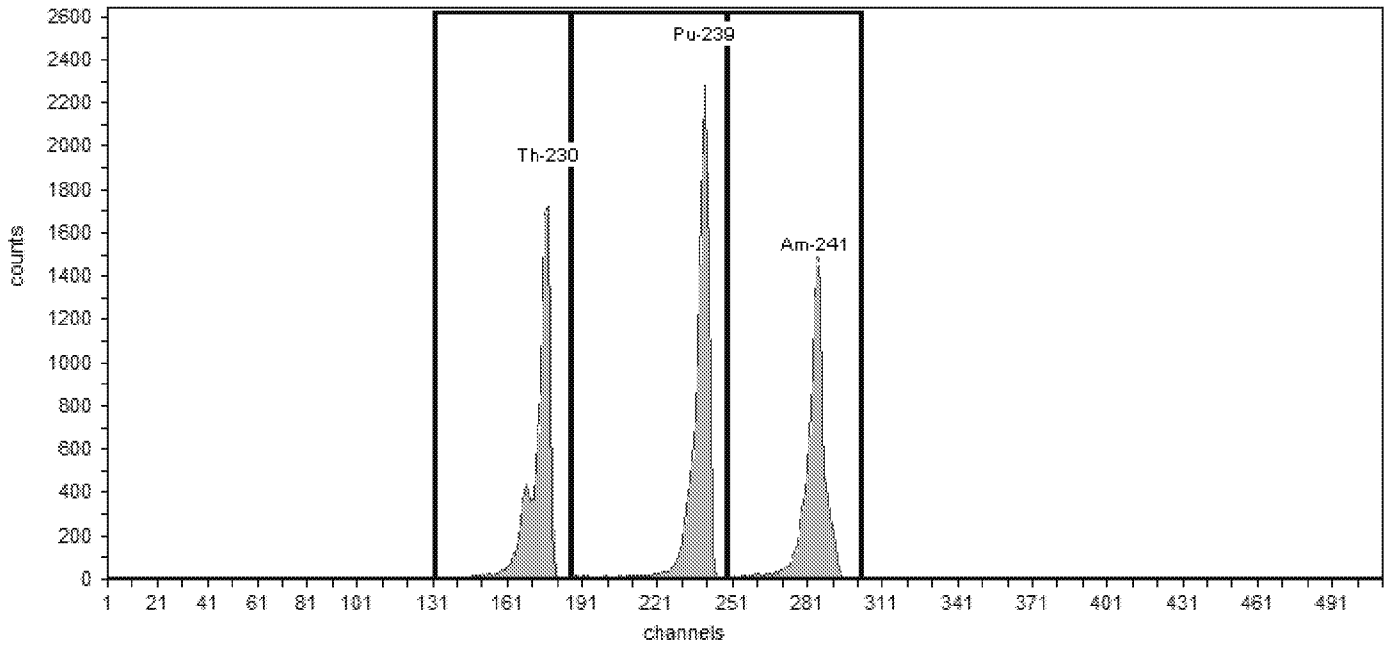
Detector: AV234 , SN: 51-005P2
Acquisition Start Date: 11/15/2018 4:14:59PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9520;AV234-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.69% +/- 0.33% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.05 | 10,873.00 | 77.66 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 32.77 | 12,751.00 | 91.08 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 34.11 | 10,335.00 | 73.82 |

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THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:58:37PM 11/15/2018

## Calibration

Sample Name: IC-1368447;AV241-11152018
Description:
Detector: AV241

Analyst: 60040
Analysis Date: 11/15/2018 10:58:36PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 12/1/2017 12:00:00PM

## Acquisition

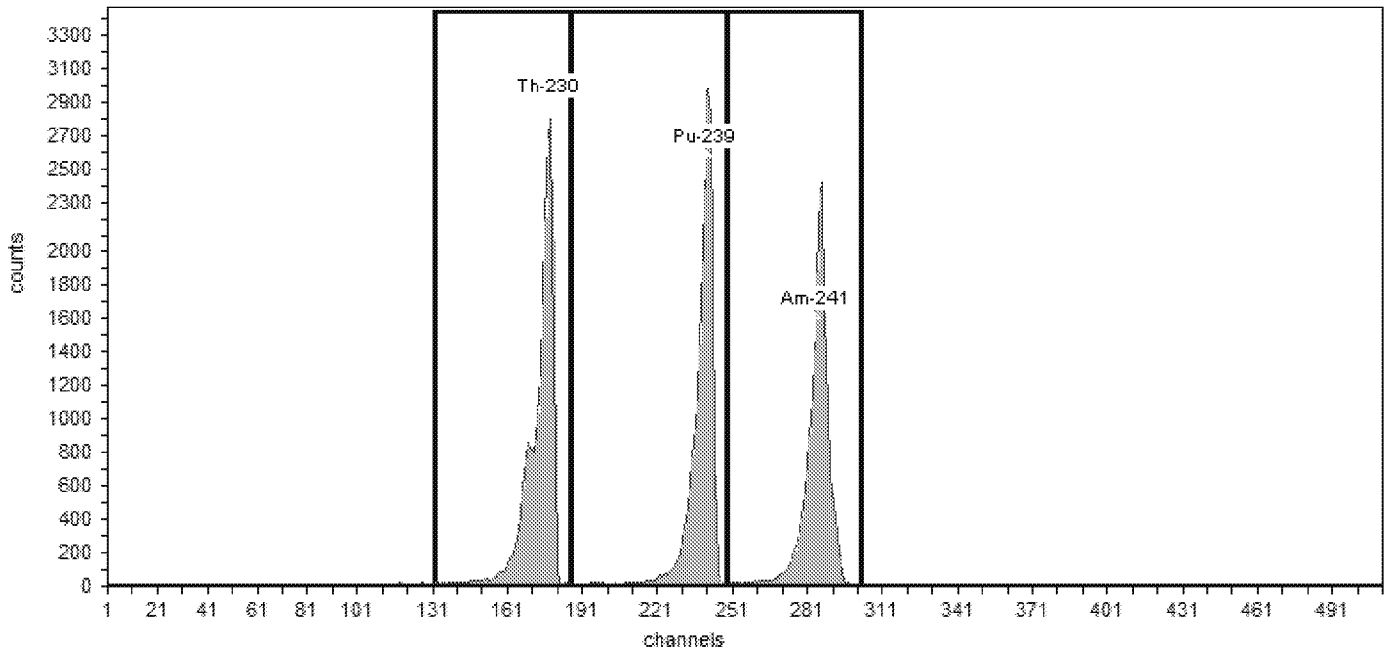
Detector: AV241 , SN: 52-059DD3
Acquisition Start Date: 11/15/2018 7:16:24PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1368447;AV241-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.37% +/- 0.22% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 38.57 | 21,443.00 | 153.16 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 39.23 | 19,911.00 | 142.22 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 40.28 | 18,325.00 | 130.89 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:28:26PM 11/16/2018

## Calibration

Sample Name: IC-1370622;AV243-11152018
Description:
Detector: AV243

Analyst: 60040
Analysis Date: 11/15/2018 10:58:43PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/22/2018 12:00:00PM

## Acquisition

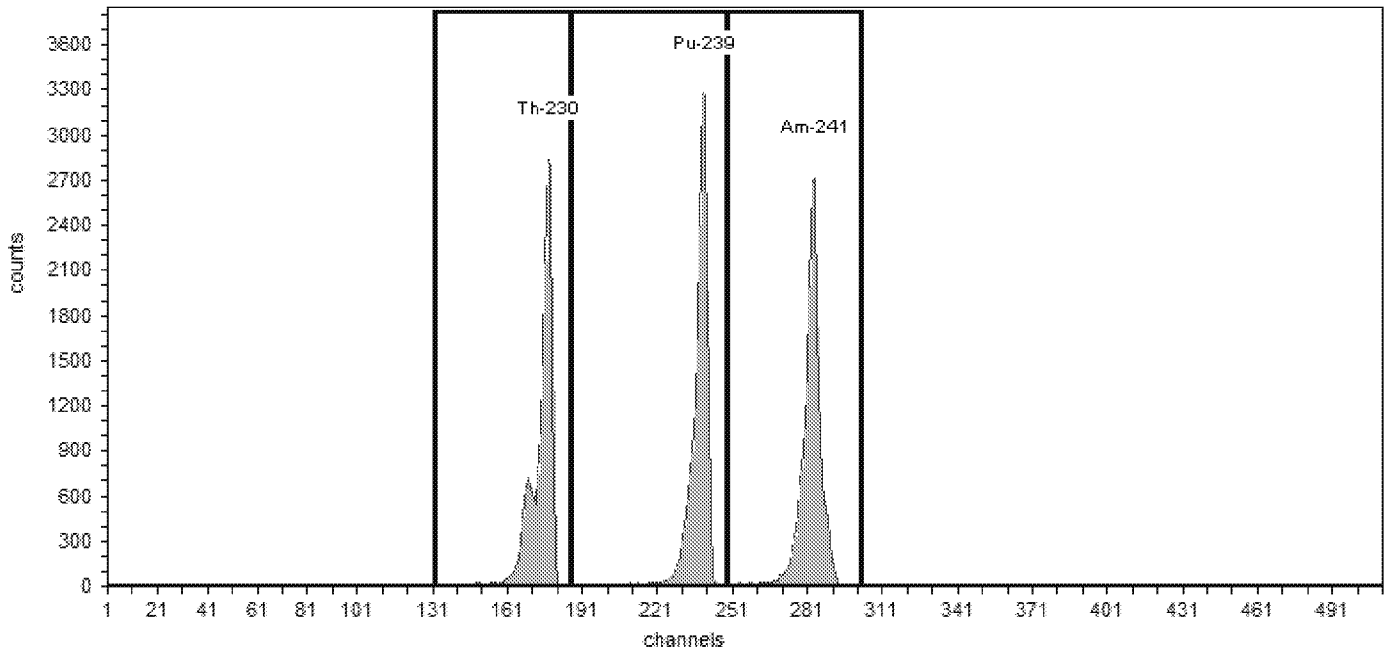
Detector: AV243 , SN: 51-005P6
Acquisition Start Date: 11/15/2018 7:16:55PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-1370622;AV243-11152(

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 26.76% +/- 0.23% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 29.99 | 16,971.00 | 121.22 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.42 | 17,841.00 | 127.44 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 33.50 | 17,813.00 | 127.24 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:28:31PM 11/16/2018

## Calibration

Sample Name: IC-9520;AV249-11152018
Description:
Detector: AV249

Analyst: 60040
Analysis Date: 11/15/2018 10:59:03PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82237-334
Prepared by: Analytics
Description:

Certification Date: 6/1/2010 12:00:00PM

## Acquisition

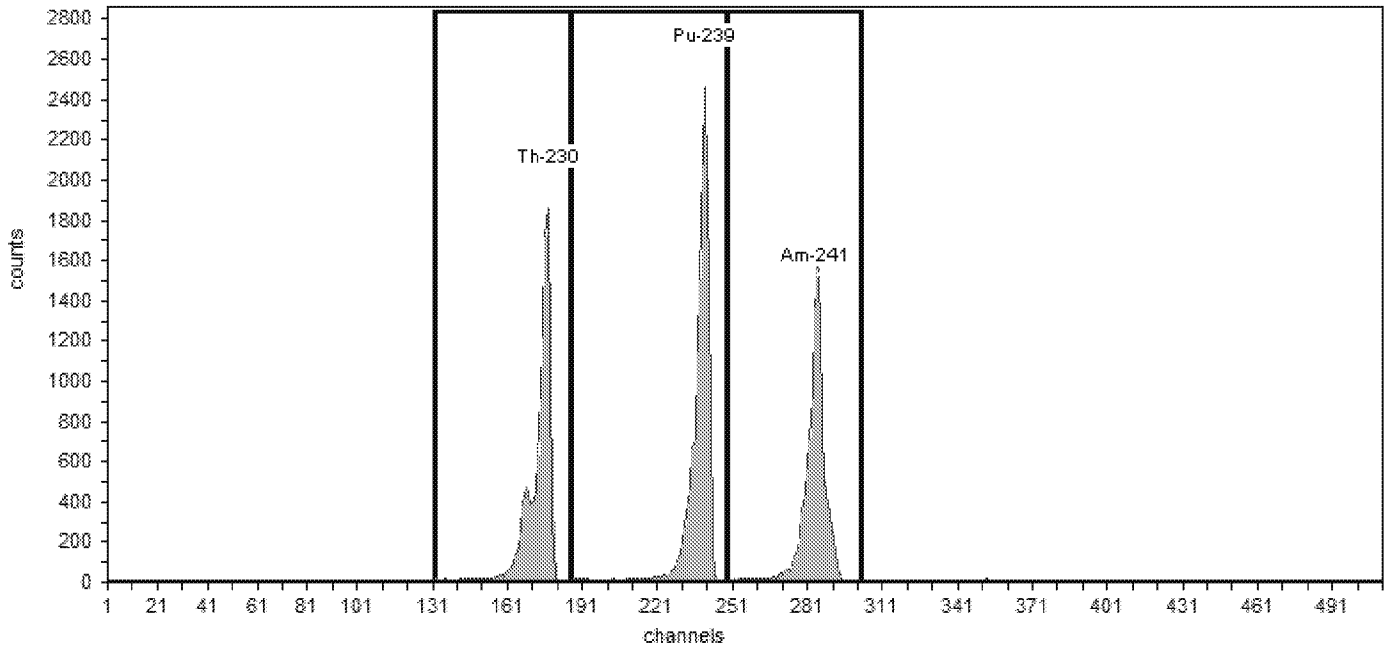
Detector: AV249 , SN: 51-005EE5
Acquisition Start Date: 11/15/2018 7:18:29PM

Live Time: 140.00 min.
Real Time: 140.01 min.

Efficiency Calibration Name: IC-9520;AV249-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 23.81% +/- 0.34% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.31 | 11,313.00 | 80.81 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 33.02 | 13,615.00 | 97.25 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 32.31 | 10,725.00 | 76.61 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:59:10PM 11/15/2018

## Calibration

Sample Name: IC-9792;AV250-11152018
Description:
Detector: AV250

Analyst: 60040
Analysis Date: 11/15/2018 10:59:07PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82240-334
Prepared by: Analytics
Description:

Certification Date: 6/8/2010 12:00:00PM

## Acquisition

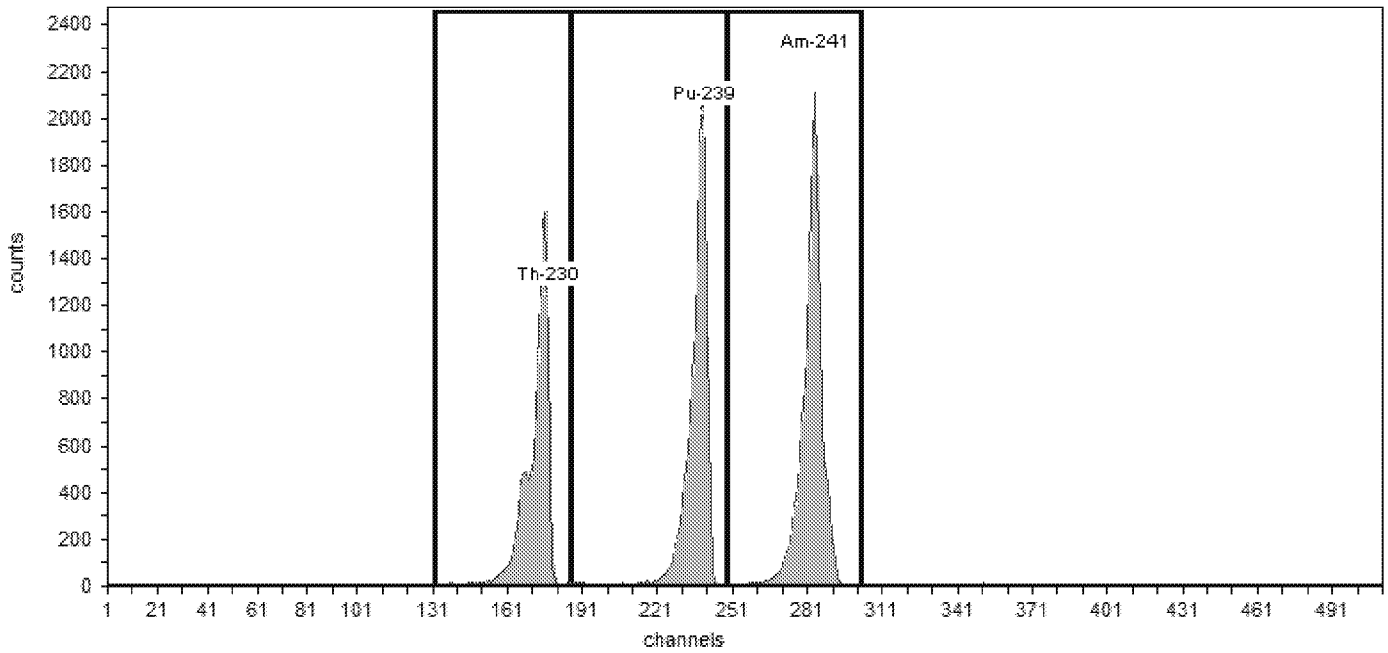
Detector: AV250 , SN: 47-052x7
Acquisition Start Date: 11/15/2018 7:18:44PM

Live Time: 140.00 min.
Real Time: 140.03 min.

Efficiency Calibration Name: IC-9792;AV250-11152018

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 22.66% +/- 0.28% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: Yes
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 37.96 | 11,744.00 | 83.89 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 38.46 | 13,934.00 | 99.53 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 38.08 | 15,539.00 | 110.99 |

# Initial Calibration Verifications

# Alpha Spectroscopy Calibration Summary

## Detector: AV1

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371830/1 | 05/14/18 15:44 | 82232-334_00001 | 0.2436 | 0.20-0.32 | | |
| ICV 160-371933/1 | 05/18/18 19:25 | 82236-334_00001 | 0.2326 | 0.20-0.32 | 95.5 | 95-105 |
| CCV 160-450128/1 | 11/12/19 07:44 | 82232-334_00001 | 0.2438 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV3

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371847/1 | 05/14/18 15:46 | 82236-334_00001 | 0.2444 | 0.20-0.32 | | |
| ICV 160-371942/1 | 05/18/18 19:25 | 82232-334_00001 | 0.2477 | 0.20-0.32 | 101.4 | 95-105 |
| CCV 160-450161/1 | 11/12/19 07:45 | 82236-334_00001 | 0.2492 | 0.20-0.32 | 102.0 | 95-105 |

## Detector: AV8

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371857/1 | 05/14/18 15:47 | 82243-334_00001 | 0.2596 | 0.20-0.32 | | |
| ICV 160-371946/1 | 05/18/18 19:27 | 82233-334_00001 | 0.2661 | 0.20-0.32 | 102.5 | 95-105 |
| CCV 160-450166/1 | 11/12/19 07:48 | 82243-334_00001 | 0.2555 | 0.20-0.32 | 98.4 | 95-105 |

## Detector: AV11

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371832/1 | 05/14/18 15:50 | 108001_00001 | 0.2819 | 0.20-0.32 | | |
| ICV 160-371934/1 | 05/18/18 19:31 | 108002_00001 | 0.2826 | 0.20-0.32 | 100.3 | 95-105 |
| CCV 160-450132/1 | 11/12/19 07:50 | 108001_00001 | 0.2778 | 0.20-0.32 | 98.5 | 95-105 |

## Detector: AV12

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371833/1 | 05/14/18 15:52 | 108002_00001 | 0.2778 | 0.20-0.32 | | |
| ICV 160-371935/1 | 05/18/18 19:32 | 108001_00001 | 0.2790 | 0.20-0.32 | 100.4 | 95-105 |
| CCV 160-450139/1 | 11/12/19 07:50 | 108002_00001 | 0.2808 | 0.20-0.32 | 101.1 | 95-105 |

## Detector: AV14

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371835/1 | 05/14/18 15:54 | 108346_00001 | 0.2640 | 0.20-0.32 | | |
| ICV 160-371938/1 | 05/18/18 19:32 | 108345_00001 | 0.2666 | 0.20-0.32 | 101.0 | 95-105 |
| CCV 160-450151/1 | 11/12/19 07:51 | 108346_00001 | 0.2708 | 0.20-0.32 | 102.6 | 95-105 |

## Detector: AV15

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371836/1 | 05/14/18 15:57 | 108347_00001 | 0.2726 | 0.20-0.32 | | |
| ICV 160-371939/1 | 05/18/18 19:34 | 108348_00001 | 0.2659 | 0.20-0.32 | 97.5 | 95-105 |
| CCV 160-450152/1 | 11/12/19 07:51 | 108347_00001 | 0.2692 | 0.20-0.32 | 98.8 | 95-105 |

## Detector: AV16

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371837/1 | 05/14/18 15:59 | | 0.2696 | 0.20-0.32 | | |
| ICV 160-371940/1 | 05/18/18 19:35 | 108347_00001 | 0.2723 | 0.20-0.32 | 101.0 | 95-105 |
| CCV 160-450153/1 | 11/12/19 07:52 | 108348_00001 | 0.2696 | 0.20-0.32 | 100.0 | 95-105 |

# Alpha Spectroscopy Calibration Summary

## Detector: AV19

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371840/1 | 05/14/18 18:35 | 82236-334_00001 | 0.2360 | 0.20-0.32 | | |
| ICV 160-371952/1 | 05/20/18 16:11 | 82232-334_00001 | 0.2370 | 0.20-0.32 | 100.4 | 95-105 |
| CCV 160-450155/1 | 11/12/19 09:41 | 82236-334_00001 | 0.2357 | 0.20-0.32 | 99.9 | 95-105 |

## Detector: AV20

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371842/1 | 05/14/18 18:36 | 82237-334_00003 | 0.2215 | 0.20-0.32 | | |
| ICV 160-371953/1 | 05/20/18 16:11 | 82244-334_00001 | 0.2191 | 0.20-0.32 | 98.9 | 95-105 |
| CCV 160-450156/1 | 11/12/19 09:42 | 82237-334_00003 | 0.2217 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV24

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371846/1 | 05/14/18 18:37 | 82244-334_00001 | 0.2221 | 0.20-0.32 | | |
| ICV 160-371957/1 | 05/20/18 16:12 | 82241-334_00001 | 0.2277 | 0.20-0.32 | 102.5 | 95-105 |
| CCV 160-450160/1 | 11/12/19 09:44 | 82244-334_00001 | 0.2247 | 0.20-0.32 | 101.2 | 95-105 |

## Detector: AV48

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371854/1 | 05/14/18 18:40 | 108347_00001 | 0.2706 | 0.20-0.32 | | |
| ICV 160-371963/1 | 05/20/18 16:15 | 108348_00001 | 0.2668 | 0.20-0.32 | 98.6 | 95-105 |
| CCV 160-452958/1 | 11/08/19 08:34 | 108347_00001 | 0.2708 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV49

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-375897/1 | 05/14/18 18:41 | 108348_00001 | 0.2627 | 0.20-0.32 | | |
| ICV 160-371964/1 | 05/20/18 16:15 | 108347_00001 | 0.2682 | 0.20-0.32 | 102.1 | 95-105 |
| CCV 160-452959/1 | 11/08/19 08:35 | 108348_00001 | 0.2648 | 0.20-0.32 | 100.8 | 95-105 |

## Detector: AV63

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371870/1 | 05/15/18 12:40 | 108345_00001 | 0.2680 | 0.20-0.32 | | |
| ICV 160-371967/1 | 05/21/18 10:36 | 108346_00001 | 0.2687 | 0.20-0.32 | 100.3 | 95-105 |
| CCV 160-450164/1 | 11/12/19 07:53 | 108345_00001 | 0.2698 | 0.20-0.32 | 100.7 | 95-105 |

## Detector: AV80

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-371886/1 | 05/15/18 15:50 | 108346_00001 | 0.2632 | 0.20-0.32 | | |
| ICV 160-371974/1 | 05/21/18 12:20 | 108345_00001 | 0.2644 | 0.20-0.32 | 100.4 | 95-105 |
| CCV 160-449693/3 | 11/08/19 10:38 | 108346_00001 | 0.2666 | 0.20-0.32 | 101.3 | 95-105 |

## Detector: AV214

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-435244/1 | 07/15/19 11:42 | 108347_00001 | 0.2790 | 0.20-0.32 | | |
| ICV 160-435244/2 | 07/15/19 14:21 | 108348_00001 | 0.2755 | 0.20-0.32 | 98.7 | 95-105 |
| CCV 160-449371/3 | 11/07/19 08:14 | 108347_00001 | 0.2806 | 0.20-0.32 | 100.6 | 95-105 |

# Alpha Spectroscopy Calibration Summary

## Detector: AV215

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401294/1 | 11/15/18 13:28 | 108348_00001 | 0.2680 | 0.20-0.32 | | |
| ICV 160-401832/1 | 11/16/18 12:38 | 108347_00001 | 0.2748 | 0.20-0.32 | 102.5 | 95-105 |
| CCV 160-449372/3 | 11/07/19 08:14 | 108348_00001 | 0.2698 | 0.20-0.32 | 100.7 | 95-105 |

## Detector: AV216

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401295/1 | 11/15/18 13:28 | 82232-334_00001 | 0.2534 | 0.20-0.32 | | |
| ICV 160-401833/1 | 11/16/18 12:38 | 82236-334_00001 | 0.2503 | 0.20-0.32 | 98.8 | 95-105 |
| CCV 160-449373/3 | 11/07/19 08:16 | 82232-334_00001 | 0.2544 | 0.20-0.32 | 100.4 | 95-105 |

## Detector: AV217

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401296/1 | 11/15/18 16:11 | 82233-334_00001 | 0.2615 | 0.20-0.32 | | |
| ICV 160-401834/1 | 11/16/18 12:38 | 82243-334_00001 | 0.2526 | 0.20-0.32 | 96.6 | 95-105 |
| CCV 160-449374/3 | 11/07/19 08:16 | 82233-334_00001 | 0.2603 | 0.20-0.32 | 99.6 | 95-105 |

## Detector: AV218

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401297/1 | 11/15/18 13:29 | 82236-334_00001 | 0.2435 | 0.20-0.32 | | |
| ICV 160-401835/1 | 11/16/18 12:39 | 82232-334_00001 | 0.2489 | 0.20-0.32 | 102.2 | 95-105 |
| CCV 160-449375/3 | 11/07/19 08:16 | 82236-334_00001 | 0.2437 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV221

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401300/1 | 11/15/18 13:29 | 82241-334_00001 | 0.2254 | 0.20-0.32 | | |
| ICV 160-401838/1 | 11/16/18 12:43 | 82237-334_00003 | 0.2217 | 0.20-0.32 | 98.4 | 95-105 |
| CCV 160-449378/3 | 11/07/19 08:18 | 82241-334_00001 | 0.2250 | 0.20-0.32 | 99.9 | 95-105 |

## Detector: AV223

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401867/1 | 11/19/18 16:59 | 82244-334_00001 | 0.2242 | 0.20-0.32 | | |
| ICV 160-401868/1 | 11/19/18 20:45 | 82241-334_00001 | 0.2297 | 0.20-0.32 | 102.5 | 95-105 |
| CCV 160-449380/3 | 11/07/19 08:20 | 82244-334_00001 | 0.2281 | 0.20-0.32 | 101.8 | 95-105 |

## Detector: AV224

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401303/1 | 11/15/18 13:31 | 82246-334_00001 | 0.2351 | 0.20-0.32 | | |
| ICV 160-401840/1 | 11/16/18 12:43 | 82240-334_00001 | 0.2285 | 0.20-0.32 | 97.2 | 95-105 |
| CCV 160-449381/3 | 11/07/19 08:20 | 82246-334_00001 | 0.2362 | 0.20-0.32 | 100.5 | 95-105 |

## Detector: AV225

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401304/1 | 11/15/18 13:31 | 108001_00001 | 0.2756 | 0.20-0.32 | | |
| ICV 160-401841/1 | 11/16/18 12:44 | 108002_00001 | 0.2806 | 0.20-0.32 | 101.8 | 95-105 |
| CCV 160-449382/3 | 11/07/19 09:34 | 108001_00001 | 0.2744 | 0.20-0.32 | 99.6 | 95-105 |

# Alpha Spectroscopy Calibration Summary

## Detector: AV227

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401306/1 | 11/15/18 16:12 | 108345_00001 | 0.2742 | 0.20-0.32 | | |
| ICV 160-401843/1 | 11/16/18 14:17 | 108346_00001 | 0.2731 | 0.20-0.32 | 99.6 | 95-105 |
| CCV 160-449384/3 | 11/07/19 09:35 | 108345_00001 | 0.2877 | 0.20-0.32 | 104.9 | 95-105 |

## Detector: AV228

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401307/1 | 11/15/18 16:13 | 108346_00001 | 0.2761 | 0.20-0.32 | | |
| ICV 160-401844/1 | 11/16/18 14:17 | 108345_00001 | 0.2778 | 0.20-0.32 | 100.6 | 95-105 |
| CCV 160-449385/3 | 11/07/19 09:36 | 108346_00001 | 0.2733 | 0.20-0.32 | 99.0 | 95-105 |

## Detector: AV229

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401308/1 | 11/15/18 16:13 | 108347_00001 | 0.2793 | 0.20-0.32 | | |
| ICV 160-401845/1 | 11/16/18 14:18 | 108348_00001 | 0.2758 | 0.20-0.32 | 98.8 | 95-105 |
| CCV 160-449386/3 | 11/07/19 09:36 | 108347_00001 | 0.2825 | 0.20-0.32 | 101.2 | 95-105 |

## Detector: AV230

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401309/1 | 11/15/18 16:13 | 108348_00001 | 0.2744 | 0.20-0.32 | | |
| ICV 160-401846/1 | 11/16/18 14:18 | 108347_00001 | 0.2834 | 0.20-0.32 | 103.2 | 95-105 |
| CCV 160-449387/3 | 11/07/19 09:37 | 108348_00001 | 0.2748 | 0.20-0.32 | 100.1 | 95-105 |

## Detector: AV232

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401311/1 | 11/15/18 19:19 | 82233-334_00001 | 0.2655 | 0.20-0.32 | | |
| ICV 160-401848/1 | 11/16/18 14:18 | 82243-334_00001 | 0.2552 | 0.20-0.32 | 96.1 | 95-105 |
| CCV 160-449389/3 | 11/07/19 09:38 | 82233-334_00001 | 0.2747 | 0.20-0.32 | 103.4 | 95-105 |

## Detector: AV233

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401312/1 | 11/15/18 16:14 | 82236-334_00001 | 0.2403 | 0.20-0.32 | | |
| ICV 160-401849/1 | 11/16/18 14:19 | 82232-334_00001 | 0.2421 | 0.20-0.32 | 100.7 | 95-105 |
| CCV 160-449390/3 | 11/07/19 09:39 | 82236-334_00001 | 0.2408 | 0.20-0.32 | 100.2 | 95-105 |

## Detector: AV234

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401313/1 | 11/15/18 16:14 | 82237-334_00003 | 0.2269 | 0.20-0.32 | | |
| ICV 160-401850/1 | 11/16/18 14:19 | 82244-334_00001 | 0.2254 | 0.20-0.32 | 99.3 | 95-105 |
| CCV 160-449391/3 | 11/07/19 09:39 | 82237-334_00003 | 0.2336 | 0.20-0.32 | 102.9 | 95-105 |

## Detector: AV241

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401320/1 | 11/15/18 19:16 | 108002_00001 | 0.2737 | 0.20-0.32 | | |
| ICV 160-401857/1 | 11/16/18 17:15 | 108001_00001 | 0.2713 | 0.20-0.32 | 99.1 | 95-105 |
| CCV 160-449398/3 | 11/07/19 10:57 | 108002_00001 | 0.2755 | 0.20-0.32 | 100.6 | 95-105 |

# Alpha Spectroscopy Calibration Summary

## Detector: AV243

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401322/1 | 11/15/18 19:16 | 108346_00001 | 0.2676 | 0.20-0.32 | | |
| ICV 160-401859/1 | 11/16/18 17:15 | 108345_00001 | 0.2688 | 0.20-0.32 | 100.4 | 95-105 |
| CCV 160-449400/3 | 11/07/19 10:58 | 108346_00001 | 0.2660 | 0.20-0.32 | 99.4 | 95-105 |

## Detector: AV249

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401328/1 | 11/15/18 19:18 | 82237-334_00003 | 0.2381 | 0.20-0.32 | | |
| ICV 160-401865/1 | 11/16/18 17:17 | 82244-334_00001 | 0.2370 | 0.20-0.32 | 99.5 | 95-105 |
| CCV 160-449406/3 | 11/07/19 11:00 | 82237-334_00003 | 0.2414 | 0.20-0.32 | 101.4 | 95-105 |

## Detector: AV250

| Lab Sample ID | Analysis Date | Reagent ID | Efficiency | Efficiency Limits | Efficiency Recovery | Recovery Limits |
|---|---|---|---|---|---|---|
| IC 160-401329/1 | 11/15/18 19:18 | 82240-334_00001 | 0.2266 | 0.20-0.32 | | |
| ICV 160-401866/1 | 11/16/18 17:17 | 82246-334_00001 | 0.2310 | 0.20-0.32 | 102.0 | 95-105 |
| CCV 160-449407/3 | 11/07/19 11:01 | 82240-334_00001 | 0.2311 | 0.20-0.32 | 102.0 | 95-105 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:09PM 5/19/2018

## Calibration

Sample Name: ICV-8877;AV1-05182018
Description:
Detector: AV1

Calibration Date: 5/19/2018 3:58:05PM
Analyst: 60040

## Source Info

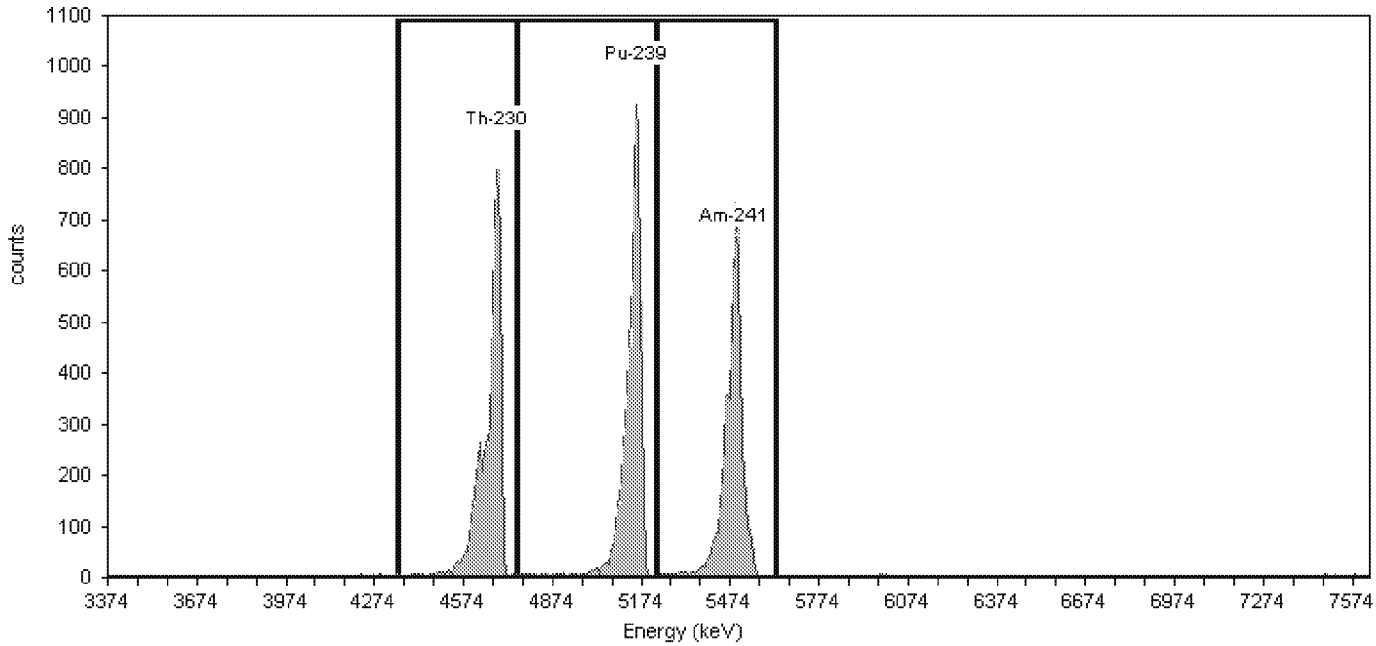
Certificate ID: 82236-334
Prepared by: Analytics

Certification Date: 6/2/2010 12:00:00PM
Description:

## Acquisition

Detector: AV1 , SN: 49-188 AA4
Acquisition Start Date: 5/18/2018 7:25:01PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 23.26% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,697.00 | 94.95 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,038.00 | 100.63 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,570.00 | 92.83 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:58:37PM 5/19/2018

## Calibration

Sample Name: ICV-7107;AV3-05182018
Description:
Detector: AV3

Calibration Date: 5/19/2018 3:58:34PM
Analyst: 60040

## Source Info

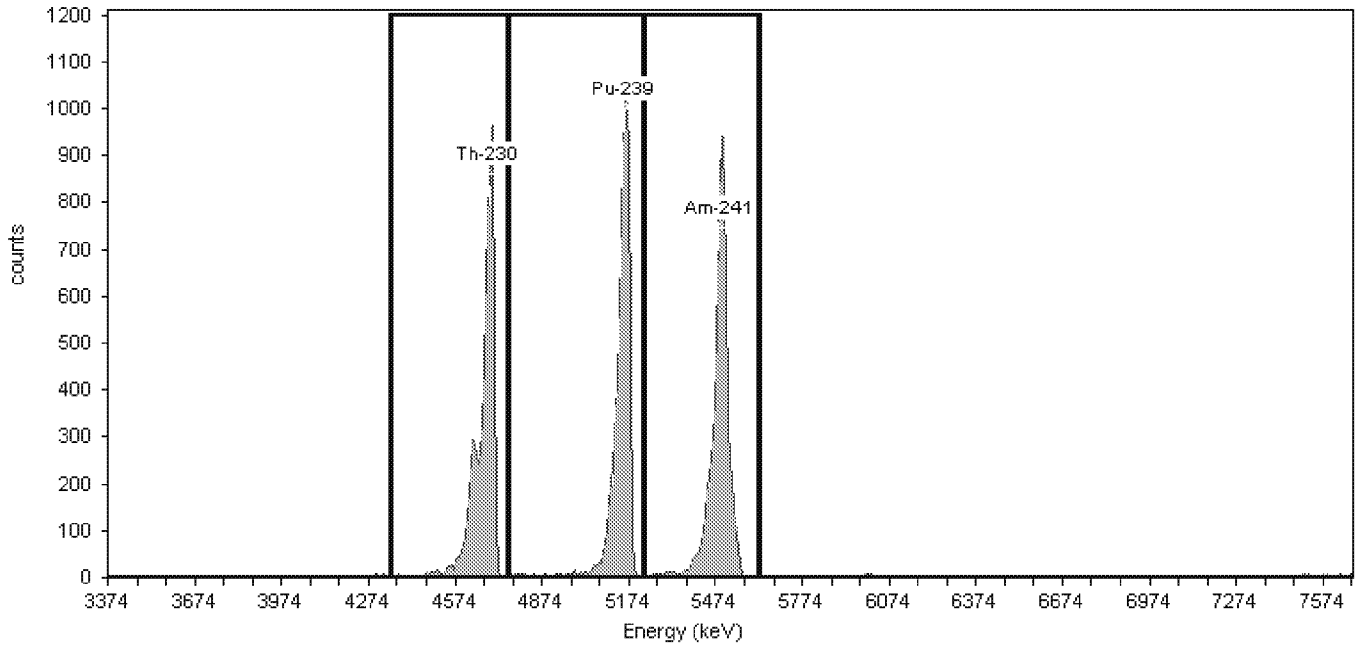
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV3 , SN: 49-202 FF7
Acquisition Start Date: 5/18/2018 7:25:51PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 24.77% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,662.00 | 111.03 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,545.00 | 109.08 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,389.00 | 106.48 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:31PM 5/19/2018

## Calibration

Sample Name: ICV-8874;AV8-05182018
Description:
Detector: AV8

Calibration Date: 5/19/2018 3:59:26PM
Analyst: 60040

## Source Info

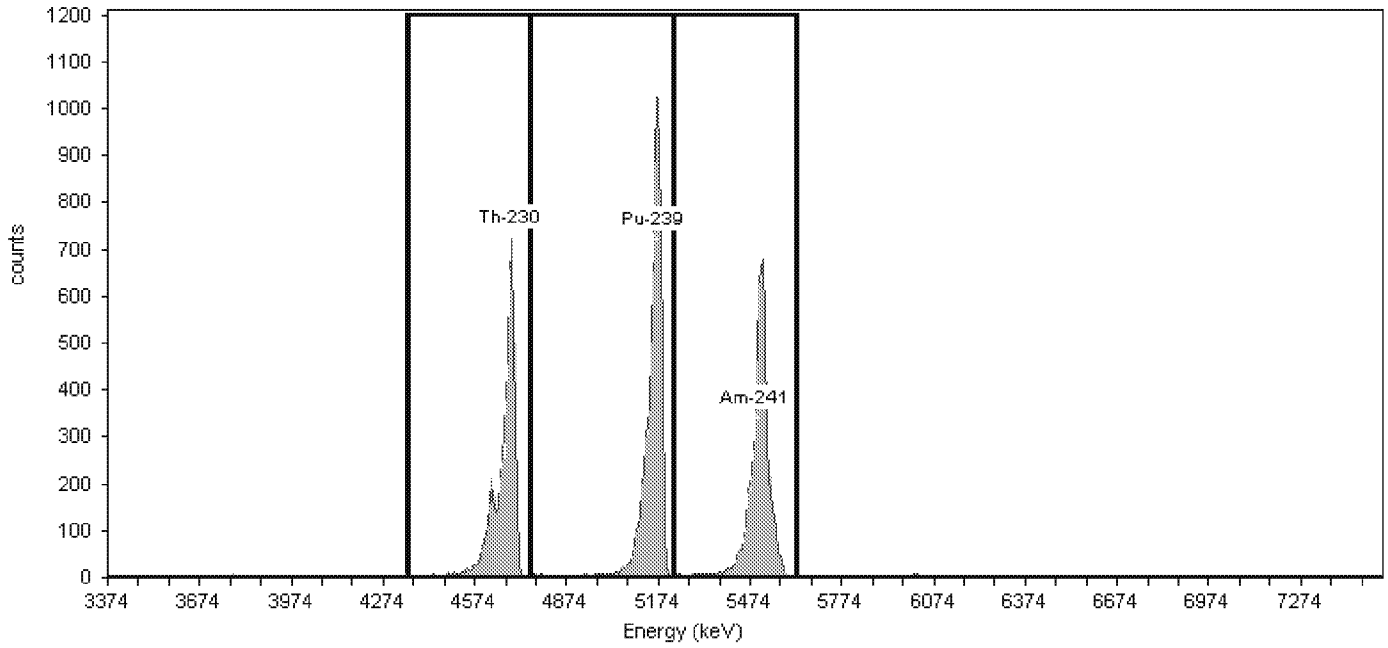
Certificate ID: 82233-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV8 , SN: 41-137Q6
Acquisition Start Date: 5/18/2018 7:27:27PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 26.61% +/- 0.50% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 4,638.00 | 77.30 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,945.00 | 99.08 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 4,809.00 | 80.15 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:44PM 5/19/2018

## Calibration

Sample Name: ICV-1368447;AV11-05182018
Description:
Detector: AV11

Calibration Date: 5/19/2018 3:59:38PM
Analyst: 60040

## Source Info

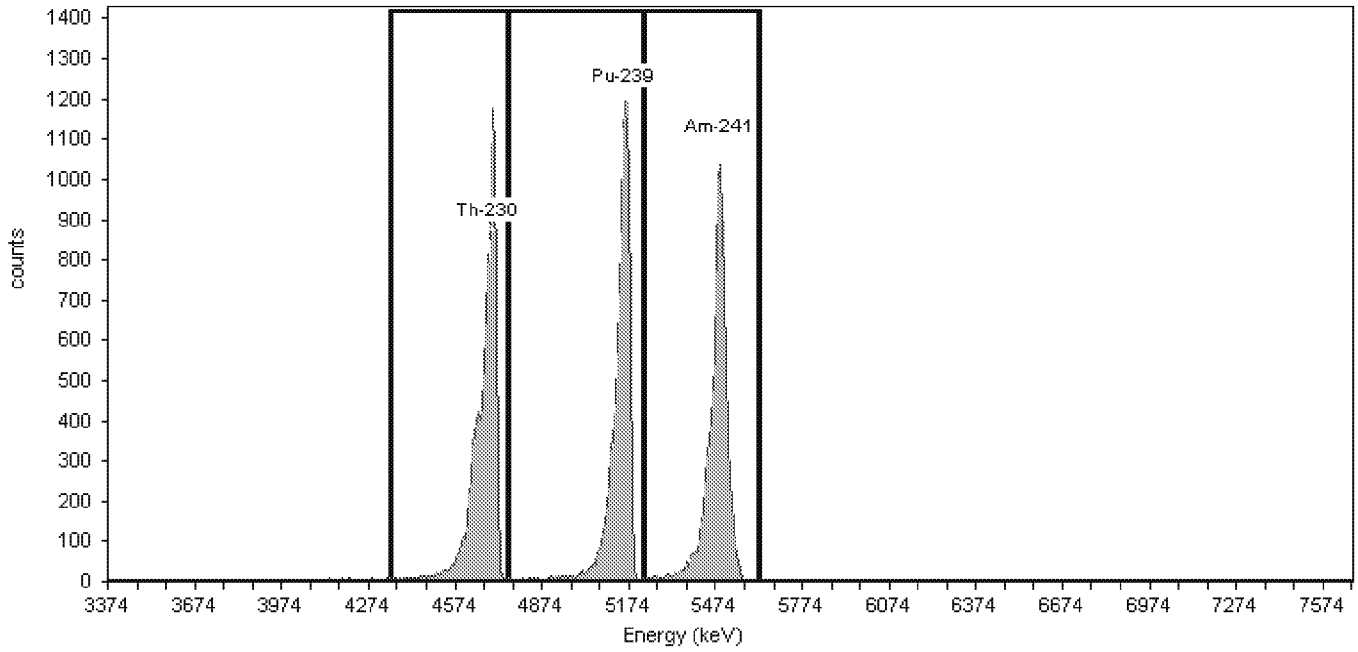
Certificate ID: 108002_00001
Prepared by: Eckert & Ziegler

Certification Date: 12/1/2017 11:00:00AM
Description:

## Acquisition

Detector: AV11 , SN: 49-155dd2
Acquisition Start Date: 5/18/2018 7:31:18PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 28.26% +/- 0.35% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 9,450.00 | 157.50 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 8,701.00 | 145.02 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 8,259.00 | 137.65 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:59:57PM 5/19/2018

## Calibration

Sample Name: ICV-1368446;AV12-05182018
Description:
Detector: AV12

Calibration Date: 5/19/2018 3:59:53PM
Analyst: 60040

## Source Info

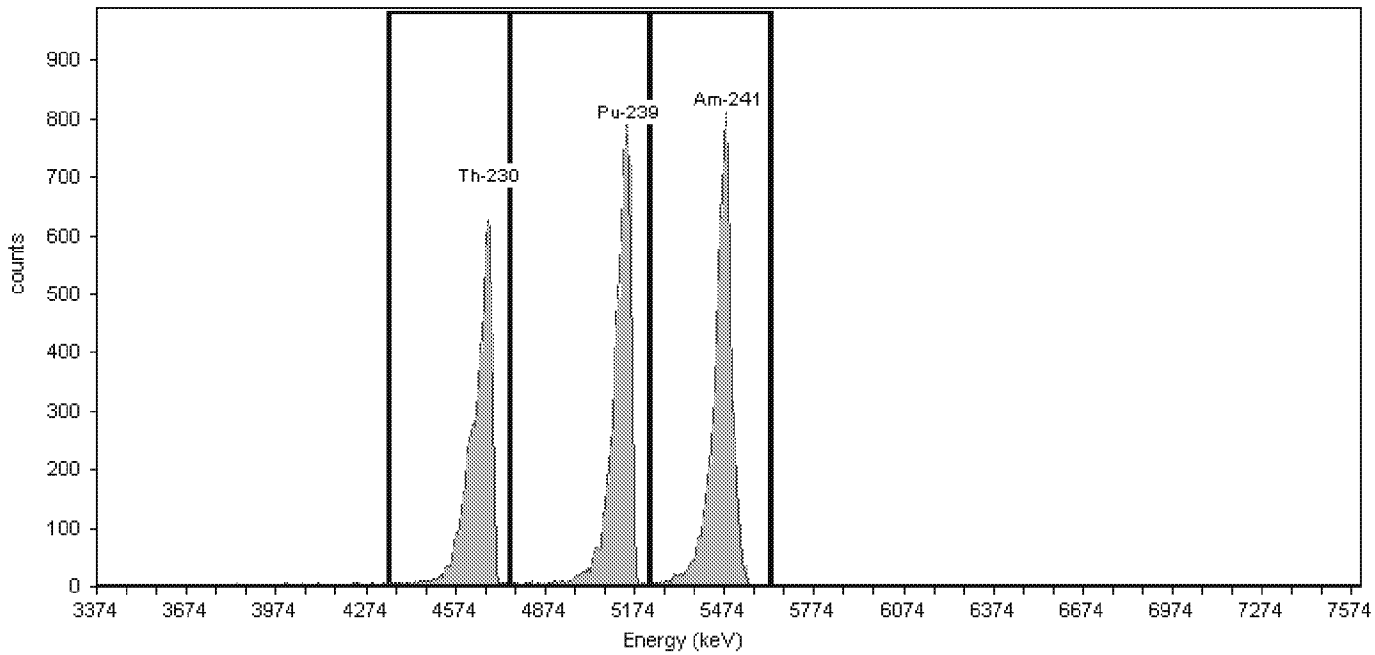
Certificate ID: 108001_00001
Prepared by: Eckert & Ziegler

Certification Date: 12/6/2017 11:00:00AM
Description:

## Acquisition

Detector: AV12 , SN: 51-082B7
Acquisition Start Date: 5/18/2018 7:32:04PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 27.90% +/- 0.39% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,971.00 | 99.52 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,903.00 | 115.05 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,169.00 | 119.48 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:00:11PM 5/19/2018

## Calibration

Sample Name: ICV-1370621;AV14-05182018
Description:
Detector: AV14

Calibration Date: 5/19/2018 4:00:07PM
Analyst: 60040

## Source Info

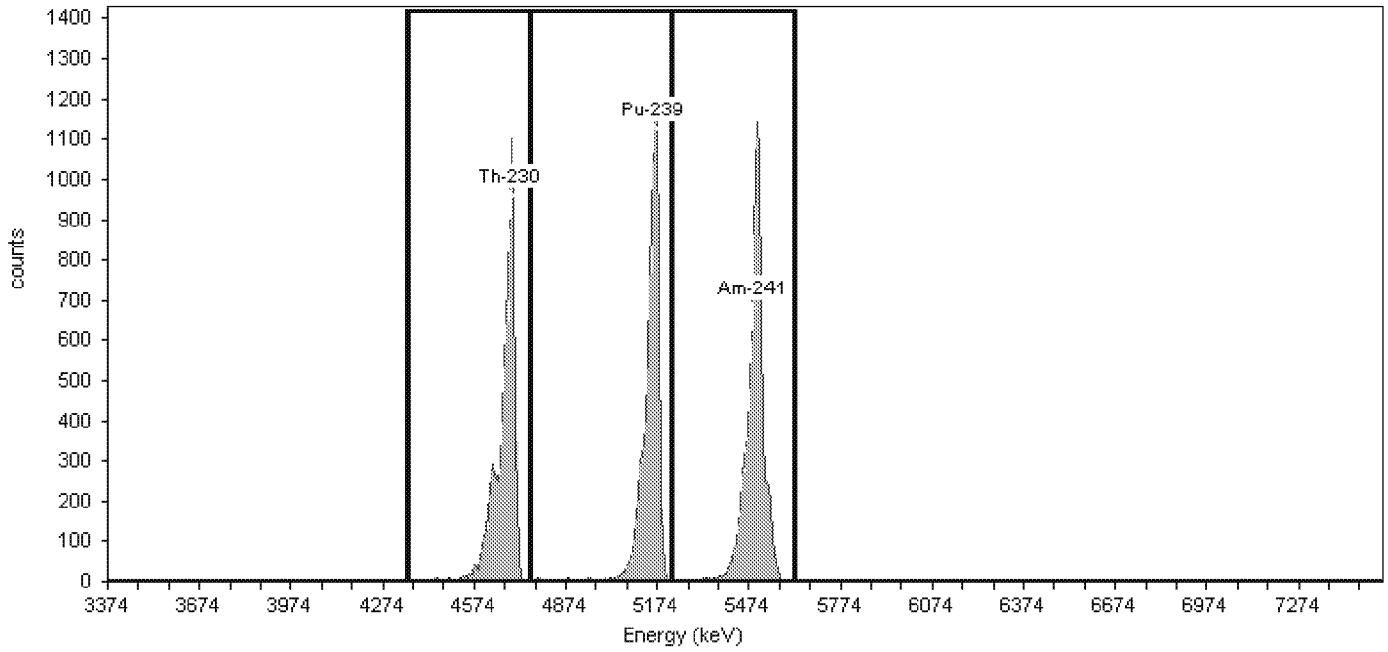
Certificate ID: 108345_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV14 , SN: 50-060W4
Acquisition Start Date: 5/18/2018 7:32:50PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.66% +/- 0.36% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,931.00 | 115.52 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 7,374.00 | 122.90 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,706.00 | 128.43 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:00:35PM 5/19/2018

## Calibration

Sample Name: ICV-1370620;AV15-05182018
Description:
Detector: AV15

Calibration Date: 5/19/2018 4:00:31PM
Analyst: 60040

## Source Info

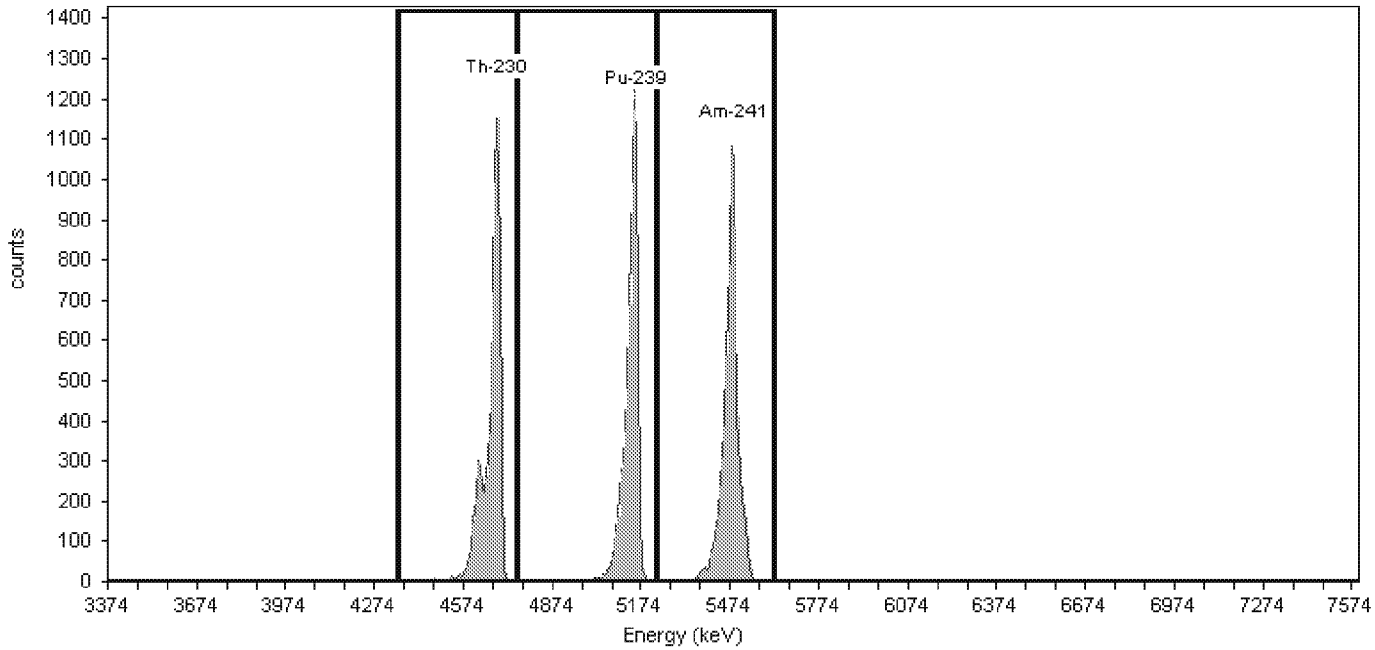
Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00PM
Description:

## Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 5/18/2018 7:34:31PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.59% +/- 0.37% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,757.00 | 112.62 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,806.00 | 113.43 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,041.00 | 117.35 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:01:38PM 5/19/2018

## Calibration

Sample Name: ICV-1370619;AV16-05182018
Description:
Detector: AV16

Calibration Date: 5/19/2018 4:01:34PM
Analyst: 60040

## Source Info

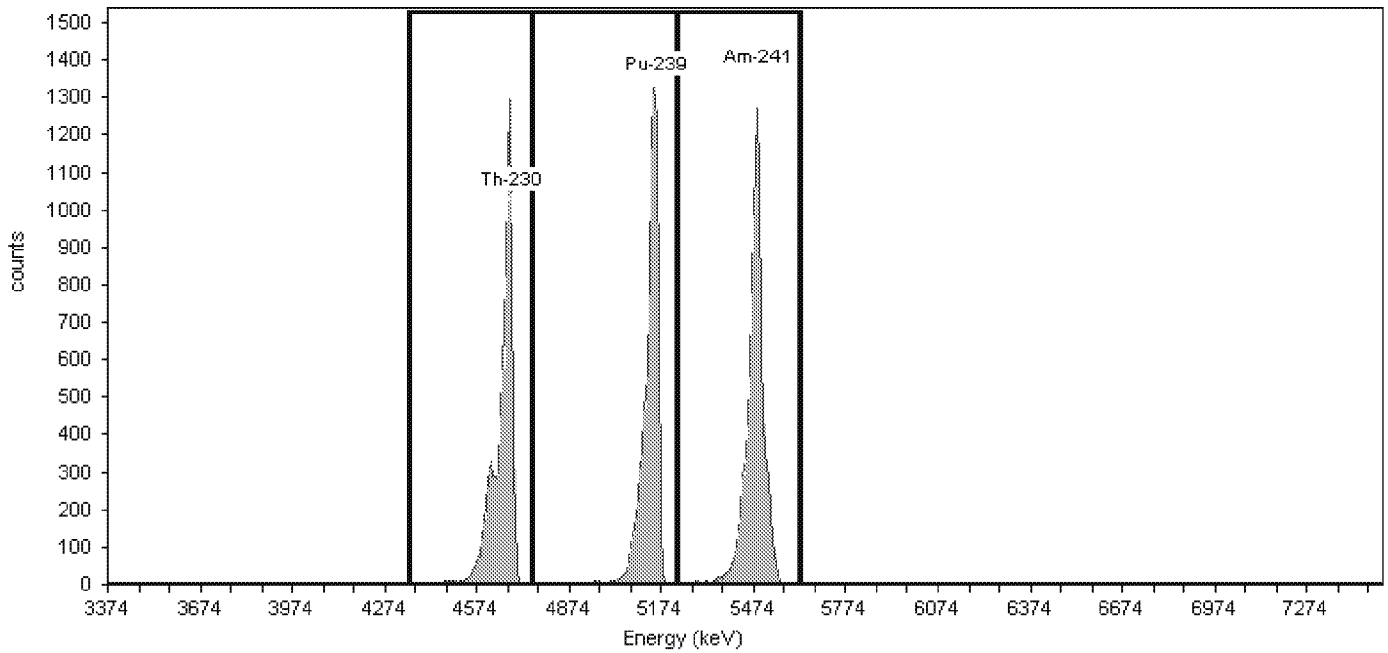
Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00AM
Description:

## Acquisition

Detector: AV16 , SN: 51-082B6
Acquisition Start Date: 5/18/2018 7:35:32PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 27.23% +/- 0.35% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 7,922.00 | 132.03 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 7,874.00 | 131.23 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 8,497.00 | 141.62 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:29:26AM 5/21/2018

## Calibration

Sample Name: ICV-7107;AV19-05202018
Description:
Detector: AV19

Calibration Date: 5/21/2018 10:29:23AM
Analyst: 60040

## Source Info

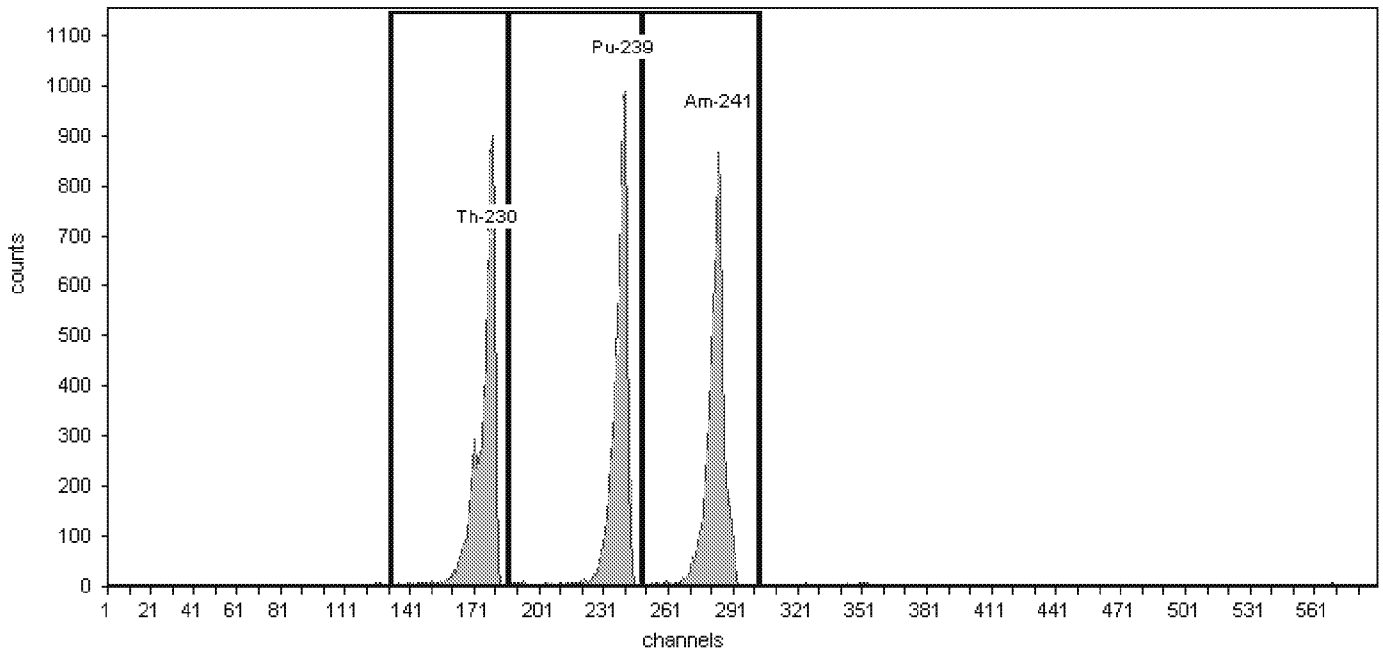
Certificate ID: 82232-334
Prepared by: Analytics

Certification Date: 6/3/2010 12:00:00PM
Description:

## Acquisition

Detector: AV19 , SN: 50-025FF5
Acquisition Start Date: 5/20/2018 4:11:20PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 23.70% +/- 0.38% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,294.00 | 104.90 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,305.00 | 105.08 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 6,161.00 | 102.68 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:29:50AM 5/21/2018

## Calibration

Sample Name: ICV-9817;AV20-05202018
Description:
Detector: AV20

Calibration Date: 5/21/2018 10:29:46AM
Analyst: 60040

## Source Info

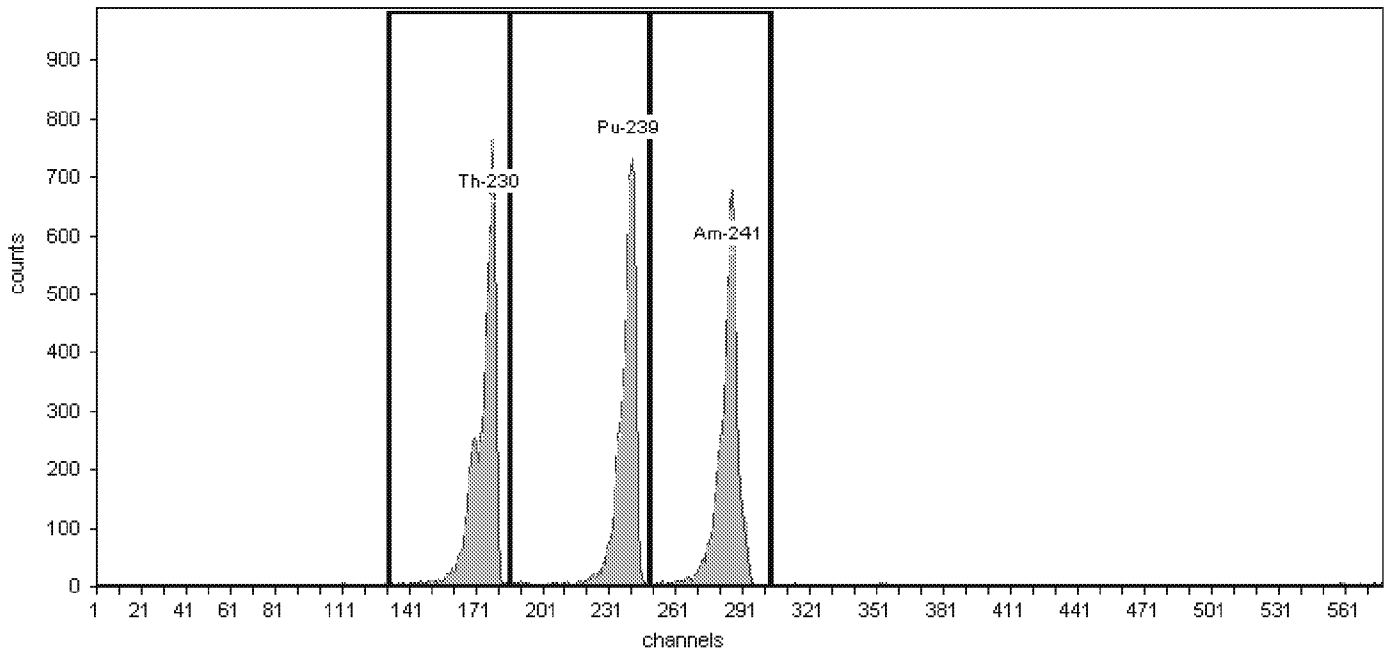
Certificate ID: 82244-334
Prepared by: Analytics

Certification Date: 6/9/2010 12:00:00PM
Description:

## Acquisition

Detector: AV20 , SN: 48-121A7
Acquisition Start Date: 5/20/2018 4:11:44PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 21.91% +/- 0.38% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,775.00 | 96.25 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,313.00 | 88.55 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,386.00 | 89.77 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:30:44AM 5/21/2018

## Calibration

Sample Name: ICV-9793;AV24-05202018
Description:
Detector: AV24

Calibration Date: 5/21/2018 10:30:40AM
Analyst: 60040

## Source Info

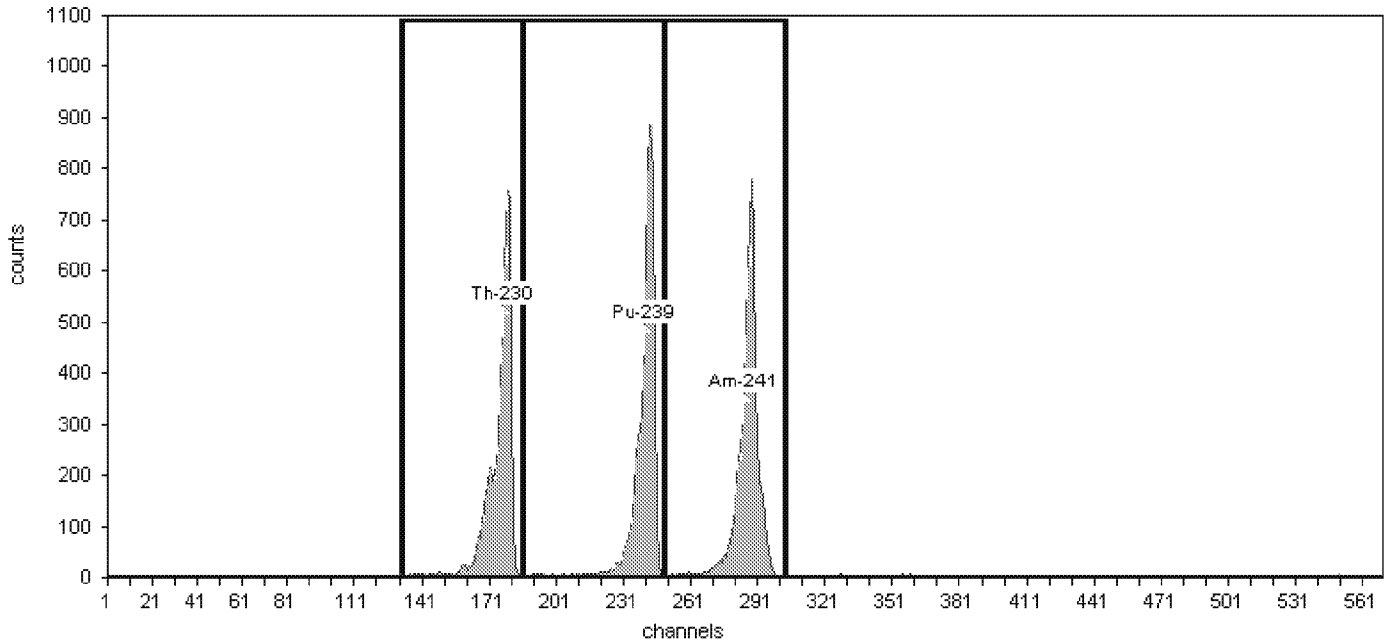
Certificate ID: 82241-334
Prepared by: Analytics

Certification Date: 6/8/2010 12:00:00PM
Description:

## Acquisition

Detector: AV24 , SN: 47-137Q4
Acquisition Start Date: 5/20/2018 4:12:51PM
Live Time: 60.00 min.
Real Time: 60.04 min.
Efficiency: 22.77% +/- 0.40% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 5,356.00 | 89.27 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 5,558.00 | 92.63 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 5,475.00 | 91.25 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:19AM 5/21/2018

## Calibration

Sample Name: ICV-1370620;AV48-05202018
Description:
Detector: AV48

Calibration Date: 5/21/2018 10:32:15AM
Analyst: 60040

## Source Info

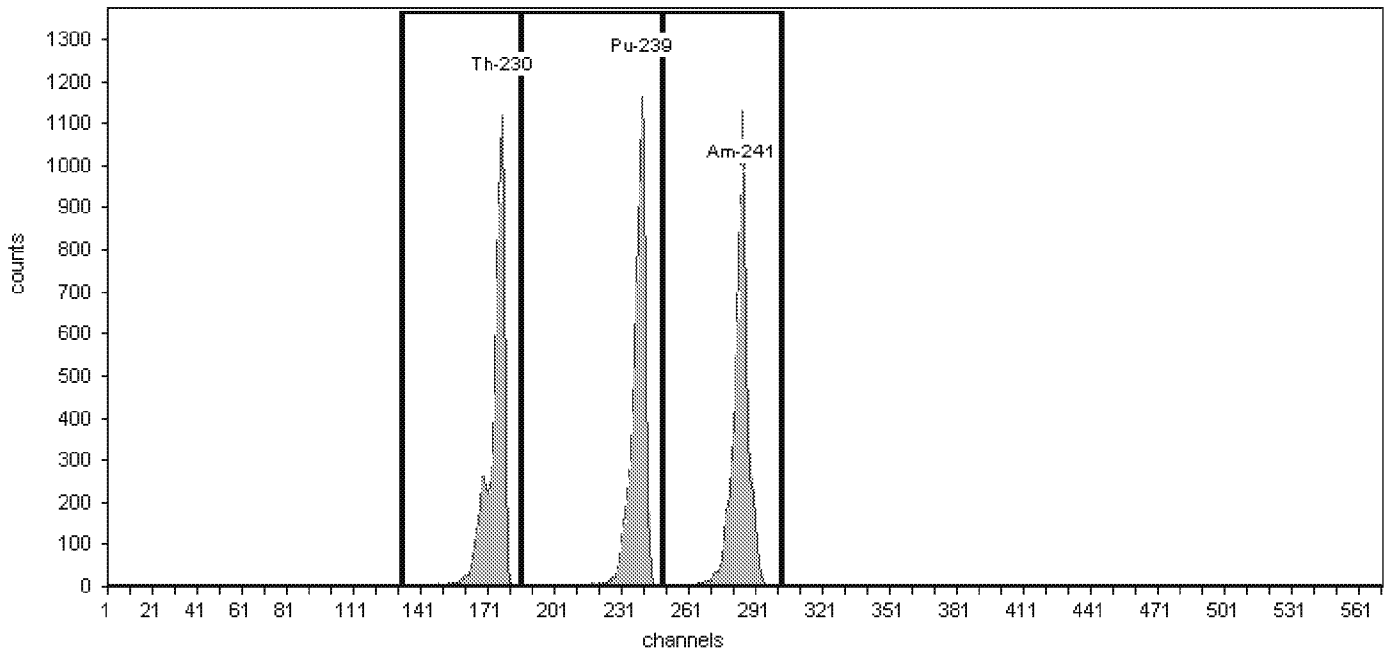
Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00PM
Description:

## Acquisition

Detector: AV48 , SN: 46-033P6
Acquisition Start Date: 5/20/2018 4:15:27PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.68% +/- 0.37% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 6,607.00 | 110.12 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 6,842.00 | 114.03 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,223.00 | 120.38 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:30AM 5/21/2018

## Calibration

Sample Name: ICV-1370619;AV49-05202018
Description:
Detector: AV49

Calibration Date: 5/21/2018 10:32:27AM
Analyst: 60040

## Source Info

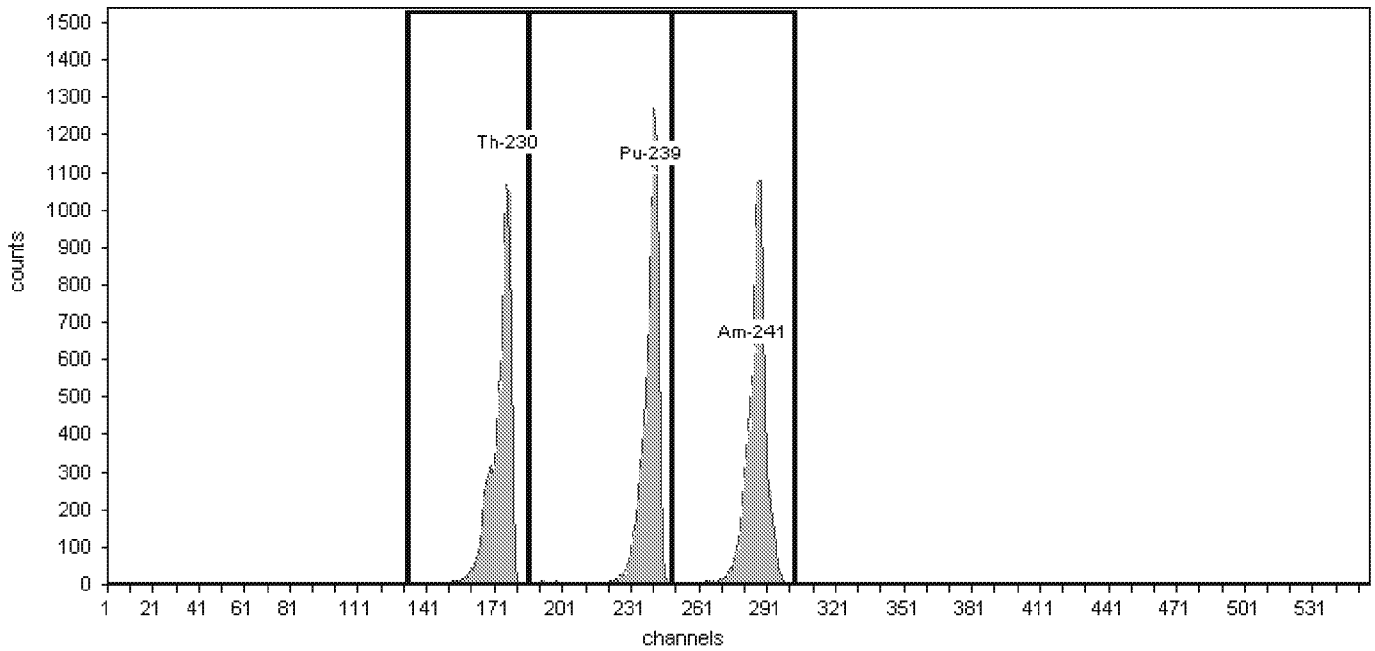
Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/23/2018 11:00:00AM
Description:

## Acquisition

Detector: AV49 , SN: 47-043hh4
Acquisition Start Date: 5/20/2018 4:15:44PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.82% +/- 0.35% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 7,803.00 | 130.05 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 7,817.00 | 130.28 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 8,306.00 | 138.43 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:16:21PM 5/21/2018

## Calibration

Sample Name: ICV-1370622;AV63-05212018
Description:
Detector: AV63

Calibration Date: 5/21/2018 12:16:17PM
Analyst: 60040

## Source Info

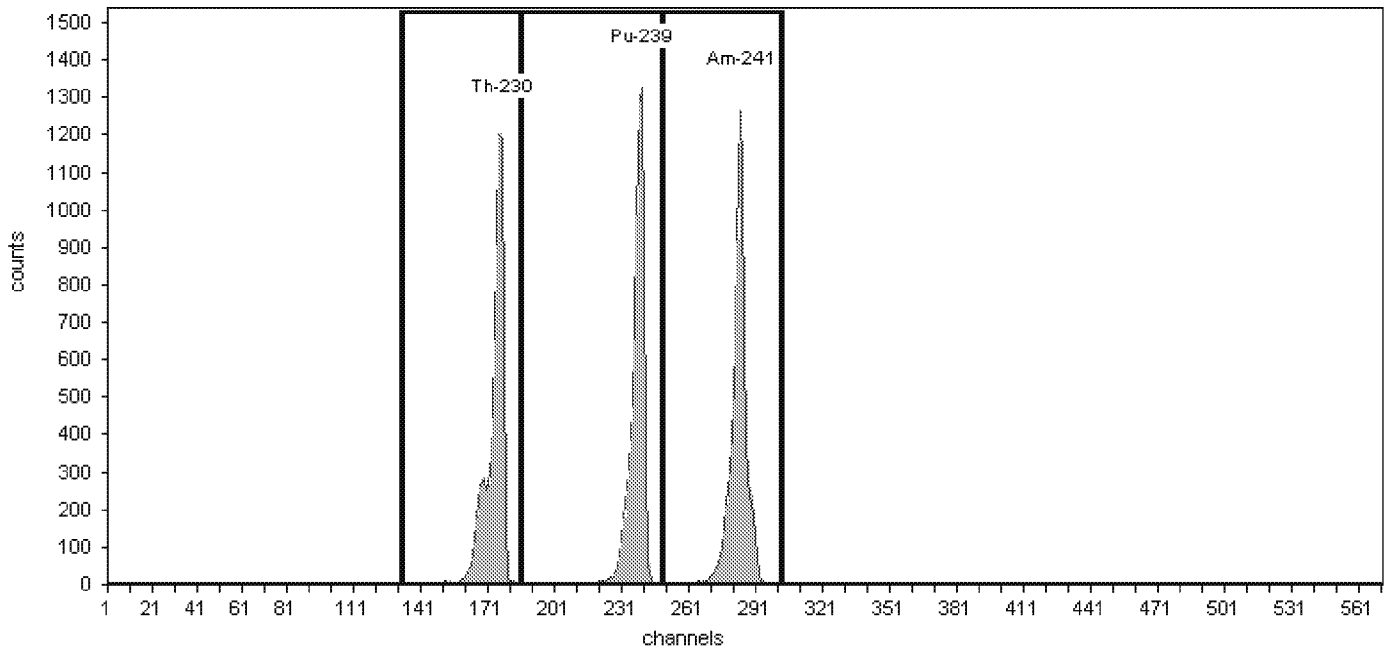
Certificate ID: 108346_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV63 , SN: 47-029ff2
Acquisition Start Date: 5/21/2018 10:36:50AM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.87% +/- 0.36% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 7,411.00 | 123.52 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 7,462.00 | 124.37 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,785.00 | 129.75 |

FWHM > 100keV
RTM 6/22/2018

TestAmerica
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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:21:09PM 5/21/2018

## Calibration

Sample Name: ICV-1370621;AV80-05212018
Description:
Detector: AV80

Calibration Date: 5/21/2018 2:21:01PM
Analyst: 60040

## Source Info

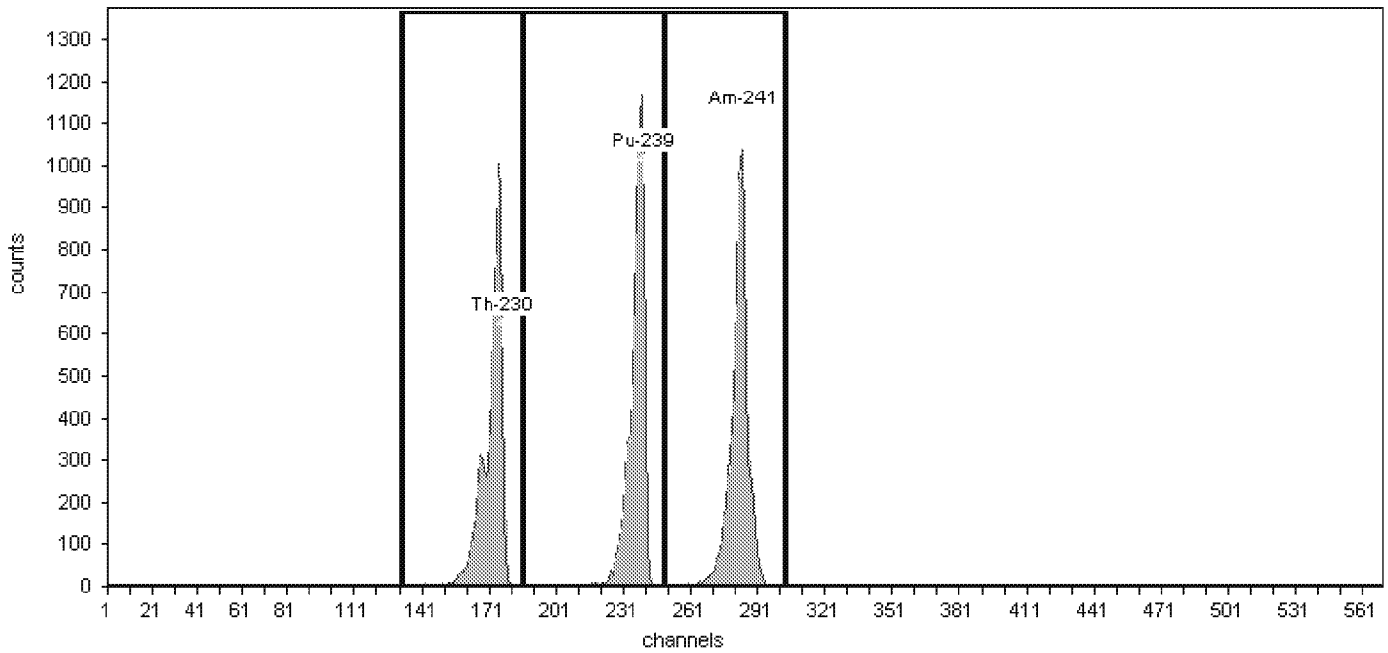
Certificate ID: 108345_00001
Prepared by: Eckert & Ziegler

Certification Date: 1/22/2018 11:00:00AM
Description:

## Acquisition

Detector: AV80 , SN: 46-03305
Acquisition Start Date: 5/21/2018 12:20:33PM
Live Time: 60.00 min.
Real Time: 60.05 min.
Efficiency: 26.44% +/- 0.36% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / $Ch^2$




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy MeV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4.69 | 132 | 186 | 0.00 | 7,001.00 | 116.68 |
| Pu-239 | 240 | 5.16 | 186 | 249 | 0.00 | 7,316.00 | 121.93 |
| Am-241 | 284 | 5.49 | 249 | 303 | 0.00 | 7,505.00 | 125.08 |

FWHM > 100keV
RTM 6/22/2018

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:19:56AM 7/26/2019

## Calibration

Sample Name: ICV-1370620;AV214-07152019
Description:
Detector: AV214

Analyst: 60040
Analysis Date: 7/15/2019 3:49:44PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108348_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

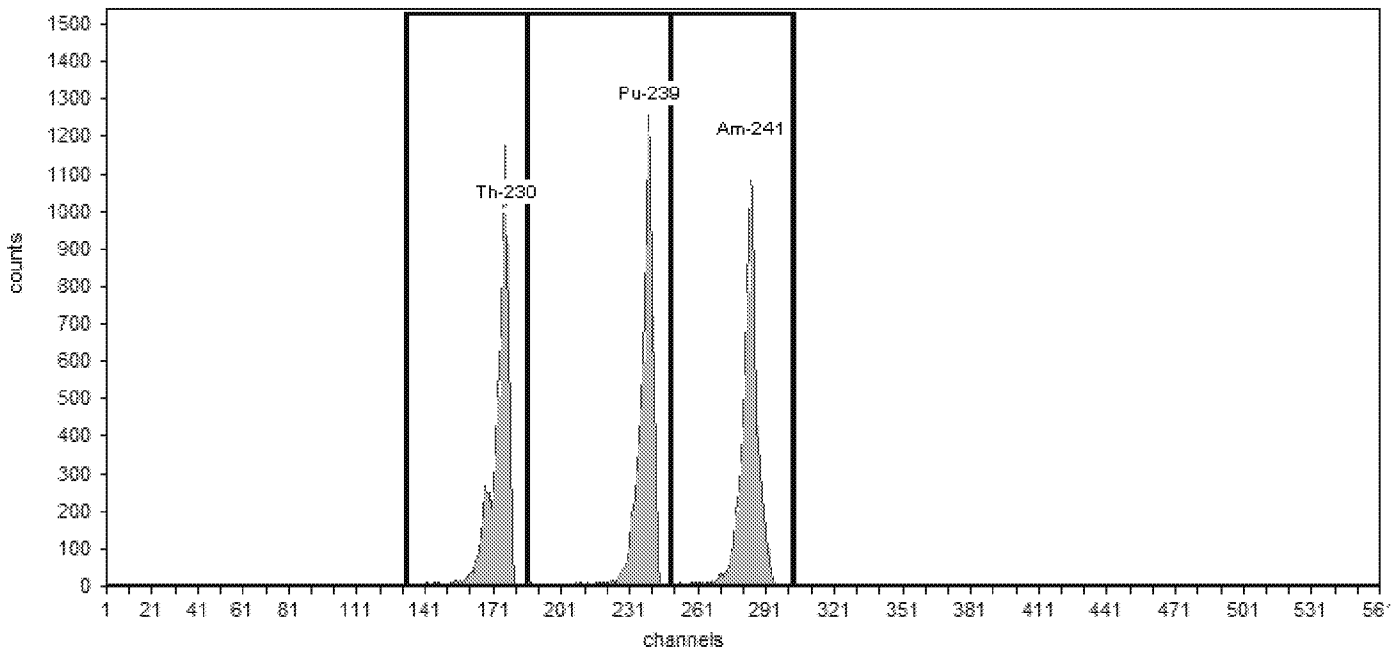
Detector: AV214 , SN: 5507304
Acquisition Start Date: 7/15/2019 2:21:37PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-1370620;AV214-0715

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.55% +/- 0.38% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 30.67 | 6,924.00 | 115.40 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 30.84 | 7,058.00 | 117.63 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 35.51 | 7,351.00 | 122.52 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:13:19PM 11/16/2018

## Calibration

Sample Name: ICV-1370619;AV215-11162018
Description:
Detector: AV215

Analyst: 60040
Analysis Date: 11/16/2018 2:13:18PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 108347_00001
Prepared by: Eckert & Ziegler
Description:

Certification Date: 1/23/2018 12:00:00PM

## Acquisition

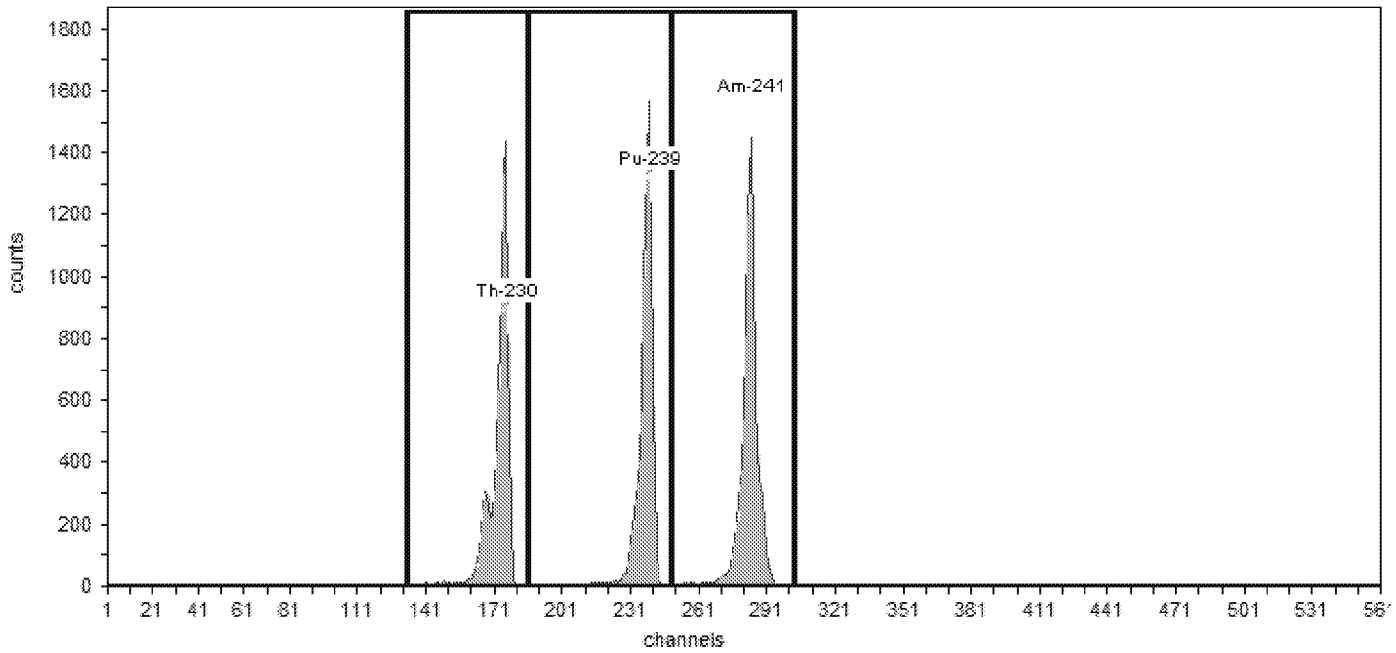
Detector: AV215 , SN: 50-119J4
Acquisition Start Date: 11/16/2018 12:38:01PM

Live Time: 60.00 min.
Real Time: 60.01 min.

Efficiency Calibration Name: ICV-1370619;AV215-1116

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 27.48% +/- 0.35% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 28.75 | 7,919.00 | 131.98 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.03 | 8,030.00 | 133.83 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 30.59 | 8,567.00 | 142.78 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:12:02PM 11/20/2018

## Calibration

Sample Name: ICV-8877;AV216-11162018
Description:
Detector: AV216

Analyst: 60040
Analysis Date: 11/16/2018 2:13:21PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82236-334
Prepared by: Analytics
Description:

Certification Date: 6/2/2010 12:00:00PM

## Acquisition

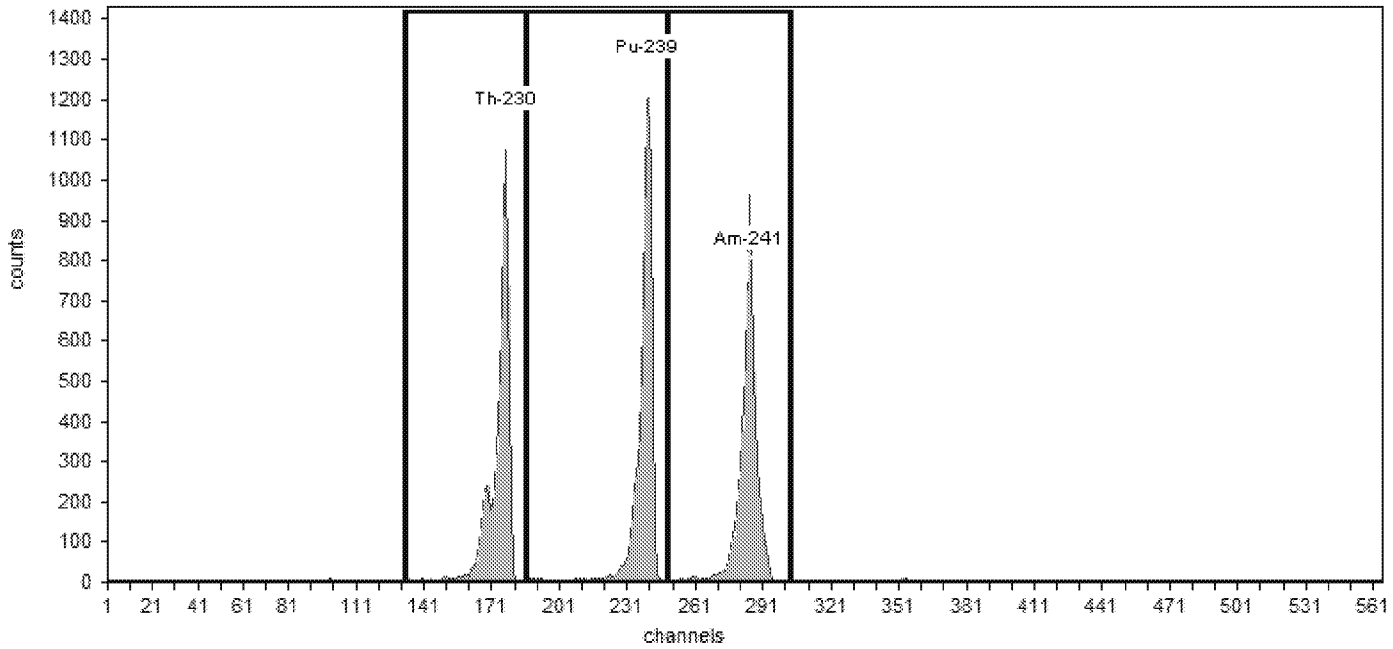
Detector: AV216 , SN: 50-117J5
Acquisition Start Date: 11/16/2018 12:38:23PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-8877;AV216-1116201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 25.03% +/- 0.41% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 30.59 | 6,102.00 | 101.70 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 31.27 | 6,429.00 | 107.15 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 33.35 | 6,071.00 | 101.18 |

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# Alpha-Spectroscopy Calibration Report

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:13:26PM 11/16/2018

## Calibration

Sample Name: ICV-9795;AV217-11162018
Description:
Detector: AV217

Analyst: 60040
Analysis Date: 11/16/2018 2:13:25PM
Calibration Type: Energy And Efficiency

## Source Info

Certificate ID: 82243-334
Prepared by: Analytics
Description:

Certification Date: 6/9/2010 12:00:00PM

## Acquisition

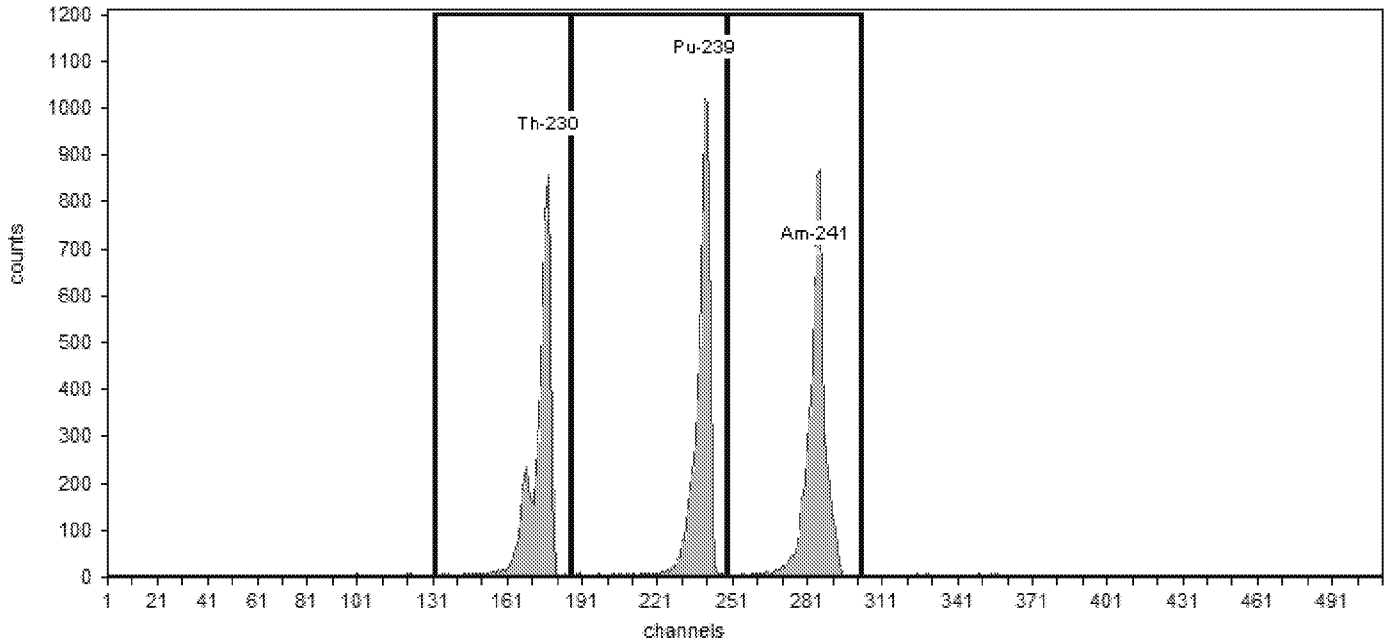
Detector: AV217 , SN: 50-117I2
Acquisition Start Date: 11/16/2018 12:38:49PM

Live Time: 60.00 min.
Real Time: 60.00 min.

Efficiency Calibration Name: ICV-9795;AV217-1116201

Energy Calibration Equation:
Gain = 7.4575 keV / Ch
Offset = 3,366.95 keV
Quadratic = 0.0000 keV / Ch$^2$

Efficiency: 25.26% +/- 0.45% TPU(2 sigma)




## General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

## Nuclide Activity Summary

| Nuclide | Peak Channel | Peak Energy keV | ROI Start Channel | ROI End Channel | Peak FWHM keV | Gross Counts | Net Count Rate (cpm) |
|---|---|---|---|---|---|---|---|
| Th-230 | 177 | 4,687.50 | 132 | 186 | 31.99 | 5,273.00 | 87.88 |
| Pu-239 | 240 | 5,155.40 | 186 | 249 | 29.14 | 5,536.00 | 92.27 |
| Am-241 | 284 | 5,485.70 | 249 | 303 | 32.53 | 5,693.00 | 94.88 |