N001-SS002-1224-01 *(12 - 24)*
AC-228 - 0.705 pCi/g
BI-214 - 0.853 pCi/g
CESIUM-137 - 0.196 pCi/g
K-40 - 13.2 pCi/g
PB-212 - 0.996 pCi/g
PB-214 - 0.99 pCi/g
RADIUM-226 - 1.98 pCi/g
RADIUM-228 - 0.705 pCi/g
THORIUM-228 - 1.13 pCi/g
THORIUM-230 - 1.22 pCi/g
THORIUM-232 - 0.965 pCi/g
TL-208 - 0.357 pCi/g
URANIUM-233/234 - 1.63 pCi/g
URANIUM-235/236 - 0.0673 pCi/g
URANIUM-238 - 1.09 pCi/g

N001-SS003-0012-01 *(0 - 12)*
AC-228 - 0.949 pCi/g
BI-214 - 0.962 pCi/g
CESIUM-137 - 0.143 pCi/g
K-40 - 17.7 pCi/g
PB-212 - 1.02 pCi/g
PB-214 - 0.985 pCi/g
RADIUM-226 - 3.68 pCi/g
RADIUM-228 - 0.949 pCi/g
THORIUM-228 - 0.936 pCi/g
THORIUM-230 - 1.04 pCi/g
THORIUM-232 - 0.92 pCi/g
TL-208 - 0.435 pCi/g
URANIUM-233/234 - 1.12 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 1.03 pCi/g

N002-SS003-0012-01 *(0 - 12)*
AC-228 - 1.42 pCi/g
BI-212 - 1.93 pCi/g
BI-214 - 0.931 pCi/g
CESIUM-137 - ND
K-40 - 17 pCi/g
PB-212 - 1.14 pCi/g
PB-214 - 0.895 pCi/g
RADIUM-226 - 4.27 pCi/g
RADIUM-228 - 1.42 pCi/g
THORIUM-228 - 1.12 pCi/g
THORIUM-230 - 1.18 pCi/g
THORIUM-232 - 1.06 pCi/g
TL-208 - 0.462 pCi/g
URANIUM-233/234 - 1.41 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 1.01 pCi/g

N002-SS004-0012-01 *(0 - 12)*
AC-228 - 1.37 pCi/g
BI-212 - 2.29 pCi/g
BI-214 - 0.933 pCi/g
CESIUM-137 - 0.256 pCi/g
K-40 - 19.3 pCi/g
PB-212 - 1.12 pCi/g
PB-214 - 0.945 pCi/g
RADIUM-226 - 5.03 pCi/g
RADIUM-228 - 1.37 pCi/g
THORIUM-228 - 0.936 pCi/g
THORIUM-230 - 0.874 pCi/g
THORIUM-232 - 0.873 pCi/g
TL-208 - 0.398 pCi/g
URANIUM-233/234 - 1.31 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 1.19 pCi/g

N002-SS005-0012-01 *(0 - 12)*
AC-228 - 0.723 pCi/g
BI-214 - 0.962 pCi/g
CESIUM-137 - ND
K-40 - 15.6 pCi/g
PB-212 - 1.08 pCi/g
PB-214 - 0.944 pCi/g
RADIUM-226 - 3.2 pCi/g
RADIUM-228 - 0.723 pCi/g
THORIUM-228 - 0.861 pCi/g
THORIUM-230 - 0.904 pCi/g
THORIUM-232 - 0.899 pCi/g
TL-208 - 0.407 pCi/g
URANIUM-233/234 - 0.721 pCi/g
URANIUM-235/236 - 0.0828 pCi/g
URANIUM-238 - 0.686 pCi/g

N002-SS006-2436-01 *(24 - 36)*
AC-228 - 1 pCi/g
BI-214 - 0.632 pCi/g
CESIUM-137 - ND
K-40 - 12.9 pCi/g
PB-212 - 0.905 pCi/g
PB-214 - 0.71 pCi/g
RADIUM-226 - ND
RADIUM-228 - 1 pCi/g
THORIUM-228 - 0.894 pCi/g
THORIUM-230 - 0.792 pCi/g
THORIUM-232 - 1.02 pCi/g
TL-208 - 0.313 pCi/g
URANIUM-233/234 - 0.648 pCi/g
URANIUM-235/236 - 0.0456 pCi/g
URANIUM-238 - 0.727 pCi/g

N001-SS004-0012-01 *(0 - 12)*
AC-228 - 1.25 pCi/g
BI-214 - 0.869 pCi/g
CESIUM-137 - ND
K-40 - 20.4 pCi/g
PB-212 - 1.02 pCi/g
PB-214 - 1.08 pCi/g
RADIUM-226 - 3.3 pCi/g
RADIUM-228 - 1.25 pCi/g
THORIUM-228 - 0.942 pCi/g
THORIUM-230 - 1.06 pCi/g
THORIUM-232 - 1 pCi/g
TL-208 - 0.491 pCi/g
URANIUM-233/234 - 0.869 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 0.776 pCi/g

N001-SS005-1830-01 *(18 - 30)*
AC-228 - 1.28 pCi/g
BI-214 - 1.37 pCi/g
CESIUM-137 - 0.137 pCi/g
K-40 - 15.6 pCi/g
PB-212 - 1.65 pCi/g
PB-214 - 1.76 pCi/g
RADIUM-226 - 3.88 pCi/g
RADIUM-228 - 1.28 pCi/g
THORIUM-228 - 1.36 pCi/g
THORIUM-230 - 1.03 pCi/g
THORIUM-232 - 1.39 pCi/g
TL-208 - 0.501 pCi/g
URANIUM-233/234 - 0.786 pCi/g
URANIUM-235/236 - 0.0726 pCi/g
URANIUM-238 - 1.05 pCi/g

Background
S15 *(24-36)*
Uranium-238 - 0.911 pCi/g
Thorium-230 - 0.799 pCi/g
Uranium-233/234 - 0.816 pCi/g
Radium-226 - 1.12 pCi/g
Thorium-232 - 0.964 pCi/g
Radium-228 - 1.42 pCi/g
Thorium-228 - 0.712 pCi/g
Uranium-235/236 - 0.0636 U pCi/g

Background
S14 *(24-36)*
Uranium-238 - 1.35 pCi/g
Thorium-230 - 0.869 pCi/g
Uranium-233/234 - 1.18 pCi/g
Radium-226 - 1.14 pCi/g
Thorium-232 - 0.885 pCi/g
Radium-228 - 1.06 pCi/g
Thorium-228 - 0.971 pCi/g
Uranium-235/236 - 0.0325 U pCi/g

Background
N003-SS001-1022-01 *(10 - 22)*
AC-228 - 0.358 pCi/g
BI-212 - 1.05 pCi/g
BI-214 - 0.765 pCi/g
CESIUM-137 - ND
K-40 - 3.55 pCi/g
PB-212 - 0.462 pCi/g
PB-214 - 0.667 pCi/g
RADIUM-226 - 2.86 pCi/g
RADIUM-228 - 0.358 pCi/g
THORIUM-228 - 0.558 pCi/g
THORIUM-230 - 0.743 pCi/g
THORIUM-232 - 0.587 pCi/g
TL-208 - 0.245 pCi/g
URANIUM-233/234 - 0.874 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 0.86 pCi/g

N002-SS002-0012-01 *(0 - 12)*
AC-228 - 13.6 pCi/g
BI-212 - 16.1 pCi/g
BI-214 - 4.62 pCi/g
CESIUM-137 - ND
K-40 - 15.9 pCi/g
PB-212 - 13.6 pCi/g
PB-214 - 4.58 pCi/g
RADIUM-226 - 14 pCi/g
RADIUM-228 - 13.6 pCi/g
THORIUM-228 - 7.97 pCi/g
THORIUM-230 - 3.18 pCi/g
THORIUM-232 - 7.17 pCi/g
TL-208 - 5.01 pCi/g
URANIUM-233/234 - 2.5 pCi/g
URANIUM-235/236 - 0.201 pCi/g
URANIUM-238 - 2.36 pCi/g

S01 *(30-48)*
Uranium-238 - 0.645 pCi/g
Thorium-230 - 0.685 pCi/g
Uranium-233/234 - 0.621 pCi/g
Radium-226 - 0.759 pCi/g
Thorium-232 - 0.806 pCi/g
Radium-228 - 1.11 pCi/g
Thorium-228 - 0.751 pCi/g
Uranium-235/236 - 0.0202 U pCi/g

N002-SS001-0012-01 *(0 - 12)*
AC-228 - 5.19 pCi/g
BI-212 - 5.81 pCi/g
BI-214 - 4.23 pCi/g
CESIUM-137 - ND
K-40 - 8.53 pCi/g
PB-212 - 5.56 pCi/g
PB-214 - 4.81 pCi/g
RADIUM-226 - 9.52 pCi/g
RADIUM-228 - 5.19 pCi/g
THORIUM-228 - 3.94 pCi/g
THORIUM-230 - 3.1 pCi/g
THORIUM-232 - 3.41 pCi/g
TL-208 - 2.11 pCi/g
URANIUM-233/234 - 2.67 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 2.56 pCi/g

N001-SS001-1224-01 *(12 - 24)*
AC-228 - 1.01 pCi/g
BI-214 - 0.678 pCi/g
CESIUM-137 - 0.215 pCi/g
K-40 - 14.9 pCi/g
PB-212 - 0.986 pCi/g
PB-214 - 0.843 pCi/g
RADIUM-226 - 5.25 pCi/g
RADIUM-228 - 1.01 pCi/g
THORIUM-228 - 0.814 pCi/g
THORIUM-230 - 0.841 pCi/g
THORIUM-232 - 0.714 pCi/g
TL-208 - 0.379 pCi/g
URANIUM-233/234 - 0.791 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 0.801 pCi/g

SG01 *(6-12)*
Uranium-238 - 153 pCi/g
Thorium-230 - 1.05 pCi/g
Uranium-233/234 - 144 pCi/g
Radium-226 - 164 pCi/g
Thorium-232 - 3.49 pCi/g
Radium-228 - 590 pCi/g
Thorium-228 - 3.35 pCi/g
Uranium-235/236 - 8.17 pCi/g

S02 *(12-24)*
Uranium-238 - 0.878 pCi/g
Thorium-230 - 1.12 pCi/g
Uranium-233/234 - 1.05 pCi/g
Radium-226 - 1.09 pCi/g
Thorium-232 - 1.64 pCi/g
Radium-228 - 1.70 pCi/g
Thorium-228 - 1.53 pCi/g
Uranium-235/236 - 0.153 pCi/g

S03 *(24-36)*
Thorium-228 - 1.05 pCi/g
Thorium-230 - 1.28 pCi/g
Thorium-232 - 1.07 pCi/g
Uranium-233/234 - 0.697 pCi/g
Uranium-235/236 - 0.0626 U pCi/g
Uranium-238 - 0.593 pCi/g
Radium-226 - 0.986 pCi/g
Radium-228 - 1.29 pCi/g

SG03 *(0-6)*
Uranium-238 - 147 pCi/g
Thorium-230 - 3.62 pCi/g
Uranium-233/234 - 143 pCi/g
Radium-226 - 196 pCi/g
Thorium-232 - 9.91 pCi/g
Radium-228 - 758 pCi/g
Thorium-228 - 10.4 pCi/g
Uranium-235/236 - 8.10 pCi/g

S05 *(6-18)*
Uranium-238 - 1.11 pCi/g
Thorium-230 - 0.887 pCi/g
Uranium-233/234 - 1.05 pCi/g
Radium-226 - 1.79 pCi/g
Thorium-232 - 1.28 pCi/g
Radium-228 - 3.05 pCi/g
Thorium-228 - 1.51 pCi/g
Uranium-235/236 - 0.0453 pCi/g

N003-SS003-1224-01 *(12 - 24)*
AC-228 - 2.42 pCi/g
BI-212 - 3.15 pCi/g
BI-214 - 1.32 pCi/g
CESIUM-137 - ND
K-40 - 11.1 pCi/g
PB-212 - 2.1 pCi/g
PB-214 - 1.32 pCi/g
RADIUM-226 - 3.19 pCi/g
RADIUM-228 - 2.42 pCi/g
THORIUM-228 - 2.31 pCi/g
THORIUM-230 - 1.65 pCi/g
THORIUM-232 - 2.28 pCi/g
TL-208 - 0.822 pCi/g
URANIUM-233/234 - 1.73 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 1.62 pCi/g

N003-SS003-1224-02 *(12 - 24)*
AC-228 - 2.17 pCi/g
BI-212 - 2.69 pCi/g
BI-214 - 1.13 pCi/g
CESIUM-137 - ND
K-40 - 8.09 pCi/g
PB-212 - 2.2 pCi/g
PB-214 - 1.06 pCi/g
RADIUM-226 - 4.87 pCi/g
RADIUM-228 - 2.17 pCi/g
THORIUM-228 - 2.63 pCi/g
THORIUM-230 - 1.96 pCi/g
THORIUM-232 - 2.79 pCi/g
TL-208 - 0.804 pCi/g
URANIUM-233/234 - 1.74 pCi/g
URANIUM-235/236 - 0.101 pCi/g
URANIUM-238 - 1.84 pCi/g

S06 *(30-48)*
Uranium-238 - 1.14 pCi/g
Thorium-230 - 1.55 pCi/g
Uranium-233/234 - 1.20 pCi/g
Radium-226 - 1.14 pCi/g
Thorium-232 - 1.95 pCi/g
Radium-228 - 1.86 pCi/g
Thorium-228 - 2.08 pCi/g
Uranium-235/236 - 0.101 pCi/g

S07 *(24-36)*
Uranium-238 - 1.37 pCi/g
Thorium-230 - 2.19 pCi/g
Uranium-233/234 - 1.41 pCi/g
Radium-226 - 1.17 pCi/g
Thorium-232 - 4.17 pCi/g
Radium-228 - 1.48 pCi/g
Thorium-228 - 3.92 pCi/g
Uranium-235/236 - 0.0623 U pCi/g

N001-SS007-0012-01 *(0 - 12)*
AC-228 - 0.76 pCi/g
BI-214 - 1.11 pCi/g
CESIUM-137 - ND
K-40 - 13.9 pCi/g
PB-212 - 0.831 pCi/g
PB-214 - 1.42 pCi/g
RADIUM-226 - 3.32 pCi/g
RADIUM-228 - 0.76 pCi/g
THORIUM-228 - 0.835 pCi/g
THORIUM-230 - 1.06 pCi/g
THORIUM-232 - 0.82 pCi/g
TL-208 - 0.306 pCi/g
URANIUM-233/234 - 0.71 pCi/g
URANIUM-235/236 - 0.0746 pCi/g
URANIUM-238 - 0.811 pCi/g

N001-SS006-0012-01 *(0 - 12)*
AC-228 - 11.5 pCi/g
BI-212 - 13.3 pCi/g
BI-214 - 4.07 pCi/g
CESIUM-137 - 0.277 pCi/g
K-40 - 13.5 pCi/g
PB-212 - 12.4 pCi/g
PB-214 - 4.6 pCi/g
RADIUM-226 - 11.7 pCi/g
RADIUM-228 - 11.5 pCi/g
THORIUM-228 - 10.8 pCi/g
THORIUM-230 - 3.96 pCi/g
THORIUM-232 - 9.56 pCi/g
TL-208 - 4.39 pCi/g
URANIUM-233/234 - 3.35 pCi/g
URANIUM-235/236 - 0.131 pCi/g
URANIUM-238 - 3.92 pCi/g

S09 *(24-36)*
Uranium-238 - 1.75 pCi/g
Thorium-230 - 2.09 pCi/g
Uranium-233/234 - 1.55 pCi/g
Radium-226 - 0.940 pCi/g
Thorium-232 - 4.03 pCi/g
Radium-228 - 1.58 pCi/g
Thorium-228 - 3.84 pCi/g
Uranium-235/236 - 0.0522 pCi/g

S12 *(24-36)*
Uranium-238 - 1.15 pCi/g
Thorium-230 - 1.08 pCi/g
Uranium-233/234 - 1.13 pCi/g
Radium-226 - 1.16 pCi/g
Thorium-232 - 1.61 pCi/g
Radium-228 - 1.99 pCi/g
Thorium-228 - 1.60 pCi/g
Uranium-235/236 - 0.0104 U pCi/g

S11 *(18-24)*
Uranium-238 - 1.11 pCi/g
Thorium-230 - 1.01 pCi/g
Uranium-233/234 - 1.14 pCi/g
Radium-226 - 0.980 pCi/g
Thorium-232 - 0.836 pCi/g
Radium-228 - 1.11 pCi/g
Thorium-228 - 1.01 pCi/g
Uranium-235/236 - 0.0174 U pCi/g

N002-TRENCH *(0 - 3)*
CESIUM-137 - ND
PB-212 - 0.161 pCi/g
PB-214 - 0.292 pCi/g
RADIUM-226 - ND
RADIUM-228 - ND
THORIUM-228 - 0.198 pCi/g
THORIUM-230 - 0.346 pCi/g
THORIUM-232 - 0.167 pCi/g
TL-208 - 0.0593 pCi/g
URANIUM-233/234 - 0.244 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 0.245 pCi/g

SG02 *(6-12)*
Uranium-238 - 196 pCi/g
Thorium-230 - 150 pCi/g
Uranium-233/234 - 179 pCi/g
Radium-226 - 199 pCi/g
Thorium-232 - 541 pCi/g
Radium-228 - 807 pCi/g
Thorium-228 - 554 pCi/g
Uranium-235/236 - 10.7 pCi/g

S04 *(24-36)*
Uranium-238 - 0.638 pCi/g
Thorium-230 - 0.956 pCi/g
Uranium-233/234 - 0.597 pCi/g
Radium-226 - 0.927 pCi/g
Thorium-232 - 0.956 pCi/g
Radium-228 - 1.61 pCi/g
Thorium-228 - 0.936 pCi/g
Uranium-235/236 - 0.0524 U pCi/g

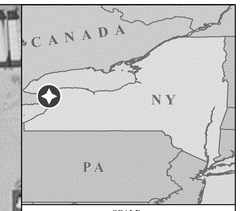
S13 *(24-36)*
Uranium-238 - 0.697 pCi/g
Thorium-230 - 0.719 pCi/g
Uranium-233/234 - 1.10 pCi/g
Radium-226 - 1.09 pCi/g
Thorium-232 - 0.731 pCi/g
Radium-228 - 1.32 pCi/g
Thorium-228 - 0.705 pCi/g
Uranium-235/236 - 0.0577 U pCi/g

S10 *(24-36)*
Uranium-238 - 0.999 pCi/g
Thorium-230 - 0.883 pCi/g
Uranium-233/234 - 0.798 pCi/g
Radium-226 - 0.938 pCi/g
Thorium-232 - 0.686 pCi/g
Radium-228 - 1.31 pCi/g
Thorium-228 - 0.722 pCi/g
Uranium-235/236 - 0.0181 U pCi/g

N003-SS002-2436-01 *(24 - 36)*
AC-228 - 0.839 pCi/g
BI-212 - 1.41 pCi/g
BI-214 - 0.589 pCi/g
CESIUM-137 - ND
K-40 - 14.8 pCi/g
PB-212 - 0.623 pCi/g
PB-214 - 0.734 pCi/g
RADIUM-226 - 3.06 pCi/g
RADIUM-228 - 0.839 pCi/g
THORIUM-228 - 0.635 pCi/g
THORIUM-230 - 0.798 pCi/g
THORIUM-232 - 0.506 pCi/g
TL-208 - 0.261 pCi/g
URANIUM-233/234 - 0.48 pCi/g
URANIUM-235/236 - ND
URANIUM-238 - 0.523 pCi/g

S08 *(12-24)*
Uranium-238 - 1.71 pCi/g
Thorium-230 - 2.34 pCi/g
Uranium-233/234 - 1.76 pCi/g
Radium-226 - 2.81 pCi/g
Thorium-232 - 3.14 pCi/g
Radium-228 - 5.10 pCi/g
Thorium-228 - 4.04 pCi/g
Uranium-235/236 - 0.00527 U pCi/g

S16 (Duplicate) *(12-24)*
Uranium-238 - 0.962 pCi/g
Thorium-230 - 1.39 pCi/g
Uranium-233/234 - 1.10 pCi/g
Radium-226 - 0.944 pCi/g
Thorium-232 - 1.23 pCi/g
Radium-228 - 1.46 pCi/g
Thorium-228 - 1.36 pCi/g
Uranium-235/236 - 0.0181 U pCi/g



SCALE
1:800

LEGEND
- RST 3 Sample Location
- SAT Sample Location

Notes:
1.) All results presented in picocuries per gram (pCi/g).
2.) Depth of sample collection is presented in parenthesis next to sample number.
3.) Sample N002-TRENCH was collected from within the on-site building.
4.) ND = Non-Detect

Figure 7: Soil Analytical Results Map

NIAGARA FALLS BOULEVARD
RADIOLOGICAL SITE
NIAGARA FALLS, NEW YORK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental, Inc., and Sovereign Consulting, Inc.

GIS ANALYST:	F.CAMPBELL
EPA OSC:	E. DALY
RST SPM:	B. NWOSU
PROJECT #:	00062061
FIGURE	7
REVISION	0
DATE MODIFIED	10/1/2015

WESTON SOLUTIONS

\\FSED2DATA1\GISDATA\RST_3\00060061\MXD\150908_SOIL_ANALYTICAL_RESULTS_NO RST EXCEEDANCES.MXD