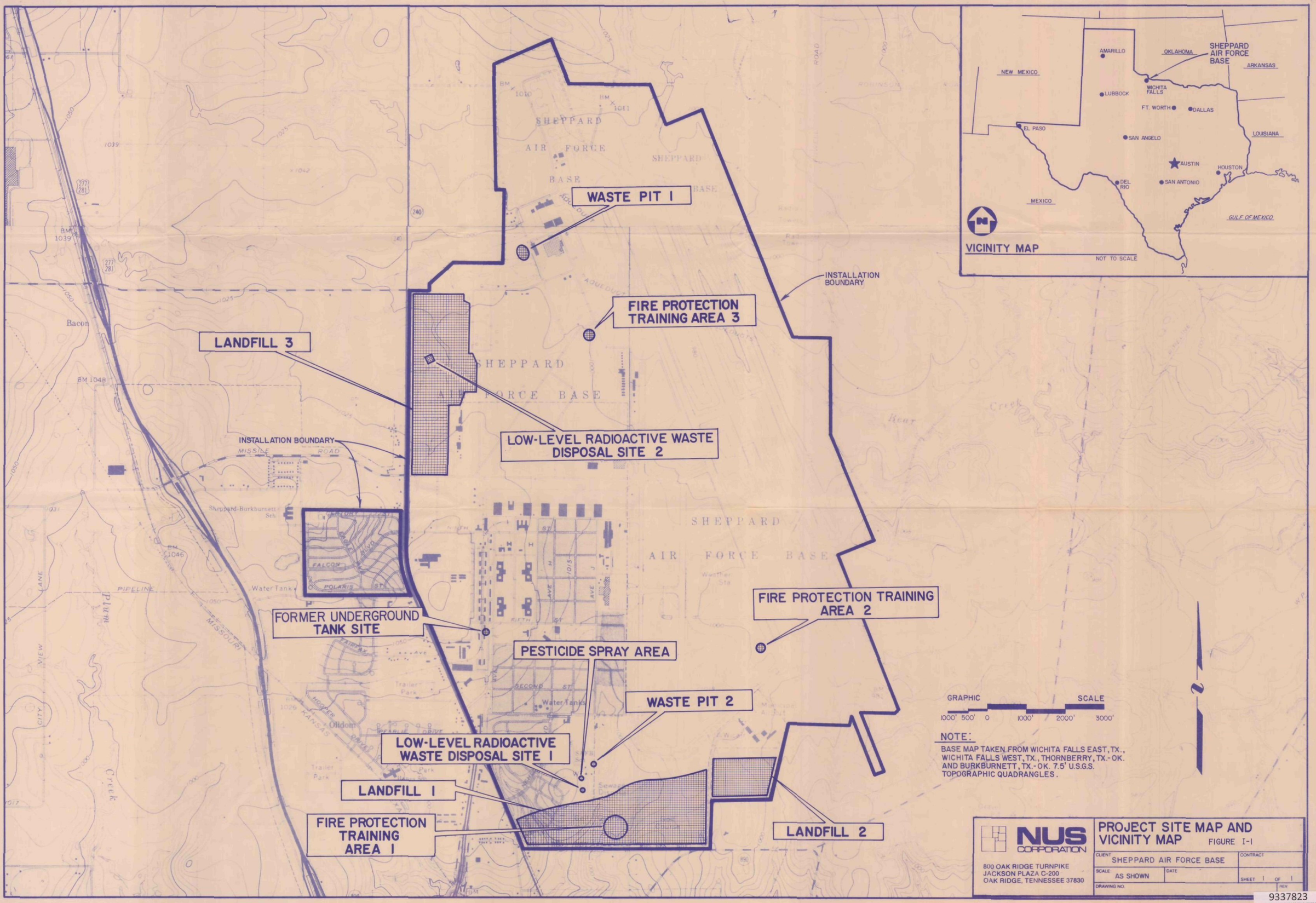
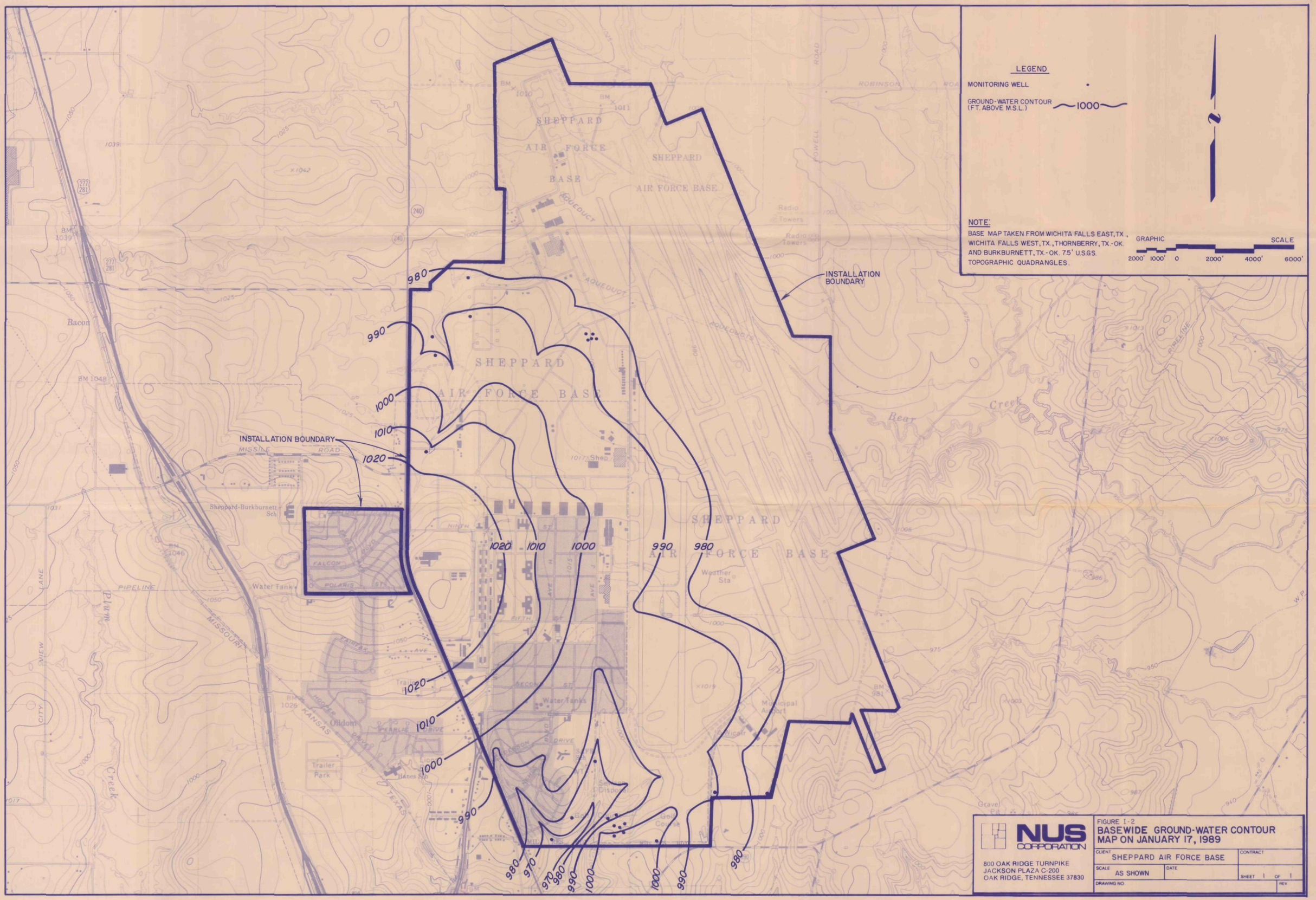

WASTE PIT 1
FIRE PROTECTION TRAINING AREA 3
INSTALLATION BOUNDARY
LANDFILL 3
LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2
INSTALLATION BOUNDARY
FORMER UNDERGROUND TANK SITE
PESTICIDE SPRAY AREA
FIRE PROTECTION TRAINING AREA 2
WASTE PIT 2
LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1
LANDFILL 1
FIRE PROTECTION TRAINING AREA 1
LANDFILL 2
SHEPPARD AIR FORCE BASE
Bacon
Oldom
Sheppard-Burkburnett Sch.
Water Tank
Trailer Park
Plum Creek
MISSOURI
KANSAS
PIPELINE
MISSILE ROAD
FALCON
POLARIS
SECOND ST.
FIFTH ST.
VICINITY MAP
NOT TO SCALE
NEW MEXICO
OKLAHOMA
ARKANSAS
LOUISIANA
MEXICO
GULF OF MEXICO
AMARILLO
LUBBOCK
WICHITA FALLS
FT. WORTH
DALLAS
EL PASO
SAN ANGELO
AUSTIN
HOUSTON
DEL RIO
SAN ANTONIO
SHEPPARD AIR FORCE BASE
GRAPHIC SCALE
1000' 500' 0 1000' 2000' 3000'
NOTE:
BASE MAP TAKEN FROM WICHITA FALLS EAST, TX., WICHITA FALLS WEST, TX., THORNBERRY, TX.-OK. AND BURKBURNETT, TX.-OK. 7.5' U.S.G.S. TOPOGRAPHIC QUADRANGLES.
NUS CORPORATION
800 OAK RIDGE TURNPIKE
JACKSON PLAZA C-200
OAK RIDGE, TENNESSEE 37830
PROJECT SITE MAP AND VICINITY MAP
FIGURE I-1
CLIENT
SHEPPARD AIR FORCE BASE
CONTRACT
SCALE
AS SHOWN
DATE
SHEET 1 OF 1
DRAWING NO.
REV

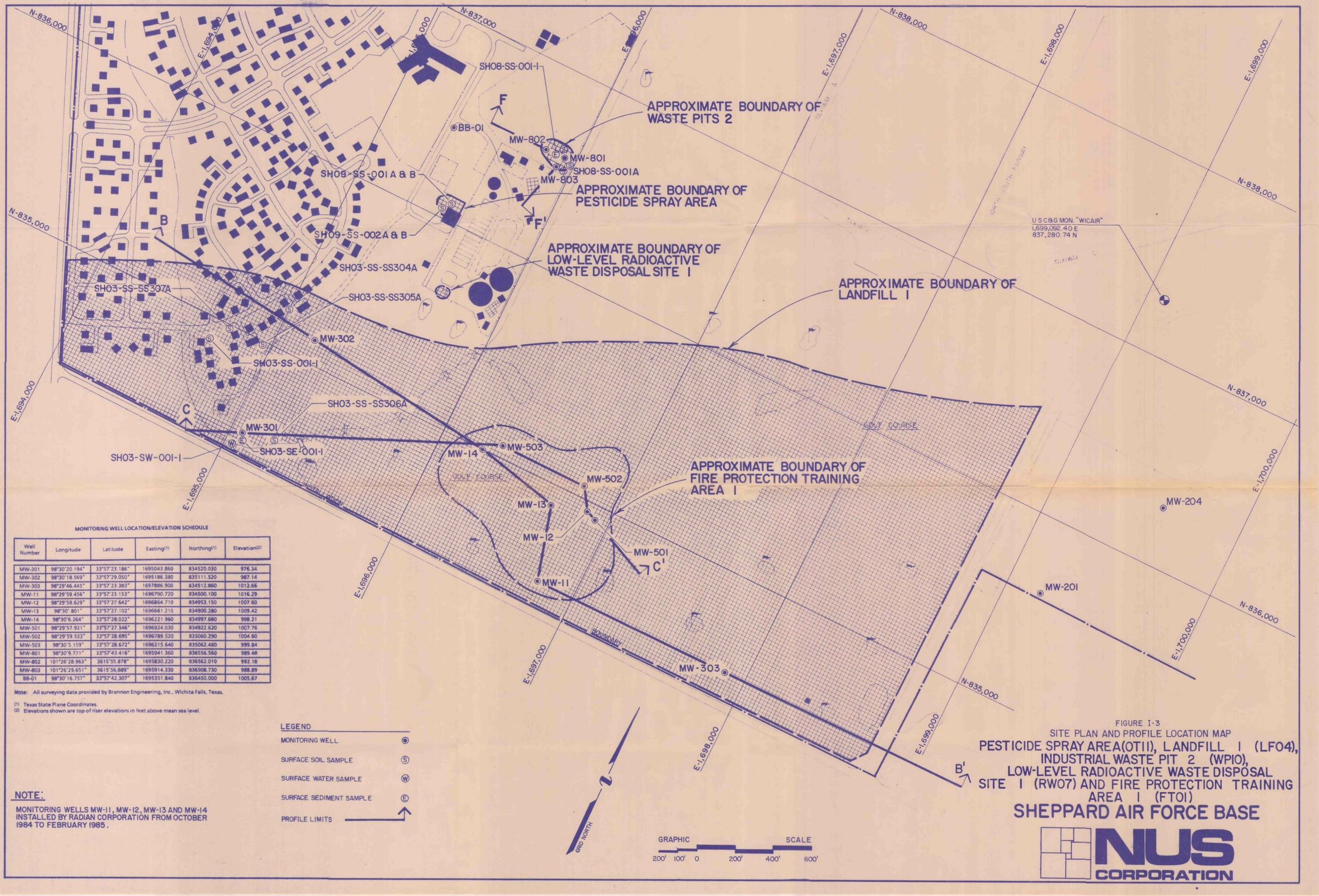
9337823



NUS CORPORATION
800 OAK RIDGE TURNPIKE
JACKSON PLAZA C-200
OAK RIDGE, TENNESSEE 37830

FIGURE I-2
BASEWIDE GROUND-WATER CONTOUR MAP ON JANUARY 17, 1989

CLIENT: SHEPPARD AIR FORCE BASE		CONTRACT
SCALE: AS SHOWN	DATE	SHEET 1 OF 1
DRAWING NO.		REV



MONITORING WELL LOCATION/ELEVATION SCHEDULE

Well Number	Longitude	Latitude	Easting(1)	Northing(1)	Elevation(2)
MW-301	98°30'20.194"	33°57'23.186"	1695043.860	834520.030	976.34
MW-302	98°30'18.569"	33°57'29.050"	1695186.380	835111.520	987.14
MW-303	98°29'46.445"	33°57'23.383"	1697886.900	834512.860	1012.66
MW-11	98°29'59.456"	33°57'23.153"	1696790.720	834500.100	1016.29
MW-12	98°29'58.629"	33°57'27.642"	1696864.710	834953.150	1007.60
MW-13	98°30' 801"	33°57'27.102"	1696681.210	834900.280	1009.42
MW-14	98°30'6.264"	33°57'28.022"	1696221.960	834997.660	998.21
MW-501	98°29'57.921"	33°57'27.346"	1696924.030	834922.620	1007.76
MW-502	98°29'59.533"	33°57'28.695"	1696789.520	835060.290	1004.60
MW-503	98°30'5.159"	33°57'28.672"	1696315.640	835062.480	999.84
MW-801	98°30'9.771"	33°57'43.416"	1695941.360	836556.560	989.48
MW-802	101°26'28.963"	3615'55.878"	1695830.220	836562.010	992.18
MW-803	101°26'29.651"	3615'56.689"	1695914.330	836508.730	988.89
BB-01	98°30'16.757"	33°57'42.307"	1695351.840	836450.000	1005.67

Note: All surveying data provided by Brannon Engineering, Inc., Wichita Falls, Texas.

(1) Texas State Plane Coordinates.
(2) Elevations shown are top of riser elevations in feet above mean sea level.

LEGEND

- MONITORING WELL ◉
- SURFACE SOIL SAMPLE Ⓢ
- SURFACE WATER SAMPLE Ⓦ
- SURFACE SEDIMENT SAMPLE Ⓔ
- PROFILE LIMITS

NOTE:

MONITORING WELLS MW-11, MW-12, MW-13 AND MW-14 INSTALLED BY RADIAN CORPORATION FROM OCTOBER 1984 TO FEBRUARY 1985.

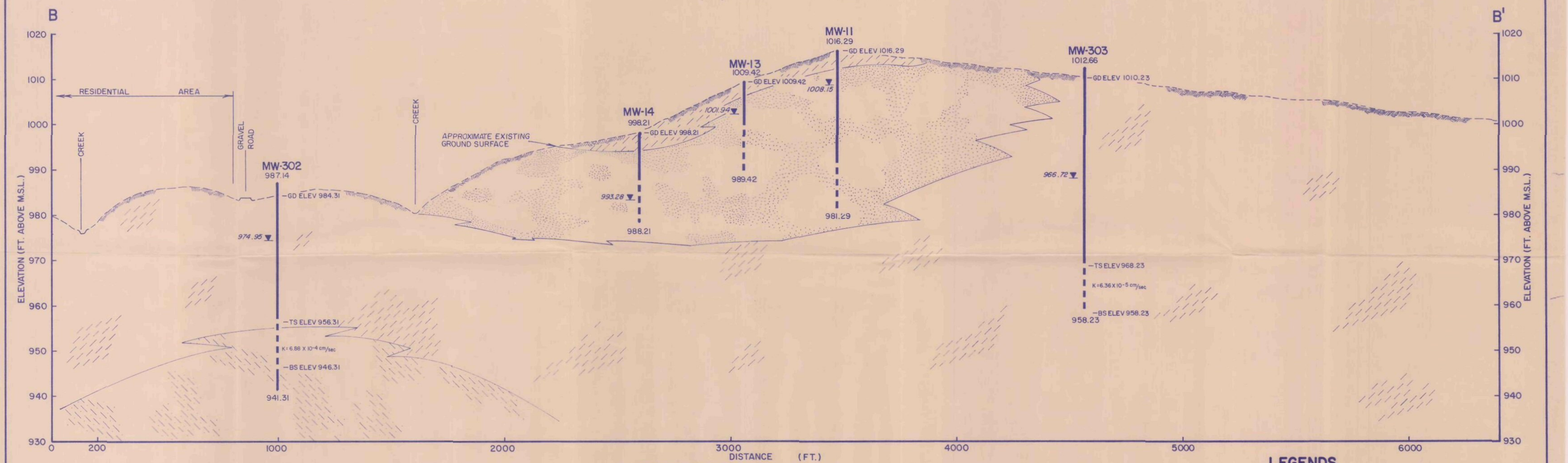
FIGURE I-3

SITE PLAN AND PROFILE LOCATION MAP

PESTICIDE SPRAY AREA (OT11), LANDFILL I (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE I (RW07) AND FIRE PROTECTION TRAINING AREA I (FT01)

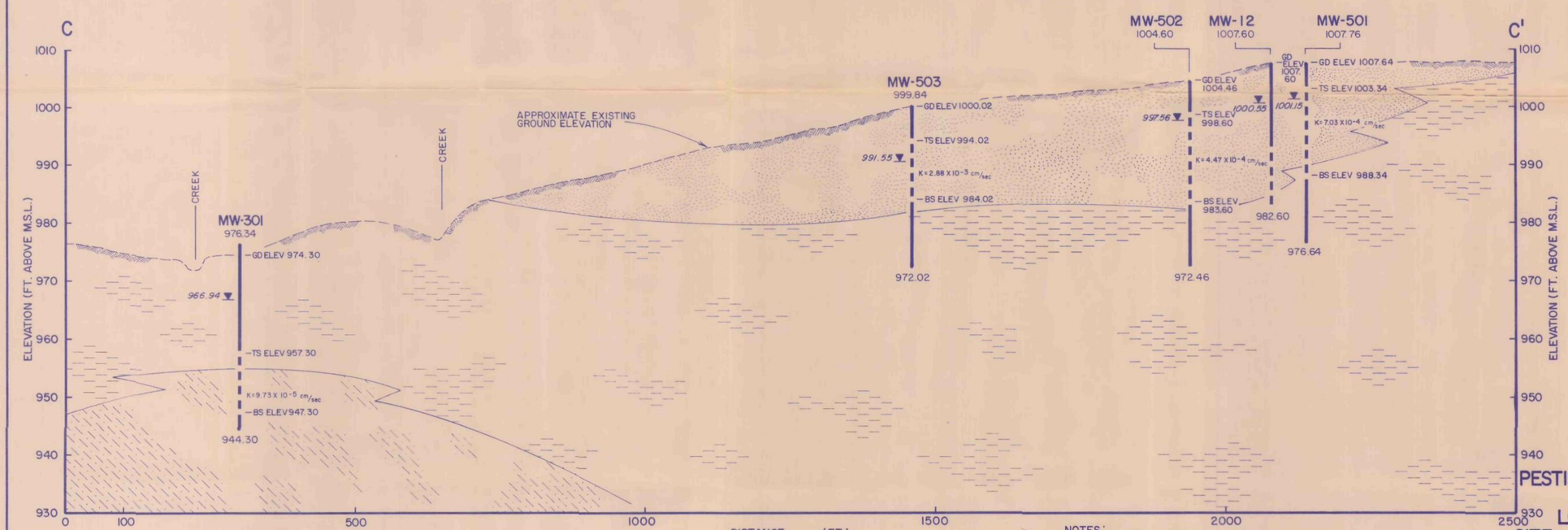
SHEPPARD AIR FORCE BASE

NUS CORPORATION



PROFILE B-B'

VERTICAL EXAGGERATION = 20 X HORIZONAL



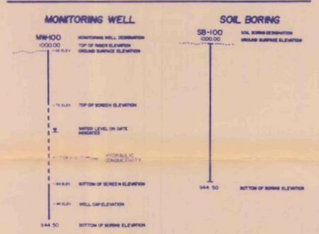
PROFILE C-C'

VERTICAL EXAGGERATION = 10 X HORIZONTAL

NOTES:

1) WATER TABLE DATA SHOWN COLLECTED ON JANUARY 17, 1989.
2) HYDRAULIC CONDUCTIVITY VALUES DERIVED FROM SLUG TESTS.
3) MONITORING WELLS MW-11, MW-12, MW-13 AND MW-14 INSTALLED BY RADIAN CORPORATION.

LEGENDS



LITHOLOGIC SYMBOLS

CLAY REDDISH-BROWN TO DARK GREYISH-BROWN, OCCASIONALLY MOTTLED YELLOWISH-BROWN OR GREENISH-GREY. SILT, PURELY SANDY, STIFF TO HARD, OFTEN CONTAINS RELICT BEDDING. GENERALLY HOMOGENEOUS. GRADES AT DEPTH TO WEATHERED SHALE AND SILTSTONE. RARE AUTHIGENIC MINERALS.

SILT REDDISH-BROWN MOTTLED GREYISH-BROWN, YELLOWISH-BROWN AND GREENISH-GREY, CLAYEY, SOMETIMES SANDY, FINE GRAINED, FIRM TO HARD, GENERALLY HOMOGENEOUS, OFTEN CONTAINS RELICT FEATURES OF PARENT MATERIAL, GRADES AT DEPTH TO WEATHERED SILTSTONE, RARE AUTHIGENIC GRANULES.

SAND LIGHT BROWN TO BROWN, OCCASIONALLY YELLOWISH-BROWN, SOMETIMES GREENISH-GREY, SILTY, CLAYEY, VERY FINE TO FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, OCCASIONAL RELICT BEDDING, USUALLY GRADES TO WEATHERED SANDSTONE, SOME OPAQUE MINERALS COMMON.

SANDSTONE LIGHT GREENISH-GREY TO GREY, OR YELLOWISH-BROWN, FINE TO VERY FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, THINLY BEDDED AND CROSS-BEDDED, OFTEN MASSIVE, SILTY MATRIX, OCCASIONAL ABUNDANT OPAQUE MINERALS, RARE FRACTURES, OFTEN WEATHERED.

FIGURE I-4
PROFILES B-B' AND C-C'

PESTICIDE SPRAY AREA (OT11), LANDFILL 1 (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1 (RW07) AND FIRE PROTECTION TRAINING AREA 1 (FT01)

SHEPPARD AIR FORCE BASE

NUS CORPORATION

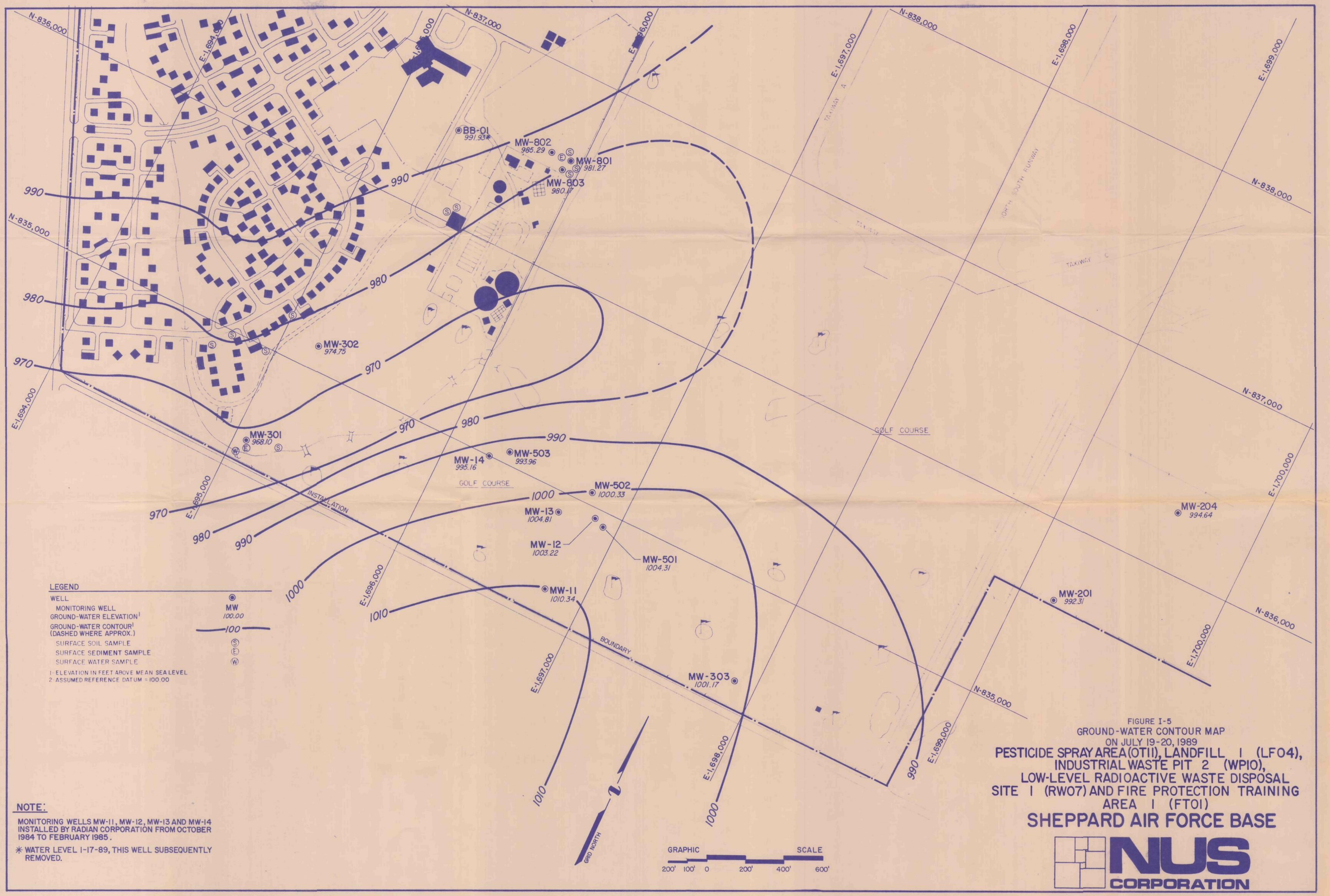
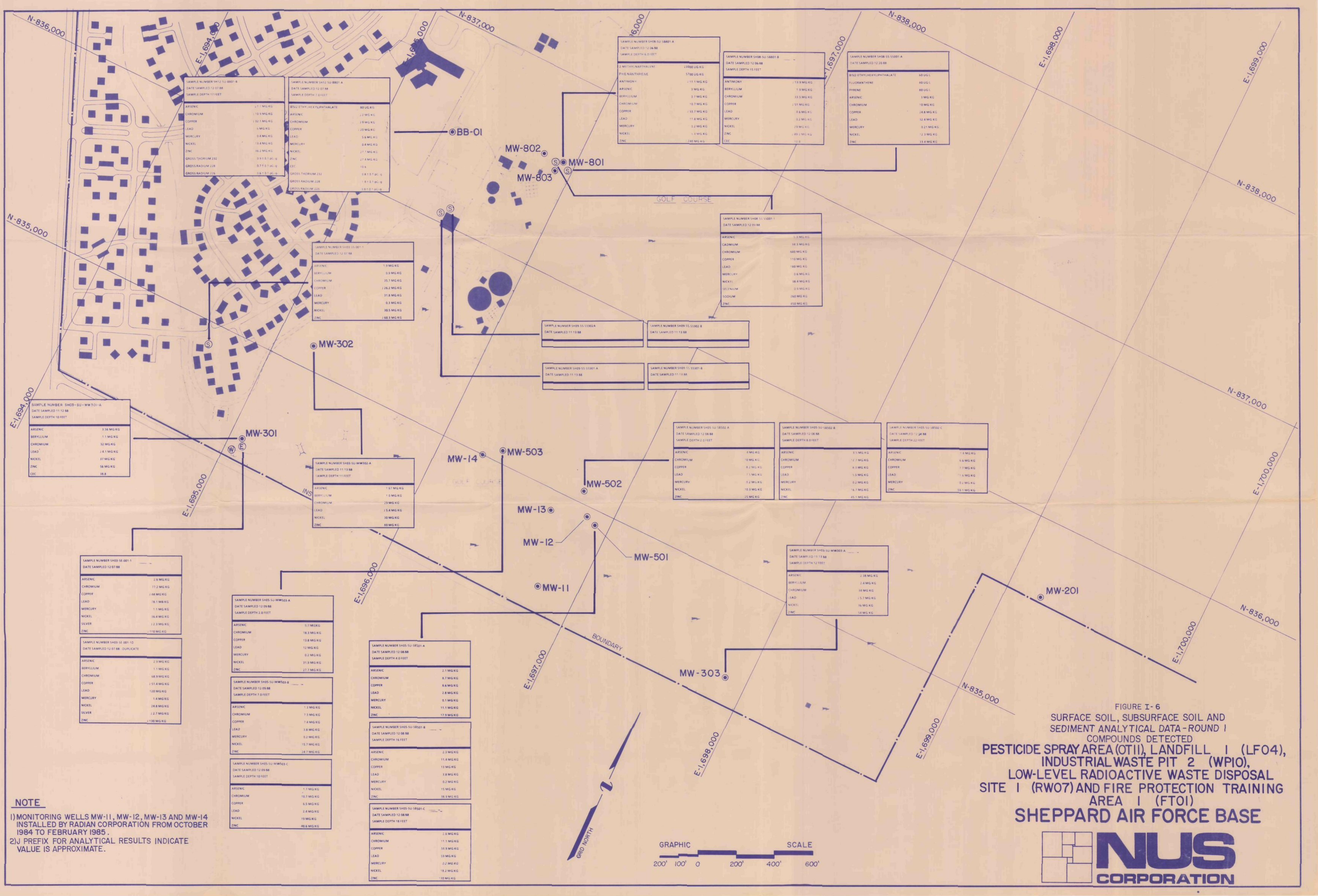


FIGURE I-5
GROUND-WATER CONTOUR MAP
ON JULY 19-20, 1989
PESTICIDE SPRAY AREA (OT11), LANDFILL 1 (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1 (RW07) AND FIRE PROTECTION TRAINING AREA 1 (FT01)
SHEPPARD AIR FORCE BASE



SAMPLE NUMBER SH12-SU-8801-B
DATE SAMPLED 12-07-88
SAMPLE DEPTH 17 FEET

ARSENIC	2.1 MG/KG
CHROMIUM	10.9 MG/KG
COPPER	32.7 MG/KG
LEAD	6 MG/KG
MERCURY	0.8 MG/KG
NICKEL	13.8 MG/KG
ZINC	16.2 MG/KG
GROSS THORIUM 232	0.9 ± 0.1 pCi/g
GROSS RADIUM 228	0.7 ± 0.1 pCi/g
GROSS RADIUM 226	0.6 ± 0.1 pCi/g

SAMPLE NUMBER SH12-SU-8801-A
DATE SAMPLED 12-07-88
SAMPLE DEPTH 7.0 FEET

BIS(2-ETHYLHEXYL)PHTHALATE	80 UG/KG
ARSENIC	2.2 MG/KG
CHROMIUM	19 MG/KG
COPPER	20 MG/KG
LEAD	5.6 MG/KG
MERCURY	0.8 MG/KG
NICKEL	21.7 MG/KG
ZINC	27.8 MG/KG
CEC	10.9
GROSS THORIUM 232	0.8 ± 0.1 pCi/g
GROSS RADIUM 228	1.0 ± 0.1 pCi/g
GROSS RADIUM 226	0.8 ± 0.1 pCi/g

SAMPLE NUMBER SH08-SU-8801-A
DATE SAMPLED 12-06-88
SAMPLE DEPTH 6.0 FEET

2-METHYLNAPHTHALENE	21000 UG/KG
PHENANTHRENE	5700 UG/KG
ANTIMONY	11.1 MG/KG
ARSENIC	3 MG/KG
BERYLLIUM	0.7 MG/KG
CHROMIUM	10.7 MG/KG
COPPER	33.7 MG/KG
LEAD	11.8 MG/KG
MERCURY	0.2 MG/KG
NICKEL	6.3 MG/KG
ZINC	280 MG/KG

SAMPLE NUMBER SH08-SU-8801-B
DATE SAMPLED 12-06-88
SAMPLE DEPTH 15 FEET

ANTIMONY	13.9 MG/KG
BERYLLIUM	1.9 MG/KG
CHROMIUM	33.5 MG/KG
COPPER	51 MG/KG
LEAD	8.6 MG/KG
MERCURY	0.2 MG/KG
NICKEL	29 MG/KG
ZINC	29.2 MG/KG
CEC	10.8

SAMPLE NUMBER SH08-SS-8801-A
DATE SAMPLED 12-20-88

BIS(2-ETHYLHEXYL)PHTHALATE	90 UG/L
FLUORANTHENE	80 UG/L
PYRENE	80 UG/L
ARSENIC	3 MG/KG
CHROMIUM	10 MG/KG
COPPER	24.8 MG/KG
LEAD	12.4 MG/KG
MERCURY	0.21 MG/KG
NICKEL	12.3 MG/KG
ZINC	33.4 MG/KG

SAMPLE NUMBER SH08-SS-8801-1
DATE SAMPLED 12-09-88

ARSENIC	3.3 MG/KG
CADMIUM	18.3 MG/KG
CHROMIUM	680 MG/KG
COPPER	110 MG/KG
LEAD	180 MG/KG
MERCURY	0.6 MG/KG
NICKEL	18.8 MG/KG
SELENIUM	0.9 MG/KG
SODIUM	260 MG/KG
ZINC	450 MG/KG

SAMPLE NUMBER SH02-SS-001-1
DATE SAMPLED 12-07-88

ARSENIC	1.9 MG/KG
BERYLLIUM	0.9 MG/KG
CHROMIUM	35.7 MG/KG
COPPER	26.2 MG/KG
LEAD	31.8 MG/KG
MERCURY	0.3 MG/KG
NICKEL	10.5 MG/KG
ZINC	60.3 MG/KG

SAMPLE NUMBER SH09-SS-5902-A
DATE SAMPLED 11-13-88

SAMPLE NUMBER SH09-SS-5902-B
DATE SAMPLED 11-13-88

SAMPLE NUMBER SH09-SS-5901-A
DATE SAMPLED 11-13-88

SAMPLE NUMBER SH09-SS-5901-B
DATE SAMPLED 11-13-88

SAMPLE NUMBER SH03-SU-MW301-A
DATE SAMPLED 11-12-88
SAMPLE DEPTH 10 FEET

ARSENIC	3.56 MG/KG
BERYLLIUM	1.1 MG/KG
CHROMIUM	32 MG/KG
LEAD	24.1 MG/KG
NICKEL	37 MG/KG
ZINC	56 MG/KG
CEC	18.8

SAMPLE NUMBER SH03-SU-MW302-A
DATE SAMPLED 11-13-88
SAMPLE DEPTH 11 FEET

ARSENIC	1.67 MG/KG
BERYLLIUM	1.0 MG/KG
CHROMIUM	29 MG/KG
LEAD	15.4 MG/KG
NICKEL	30 MG/KG
ZINC	60 MG/KG

SAMPLE NUMBER SH05-SU-8502-A
DATE SAMPLED 12-08-88
SAMPLE DEPTH 2.0 FEET

ARSENIC	4 MG/KG
CHROMIUM	10 MG/KG
COPPER	8.2 MG/KG
LEAD	7.1 MG/KG
MERCURY	0.2 MG/KG
NICKEL	10.3 MG/KG
ZINC	25 MG/KG

SAMPLE NUMBER SH05-SU-8502-B
DATE SAMPLED 12-08-88
SAMPLE DEPTH 8.0 FEET

ARSENIC	3.5 MG/KG
CHROMIUM	12.1 MG/KG
COPPER	8.3 MG/KG
LEAD	5.5 MG/KG
MERCURY	0.2 MG/KG
NICKEL	16.7 MG/KG
ZINC	45.1 MG/KG

SAMPLE NUMBER SH05-SU-8502-C
DATE SAMPLED 12-08-88
SAMPLE DEPTH 22 FEET

ARSENIC	1.8 MG/KG
CHROMIUM	6.6 MG/KG
COPPER	7.7 MG/KG
LEAD	1.6 MG/KG
MERCURY	0.2 MG/KG
ZINC	59.1 MG/KG

SAMPLE NUMBER SH03-SE-001-1
DATE SAMPLED 12-07-88

ARSENIC	2.6 MG/KG
CHROMIUM	77.2 MG/KG
COPPER	1.68 MG/KG
LEAD	78.1 MG/KG
MERCURY	1.1 MG/KG
NICKEL	16.4 MG/KG
SILVER	2.3 MG/KG
ZINC	110 MG/KG

SAMPLE NUMBER SH03-SE-001-10
DATE SAMPLED 12-07-88 - DUPLICATE

ARSENIC	2.9 MG/KG
BERYLLIUM	1.1 MG/KG
CHROMIUM	68.9 MG/KG
COPPER	51.4 MG/KG
LEAD	120 MG/KG
MERCURY	1.4 MG/KG
NICKEL	24.8 MG/KG
SILVER	2.7 MG/KG
ZINC	130 MG/KG

SAMPLE NUMBER SH05-SU-MW503-A
DATE SAMPLED 12-09-88
SAMPLE DEPTH 2.0 FEET

ARSENIC	5.7 MG/KG
CHROMIUM	18.3 MG/KG
COPPER	13.8 MG/KG
LEAD	12 MG/KG
MERCURY	0.2 MG/KG
NICKEL	31.9 MG/KG
ZINC	27.7 MG/KG

SAMPLE NUMBER SH05-SU-MW503-B
DATE SAMPLED 12-09-88
SAMPLE DEPTH 7.0 FEET

ARSENIC	1.2 MG/KG
CHROMIUM	7.3 MG/KG
COPPER	7.4 MG/KG
LEAD	3.8 MG/KG
MERCURY	0.2 MG/KG
NICKEL	15.7 MG/KG
ZINC	24.7 MG/KG

SAMPLE NUMBER SH05-SU-MW503-C
DATE SAMPLED 12-09-88
SAMPLE DEPTH 10 FEET

ARSENIC	1.7 MG/KG
CHROMIUM	10.7 MG/KG
COPPER	6.5 MG/KG
LEAD	2.4 MG/KG
NICKEL	19 MG/KG
ZINC	46.6 MG/KG

SAMPLE NUMBER SH05-SU-MW303-A
DATE SAMPLED 11-13-88
SAMPLE DEPTH 12 FEET

ARSENIC	2.38 MG/KG
BERYLLIUM	2.4 MG/KG
CHROMIUM	38 MG/KG
LEAD	15.7 MG/KG
NICKEL	16 MG/KG
ZINC	58 MG/KG

SAMPLE NUMBER SH05-SU-8501-A
DATE SAMPLED 12-08-88
SAMPLE DEPTH 8.0 FEET

ARSENIC	2.1 MG/KG
CHROMIUM	8.7 MG/KG
COPPER	8.6 MG/KG
LEAD	2.8 MG/KG
MERCURY	0.1 MG/KG
NICKEL	11.1 MG/KG
ZINC	17.9 MG/KG

SAMPLE NUMBER SH05-SU-8501-B
DATE SAMPLED 12-08-88
SAMPLE DEPTH 16 FEET

ARSENIC	2.3 MG/KG
CHROMIUM	11.4 MG/KG
COPPER	13 MG/KG
LEAD	3.8 MG/KG
MERCURY	0.2 MG/KG
NICKEL	15 MG/KG
ZINC	18.9 MG/KG

SAMPLE NUMBER SH05-SU-8501-C
DATE SAMPLED 12-08-88
SAMPLE DEPTH 18 FEET

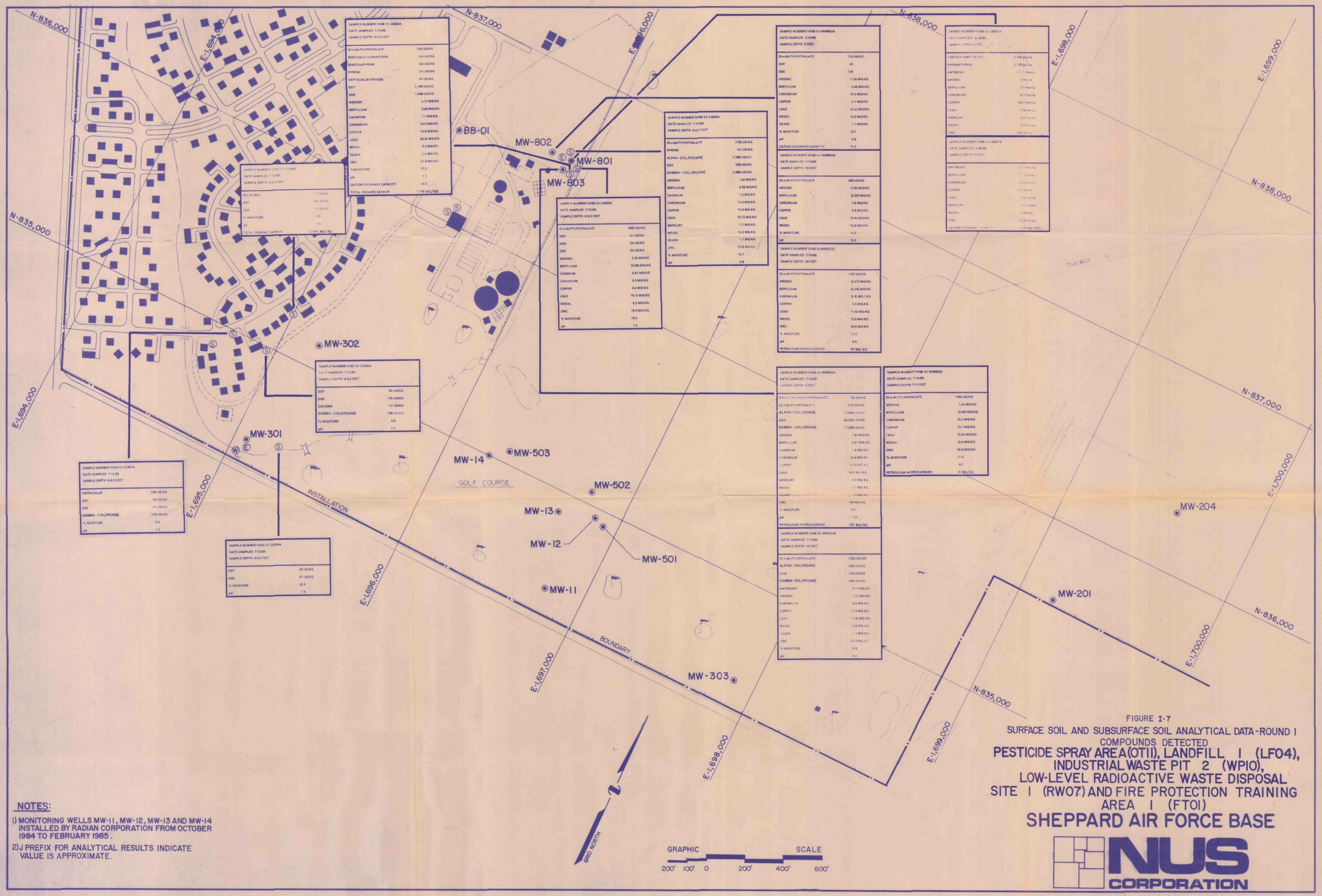
ARSENIC	2.6 MG/KG
CHROMIUM	11.1 MG/KG
COPPER	34.9 MG/KG
LEAD	59 MG/KG
MERCURY	0.2 MG/KG
NICKEL	18.2 MG/KG
ZINC	10 MG/KG

NOTE

1) MONITORING WELLS MW-11, MW-12, MW-13 AND MW-14 INSTALLED BY RADIAN CORPORATION FROM OCTOBER 1984 TO FEBRUARY 1985.
2) J PREFIX FOR ANALYTICAL RESULTS INDICATE VALUE IS APPROXIMATE.

FIGURE I-6
SURFACE SOIL, SUBSURFACE SOIL AND SEDIMENT ANALYTICAL DATA - ROUND I
COMPOUNDS DETECTED
PESTICIDE SPRAY AREA (OT11), LANDFILL 1 (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1 (RW07) AND FIRE PROTECTION TRAINING AREA 1 (FT01)
SHEPPARD AIR FORCE BASE

NUS CORPORATION



SAMPLE NUMBER SH08-SS-SS802A	
DATE SAMPLED 7-15-89	
SAMPLE DEPTH 0-0.5 FEET	
DI-n-BUTYLPHTHALATE	550 UG/KG
BENZO(b) FLOURANTHENE	652 UG/KG
BENZO(a)PYRENE	542 UG/KG
PYRENE	512 UG/KG
HEPTACHLOR EPOXIDE	42 UG/KG
DDT	1,100 UG/KG
DDE	1,400 UG/KG
ARSENIC	2.7J MG/KG
BERYLLIUM	0.60 MG/KG
CADMIUM	1.1 MG/KG
CHROMIUM	16.5 MG/KG
COPPER	10.9 MG/KG
LEAD	89.6J MG/KG
NICKEL	9.2 MG/KG
SILVER	2.4 MG/KG
ZINC	51.9 MG/KG
% MOISTURE	17.5
pH	7.1
CATION EXCHANGE CAPACITY	24.5
TOTAL ORGANIC CARBON	3,100 MG/KG

SAMPLE NUMBER SH03-SS-SS304A	
DATE SAMPLED 7-12-89	
SAMPLE DEPTH 0-0.5 FEET	
DELTA-BHC	17 UG/KG
DDT	76 UG/KG
DDE	79 UG/KG
% MOISTURE	4.0
pH	7.4
TOTAL ORGANIC CARBON	15,000 MG/KG

SAMPLE NUMBER SH08-SS-SS803A	
DATE SAMPLED 7-15-89	
SAMPLE DEPTH 0-0.5 FEET	
DI-n-BUTYLPHTHALATE	280J UG/KG
DDT	61 UG/KG
DDD	50 UG/KG
DDE	56 UG/KG
ARSENIC	3.0J MG/KG
BERYLLIUM	(0.48) MG/KG
CADMIUM	0.61 MG/KG
CHROMIUM	9.5 MG/KG
COPPER	8.0 MG/KG
LEAD	14.7J MG/KG
NICKEL	8.3 MG/KG
ZINC	28.9 MG/KG
% MOISTURE	18.5
pH	7.6

SAMPLE NUMBER SH08-SS-SS804A	
DATE SAMPLED 7-15-89	
SAMPLE DEPTH 0-0.5 FEET	
DI-n-BUTYLPHTHALATE	276J UG/KG
PYRENE	422 UG/KG
ALPHA-CHLRODANE	2,300 UG/KG
DDT	930 UG/KG
GAMMA-CHLORDANE	2,900 UG/KG
ARSENIC	1.6J MG/KG
BERYLLIUM	0.56 MG/KG
CADMIUM	1.6 MG/KG
CHROMIUM	12.3 MG/KG
COPPER	15.4 MG/KG
LEAD	35.7J MG/KG
MERCURY	1.7 MG/KG
NICKEL	12.3 MG/KG
SILVER	1.1 MG/KG
ZINC	19.8 MG/KG
% MOISTURE	12.1
pH	6.8

SAMPLE NUMBER SH03-SS-SS305A	
DATE SAMPLED 7-12-89	
SAMPLE DEPTH 0-0.5 FEET	
DDT	85 UG/KG
DDE	170 UG/KG
DIELDRIN	150 UG/KG
GAMMA-CHLORDANE	100 UG/KG
% MOISTURE	4.0
pH	6.3

SAMPLE NUMBER SH03-SS-SS307A	
DATE SAMPLED 7-12-89	
SAMPLE DEPTH 0-0.5 FEET	
HEPTACHLOR	200 UG/KG
DDT	58 UG/KG
DDE	61 UG/KG
GAMMA-CHLORDANE	270 UG/KG
% MOISTURE	6.6
pH	7.4

SAMPLE NUMBER SH03-SS-SS306A	
DATE SAMPLED 7-12-89	
SAMPLE DEPTH 0-0.5 FEET	
DDT	89 UG/KG
DDE	67 UG/KG
% MOISTURE	20.9
pH	7.5

SAMPLE NUMBER SH08-SU-MW802A	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 5 FEET	
DI-n-BUTYLPHTHALATE	330 UG/KG
DDT	69
DDE	120
ARSENIC	13.8J MG/KG
BERYLLIUM	0.66 MG/KG
CHROMIUM	10.3 MG/KG
COPPER	6.7 MG/KG
LEAD	23.2J MG/KG
NICKEL	10.5 MG/KG
SILVER	1.1 MG/KG
% MOISTURE	10.7
pH	8.6
CATION EXCHANGE CAPACITY	15.5

SAMPLE NUMBER SH08-SU-MW802B	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 10 FEET	
DI-n-BUTYLPHTHALATE	380 UG/KG
ARSENIC	13.8J MG/KG
BERYLLIUM	(0.35) MG/KG
CHROMIUM	9.8 MG/KG
COPPER	8.8 MG/KG
LEAD	19.4J MG/KG
NICKEL	12.0 MG/KG
% MOISTURE	15.3
pH	10.3

SAMPLE NUMBER SH08-SU-MW802C	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 20 FEET	
DI-n-BUTYLPHTHALATE	120J UG/KG
ARSENIC	(0.37) MG/KG
BERYLLIUM	(0.34) MG/KG
CHROMIUM	9.8 MG/KG
COPPER	4.5 MG/KG
LEAD	11.9J MG/KG
NICKEL	15.8 MG/KG
ZINC	30.6 MG/KG
% MOISTURE	13.3
pH	8.6
PETROLEUM HYDROCARBONS	98 MG/KG

SAMPLE NUMBER SH08-SU-SB801A	
DATE SAMPLED 7/06/88	
SAMPLE DEPTH 4-15FEET	
2-METHYL NAPTHALENE	2,700 µg/kg
PHENANTHRENE	5,700 µg/kg
ANTIMONY	(11.1 mg/kg)
ARSENIC	8 mg/kg
BERYLLIUM	0.7 mg/kg
CHROMIUM	10.7 mg/kg
COPPER	193.1 mg/kg
LEAD	11.8 mg/kg
MERCURY	0.2 mg/kg
NICKEL	6.4 mg/kg
ZINC	120 mg/kg

SAMPLE NUMBER SH08-SU-SB801B	
DATE SAMPLED 7/06/88	
SAMPLE DEPTH 15 FEET	
ANTIMONY	(11.1 mg/kg)
BERYLLIUM	1.3 mg/kg
CHROMIUM	11.5 mg/kg
COPPER	11 mg/kg
LEAD	5.6 mg/kg
MERCURY	0.2 mg/kg
NICKEL	4 mg/kg
ZINC	23.2 mg/kg
CATION EXCHANGE CAPACITY	0.4 meq/100g

SAMPLE NUMBER SH08-SU-MW803A	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 5 FEET	
BIS(2-ETHYLHEXYL)PHTHALATE	18J UG/KG
DI-n-BUTYLPHTHALATE	510 UG/KG
ALPHA-CHLORDANE	19,000 UG/KG
DDD	66,000 UG/KG
GAMMA-CHLORDANE	17,000 UG/KG
ARSENIC	1.8J MG/KG
BERYLLIUM	0.61 MG/KG
CADMIUM	1.8 MG/KG
CHROMIUM	24.4 MG/KG
COPPER	67.0 MG/KG
LEAD	141J MG/KG
MERCURY	4.0 MG/KG
NICKEL	11.7 MG/KG
SILVER	3 MG/KG
ZINC	194 MG/KG
% MOISTURE	19.1
pH	7.9
PETROLEUM HYDROCARBONS	180 MG/KG

SAMPLE NUMBER SH08-SU-MW803B	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 10 FEET	
DI-n-BUTYLPHTHALATE	236J UG/KG
ALPHA-CHLORDANE	440 UG/KG
DDD	520 UG/KG
GAMMA-CHLORDANE	460 UG/KG
ANTIMONY	9.1J MG/KG
ARSENIC	1.2J MG/KG
CHROMIUM	8.6 MG/KG
COPPER	12.4 MG/KG
LEAD	11.0J MG/KG
NICKEL	13.8 MG/KG
SILVER	1.1 MG/KG
ZINC	27.4 MG/KG
% MOISTURE	13.6
pH	8.2

SAMPLE NUMBER SH08-SU-MW803C	
DATE SAMPLED 7/14/89	
SAMPLE DEPTH 11.5 FEET	
DI-n-BUTYLPHTHALATE	130J UG/KG
ARSENIC	5.9J MG/KG
BERYLLIUM	(0.44) MG/KG
CHROMIUM	16.3 MG/KG
COPPER	19.7 MG/KG
LEAD	76.4J MG/KG
NICKEL	18.4 MG/KG
ZINC	96.9 MG/KG
% MOISTURE	11.3
pH	8.1
PETROLEUM HYDROCARBONS	78 MG/KG

NOTES:

1) MONITORING WELLS MW-11, MW-12, MW-13 AND MW-14 INSTALLED BY RADIAN CORPORATION FROM OCTOBER 1984 TO FEBRUARY 1985.

2) J PREFIX FOR ANALYTICAL RESULTS INDICATE VALUE IS APPROXIMATE.

FIGURE I-7

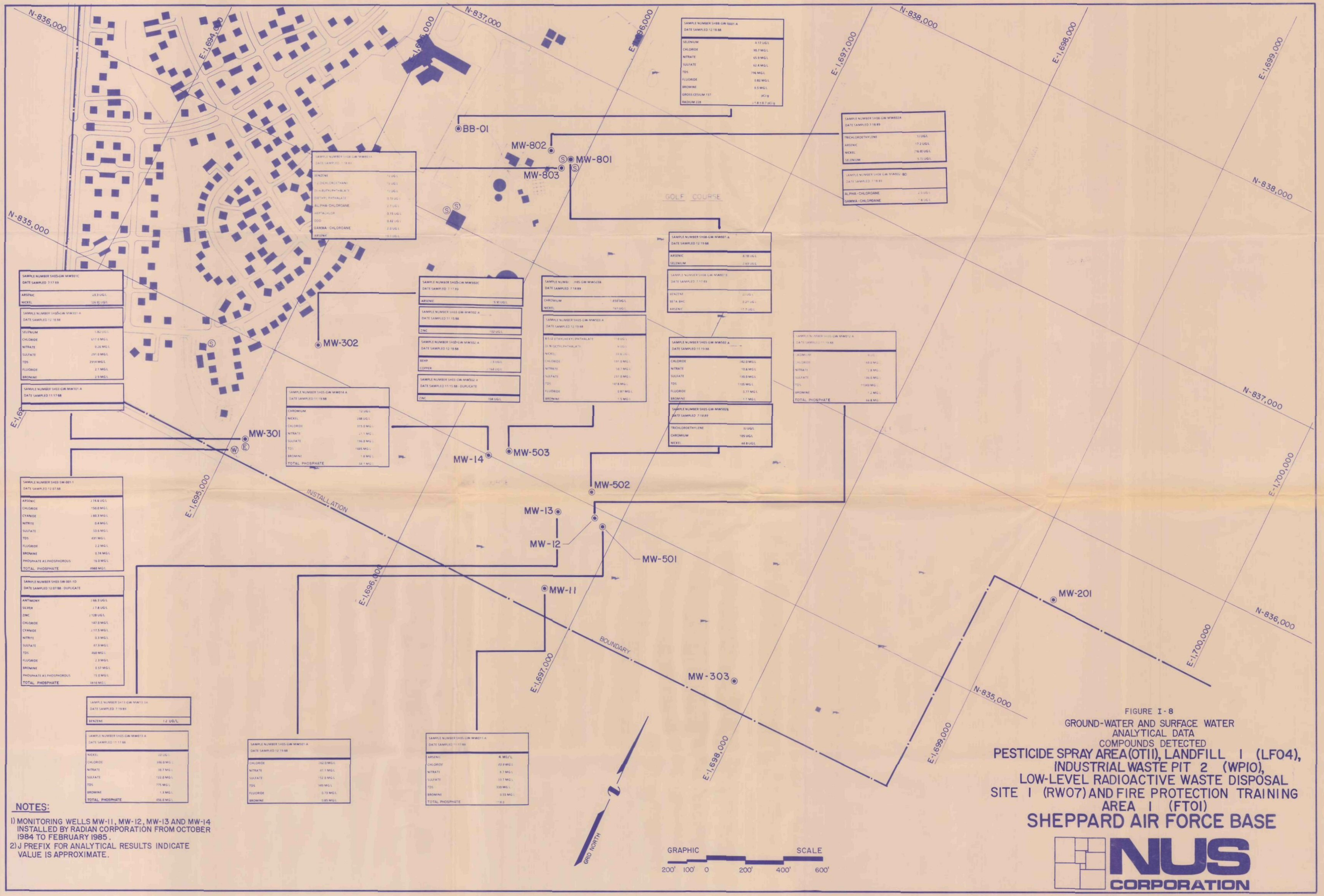
SURFACE SOIL AND SUBSURFACE SOIL ANALYTICAL DATA-ROUND I

COMPOUNDS DETECTED

PESTICIDE SPRAY AREA (OT11), LANDFILL 1 (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1 (RW07) AND FIRE PROTECTION TRAINING AREA 1 (FT01)

SHEPPARD AIR FORCE BASE

NUS CORPORATION



SAMPLE NUMBER SH08-GW-8801-A
DATE SAMPLED 12-18-88

SELENIUM	4.17 UG/L
CHLORIDE	16.7 MG/L
NITRATE	65.9 MG/L
SULFATE	52.4 MG/L
TDS	396 MG/L
FLUORIDE	0.82 MG/L
BROMINE	0.5 MG/L
GROSS CESIUM 137	pCi/g
RADIUM 226	(1.8 ± 0.7) pCi/g

SAMPLE NUMBER SH08-GW-MW802A
DATE SAMPLED 7-18-89

TRICHLOROETHYLENE	11 UG/L
ARSENIC	17.2 UG/L
NICKEL	16.8 UG/L
SELENIUM	5.3 UG/L

SAMPLE NUMBER SH08-GW-MW802-BD
DATE SAMPLED 7-18-89

ALPHA-CHLORDANE	4.9 UG/L
GAMMA-CHLORDANE	4 UG/L

SAMPLE NUMBER SH08-GW-MW801-A
DATE SAMPLED 12-19-88

ARSENIC	8.18 UG/L
SELENIUM	2.63 UG/L

SAMPLE NUMBER SH08-GW-MW801-B
DATE SAMPLED 7-17-89

BENZENE	21 UG/L
BETA BHC	0.21 UG/L
ARSENIC	17.5 UG/L

SAMPLE NUMBER SH08-GW-MW803-A
DATE SAMPLED 12-18-88

BENZENE	12 UG/L
1,2-DICHLOROETHANE	12 UG/L
DI-N-BUTYL PHTHALATE	12 UG/L
DIETHYL PHTHALATE	5.72 UG/L
ALPHA-CHLORDANE	2.7 UG/L
HEPTACHLOR	0.15 UG/L
DDD	0.42 UG/L
GAMMA-CHLORDANE	2.8 UG/L
ARSENIC	18.1 UG/L

SAMPLE NUMBER SH05-GW-MW501C
DATE SAMPLED 7-17-89

ARSENIC	23.3 UG/L
NICKEL	26.9 UG/L

SAMPLE NUMBER SH05-GW-MW501-A
DATE SAMPLED 12-18-88

SELENIUM	1.82 UG/L
CHLORIDE	617.0 MG/L
NITRATE	0.26 MG/L
SULFATE	291.0 MG/L
TDS	2914 MG/L
FLUORIDE	2.1 MG/L
BROMINE	2.9 MG/L

SAMPLE NUMBER SH03-GW-MW301-A
DATE SAMPLED 11-17-88

SAMPLE NUMBER SH05-GW-MW302C
DATE SAMPLED 7-17-89

ARSENIC	5.91 UG/L

SAMPLE NUMBER SH05-GW-MW302-A
DATE SAMPLED 11-15-88

ZINC	192 UG/L

SAMPLE NUMBER SH05-GW-MW302-A
DATE SAMPLED 12-18-88

BHP	2.8 UG/L
COPPER	148 UG/L

SAMPLE NUMBER SH03-GW-MW302-A
DATE SAMPLED 11-15-88 - DUPLICATE

ZINC	198 UG/L

SAMPLE NUMBER SH05-GW-MW503B
DATE SAMPLED 7-18-89

CHROMIUM	8501 UG/L
NICKEL	767 UG/L

SAMPLE NUMBER SH05-GW-MW503-A
DATE SAMPLED 12-19-88

BIS(2-ETHYLHEXYL)PHTHALATE	10 UG/L
DI-N-OCTYLPHTHALATE	9 UG/L
NICKEL	33.6 UG/L
CHLORIDE	191.0 MG/L
NITRATE	58.7 MG/L
SULFATE	231.0 MG/L
TDS	1416 MG/L
FLUORIDE	0.87 MG/L
BROMINE	1.5 MG/L

SAMPLE NUMBER SH05-GW-MW014-A
DATE SAMPLED 11-19-88

CHROMIUM	12 UG/L
NICKEL	248 UG/L
CHLORIDE	315.0 MG/L
NITRATE	2.1 MG/L
SULFATE	196.0 MG/L
TDS	1485 MG/L
BROMINE	1.6 MG/L
TOTAL PHOSPHATE	38.1 MG/L

SAMPLE NUMBER SH05-GW-MW502-A
DATE SAMPLED 11-19-88

CHLORIDE	162.0 MG/L
NITRATE	10.8 MG/L
SULFATE	190.0 MG/L
TDS	1105 MG/L
FLUORIDE	0.77 MG/L
BROMINE	1.1 MG/L

SAMPLE NUMBER SH05-GW-MW502B
DATE SAMPLED 7-18-89

TRICHLOROETHYLENE	10 UG/L
CHROMIUM	105 UG/L
NICKEL	44.8 UG/L

SAMPLE NUMBER SH05-GW-MW012-A
DATE SAMPLED 11-19-88

CHROMIUM	4 UG/L
CHLORIDE	63.0 MG/L
NITRATE	12.8 MG/L
SULFATE	26.0 MG/L
TDS	1134.0 MG/L
BROMINE	1.2 MG/L
TOTAL PHOSPHATE	66.8 MG/L

SAMPLE NUMBER SH03-SW-001-1
DATE SAMPLED 12-07-88

ARSENIC	J 74.6 UG/L
CHLORIDE	150.0 MG/L
CYANIDE	J 80.3 MG/L
NITRITE	0.4 MG/L
SULFATE	53.6 MG/L
TDS	431 MG/L
FLUORIDE	2.2 MG/L
BROMINE	0.74 MG/L
PHOSPHATE AS PHOSPHOROUS	16.0 MG/L
TOTAL PHOSPHATE	49.0 MG/L

SAMPLE NUMBER SH03-SW-001-1D
DATE SAMPLED 12-07-88 - DUPLICATE

ANTIMONY	J 68.3 UG/L
SILVER	J 7.8 UG/L
ZINC	J 128 UG/L
CHLORIDE	147.0 MG/L
CYANIDE	J 11.5 MG/L
NITRITE	0.3 MG/L
SULFATE	47.9 MG/L
TDS	460 MG/L
FLUORIDE	2.3 MG/L
BROMINE	0.57 MG/L
PHOSPHATE AS PHOSPHOROUS	15.0 MG/L
TOTAL PHOSPHATE	46.0 MG/L

SAMPLE NUMBER SH13-GW-MW13-1A
DATE SAMPLED 7-19-89

BENZENE	12 UG/L

SAMPLE NUMBER SH03-GW-MW013-A
DATE SAMPLED 11-17-88

NICKEL	22 UG/L
CHLORIDE	186.0 MG/L
NITRATE	38.7 MG/L
SULFATE	122.0 MG/L
TDS	775 MG/L
BROMINE	1.3 MG/L
TOTAL PHOSPHATE	456.0 MG/L

SAMPLE NUMBER SH05-GW-MW501-A
DATE SAMPLED 12-19-88

CHLORIDE	162.0 MG/L
NITRATE	47.1 MG/L
SULFATE	152.0 MG/L
TDS	749 MG/L
FLUORIDE	0.73 MG/L
BROMINE	0.85 MG/L

SAMPLE NUMBER SH05-GW-MW011-A
DATE SAMPLED 12-17-88

ARSENIC	4 MG/L
CHLORIDE	22.9 MG/L
NITRATE	5.7 MG/L
SULFATE	11.7 MG/L
TDS	130 MG/L
BROMINE	0.55 MG/L
TOTAL PHOSPHATE	[illegible]

NOTES:

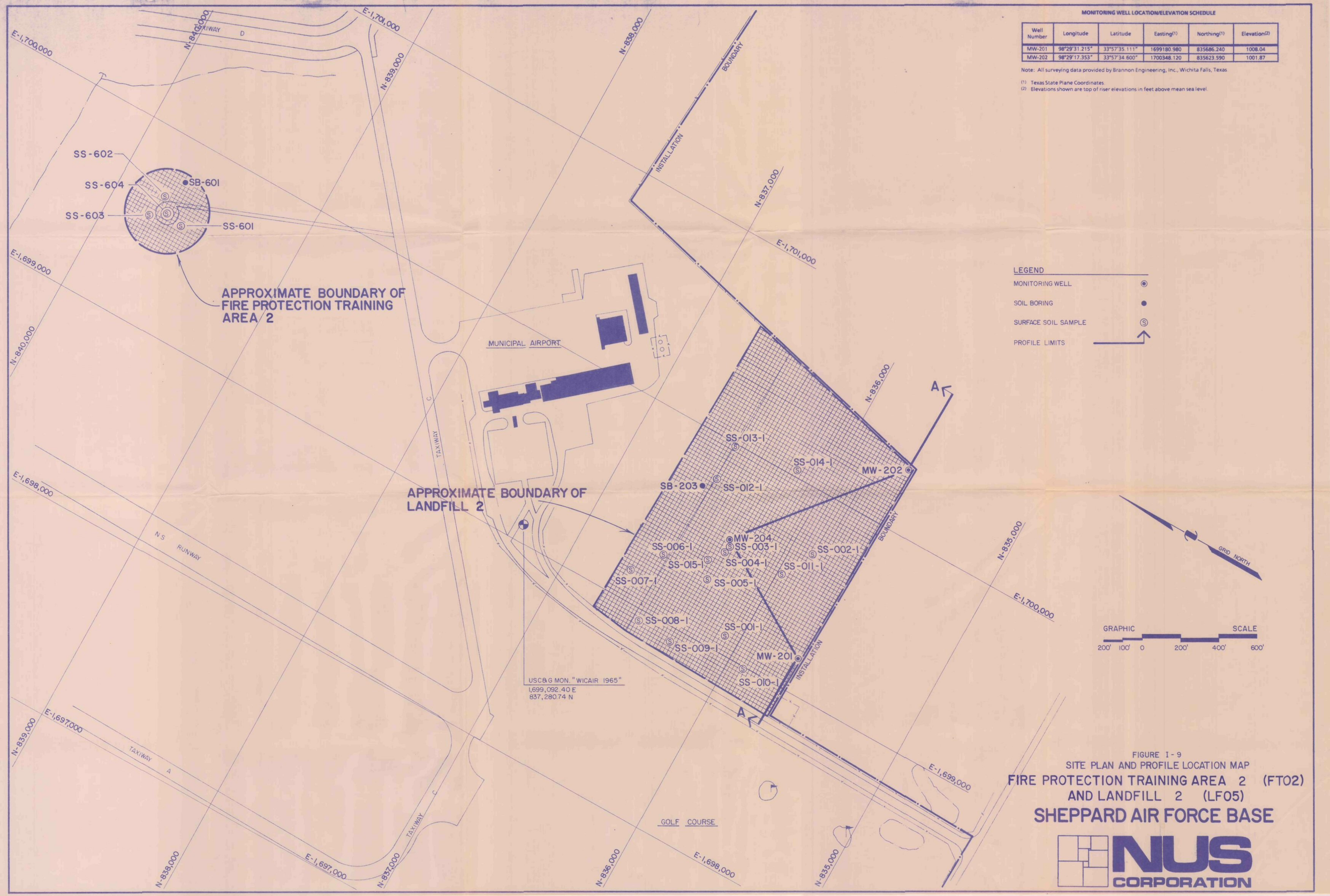
1) MONITORING WELLS MW-11, MW-12, MW-13 AND MW-14 INSTALLED BY RADIAN CORPORATION FROM OCTOBER 1984 TO FEBRUARY 1985.
2) J PREFIX FOR ANALYTICAL RESULTS INDICATE VALUE IS APPROXIMATE.

FIGURE I-8
GROUND-WATER AND SURFACE WATER ANALYTICAL DATA
COMPOUNDS DETECTED

PESTICIDE SPRAY AREA (OT11), LANDFILL 1 (LF04), INDUSTRIAL WASTE PIT 2 (WP10), LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 1 (RW07) AND FIRE PROTECTION TRAINING AREA 1 (FT01)

SHEPPARD AIR FORCE BASE

NUS CORPORATION



MONITORING WELL LOCATION/ELEVATION SCHEDULE

Well Number	Longitude	Latitude	Easting(1)	Northing(1)	Elevation(2)
MW-201	98°29'31.215"	33°57'35.111"	1699180.980	835686.240	1008.04
MW-202	98°29'17.353"	33°57'34.600"	1700348.120	835623.590	1001.87

Note: All surveying data provided by Brannon Engineering, Inc., Wichita Falls, Texas.

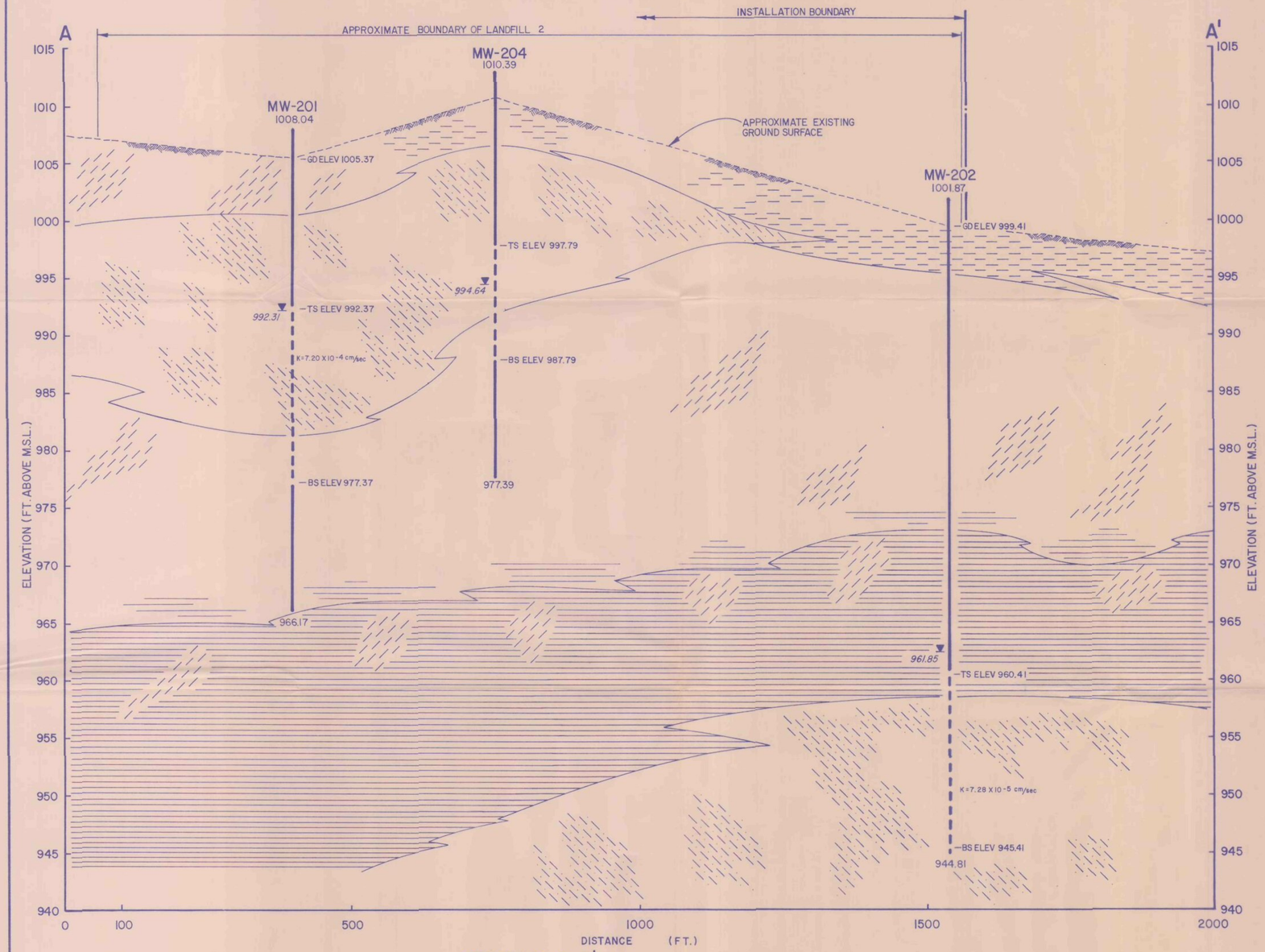
(1) Texas State Plane Coordinates.
(2) Elevations shown are top of riser elevations in feet above mean sea level.

LEGEND

- MONITORING WELL
- SOIL BORING
- SURFACE SOIL SAMPLE
- PROFILE LIMITS

FIGURE I-9
SITE PLAN AND PROFILE LOCATION MAP
FIRE PROTECTION TRAINING AREA 2 (FT02)
AND LANDFILL 2 (LF05)
SHEPPARD AIR FORCE BASE

NUS CORPORATION



PROFILE A-A'

VERTICAL EXAGGERATION = 20 X HORIZONTAL

LEGENDS

MONITORING WELL

MW-100 — MONITORING WELL DESIGNATION
1000.00 — TOP OF RISER ELEVATION
GD ELEV — GROUND SURFACE ELEVATION
TS ELEV — TOP OF SCREEN ELEVATION
WATER LEVEL ON DATE INDICATED
K = 7.28 X 10 -5 cm/sec — HYDRAULIC CONDUCTIVITY
BS ELEV — BOTTOM OF SCREEN ELEVATION
WC ELEV — WELL CAP ELEVATION
944.50 — BOTTOM OF BORING ELEVATION

SOIL BORING

SB-100 — SOIL BORING DESIGNATION
1000.00 — GROUND SURFACE ELEVATION
944.50 — BOTTOM OF BORING ELEVATION

LITHOLOGIC SYMBOLS

CLAY REDDISH-BROWN TO DARK GREYISH-BROWN, OCCASIONALLY MOTTLED YELLOWISH-BROWN OR GREENISH-GREY SILT, RARELY SANDY, STIFF TO HARD, OFTEN CONTAINS RELICT BEDDING, GENERALLY HOMOGENEOUS. GRADES AT DEPTH TO WEATHERED SHALE AND SILTSTONE. RARE AUTHIGENIC MINERALS.

SILT REDDISH-BROWN MOTTLED GREYISH-BROWN, YELLOWISH-BROWN AND GREENISH-GREY, CLAYEY, SOMETIMES SANDY, FINE GRAINED, FIRM TO HARD, GENERALLY HOMOGENOUS, OFTEN CONTAINS RELICT FEATURES OF PARENT MATERIAL, GRADES AT DEPTH TO WEATHERED SILTSTONE, RARE AUTHIGENIC GRANULES.

SAND LIGHT BROWN TO BROWN, OCCASIONALLY YELLOWISH-BROWN, SOMETIMES GREENISH-GREY, SILTY, CLAYEY, VERY FINE TO FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, OCCASIONAL RELICT BEDDING, USUALLY GRADES TO WEATHERED SANDSTONE, SOME OPAQUE MINERALS COMMON.

SHALE OR SILTSTONE MOTTLED BROWN AND GREYISH-BROWN, WEATHERED, GENERALLY MASSIVE, OCCASIONALLY FISSILE, OFTEN CONTAINS SUBVERTICAL FRACTURES.

SANDSTONE LIGHT GREENISH-GREY TO GREY, OR YELLOWISH-BROWN, FINE TO VERY FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, THINLY BEDDED AND CROSS-BEDDED, OFTEN MASSIVE, SILTY MATRIX, OCCASIONAL ABUNDANT OPAQUE MINERALS, RARE FRACTURES, OFTEN WEATHERED.

CRUSHED STONE

FILL

NOTES:
1) WATER TABLE DATA SHOWN COLLECTED ON JULY 19-20, 1989.
2) HYDRAULIC CONDUCTIVITY VALUES DERIVED FROM SLUG TESTS.

FIGURE I-10
PROFILE A-A' AND PROFILE LEGENDS
LANDFILL 2 (LF05)
SHEPPARD AIR FORCE BASE

NUS CORPORATION

SAMPLE NUMBER SH06-SS-SS602-A
DATE SAMPLED 11-11-88

ARSENIC	1.3 MG/KG
BERYLLIUM	1.0 MG/KG
CHROMIUM	J 18 MG/KG
LEAD	J 11.7 MG/KG
NICKEL	9.6 MG/KG

SAMPLE NUMBER SH06-SU-MW601-A
DATE SAMPLED 11-11-88
SAMPLE DEPTH 10 FEET

ARSENIC	4.1 MG/KG
BERYLLIUM	1.2 MG/KG
CHROMIUM	J 22 MG/KG
LEAD	J 9.84 MG/KG
NICKEL	28 MG/KG
CEC	16.9

SAMPLE NUMBER SH06-SS-SS606-A
DATE SAMPLED 11-11-88

ARSENIC	5.9 MG/KG
BERYLLIUM	1.0 MG/KG
CHROMIUM	15 MG/KG
LEAD	J 13.7 MG/KG
NICKEL	15 MG/KG

SAMPLE NUMBER SH06-SS-SS601-A
DATE SAMPLED 11-11-88

ARSENIC	6.1 MG/KG
BERYLLIUM	1.1 MG/KG
CADMIUM	J 1.0 MG/KG
COPPER	J 19 MG/KG
LEAD	J 11.8 MG/KG
NICKEL	16 MG/KG

SAMPLE NUMBER SH06-SS-SS603-A
DATE SAMPLED 11-11-88

ARSENIC	3.4 MG/KG
BERYLLIUM	0.05 MG/KG
CHROMIUM	1 MG/KG
LEAD	J 12.5 MG/KG
NICKEL	10 MG/KG

SAMPLE NUMBER SH02-GW-MW202BD
DATE SAMPLED 7-18-89

DIETHYL PHTHALATE	2J UG/L
BUTYL BENZYL PHTHALATE	12 UG/L
ARSENIC	190 UG/L

SAMPLE NUMBER SH02-GW-MW202B
DATE SAMPLED 7-18-89

DIETHYL PHTHALATE	2J UG/L
ARSENIC	16.1J UG/L

SAMPLE NUMBER SH02-SU-MW202-A
DATE SAMPLED 11-09-88
SAMPLE DEPTH 25 FEET

ARSENIC	1.1 MG/KG
BERYLLIUM	1.4 MG/KG
CHROMIUM	26 MG/KG
LEAD	J 5.6 MG/KG
NICKEL	24 MG/KG

SAMPLE NUMBER SH02-GW-MW202-A
DATE SAMPLED 12-20-88

CHLORIDE	1335 MG/L
SULFATE	2885 MG/L
TDS	14542 MG/L
BROMINE	2.0 MG/L

SAMPLE NUMBER SH02-SU-MW203-A
DATE SAMPLED 11-10-88
SAMPLE DEPTH 15 FEET

ARSENIC	J 3.7 MG/KG
BERYLLIUM	0.52 MG/KG
CHROMIUM	26 MG/KG
LEAD	J 2.58 MG/KG
NICKEL	24 MG/KG

SAMPLE NUMBER SH02-SS-002-1
DATE SAMPLED 12-08-88

BIS(2-ETHYLHEXYL)PHTHALATE	70 UG/KG
ARSENIC	J 1.7 MG/KG
CHROMIUM	J 7.5 MG/KG
COPPER	15.8 MG/KG
LEAD	17.5 MG/KG
MERCURY	0.3 MG/KG
ZINC	22.1 MG/KG

SAMPLE NUMBER SH02-GW-MW204A
DATE SAMPLED 7-18-89

DIETHYL PHTHALATE	2J UG/L
ARSENIC	(4.2) UG/L
CHROMIUM	45.8 UG/L

SAMPLE NUMBER SH02-SU-MW204A
DATE SAMPLED 7-13-89
SAMPLE DEPTH 5 FEET

ARSENIC	4.4J MG/KG
BERYLLIUM	0.54 MG/KG
CADMIUM	0.97 MG/KG
CHROMIUM	14 : 2 MG/KG
COPPER	6.7 MG/KG
LEAD	19.4J MG/KG
NICKEL	J 3.4 MG/KG
SILVER	2.1 MG/KG
ZINC	44.6 MG/KG
% MOISTURE	7.4
pH	7.8
TOTAL ORGANIC CARBON	99 MG/KG

SAMPLE NUMBER SH02-SU-MW204B
DATE SAMPLED 7-13-89
SAMPLE DEPTH 13 FEET

ANTIMONY	11.1J MG/KG
ARSENIC	1.5J MG/KG
BERYLLIUM	(0.43) MG/KG
CHROMIUM	11.4 MG/KG
COPPER	5.5 MG/KG
LEAD	7.5J MG/KG
NICKEL	J 1.6 MG/KG
SILVER	1.1 MG/KG
ZINC	13.8 MG/KG
% MOISTURE	7.8
pH	8.2
TOTAL ORGANIC CARBON	200 MG/KG

SAMPLE NUMBER SH02-SS-003-1
DATE SAMPLED 12-08-88

BIS(2-ETHYLHEXYL)PHTHALATE	100 UG/KG
ARSENIC	J 2.9 MG/KG
CHROMIUM	J 63.5 MG/KG
COPPER	J 17.1 MG/KG
LEAD	3.92 MG/KG
MERCURY	0.3 MG/KG
ZINC	5.3 MG/KG

SAMPLE NUMBER SH02-SS-001-1
DATE SAMPLED 12-07-88

BIS(2-ETHYLHEXYL)PHTHALATE	60 UG/KG
ARSENIC	J 3.5 MG/KG
CHROMIUM	J 15.1 MG/KG
COPPER	J 38.2 MG/KG
LEAD	J 21.9 MG/KG
MERCURY	0.3 MG/KG
NICKEL	J 2.2 MG/KG
ZINC	35.5 MG/KG

SAMPLE NUMBER SH02-SU-MW201-A
DATE SAMPLED 11-08-88
SAMPLE DEPTH 28 FEET - DUPLICATE

ARSENIC	1.84 MG/KG
BERYLLIUM	0.56 MG/KG
CHROMIUM	14 MG/KG
LEAD	J 12.6 MG/KG
NICKEL	16 MG/KG
ZINC	55 MG/KG
CEC	7.6

SAMPLE NUMBER SH03-GW-MW201-A
DATE SAMPLED 12-20-88

SELENIUM	1.0 UG/L
CHLORIDE	1332 MG/L
NITRATE	58.6 MG/L
SULFATE	1197 MG/L
TDS	11788 MG/L
BROMINE	15.0 MG/L

SAMPLE NUMBER SH02-SU-MW201-X
DATE SAMPLED 11-08-88
DUPLICATE

ARSENIC	1.64 MG/KG
BERYLLIUM	0.77 MG/KG
CHROMIUM	17 MG/KG
LEAD	J 6.2 MG/KG
NICKEL	17 MG/KG
ZINC	65 MG/KG
CEC	5.4

SAMPLE NUMBER SH02-GW-MW201B
DATE SAMPLED 7-18-89

ARSENIC	11.5 UG/L
SELENIUM	(0.50) UG/L

NOTES:

1) SURFACE SOIL SAMPLES SH03-SS-SS204-A THROUGH 215A ALL CONTAINED NO COMPOUNDS ABOVE DETECTABLE LIMITS.
2) LOCATIONS OF SAMPLES ARE LOCATED THOUGHOUT THE LANDFILL NO. 2 AREA.
3) J PREFIX FOR ANALYTICAL RESULTS INDICATE VALUE IS APPROXIMATE.

FIGURE I-11
SURFACE SOIL, SUBSURFACE SOIL AND GROUND-WATER ANALYTICAL DATA COMPOUNDS DETECTED

FIRE PROTECTION TRAINING AREA 2 (FT02) AND LANDFILL 2 (LF05)

SHEPPARD AIR FORCE BASE

NUS CORPORATION

MONITORING WELL LOCATION/ELEVATION SCHEDULE

Well Number	Longitude	Latitude	Easting(1)	Northing(1)	Elevation(2)
MW-4	98°30'50.521"	33°59'44.788"	1692627.400	848857.860	994.78
MW-7	98°31'1.538"	33°59'2.290"	1691658.220	844571.030	1029.67
MW-402	98°30'49.955"	33°59'34.490"	1692665.080	847816.380	1006.05
MW-403	98°30'59.964"	33°59'31.677"	1691819.520	847540.250	1008.08
MW-11-1	98°31'2.097"	33°59'26.742"	1691635.120	847043.120	1006.25
MW-8	98°30'15.113"	33°59'29.823"	1695594.260	847316.460	1001.30
MW-9	98°30'9.848"	33°59'25.777"	1696033.660	846903.320	995.84
MW-10	98°30'7.651"	33°59'28.263"	1696221.040	847152.820	995.43
MW-701	98°30'7.501"	33°59'26.016"	1696231.490	846925.590	994.97
MW-702	98°30'5.509"	33°59'27.423"	1696400.580	847066.190	994.26

Note: All surveying data provided by Brannon Engineering, Inc., Wichita Falls, Texas.

(1) Texas State Plane Coordinates.
(2) Elevations shown are top of riser elevations in feet above mean sea level.

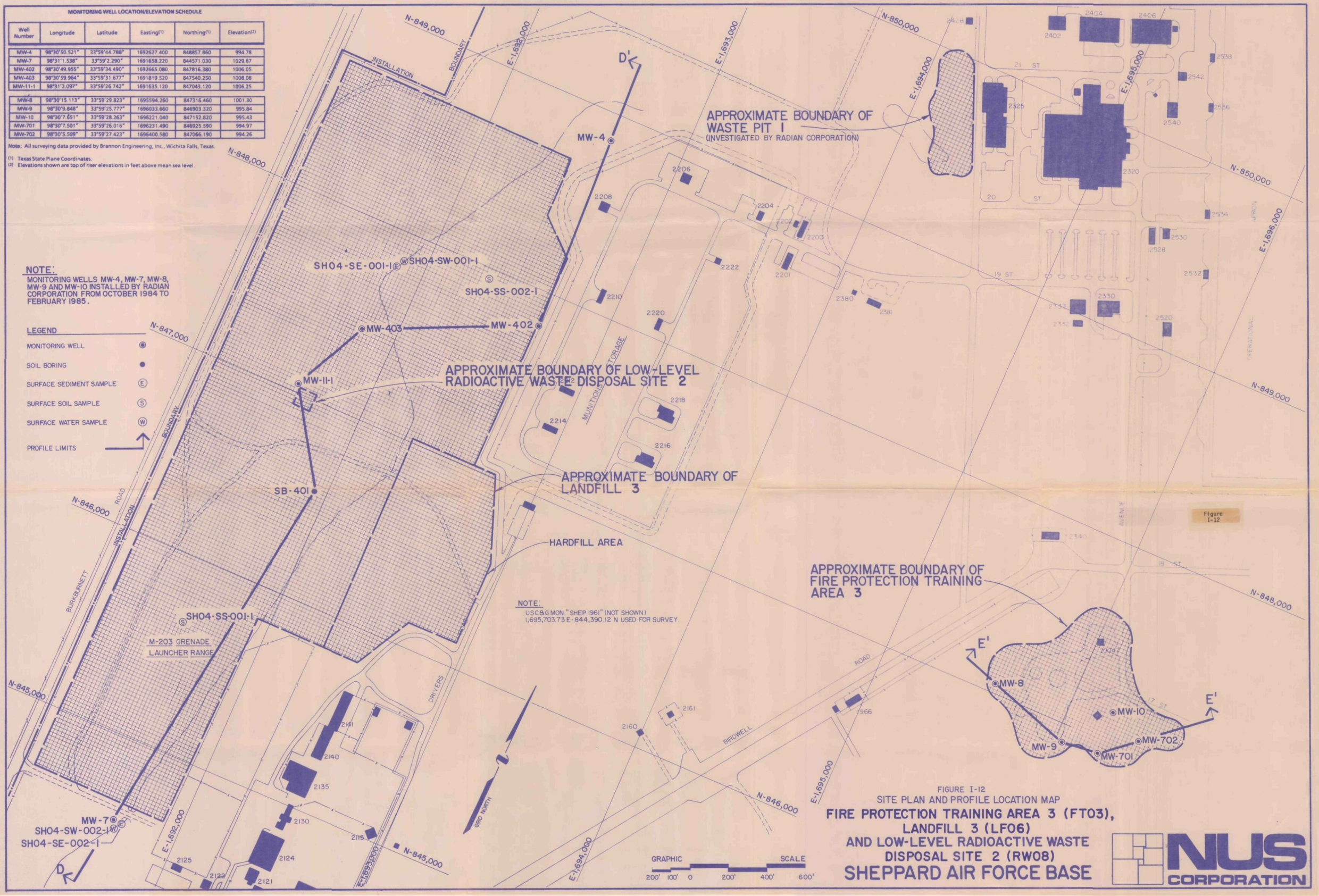
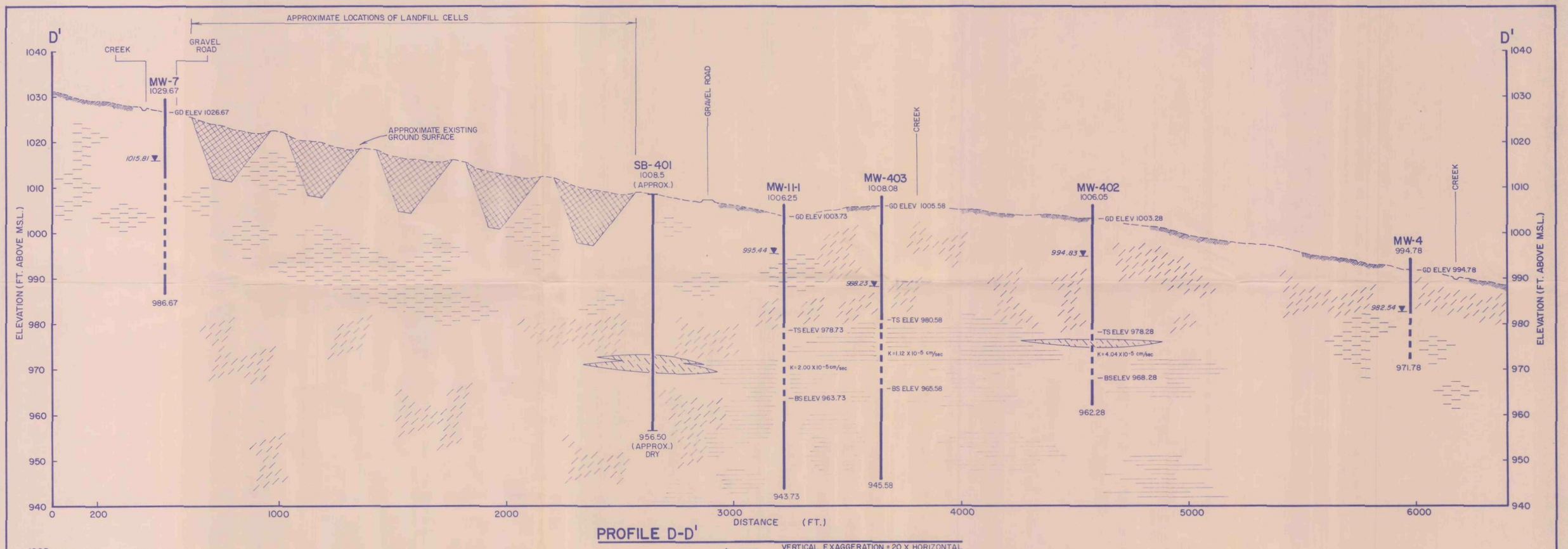


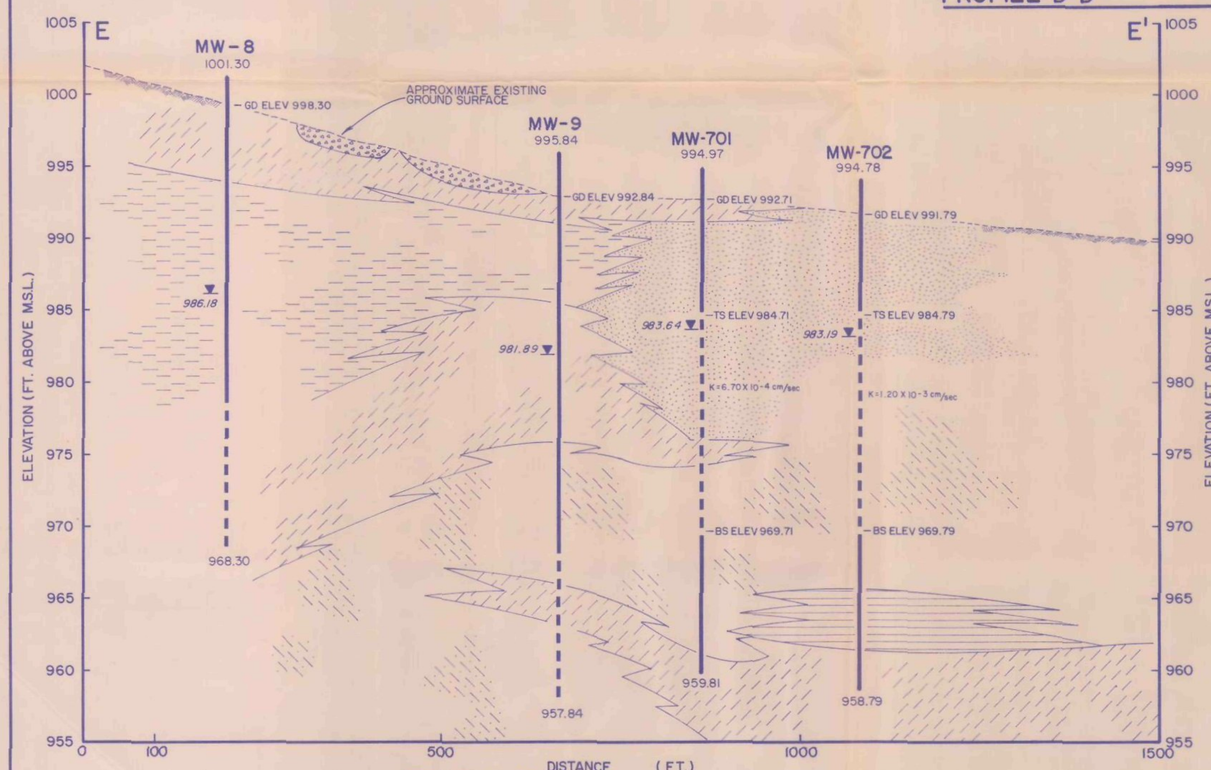
FIGURE I-12
SITE PLAN AND PROFILE LOCATION MAP
FIRE PROTECTION TRAINING AREA 3 (FT03), LANDFILL 3 (LF06) AND LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2 (RW08)
SHEPPARD AIR FORCE BASE

NUS CORPORATION



PROFILE D-D'

VERTICAL EXAGGERATION = 20 X HORIZONTAL



PROFILE E-E'

VERTICAL EXAGGERATION = 20 X HORIZONTAL

LEGENDS

LITHOLOGIC SYMBOLS

CLAY REDDISH-BROWN TO DARK GREYISH-BROWN, OCCASIONALLY MOTTLED YELLOWISH-BROWN OR GREENISH-GREY. SILT, RARELY SANDY, STIFF TO HARD, OFTEN CONTAINS RELICT BEDDING, GENERALLY HOMOGENEOUS. GRADES AT DEPTH TO WEATHERED SHALE AND SILTSTONE. RARE AUTHIGENIC MINERALS

SILT REDDISH-BROWN MOTTLED GREYISH-BROWN, YELLOWISH-BROWN AND GREENISH-GREY, CLAYEY, SOMETIMES SANDY, FINE GRAINED, FIRM TO HARD, GENERALLY HOMOGENOUS, OFTEN CONTAINS RELICT FEATURES OF PARENT MATERIAL. GRADES AT DEPTH TO WEATHERED SILTSTONE. RARE AUTHIGENIC GRANULES

SAND LIGHT BROWN TO BROWN, OCCASIONALLY YELLOWISH-BROWN, SOMETIMES GREENISH-GREY, SILTY, CLAYEY, VERY FINE TO FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, OCCASIONAL RELICT BEDDING. USUALLY GRADES TO WEATHERED SANDSTONE, SOME OPAQUE MINERALS COMMON

SHALE OR SILTSTONE MOTTLED BROWN AND GREYISH-BROWN, WEATHERED, GENERALLY MASSIVE, OCCASIONALLY FISSILE, OFTEN CONTAINS SUBVERTICAL FRACTURES

SANDSTONE LIGHT GREENISH-GREY TO GREY, OR YELLOWISH-BROWN, FINE TO VERY FINE GRAINED, MODERATE TO WELL SORTED, ROUNDED, THINLY BEDDED AND CROSS-BEDDED, OFTEN MASSIVE, SILTY MATRIX, OCCASIONAL ABUNDANT OPAQUE MINERALS, RARE FRACTURES, OFTEN WEATHERED

CRUSHED STONE

FILL

MONITORING WELL

MW-100 — MONITORING WELL DESIGNATION
1000.00 — TOP OF RISER ELEVATION
-10 ELEV — GROUND SURFACE ELEVATION
-15 ELEV — TOP OF SCREEN ELEVATION
▼ — WATER LEVEL ON DATE INDICATED
K=7.28 X 10-5 cm/sec — HYDRAULIC CONDUCTIVITY
-35 ELEV — BOTTOM OF SCREEN ELEVATION
-40 ELEV — WELL CAP ELEVATION
944.50 — BOTTOM OF BORING ELEVATION

SOIL BORING

SB-100 — SOIL BORING DESIGNATION
1000.00 — GROUND SURFACE ELEVATION
944.50 — BOTTOM OF BORING ELEVATION

NOTES:

1) WATER TABLE DATA SHOWN COLLECTED ON JANUARY 17, 1989.
2) SOIL BORING SB-401 NOT SURVEYED VERTICALLY.
3) MONITORING WELLS MW-4, MW-7, MW-8 AND MW-9 INSTALLED BY RADIAN CORPORATION.
4) HYDRAULIC CONDUCTIVITY VALUES DERIVED FROM SLUG TESTS.

FIGURE I-13
PROFILES D-D' AND E-E'

FIRE PROTECTION TRAINING AREA 3 (FT03), LANDFILL 3 (LF06) AND LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2 (RW08)

SHEPPARD AIR FORCE BASE

NUS CORPORATION

FIGURE I-14
GROUND-WATER CONTOUR MAP
ON JANUARY 17, 1989

FIRE PROTECTION TRAINING AREA 3 (FT03), LANDFILL 3 (LF06) AND LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2 (RW08)

SHEPPARD AIR FORCE BASE

Figure I-14

NUS CORPORATION

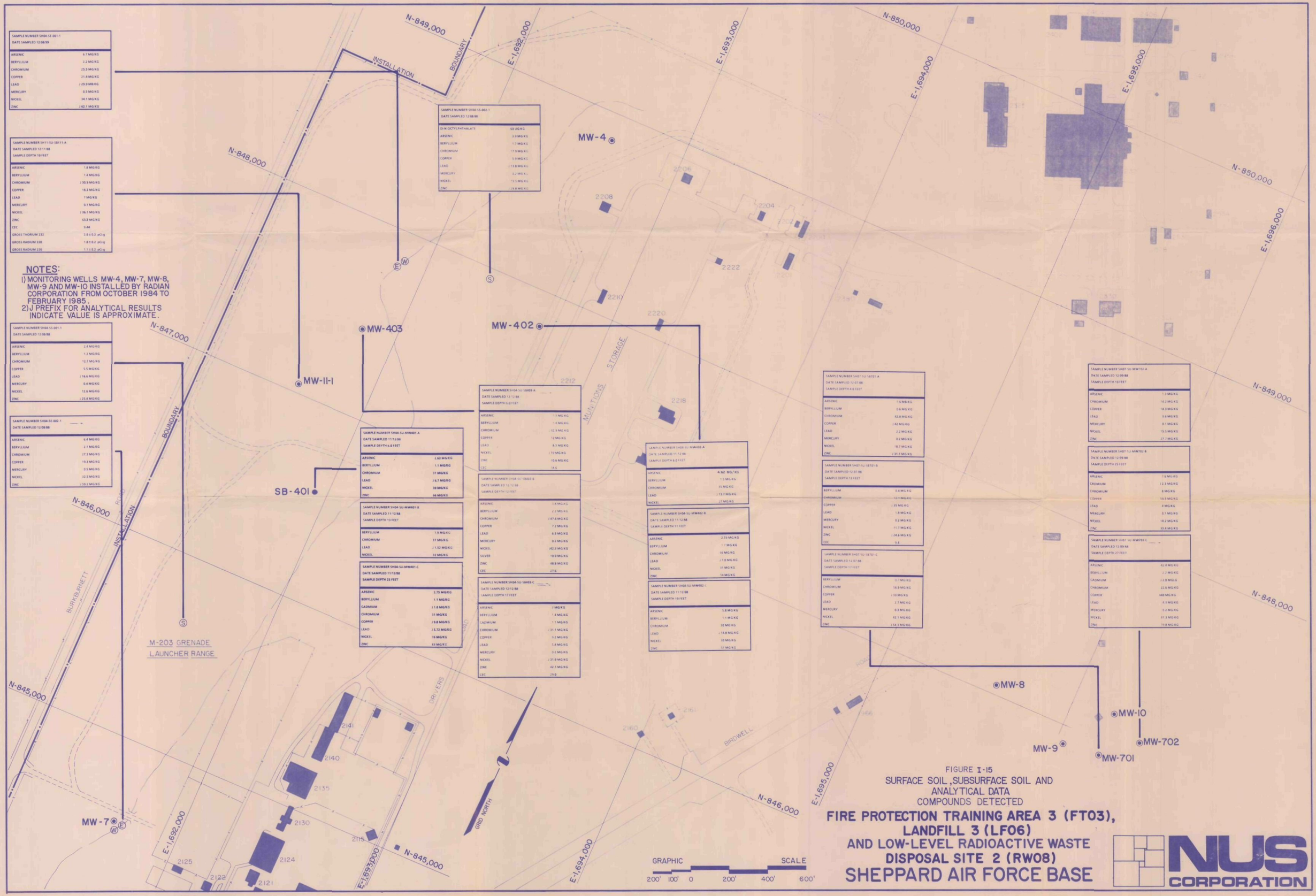


FIGURE I-15
SURFACE SOIL, SUBSURFACE SOIL AND ANALYTICAL DATA
COMPOUNDS DETECTED

FIRE PROTECTION TRAINING AREA 3 (FT03), LANDFILL 3 (LF06) AND LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2 (RW08)

SHEPPARD AIR FORCE BASE

NUS CORPORATION

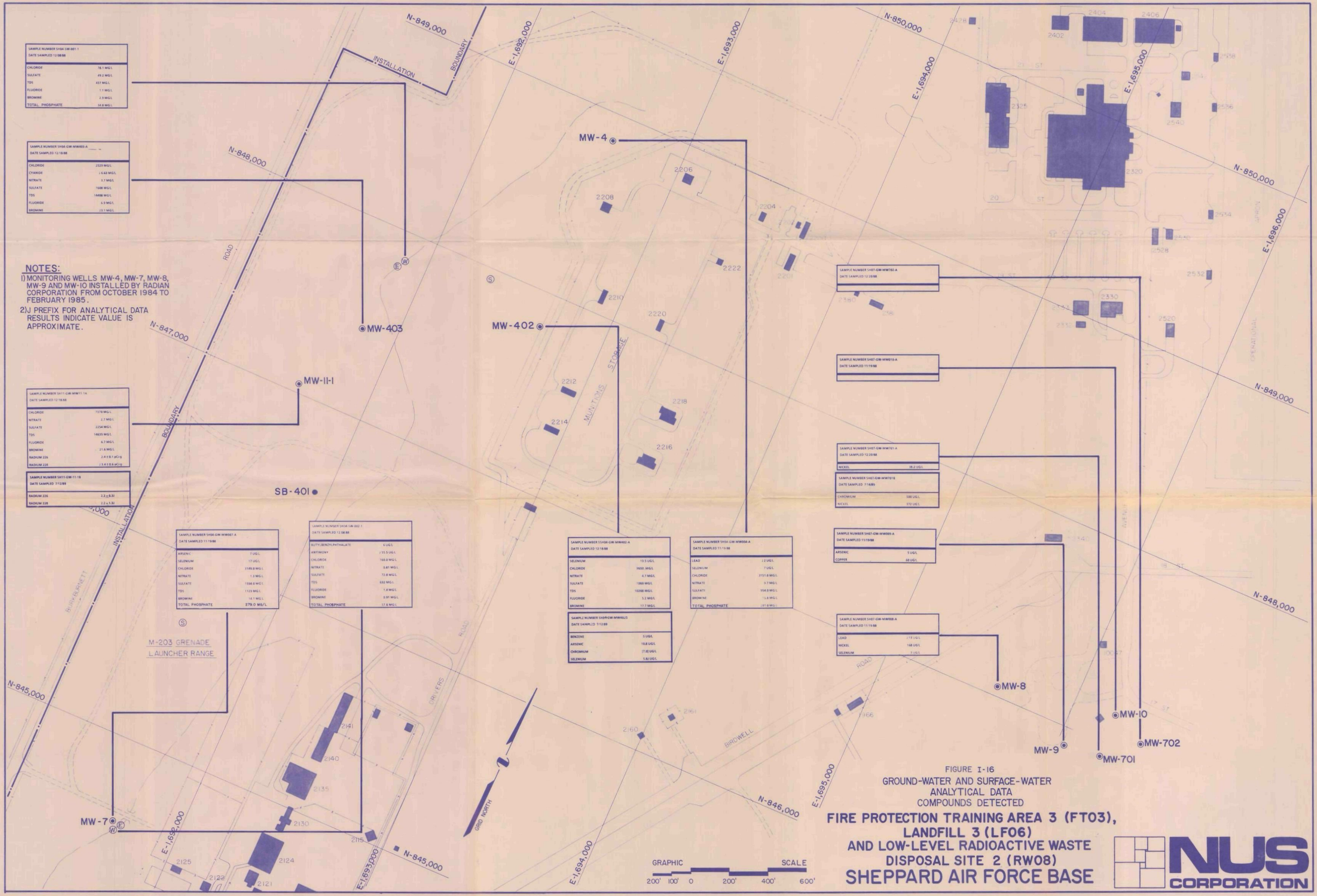


FIGURE I-16
GROUND-WATER AND SURFACE-WATER ANALYTICAL DATA COMPOUNDS DETECTED

FIRE PROTECTION TRAINING AREA 3 (FT03), LANDFILL 3 (LF06) AND LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE 2 (RW08)

SHEPPARD AIR FORCE BASE

NUS CORPORATION