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MCB CAMP LEJUENE
5090.3a

FINAL REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 1 (OU 1) SITES 21, 24 AND 78 VOLUME 3 APPENDICES MCB CAMP LEJEUNE NC

06/01/1994

BAKER ENVIRONMENTAL, INC

6/1/94 - 04388

FINAL
REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT NO. 1
(SITES 21, 24, AND 78)

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA
APPENDICES
VOLUME 3

Doc. No.: CLEJ-06269-1.05-04/01/83

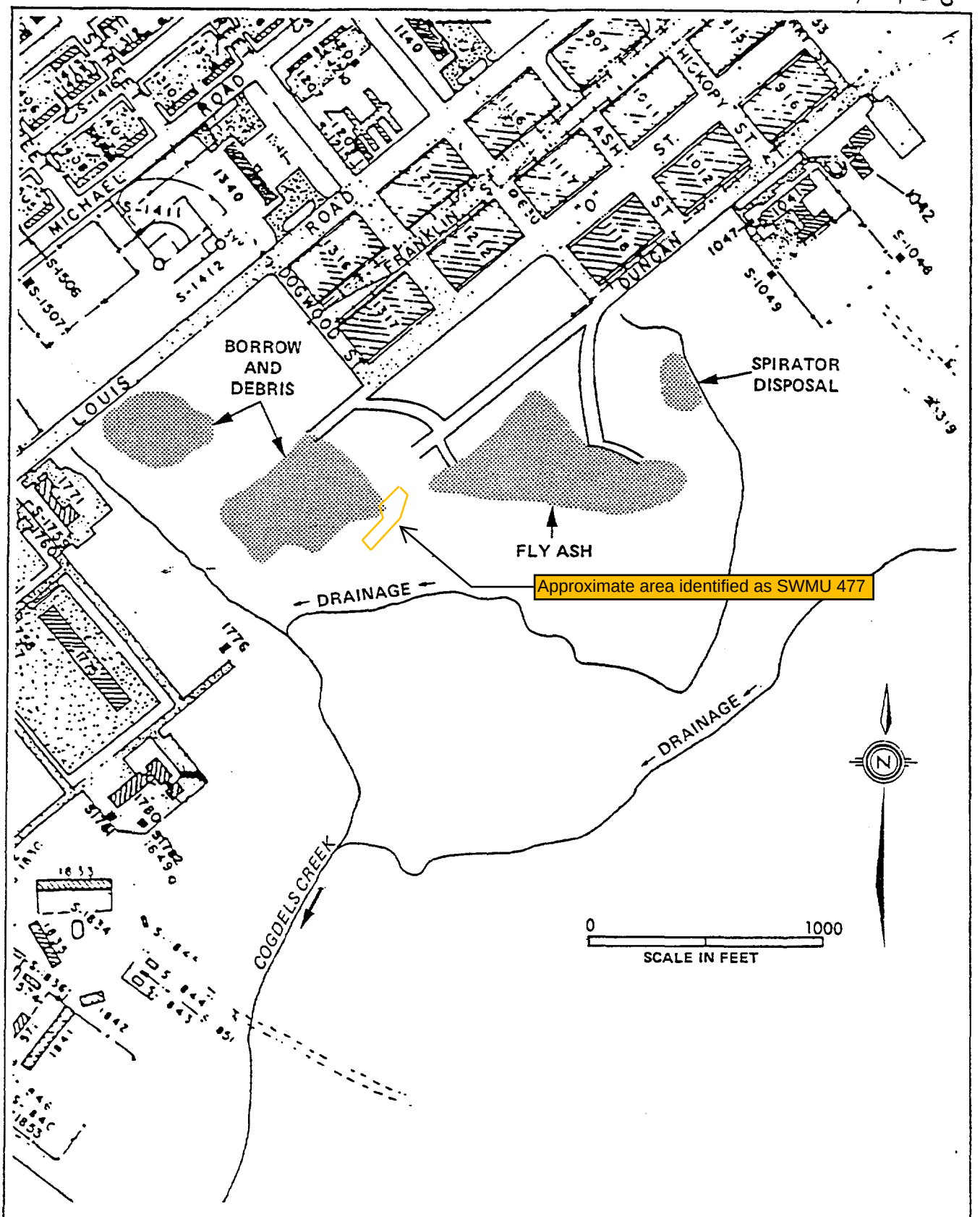
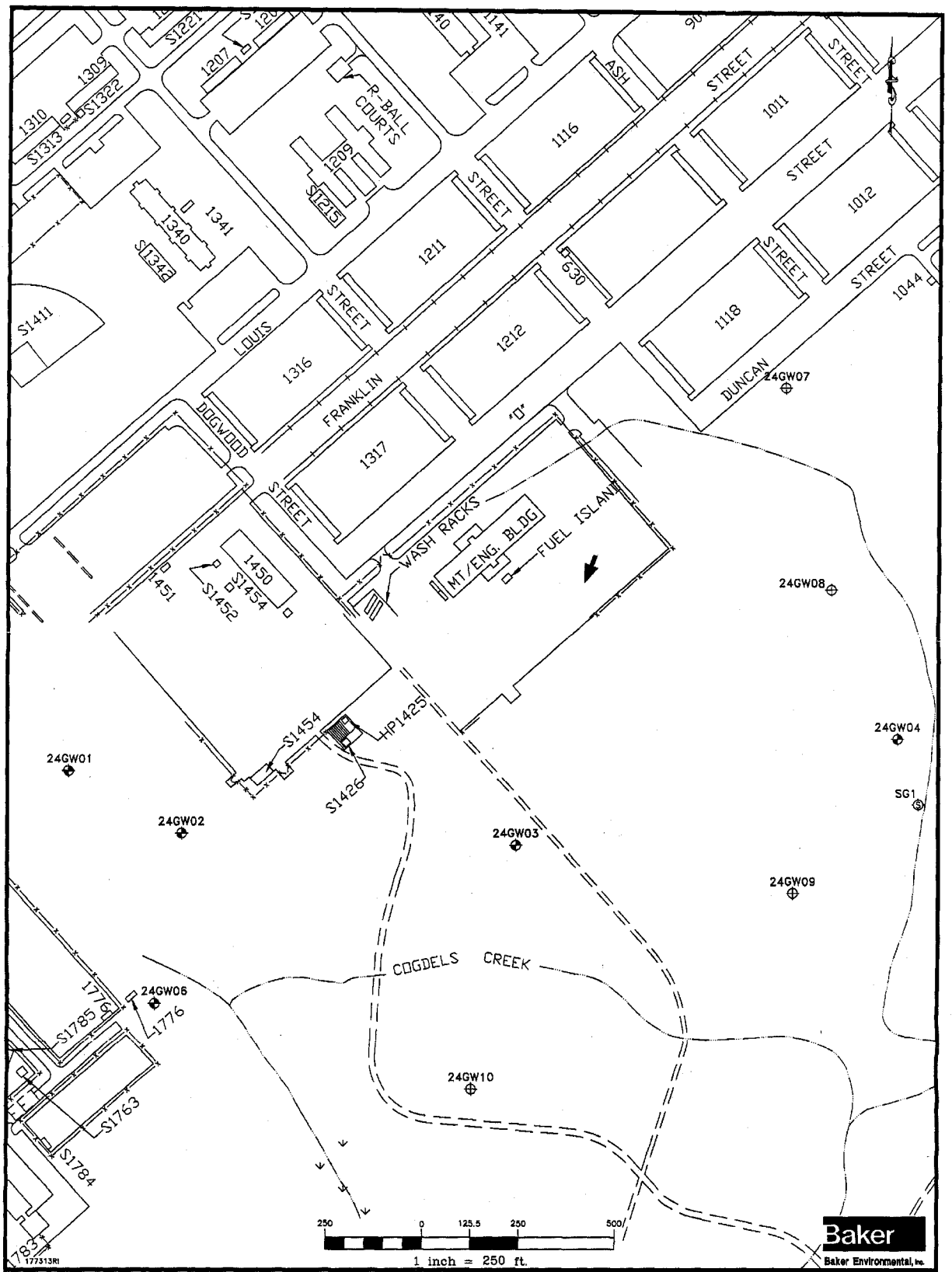


FIGURE 6–14
Detail of Site No. 24, Industrial Area Fly Ash Dump

SOURCE: BASE PUBLIC WORKS DEVELOPMENT MAP, SHEET 10 OF 24, JUNE 30, 1979.



LEGEND

24GW01 EXISTING SHALLOW MONITORING WELL INSTALLED BY ESE, 1984-1986

24GW07 SHALLOW MONITORING WELL INSTALLED BY BAKER ENVIRONMENTAL, INC., 1993

SG1 STAFF GAUGE INSTALLED BY BAKER ENVIRONMENTAL, INC., 1993

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

SOURCE: LANTDIV, FEBRUARY 1992

FIGURE 2-8
MONITORING WELL AND
STAFF GAUGE LOCATIONS
SITE 24
REMEDIAL INVESTIGATION CTO-0177
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

01271V14Z

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

	MINIMUM NONDETECTED MG/KG	MAXIMUM NONDETECTED MG/KG	MINIMUM DETECTED MG/KG	MAXIMUM DETECTED MG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
ALUMINUM	NA	NA	964	19800	24-BM-SB10-02	59 / 59
ANTIMONY	1.4 U	4.8 U	ND	ND	ND	0 / 59
ARSENIC	0.4 U	0.5 U	0.46 B	15 J	24-BM-SB06-05	39 / 59
BARIUM	NA	NA	3 B	628 J	24-BM-SB06-04	59 / 59
BERYLLIUM	0.21 U	0.24 U	0.2 B	3.8	24-BM-SB07-04	29 / 59
CADMIUM	1 U	2.4 U	ND	ND	ND	0 / 59
CALCIUM	13.9 U	61.2 U	20.9 B	62200	24-BM-SB08-03	46 / 59
CHROMIUM	2.2 U	2.4 U	2.1 J	32.8	24-BM-SB10-02	57 / 59
COBALT	1.6 U	2 U	1.8 B	13.8 B	24-BM-SB06-04	12 / 59
COPPER	NA	NA	0.44 B	55	24-BM-SB06-04	59 / 59
IRON	NA	NA	411	17300	24-BM-SB10-02	59 / 59
LEAD	NA	NA	1.3 J	19.3 J	24-BM-SB06-05	59 / 59
MAGNESIUM	72.2 U	79.3 U	29.8 J	2950	24-BM-SB06-04	57 / 59
MANGANESE	1.2 U	2.4 U	1.6 B	113 J	24-BM-SB06-04	52 / 59
MERCURY	0.09 U	0.21 U	0.11	0.29	24-BM-SB07-04	4 / 59
NICKEL	4 U	8.5 U	8 B	96.2	24-BM-SB07-04	4 / 59
POTASSIUM	NA	NA	51.6 B	1710 B	24-BM-SB06-05	59 / 59
SELENIUM	0.2 U	0.46 U	0.25 J	11.9 J	24-BM-SB11-06	19 / 59
SILVER	0.6 U	1.4 U	ND	ND	ND	0 / 59
SODIUM	35.6 U	35.6 U	16.6 B	729 B	24-BM-SB06-04	58 / 59
THALLIUM	0.2 U	0.48 U	0.23	0.56 B	24-BM-SB11-06	3 / 59
VANADIUM	NA	NA	2 B	594	24-BM-SB07-04	59 / 59
ZINC	1.3 U	3.9 U	1.3 B	20.1 J	24-BM-SB06-04	46 / 59
CYANIDE	0.46 U	1 U	1.5	1.7	24-BM-SB06-05	2 / 58

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB02-04	24-BDA-SB03-03	24-BDA-SB04-03	24-BDA-SB05-01
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	7000	4240	4370	964	2480	11300
ANTIMONY	1.5 UJ	1.5 UJ	1.6 UJ	1.5 UJ	2.2 UJ	1.7 UJ
ARSENIC	0.49 B	0.47 B	1.3 B	0.44 U	0.44 UJ	1.4 B
BARIUM	9.5 B	6.4 B	9.7 B	3.1 B	6.3 B	17.8 B
BERYLLIUM	0.22 B	0.21 B	0.23 B	0.22 U	0.22 U	0.24 B
CADMIUM	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U
CALCIUM	145 J	80.6 J	286 J	125 J	143 B	89.8 J
CHROMIUM	7.7	4.1	2.8	2.2 U	4.2 J	10.9 J
COBALT	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.9 U
COPPER	1.1 B	0.64 B	1.1 B	0.44 B	1.3 J	2.8 B
IRON	1240	752	1190	411	556	3930
LEAD	4.3	4.1	3.3	1.5	1.9	6.4
MAGNESIUM	193 B	134 B	118 B	29.8 J	74.5 B	277 B
MANGANESE	3.8	3.4	13.6	2.4 B	2.6 J	5.2
MERCURY	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
NICKEL	4.4 U	4.3 U	4.6 U	4.4 U	4.4 U	4.7 U
POTASSIUM	250 B	184 B	178 B	51.6 B	112 B	252 B
SELENIUM	0.33 J	0.45 J	0.23 UJ	0.22 UJ	0.22 UJ	0.24 UJ
SILVER	0.66 U	0.64 U	0.69 U	0.66 U	0.66 U	0.71 U
SODIUM	39.2 J	43.1 J	54.7 J	48.4 J	35.6 U	50 B
THALLIUM	0.22 U	0.21 U	0.23 U	0.22 U	0.22 U	0.24 U
VANADIUM	6.4 B	3.4 B	7.6 B	2 B	2.6 B	18
ZINC	2.7 B	1.7 B	1.8 B	1.3 B	1.7 J	4.5 B
CYANIDE	0.56 U	0.52 U	0.58 U	0.54 U	0.56 U	0.58 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB06-01	24-BDA-SB07-01A	24-BDA-SB08-01A	24-BDA-SB09-01	24-BDA-SB10-01A	24-BDA-SB11-02
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	5570	4430 J	2470 J	6120	2830	5700
ANTIMONY	1.6 UJ	1.5 UJ	1.5 UJ	1.4 UJ	1.6 UJ	1.5 UJ
ARSENIC	0.52 B	0.62 B	1 B	0.4 U	1.7 J	0.59 B
BARIUM	10.1 B	6 B	4.3 B	13 B	6.8 B	8.6 B
BERYLLIUM	0.23 U	0.22 U	0.21 U	0.2 B	0.24 U	0.22 U
CADMIUM	1.1 U	1.1 U	1.1 U	1 U	1.2 U	1.1 U
CALCIUM	3950 J	1390	1410	556 B	467 B	93.7 B
CHROMIUM	6.1 J	4.6 J	2.1 J	9 J	7.3 J	7.9 J
COBALT	1.8 U	1.8 U	1.7 U	1.6 U	1.9 U	2.6 B
COPPER	1.4 B	1.1 B	0.85 B	2 B	2.1 J	1.3 B
IRON	2720	1290 J	1110 J	1730	2780	2200
LEAD	4.7	3.4 J	4.3 J	6.2 J	7	4.3 J
MAGNESIUM	196 B	133 B	83.6 B	277 B	105 B	229 B
MANGANESE	5	2.4 B	2.6 B	8.4 J	4.5 J	5 J
MERCURY	0.1 U	0.11 U	0.1 U	0.09 U	0.11 U	0.1 U
NICKEL	4.5 U	4.4 U	4.3 U	4 U	4.7 U	4.4 U
POTASSIUM	163 B	223 B	124 B	454 B	273 B	250 B
SELENIUM	0.23 UJ	0.22 U	0.21 U	0.2 UJ	0.47 J	0.22 UJ
SILVER	0.68 U	0.66 U	0.64 U	0.6 U	0.71 U	0.66 U
SODIUM	57.9 B	26.1 B	16.6 B	45.6 B	81.3 B	42.8 B
THALLIUM	0.23 U	0.22 UJ	0.21 UJ	0.2 U	0.24 U	0.22 U
VANADIUM	9 B	10 B	4.9 B	10	11.3 B	8.6 B
ZINC	4.3 B	1.3 U	1.3 B	7.8	8.7 J	2.9 B
CYANIDE	0.54 U	0.55 U	0.54 U	0.47 U	0.59 U	0.54 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB12-01A	24-BDA-SB13-01A	24-BM-SB01-04	24-BM-SB02-04	24-BM-SB03-04	24-BM-SB04-03
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	2180 J	4070	7780	5730	8410	5110
ANTIMONY	1.7 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.5 UJ	1.6 UJ
ARSENIC	1.2 B	0.78 B	1.6 B	0.46 U	0.66 B	0.92 J
BARIUM	12.1 B	7.6 B	9 B	13.8 B	9.4 B	6.3 B
BERYLLIUM	0.24 U	0.23 U	0.23 U	0.23 U	0.22 U	0.22 U
CADMIUM	1.2 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U
CALCIUM	1710	345 J	106 J	560 J	170 J	35.3 B
CHROMIUM	4.1 J	3.4 J	8.4	10.6	10.5	6.7 J
COBALT	1.9 U	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U
COPPER	2.4 B	1.1 B	1.1 B	0.92 B	1.1 B	0.89 B
IRON	1640 J	1170	1770	1620	1640	1060 J
LEAD	14.9 J	4.9	3.6	4.5	3.4	5.1 J
MAGNESIUM	99.6 B	102 B	253 B	272 B	316 B	190 B
MANGANESE	8.2	3.2 B	3.6	5.1	5.7	4 J
MERCURY	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U
NICKEL	4.8 U	4.6 U	4.5 U	4.6 U	4.4 U	4.5 U
POTASSIUM	100 B	167 B	339 B	302 B	503 B	343 B
SELENIUM	0.32 J	0.23 UJ	0.23 UJ	0.23 UJ	0.33 J	0.25 J
SILVER	0.73 U	0.69 U	0.68 U	0.69 U	0.66 U	0.67 U
SODIUM	37.3 B	50.5 B	56.4 B	39.1 B	46.3 B	48.3 B
THALLIUM	0.24 UJ	0.23 U	0.23 B	0.23 U	0.22 U	0.22 U
VANADIUM	6.8 B	6.9 B	9.7 B	9.2 B	10.7 B	7.8 B
ZINC	15.3	4.4 B	4.5	3.5 B	4.1 B	3.1 B
CYANIDE	0.61 U	0.56 U	0.55 U	0.57 U	0.56 U	0.58 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BM-SB05-04	24-BM-SB05-05	24-BM-SB06-04	24-BM-SB06-05	24-BM-SB07-04	24-BM-SB08-03
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	3510	12400	16900	10800	11000	3190
ANTIMONY	1.7 UJ	1.7 UJ	2.6 UJ	3 UJ	4.8 UJ	1.4 UJ
ARSENIC	1.2 B	1.4 B	12.3 J	15 J	9.2 J	5.2
BARIUM	9 B	11.5 B	628 J	213 J	467	126
BERYLLIUM	0.24 U	0.24 U	3.7	1.7 B	3.8	1
CADMIUM	1.2 U	1.2 U	1.9 UJ	2.1 UJ	2.4 U	1 U
CALCIUM	3840	76.2 B	29600 J	8300 J	19000	62200
CHROMIUM	2.4 UJ	13.4 J	12.3 J	8.9 J	8.2 J	5.2 J
COBALT	1.9 U	2.2 B	13.8 B	6.8 B	11.5 B	4.4 B
COPPER	1.2 B	1.9 B	55	28.9	42.8 J	12.4
IRON	1500	2340	13600 J	4960 J	10800	3590
LEAD	6.5 J	4.5 J	10.8 J	19.3 J	10.6	5.2 J
MAGNESIUM	123 B	425 B	2950	730 B	2360 B	428 B
MANGANESE	9.2 J	7.4 J	113 J	24.2 J	78.8 J	22.8 J
MERCURY	0.12 U	0.12 U	0.18 U	0.21 U	0.29	0.1 U
NICKEL	4.7 U	4.8 U	19.3	8.5 U	96.2	8.6
POTASSIUM	98.2 B	677 B	1030 B	1710 B	1110 B	564 B
SELENIUM	0.24 UJ	0.31 J	5.1 J	3.7 J	7.8 J	0.94 J
SILVER	0.71 U	0.72 U	1.1 U	1.3 U	1.4 U	0.6 U
SODIUM	42.6 B	87.9 B	729 B	665 B	559 B	119 B
THALLIUM	0.24 U	0.24 U	0.37 U	0.51 B	0.48 U	0.2 U
VANADIUM	6.2 B	16.7	116	28.5	594	78.6
ZINC	6.2	9.3	20.1 J	12.7 J	17.3 J	8.2
CYANIDE	0.58 U	0.59 U	0.92 U	1.7	1.5	0.46 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BM-SB09-01	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB11-07	24-BM-SB12-03	24-BM-SB12-05
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	8560	19800	7320	8100	6760	10800
ANTIMONY	1.4 UJ	1.8 UJ	2.8 UJ	1.6 UJ	1.7 UJ	1.7 UJ
ARSENIC	4.3	5.4	10.4 J	4.4 J	0.57 J	6.7 J
BARIUM	11.8 B	27.4 B	220 J	12.5 J	9.5 J	12.8 J
BERYLLIUM	0.2 B	0.26 B	2.4	0.24 B	0.24 B	0.24 B
CADMIUM	1 U	1.3 U	2 UJ	1.2 UJ	1.2 UJ	1.2 UJ
CALCIUM	741 B	66.8 J	10700 J	421 J	39.5 UJ	31.7 UJ
CHROMIUM	14.8 J	32.8	13.2 J	10.8 J	5.9 J	14.9 J
COBALT	1.6 U	3.1 B	8.4 B	1.9 U	1.9 U	1.9 U
COPPER	2.6 B	5.9 B	38.3	2.4 B	0.95 B	2.6 B
IRON	10100	17300	6660 J	5110 J	1490 J	7270 J
LEAD	7.1 J	7.3	6.5 J	5.6 J	3.7 J	5.6 J
MAGNESIUM	508 B	1000 B	509 B	273 B	202 B	416 B
MANGANESE	8 J	13.2	50.3 J	4 J	3.6 J	5.4 J
MERCURY	0.09 U	0.13 U	0.29	0.1 U	0.11 U	0.09 U
NICKEL	4 U	5.2 U	8 B	4.7 U	4.7 U	4.7 U
POTASSIUM	629 B	1200 B	1240 B	490 B	256 B	685 B
SELENIUM	0.5 J	0.65 J	11.9 J	0.66 J	0.24 UJ	0.24 UJ
SILVER	0.6 U	0.77 U	1.2 U	0.71 U	0.71 U	0.71 U
SODIUM	41 B	84.1 B	280 B	50.9 B	36 B	66.9 B
THALLIUM	0.2 U	0.26 U	0.56 B	0.24 U	0.24 U	0.24 U
VANADIUM	18.8	43.1	50.3	18.1	7.1 J	24.3
ZINC	10	10.3	10.8 J	3.1 J	2.4 J	4.7 J
CYANIDE	0.5 U	0.65 U	1 U	0.58 U	0.59 U	0.56 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BM-SB13-04	24-BM-SB14-04	24-BM-SB15-04	24-BM-SB15-06	24-SSA-SB01-03	24-SSA-SB01-05
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	5840	8630	6720	12500	9040	8480
ANTIMONY	1.6 UJ	1.6 UJ	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ
ARSENIC	0.61 B	0.97 B	1.1 B	3.5	1.2 B	0.49 U
BARIUM	11 B	12.9 B	6.4 B	13.3 B	7.6 B	7.8 B
BERYLLIUM	0.23 U	0.23 U	0.22 U	0.24 B	0.23 B	0.24 U
CADMIUM	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
CALCIUM	93.3 B	98.3 B	35.1 B	20.9 B	217 J	83.5 J
CHROMIUM	5.4 J	11.3 J	5.8 J	15.4 J	11.1	8.8
COBALT	1.9 U	2.3 B	1.8 B	2.6 B	1.8 U	1.9 U
COPPER	1.2 B	1.4 B	0.89 B	2.4 B	0.92 B	1.2 B
IRON	1510 J	2140 J	1340 J	4800 J	1610	935
LEAD	3.7 J	3.6 J	3.2 J	6.1 J	3.9 J	5.9 J
MAGNESIUM	191 B	338 B	179 B	482 B	149 B	186 B
MANGANESE	4.2 J	5.3 J	3.8 J	9.3 J	2.3 B	3.4 B
MERCURY	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U
NICKEL	4.7 U	4.6 U	4.4 U	4.8 U	4.6 U	4.9 U
POTASSIUM	218 B	427 B	231 B	744 B	298 B	347 B
SELENIUM	0.33 J	0.28 J	0.4 J	0.29 J	0.23 U	0.34 U
SILVER	0.7 U	0.69 U	0.67 U	0.71 U	0.69 U	0.73 U
SODIUM	49.7 B	57.8 B	40.6 B	50.8 B	39.2 B	55 B
THALLIUM	0.23 U	0.23 U	0.22 U	0.24 U	0.23 U	0.24 U
VANADIUM	7 B	12.5	6.4 B	20.2	11.5	8.5 B
ZINC	7.2	9.9	3.6 B	6.4	2.5 J	2.2 J
CYANIDE	0.58 U	0.58 U	0.55 U	0.58 U	0.61 U	0.53 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-03	24-SSA-SB03-06	24-SSA-SB04-04	24-SSA-SB04-06
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	6720	8290	7480	3590	7680	2430
ANTIMONY	1.6 UJ	1.7 UJ	1.6 UJ	1.6 UJ	1.5 UJ	1.6 UJ
ARSENIC	0.46 U	0.48 U	2.4 J	0.71 J	0.44 U	0.46 B
BARIUM	7.6 B	8.7 B	8 J	4.5 J	8.7 B	3 B
BERYLLIUM	0.23 B	0.24 B	0.23 B	0.22 B	0.22 B	0.23 U
CADMIUM	1.2 U	1.2 U	1.1 UJ	1.1 UJ	1.1 U	1.2 U
CALCIUM	57.5 J	63.9 J	61.3 J	25.8 UJ	26.9 J	151 J
CHROMIUM	9	12.3	7.8 J	2.2 J	10.1	4.4
COBALT	2.1 B	1.9 U	1.8 U	1.8 U	1.7 U	1.8 U
COPPER	1.2 B	1.7 B	1.4 B	1.1 B	1.5 B	0.46 B
IRON	1210	1210	1650 J	819 J	1070	538
LEAD	3.3 J	4.8 J	4.5 J	2.3 J	4.5 J	2.4 J
MAGNESIUM	205 B	230 B	175 B	118 B	138 B	69.1 B
MANGANESE	3.2 B	3.1 B	2.5 J	2 J	2.6 B	1.6 B
MERCURY	0.1 U	0.12 U	0.13	0.11	0.09 U	0.1 U
NICKEL	4.6 U	4.8 U	4.6 U	4.5 U	4.4 U	4.6 U
POTASSIUM	327 B	398 B	237 B	210 B	269 B	133 B
SELENIUM	0.25 U	0.41 UJ	0.23 UJ	0.22 UJ	0.22 U	0.23 U
SILVER	0.7 U	0.72 U	0.69 U	0.67 U	0.66 U	0.69 U
SODIUM	51.2 B	52.3 B	51.5 B	42.3 B	42.6 B	34.4 B
THALLIUM	0.23 U	0.24 U	0.23 U	0.22 U	0.22 U	0.23 U
VANADIUM	8.8 B	9.9 B	8.9 B	5.3 J	10.7 B	3.9 J
ZINC	3 J	2.7 J	1.4 UJ	1.3 UJ	2.8 J	1.6 J
CYANIDE	0.57 U	0.61 U	0.57 U	0.55 U	0.55 U	0.55 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03	24-GW07-04	24-GW07-05	24-GW08-05
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	7820	4220	9530	5250	4260	4480
ANTIMONY	1.7 UJ	1.7 UJ	1.7 UJ	1.6 UJ	1.6 UJ	1.7 UJ
ARSENIC	0.5 U	0.48 U	0.48 U	0.46 U	0.45 U	0.47 U
BARIUM	8.7 B	5.5 B	10.5 B	6.4 B	4.9 B	6.2 B
BERYLLIUM	0.25 B	0.24 B	0.24 B	0.23 U	0.22 U	0.24 U
CADMIUM	1.2 U	1.2 U	1.2 U	1.1 U	1.1 U	1.2 U
CALCIUM	43.4 J	37.8 J	79.5 J	28.7 UJ	18.4 UJ	61.2 UJ
CHROMIUM	10.2	6.5	15	5.5	5.4	7.1
COBALT	2 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U
COPPER	1.5 B	0.96 B	1.7 B	0.68 B	0.45 B	0.95 B
IRON	2240	828	1750	1250	1220	956
LEAD	4.3 J	5.1 J	5 J	3.2 J	1.7 J	2.5 J
MAGNESIUM	169 B	136 B	252 B	108 B	115 B	129 B
MANGANESE	2.5 B	2.6 B	3.8	2.1 U	1.8 U	1.9 U
MERCURY	0.11 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
NICKEL	5 U	4.8 U	4.8 U	4.6 U	4.5 U	4.7 U
POTASSIUM	372 B	289 B	486 B	135 B	190 B	232 B
SELENIUM	0.25 U	0.46 UJ	0.38 U	0.23 U	0.22 U	0.24 U
SILVER	0.75 U	0.72 U	0.72 U	0.68 UJ	0.67 UJ	0.71 UJ
SODIUM	36 B	26.2 B	37 B	32.8 B	30.3 B	32.7 B
THALLIUM	0.25 U	0.24 U	0.24 U	0.23 U	0.22 U	0.24 U
VANADIUM	16.5	6.5 J	14.6	7.1 J	6.1 J	8.8 B
ZINC	3.2 J	2.6 J	3.1 J	2.3 UJ	1.8 UJ	1.9 UJ
CYANIDE	0.57 U	0.62 U	0.59 U	0.57 U	0.54 U	0.57 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB08-03
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	9760	11400	12800	2630	6180	7110
ANTIMONY	1.6 UJ	1.7 UJ	1.7 UJ	1.6 UJ	1.7 UJ	1.7 UJ
ARSENIC	2.3	0.54 B	0.49 U	0.47 U	0.48 U	0.56 B
BARIUM	10.2 B	12.6 B	14.2 B	3.8 B	6.8 B	9.8 B
BERYLLIUM	0.23 U	0.25 B	0.24 B	0.24 U	0.24 U	0.24 U
CADMIUM	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
CALCIUM	58.6 J	30.8 J	20.3 UJ	13.9 UJ	34.8 J	175 J
CHROMIUM	13.7	15.8	15.2	3.1	6.8	7.6
COBALT	1.9 U	2 U	2 U	1.9 U	1.9 U	2 U
COPPER	1.2 B	1.7 B	2 B	0.47 B	1.2 B	1.5 B
IRON	2250	1600	2720	523	1210	1580
LEAD	5.1 J	6.2 J	5.7 J	3.1 J	4 J	4.3 J
MAGNESIUM	291 B	315 B	289 B	72.2 U	183 B	172 B
MANGANESE	3.3 B	3.7	4.4	1.6 U	3.1 B	2.4 B
MERCURY	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U
NICKEL	4.7 U	4.9 U	4.9 U	4.7 U	4.8 U	4.9 U
POTASSIUM	385 B	586 B	521 B	166 B	353 B	338 B
SELENIUM	0.23 U	0.25 U	0.27 U	0.24 U	0.27 U	0.42 U
SILVER	0.7 U	0.74 U	0.73 UJ	0.71 UJ	0.72 U	0.73 U
SODIUM	33.7 B	37.7 B	59.9 B	54.6 B	35.7 B	19.8 B
THALLIUM	0.23 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U
VANADIUM	11.6	15.8	13	3.8 J	9.2 B	11.5 B
ZINC	2.6 J	3.2 J	3.9 UJ	1.6 UJ	2.2 J	2.9 J
CYANIDE	0.52 U	0.53 U	0.57 U	0.59 U		0.62 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-GW08-06	24-GW09-01	24-GW09-02	24-GW10-03	24-GW10-04
DEPTH					
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	2210	6950	2680	8220	10500
ANTIMONY	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ
ARSENIC	0.48 U	0.97 B	1.4 B	0.48 U	0.5 U
BARIUM	3.4 B	12 B	5.2 B	10.3 B	14.4 B
BERYLLIUM	0.24 U	0.24 U	0.24 B	0.24 U	0.25 B
CADMIUM	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
CALCIUM	26.4 UJ	22.4 UJ	15.7 UJ	18.4 UJ	17.1 UJ
CHROMIUM	4.1	9.7	6.7	7.7	11.2
COBALT	1.9 U	1.9 U	1.9 U	1.9 U	2 U
COPPER	0.48 B	0.71 B	0.71 B	1.7 B	2.7 B
IRON	690	2930	3120	1010	1820
LEAD	1.3 J	2.9 J	2.6 J	5.1 J	4.6 J
MAGNESIUM	79.3 U	281 B	115 B	124 B	268 B
MANGANESE	1.2 U	5.2	2.1 U	2.4 U	4.7
MERCURY	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U
NICKEL	4.8 U	4.7 U	4.8 U	4.8 U	5 U
POTASSIUM	157 B	379 B	202 B	286 B	601 B
SELENIUM	0.24 UJ	0.28 U	0.36 U	0.24 U	0.25 U
SILVER	0.73 UJ	0.71 UJ	0.71 UJ	0.72 UJ	0.74 UJ
SODIUM	37.2 B	30.7 B	43.9 B	34.7 B	47.9 B
THALLIUM	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U
VANADIUM	5.8 J	11.1 B	9 B	14.9	18.4
ZINC	2.2 UJ	3.8 UJ	2.1 UJ	2.6 UJ	3.2 UJ
CYANIDE	0.51 U	0.59 U	0.59 U	0.58 U	0.55 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
CHLOROMETHANE	11 U	1500 U	ND	ND	ND	0 / 44
BROMOMETHANE	11 U	1500 U	ND	ND	ND	0 / 44
VINYL CHLORIDE	11 U	1500 U	ND	ND	ND	0 / 44
CHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
METHYLENE CHLORIDE	11 U	1500 U	33 B	120 J	24-BM-SB11-06	3 / 44
ACETONE	11 U	1500 U	12 J	1800 J	24-SSA-SB05-06	15 / 44
CARBON DISULFIDE	11 U	1500 U	4 J	8 J	24-BM-SB14-04	4 / 44
1,1-DICHLOROETHENE	11 U	1500 U	ND	ND	ND	0 / 44
1,1-DICHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
1,2-DICHLOROETHENE (total)	11 U	1500 U	ND	ND	ND	0 / 44
CHLOROFORM	11 U	1500 U	ND	ND	ND	0 / 44
1,2-DICHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
2-BUTANONE	11 U	62 U	480 J	480 J	24-SSA-SB06-04	1 / 44
1,1,1-TRICHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
CARBON TETRACHLORIDE	11 U	1500 U	ND	ND	ND	0 / 44
BROMODICHLOROMETHANE	11 U	1500 U	ND	ND	ND	0 / 44
1,2-DICHLOROPROPANE	11 U	1500 U	ND	ND	ND	0 / 44
CIS-1,3-DICHLOROPROPENE	11 U	1500 U	ND	ND	ND	0 / 44
TRICHLOROETHENE	11 U	1500 U	ND	ND	ND	0 / 44
DIBROMOCHLOROMETHANE	11 U	1500 U	ND	ND	ND	0 / 44
1,1,2-TRICHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
BENZENE	11 U	1500 U	ND	ND	ND	0 / 44
TRANS-1,3-TRICHLOROPROPENE	11 U	1500 U	ND	ND	ND	0 / 44
BROMOFORM	11 U	1500 U	ND	ND	ND	0 / 44
4-METHYL-2-PENTANONE	11 U	1500 U	ND	ND	ND	0 / 44
2-HEXANONE	11 U	1500 U	ND	ND	ND	0 / 44
TETRACHLOROETHENE	11 U	1500 U	ND	ND	ND	0 / 44
1,1,2,2-TETRACHLOROETHANE	11 U	1500 U	ND	ND	ND	0 / 44
TOLUENE	11 U	1500 U	ND	ND	ND	0 / 44
CHLOROBENZENE	11 U	1500 U	ND	ND	ND	0 / 44
ETHYLBENZENE	11 U	1500 U	ND	ND	ND	0 / 44
STYRENE	11 U	1500 U	ND	ND	ND	0 / 44
XYLENES (total)	11 U	1500 U	ND	ND	ND	0 / 44

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

	MINIMUM NONDETECTED UGKG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
PHENOL	340 U	660 U	ND	ND	ND	0 / 44
BIS(2-CHLOROETHYL)ETHER	340 U	660 U	ND	ND	ND	0 / 44
2-CHLOROPHENOL	340 U	660 U	ND	ND	ND	0 / 44
1,3-DICHLOROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
1,4-DICHLOROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
1,2-DICHLOROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
2-METHYLPHENOL	340 U	660 U	ND	ND	ND	0 / 44
2,2'-OXYBIS-1-CHLOROPROPANE	340 U	660 U	ND	ND	ND	0 / 44
4-METHYLPHENOL	340 U	660 U	ND	ND	ND	0 / 44
N-NITROSO-DI-N-PROPYLAMINE	340 U	660 U	ND	ND	ND	0 / 44
HEXACHLOROETHANE	340 U	660 U	ND	ND	ND	0 / 44
NITROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
ISOPHORONE	340 U	660 U	ND	ND	ND	0 / 44
2-NITROPHENOL	340 U	660 U	ND	ND	ND	0 / 44
2,4-DIMETHYLPHENOL	340 U	660 U	ND	ND	ND	0 / 44
BIS(2-CHLOROETHOXY)METHANE	340 U	660 U	ND	ND	ND	0 / 44
2,4-DICHLOROPHENOL	340 U	660 U	ND	ND	ND	0 / 44
1,2,4-TRICHLOROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
NAPHTHALENE	340 U	660 U	ND	ND	ND	0 / 44
4-CHLOROANILINE	340 U	660 U	ND	ND	ND	0 / 44
HEXACHLOROBUTADIENE	340 U	660 U	ND	ND	ND	0 / 44
4-CHLORO-3-METHYLPHENOL	340 U	660 U	ND	ND	ND	0 / 44
2-METHYLNAPHTHALENE	340 U	660 U	ND	ND	ND	0 / 44
HEXACHLOROCYCLOPENTADIENE	340 U	660 U	ND	ND	ND	0 / 44
2,4,6-TRICHLOROPHENOL	340 U	660 U	ND	ND	ND	0 / 44
2,4,5-TRICHLOROPHENOL	820 U	1600 U	ND	ND	ND	0 / 44
2-CHLORONAPHTHALENE	340 U	660 U	ND	ND	ND	0 / 44
2-NITROANILINE	820 U	1600 U	ND	ND	ND	0 / 44
DIMETHYL PHTHALATE	340 U	660 U	ND	ND	ND	0 / 44
ACENAPHTHYLENE	340 U	660 U	ND	ND	ND	0 / 44
2,6-DINITROTOLUENE	340 U	660 U	ND	ND	ND	0 / 44
3-NITROANILINE	820 U	1600 U	ND	ND	ND	0 / 44
ACENAPHTHENE	340 U	660 U	ND	ND	ND	0 / 44

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

	MINIMUM NONDETECTED UGKG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
2,4-DINITROPHENOL	820 U	1600 U	ND	ND	ND	0 / 44
4-NITROPHENOL	820 U	1600 U	ND	ND	ND	0 / 41
DIBENZOFURAN	340 U	660 U	ND	ND	ND	0 / 44
2,4-DINITROTOLUENE	340 U	660 U	ND	ND	ND	0 / 44
DIETHYL PHTHALATE	340 U	660 U	ND	ND	ND	0 / 44
4-CHLOROPHENYL PHENYL ETHER	340 U	660 U	ND	ND	ND	0 / 44
FLUORENE	340 U	660 U	ND	ND	ND	0 / 44
4-NITROANILINE	820 U	1600 U	ND	ND	ND	0 / 44
4,6-DINITRO-2-METHYLPHENOL	820 U	1600 U	ND	ND	ND	0 / 44
N-NITROSODIPHENYLAMINE	340 U	660 U	ND	ND	ND	0 / 44
4-BROMOPHENYL PHENYL ETHER	340 U	660 U	ND	ND	ND	0 / 44
HEXACHLOROBENZENE	340 U	660 U	ND	ND	ND	0 / 44
PENTACHLOROPHENOL	820 U	1600 U	ND	ND	ND	0 / 44
PHENANTHRENE	340 U	660 U	ND	ND	ND	0 / 44
ANTHRACENE	340 U	660 U	ND	ND	ND	0 / 44
CARBAZOLE	340 U	660 U	ND	ND	ND	0 / 44
DI-N-BUTYL PHTHALATE	340 U	660 U	74 J	74 J	24-SSA-SB02-04	1 / 44
FLUORANTHENE	340 U	660 U	45 J	45 J	24-BDA-SB13-01A	1 / 44
PYRENE	340 U	660 U	ND	ND	ND	0 / 44
BUTYL BENZYL PHTHALATE	340 U	660 U	ND	ND	ND	0 / 44
3,3'-DICHLOROBENZIDINE	340 U	660 U	ND	ND	ND	0 / 44
BENZO(A)ANTHRACENE	340 U	660 U	ND	ND	ND	0 / 44
CHRYSENE	340 U	660 U	ND	ND	ND	0 / 44
BIS(2-ETHYLHEXYL)PHTHALATE	340 U	660 U	44 J	1000	24-BM-SB05-04	8 / 44
DI-N-OCTYL PHTHALATE	340 U	660 U	ND	ND	ND	0 / 44
BENZO(B)FLUORANTHENE	340 U	660 U	ND	ND	ND	0 / 44
BENZO(K)FLUORANTHENE	340 U	660 U	ND	ND	ND	0 / 44
BENZO(A)PYRENE	340 U	660 U	ND	ND	ND	0 / 44
INDENO(1,2,3-CD)PYRENE	340 U	660 U	ND	ND	ND	0 / 44
DIBENZ(A,H)ANTHRACENE	340 U	660 U	ND	ND	ND	0 / 44
BENZO(GHI)PERYLENE	340 U	660 U	ND	ND	ND	0 / 44

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

PESTICIDES/PCBS

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
ALPHA-BHC	1.8 U	2.7 U	ND	ND	ND	0 / 44
BETA-BHC	1.8 U	2.7 U	ND	ND	ND	0 / 44
DELTA-BHC	1.8 U	2.7 U	ND	ND	ND	0 / 44
GAMMA-BHC	1.8 U	2.7 U	ND	ND	ND	0 / 44
HEPTACHLOR	1.8 U	2.7 U	ND	ND	ND	0 / 44
ALDRIN	1.8 U	2.7 U	ND	ND	ND	0 / 44
HEPTACHLOR EPOXIDE	1.8 U	2.7 U	ND	ND	ND	0 / 44
ENDOSULFAN I	1.8 U	2.7 U	ND	ND	ND	0 / 44
DIELDRIN	3.5 U	5.3 U	ND	ND	ND	0 / 44
4,4'-DDE	3.5 U	5.3 U	ND	ND	ND	0 / 44
ENDRIN	3.5 U	5.3 U	ND	ND	ND	0 / 43
ENDOSULFAN II	3.5 U	5.3 U	ND	ND	ND	0 / 44
4,4'-DDD	3.5 U	5.3 U	4.4 J	19	24-SSA-SB06-06	7 / 44
ENDOSULFAN SULFATE	3.5 U	5.3 U	ND	ND	ND	0 / 44
4,4'-DDT	3.5 U	5.3 U	4 J	220	24-SSA-SB06-06	10 / 44
METHOXYCHLOR	18 U	27 U	ND	ND	ND	0 / 44
ENDRIN KETONE	3.5 U	5.3 U	ND	ND	ND	0 / 44
ENDRIN ALDEHYDE	3.5 U	5.3 U	ND	ND	ND	0 / 44
ALPHA-CHLORDANE	1.8 U	2.7 U	ND	ND	ND	0 / 44
GAMMA-CHLORDANE	1.8 U	2.7 U	ND	ND	ND	0 / 44
TOXAPHENE	180 U	270 U	ND	ND	ND	0 / 44
AROCLOR-1016	35 U	53 U	ND	ND	ND	0 / 44
AROCLOR-1221	71 U	110 U	ND	ND	ND	0 / 44
AROCLOR-1232	35 U	53 U	ND	ND	ND	0 / 44
AROCLOR-1242	35 U	53 U	ND	ND	ND	0 / 44
AROCLOR-1248	35 U	53 U	ND	ND	ND	0 / 44
AROCLOR-1254	35 U	53 U	ND	ND	ND	0 / 44
AROCLOR-1260	35 U	53 U	ND	ND	ND	0 / 44

OPERABLE UNIT NO. 1 - SITE 24
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SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB04-03	24-BDA-SB05-01	24-BDA-SB08-01A	24-BDA-SB09-01
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	11 U	12 U	11 U	12 U
BROMOMETHANE	11 U	11 U	11 U	12 U	11 U	12 U
VINYL CHLORIDE	11 U	11 U	11 U	12 U	11 U	12 U
CHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
METHYLENE CHLORIDE	12 U	11 U	20 U	12 U	16 U	12 U
ACETONE	11 UJ	60 J	33 U	12 U	70 J	140 J
CARBON DISULFIDE	11 U	11 U	11 U	12 U	11 U	12 U
1,1-DICHLOROETHENE	11 U	11 U	11 U	12 U	11 U	12 U
1,1-DICHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
1,2-DICHLOROETHENE (total)	11 U	11 U	11 U	12 U	11 U	12 U
CHLOROFORM	11 U	11 U	11 U	12 U	11 U	12 U
1,2-DICHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
2-BUTANONE	11 UJ	11 UJ	11 U	12 UJ	11 UJ	12 UJ
1,1,1-TRICHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
CARBON TETRACHLORIDE	11 U	11 U	11 U	12 U	11 U	12 U
BROMODICHLOROMETHANE	11 U	11 U	11 U	12 U	11 U	12 U
1,2-DICHLOROPROPANE	11 U	11 U	11 U	12 U	11 U	12 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	12 U	11 U	12 U
TRICHLOROETHENE	11 U	11 U	11 U	12 U	11 U	12 U
DIBROMOCHLOROMETHANE	11 U	11 U	11 U	12 U	11 U	12 U
1,1,2-TRICHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
BENZENE	11 U	11 U	11 U	12 U	11 U	12 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	12 U	11 U	12 U
BROMOFORM	11 U	11 U	11 U	12 U	11 U	12 U
4-METHYL-2-PENTANONE	11 U	11 U	11 U	12 U	11 U	12 U
2-HEXANONE	11 UJ	11 UJ	11 U	12 U	11 U	12 UJ
TETRACHLOROETHENE	11 U	11 U	11 U	12 U	11 U	12 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	11 U	12 U	11 U	12 U
TOLUENE	11 U	11 U	11 U	12 U	11 U	12 U
CHLOROBENZENE	11 U	11 U	11 U	12 U	11 U	12 U
ETHYLBENZENE	11 U	11 U	11 U	12 U	11 U	12 U
STYRENE	11 U	11 U	11 U	12 U	11 U	12 U
XYLENES (total)	11 U	11 U	11 U	12 U	11 U	12 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB04-03	24-BDA-SB05-01	24-BDA-SB08-01A	24-BDA-SB09-01
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	360 U	360 U	350 U	400 U	350 U	390 U
BIS(2-CHLOROETHYL)ETHER	360 U	360 U	350 U	400 U	350 U	390 U
2-CHLOROPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
1,3-DICHLOROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
1,4-DICHLOROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
1,2-DICHLOROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
2-METHYLPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
2,2'-OXYBIS-1-CHLOROPROPANE	360 U	360 U	350 U	400 U	350 U	390 UJ
4-METHYLPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
N-NITROSO-DI-N-PROPYLAMINE	360 U	360 U	350 U	400 U	350 U	390 U
HEXACHLOROETHANE	360 U	360 U	350 U	400 U	350 U	390 U
NITROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
ISOPHORONE	360 U	360 U	350 U	400 U	350 U	390 U
2-NITROPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
2,4-DIMETHYLPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
BIS(2-CHLOROETHOXY)METHANE	360 U	360 U	350 U	400 U	350 U	390 U
2,4-DICHLOROPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
1,2,4-TRICHLOROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
NAPHTHALENE	360 U	360 U	350 U	400 U	350 U	390 U
4-CHLOROANILINE	360 U	360 U	350 UJ	400 U	350 U	390 U
HEXACHLOROBUTADIENE	360 U	360 U	350 U	400 U	350 U	390 U
4-CHLORO-3-METHYLPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
2-METHYLNAPHTHALENE	360 U	360 U	350 U	400 U	350 U	390 U
HEXACHLOROCYCLOPENTADIENE	360 U	360 U	350 U	400 U	350 U	390 U
2,4,6-TRICHLOROPHENOL	360 U	360 U	350 U	400 U	350 U	390 U
2,4,5-TRICHLOROPHENOL	880 U	870 U	860 U	960 U	850 U	940 U
2-CHLORONAPHTHALENE	360 U	360 U	350 U	400 U	350 U	390 U
2-NITROANILINE	880 U	870 U	860 U	960 U	850 UJ	940 U
DIMETHYL PHTHALATE	360 U	360 U	350 U	400 U	350 U	390 U
ACENAPHTHYLENE	360 U	360 U	350 U	400 U	350 U	390 U
2,6-DINITROTOLUENE	360 U	360 U	350 U	400 U	350 U	390 U
3-NITROANILINE	880 U	870 U	860 UJ	960 U	850 U	940 U
ACENAPHTHENE	360 U	360 U	350 U	400 U	350 U	390 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES (con't)

SAMPLE NO.	24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB04-03	24-BDA-SB05-01	24-BDA-SB08-01A	24-BDA-SB09-01
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	880 U	870 U	860 U	960 U	850 U	940 U
4-NITROPHENOL	880 U	870 U	860 U	960 U	850 UJ	940 R
DIBENZOFURAN	360 U	360 U	350 U	400 U	350 U	390 U
2,4-DINITROTOLUENE	360 U	360 U	350 U	400 U	350 U	390 U
DIETHYL PHTHALATE	360 U	360 U	350 U	400 U	350 U	390 U
4-CHLOROPHENYL PHENYL ETHER	360 U	360 U	350 U	400 U	350 U	390 U
FLUORENE	360 U	360 U	350 U	400 U	350 U	390 U
4-NITROANILINE	880 U	870 U	860 U	960 U	850 U	940 U
4,6-DINITRO-2-METHYLPHENOL	880 U	870 U	860 U	960 U	850 U	940 U
N-NITROSODIPHENYLAMINE	360 U	360 U	350 U	400 U	350 U	390 U
4-BROMOPHENYL PHENYL ETHER	360 U	360 U	350 U	400 U	350 U	390 U
HEXACHLOROBENZENE	360 U	360 U	350 U	400 U	350 U	390 U
PENTACHLOROPHENOL	880 U	870 U	860 U	960 U	850 U	940 U
PHENANTHRENE	360 U	360 U	350 U	400 U	350 U	390 U
ANTHRACENE	360 U	360 U	350 U	400 U	350 U	390 U
CARBAZOLE	360 U	360 U	350 U	400 U	350 U	390 U
DI-N-BUTYL PHTHALATE	360 U	360 U	350 U	400 U	350 U	390 U
FLUORANTHENE	360 U	360 U	350 U	400 U	350 U	390 U
PYRENE	360 U	360 U	350 U	400 U	350 U	390 U
BUTYL BENZYL PHTHALATE	360 U	360 U	350 U	400 U	350 U	390 U
3,3'-DICHLOROBENZIDINE	360 U	360 U	350 UJ	400 UJ	350 U	390 U
BENZO(A)ANTHRACENE	360 U	360 U	350 U	400 U	350 U	390 U
CHRYSENE	360 U	360 U	350 U	400 U	350 U	390 U
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	360 U	350 U	400 U	350 U	85 J
DI-N-OCTYL PHTHALATE	360 U	360 U	350 U	400 U	350 U	390 U
BENZO(B)FLUORANTHENE	360 U	360 U	350 U	400 U	350 U	390 U
BENZO(K)FLUORANTHENE	360 U	360 U	350 U	400 U	350 U	390 U
BENZO(A)PYRENE	360 U	360 U	350 U	400 U	350 U	390 U
INDENO(1,2,3-CD)PYRENE	360 U	360 U	350 U	400 U	350 U	390 U
DIBENZ(A,H)ANTHRACENE	360 U	360 U	350 U	400 U	350 U	390 U
BENZO(GHI)PERYLENE	360 U	360 U	350 U	400 U	350 U	390 U

PESTICIDES/PCBS

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB04-03	24-BDA-SB05-01	24-BDA-SB08-01A	24-BDA-SB09-01
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
BETA-BHC	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
DELTA-BHC	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
GAMMA-BHC	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
HEPTACHLOR	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
ALDRIN	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
HEPTACHLOR EPOXIDE	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
ENDOSULFAN I	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
DIELDRIN	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
4,4'-DDE	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
ENDRIN	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
ENDOSULFAN II	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
4,4'-DDD	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	8.2 J
ENDOSULFAN SULFATE	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
4,4'-DDT	43 J	67 J	3.6 U	3.9 U	3.5 U	3.9 U
METHOXYCHLOR	19 UJ	18 UJ	18 UJ	20 U	18 UJ	20 UJ
ENDRIN KETONE	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
ENDRIN ALDEHYDE	3.7 U	3.5 U	3.6 U	3.9 U	3.5 U	3.9 U
ALPHA-CHLORDANE	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
GAMMA-CHLORDANE	1.9 U	1.8 U	1.8 U	2 U	1.8 U	2 U
TOXAPHENE	190 U	180 U	180 U	200 U	180 U	200 U
AROCLOR-1016	37 U	35 U	36 U	39 U	35 U	39 U
AROCLOR-1221	74 U	72 U	73 U	80 U	71 U	79 U
AROCLOR-1232	37 U	35 U	36 U	39 U	35 U	39 U
AROCLOR-1242	37 U	35 U	36 U	39 U	35 U	39 U
AROCLOR-1248	37 U	35 U	36 U	39 U	35 U	39 U
AROCLOR-1254	37 U	35 U	36 U	39 U	35 U	39 U
AROCLOR-1260	37 U	35 U	36 U	39 U	35 U	39 U

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REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB01-04	24-BM-SB02-04	24-BM-SB04-03	24-BM-SB05-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	12 U
BROMOMETHANE	11 U	11 U	11 U	11 U	11 U	12 U
VINYL CHLORIDE	11 U	11 U	11 U	11 U	11 U	12 U
CHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
METHYLENE CHLORIDE	22 U	11 U	17 U	11 U	13 U	25 U
ACETONE	63 J	11 U	20 U	35 UJ	88 UJ	19 J
CARBON DISULFIDE	11 U	11 U	11 U	11 U	11 U	12 U
1,1-DICHLOROETHENE	11 U	11 U	11 U	11 U	11 U	12 U
1,1-DICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
1,2-DICHLOROETHENE (total)	11 U	11 U	11 U	11 U	11 U	12 U
CHLOROFORM	11 U	11 U	11 U	11 U	11 U	12 U
1,2-DICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
2-BUTANONE	11 U	11 UJ	11 U	11 U	11 U	12 U
1,1,1-TRICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
CARBON TETRACHLORIDE	11 U	11 U	11 U	11 U	11 U	12 U
BROMODICHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	12 U
1,2-DICHLOROPROPANE	11 U	11 U	11 U	11 U	11 U	12 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	11 U	11 U	12 U
TRICHLOROETHENE	11 U	11 U	11 U	11 U	11 U	12 U
DIBROMOCHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	12 U
1,1,2-TRICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
BENZENE	11 U	11 U	11 U	11 U	11 U	12 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	11 U	11 U	12 U
BROMOFORM	11 U	11 U	11 U	11 U	11 U	12 U
4-METHYL-2-PENTANONE	11 U	11 U	11 U	11 U	11 U	12 U
2-HEXANONE	11 U	11 U	11 U	11 U	11 U	12 U
TETRACHLOROETHENE	11 U	11 U	11 U	11 U	11 U	12 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	11 U	11 U	11 U	12 U
TOLUENE	11 U	11 U	11 U	11 U	11 U	12 U
CHLOROBENZENE	11 U	11 U	11 U	11 U	11 U	12 U
ETHYLBENZENE	11 U	11 U	11 U	11 U	11 U	12 U
STYRENE	11 U	11 U	11 U	11 U	11 U	12 U
XYLENES (total)	11 U	11 U	11 U	11 U	11 U	12 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB01-04	24-BM-SB02-04	24-BM-SB04-03	24-BM-SB05-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	340 U	360 U	370 U	370 U	380 U	380 U
BIS(2-CHLOROETHYL)ETHER	340 U	360 U	370 U	370 U	380 U	380 U
2-CHLOROPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
1,3-DICHLOROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
1,4-DICHLOROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
1,2-DICHLOROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
2-METHYLPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
2,2'-OXYBIS-1-CHLOROPROPANE	340 U	360 U	370 U	370 U	380 U	380 U
4-METHYLPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
N-NITROSO-DI-N-PROPYLAMINE	340 U	360 U	370 U	370 U	380 U	380 U
HEXACHLOROETHANE	340 U	360 U	370 U	370 U	380 U	380 U
NITROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
ISOPHORONE	340 U	360 U	370 U	370 U	380 U	380 U
2-NITROPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
2,4-DIMETHYLPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
BIS(2-CHLOROETHOXY)METHANE	340 U	360 U	370 U	370 U	380 U	380 U
2,4-DICHLOROPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
1,2,4-TRICHLOROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
NAPHTHALENE	340 U	360 U	370 U	370 U	380 U	380 U
4-CHLOROANILINE	340 U	360 U	370 U	370 U	380 U	380 U
HEXACHLOROBUTADIENE	340 U	360 U	370 U	370 U	380 U	380 U
4-CHLORO-3-METHYLPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
2-METHYLNAPHTHALENE	340 U	360 U	370 U	370 U	380 U	380 U
HEXACHLOROCYCLOPENTADIENE	340 U	360 U	370 U	370 U	380 U	380 U
2,4,6-TRICHLOROPHENOL	340 U	360 U	370 U	370 U	380 U	380 U
2,4,5-TRICHLOROPHENOL	820 U	870 U	890 U	900 U	910 U	930 U
2-CHLORONAPHTHALENE	340 U	360 U	370 U	370 U	380 U	380 U
2-NITROANILINE	820 U	870 U	890 U	900 U	910 U	930 U
DIMETHYL PHTHALATE	340 U	360 U	370 U	370 U	380 U	380 U
ACENAPHTHYLENE	340 U	360 U	370 U	370 U	380 U	380 U
2,6-DINITROTOLUENE	340 U	360 U	370 U	370 U	380 U	380 U
3-NITROANILINE	820 U	870 U	890 U	900 U	910 U	930 U
ACENAPHTHENE	340 U	360 U	370 U	370 U	380 U	380 U

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REMEDIAL INVESTIGATION CTO - 19177
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ORGANIC CHEMICALS

SEMIVOLATILES (con't)

SAMPLE NO.	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB01-04	24-BM-SB02-04	24-BM-SB04-03	24-BM-SB05-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	820 U	870 U	890 U	900 U	910 U	930 U
4-NITROPHENOL	820 U	870 U	890 U	900 U	910 U	930 U
DIBENZOFURAN	340 U	360 U	370 U	370 U	380 U	380 U
2,4-DINITROTOLUENE	340 U	360 U	370 U	370 U	380 U	380 U
DIETHYL PHTHALATE	340 U	360 U	370 U	370 U	380 U	380 U
4-CHLOROPHENYL PHENYL ETHER	340 U	360 U	370 U	370 U	380 U	380 U
FLUORENE	340 U	360 U	370 U	370 U	380 U	380 U
4-NITROANILINE	820 U	870 U	890 U	900 U	910 U	930 U
4,6-DINITRO-2-METHYLPHENOL	820 U	870 U	890 U	900 U	910 U	930 U
N-NITROSODIPHENYLAMINE	340 U	360 U	370 U	370 U	380 U	380 U
4-BROMOPHENYL PHENYL ETHER	340 U	360 U	370 U	370 U	380 U	380 U
HEXACHLOROBENZENE	340 U	360 U	370 U	370 U	380 U	380 U
PENTACHLOROPHENOL	820 U	870 U	890 U	900 U	910 U	930 U
PHENANTHRENE	340 U	360 U	370 U	370 U	380 U	380 U
ANTHRACENE	340 U	360 U	370 U	370 U	380 U	380 U
CARBAZOLE	340 U	360 U	370 U	370 U	380 U	380 U
DI-N-BUTYL PHTHALATE	340 U	360 U	370 U	370 U	380 U	380 U
FLUORANTHENE	340 U	45 J	370 U	370 U	380 U	380 U
PYRENE	340 U	360 U	370 U	370 U	380 U	380 U
BUTYL BENZYL PHTHALATE	340 U	360 U	370 U	370 U	380 U	380 U
3,3'-DICHLOROBENZIDINE	340 U	360 U	370 U	370 U	380 U	380 U
BENZO(A)ANTHRACENE	340 U	360 U	370 U	370 U	380 U	380 U
CHRYSENE	340 U	360 U	370 U	370 U	380 U	380 U
BIS(2-ETHYLHEXYL)PHTHALATE	340 U	360 U	370 UJ	170 J	380 U	1000
DI-N-OCTYL PHTHALATE	340 U	360 U	370 U	370 U	380 UJ	380 U
BENZO(B)FLUORANTHENE	340 U	360 U	370 U	370 U	380 UJ	380 U
BENZO(K)FLUORANTHENE	340 U	360 U	370 U	370 U	380 UJ	380 U
BENZO(A)PYRENE	340 U	360 U	370 U	370 U	380 UJ	380 U
INDENO(1,2,3-CD)PYRENE	340 U	360 U	370 U	370 U	380 UJ	380 U
DIBENZ(A,H)ANTHRACENE	340 U	360 U	370 U	370 U	380 UJ	380 U
BENZO(GHI)PERYLENE	340 U	360 U	370 U	370 U	380 UJ	380 U

PESTICIDES/PCBS

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INDUSTRIAL FLY ASH DUMP
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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB01-04	24-BM-SB02-04	24-BM-SB04-03	24-BM-SB05-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
BETA-BHC	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
DELTA-BHC	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
GAMMA-BHC	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
HEPTACHLOR	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
ALDRIN	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
HEPTACHLOR EPOXIDE	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
ENDOSULFAN I	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
DIELDRIN	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
4,4'-DDE	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
ENDRIN	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 R	3.9 U
ENDOSULFAN II	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
4,4'-DDD	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
ENDOSULFAN SULFATE	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
4,4'-DDT	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
METHOXYCHLOR	19 UJ	19 UJ	19 UJ	20 U	19 U	20 U
ENDRIN KETONE	3.6 U	3.7 UJ	3.7 U	3.8 UJ	3.7 U	3.9 U
ENDRIN ALDEHYDE	3.6 U	3.7 UJ	3.7 U	3.8 U	3.7 U	3.9 U
ALPHA-CHLORDANE	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
GAMMA-CHLORDANE	1.9 U	1.9 UJ	1.9 U	2 U	1.9 U	2 U
TOXAPHENE	190 U	190 UJ	190 U	200 U	190 U	200 U
AROCLOR-1016	36 U	37 UJ	37 U	38 U	37 U	39 U
AROCLOR-1221	74 U	75 UJ	75 U	77 U	74 U	80 U
AROCLOR-1232	36 U	37 UJ	37 U	38 U	37 U	39 U
AROCLOR-1242	36 U	37 UJ	37 U	38 U	37 U	39 U
AROCLOR-1248	36 U	37 UJ	37 U	38 U	37 U	39 U
AROCLOR-1254	36 U	37 UJ	37 U	38 U	37 U	39 U
AROCLOR-1260	36 U	37 UJ	37 U	38 U	37 U	39 U

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SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB11-07	24-BM-SB14-04	24-BM-SB15-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	12 U	13 U	40 U	12 U	12 U	11 U
BROMOMETHANE	12 U	13 U	40 U	12 U	12 U	11 U
VINYL CHLORIDE	12 U	13 U	40 U	12 U	12 U	11 U
CHLOROETHANE	12 U	13 U	40 U	12 U	12 U	11 U
METHYLENE CHLORIDE	24 U	15 U	120 J	17 U	13 U	19 U
ACETONE	78 J	67 U	40 U	110 U	150 UJ	110 U
CARBON DISULFIDE	12 U	13 U	40 U	12 U	8 J	11 U
1,1-DICHLOROETHENE	12 U	13 U	40 U	12 U	12 U	11 U
1,1-DICHLOROETHANE	12 U	13 U	40 U	12 U	12 U	11 U
1,2-DICHLOROETHENE (total)	12 U	13 U	40 U	12 U	12 U	11 U
CHLOROFORM	12 U	13 U	40 U	12 U	12 U	11 U
1,2-DICHLOROETHANE	12 U	13 U	40 U	12 U	12 U	11 U
2-BUTANONE	12 U	13 U	40 U	12 U	12 U	11 U
1,1,1-TRICHLOROETHANE	12 U	13 U	40 UJ	12 U	12 U	11 U
CARBON TETRACHLORIDE	12 U	13 U	40 UJ	12 U	12 U	11 U
BROMODICHLOROMETHANE	12 U	13 U	40 UJ	12 U	12 U	11 U
1,2-DICHLOROPROPANE	12 U	13 U	40 UJ	12 U	12 U	11 U
CIS-1,3-DICHLOROPROPENE	12 U	13 U	40 UJ	12 U	12 U	11 U
TRICHLOROETHENE	12 U	13 U	40 UJ	12 U	12 U	11 U
DIBROMOCHLOROMETHANE	12 U	13 U	40 UJ	12 U	12 U	11 U
1,1,2-TRICHLOROETHANE	12 U	13 U	40 UJ	12 U	12 U	11 U
BENZENE	12 U	13 U	40 UJ	12 U	12 U	11 U
TRANS-1,3-DICHLOROPROPENE	12 U	13 U	40 UJ	12 U	12 U	11 U
BROMOFORM	12 U	13 U	40 UJ	12 U	12 U	11 U
4-METHYL-2-PENTANONE	12 U	13 U	40 UJ	12 U	12 U	11 U
2-HEXANONE	12 U	13 U	40 UJ	12 U	12 U	11 U
TETRACHLOROETHENE	12 U	13 U	40 UJ	12 U	12 U	11 U
1,1,2,2-TETRACHLOROETHANE	12 U	13 U	40 UJ	12 U	12 U	11 U
TOLUENE	12 U	13 U	40 UJ	12 U	12 U	11 U
CHLOROBENZENE	12 U	13 U	40 UJ	12 U	12 U	11 U
ETHYLBENZENE	12 U	13 U	40 UJ	12 U	12 U	11 U
STYRENE	12 U	13 U	40 UJ	12 U	12 U	11 U
XYLENES (total)	12 U	13 U	40 UJ	12 U	12 U	11 U

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ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB11-07	24-BM-SB14-04	24-BM-SB15-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	390 U	410 U	660 U	390 U	370 U	360 U
BIS(2-CHLOROETHYL)ETHER	390 U	410 U	660 U	390 U	370 U	360 U
2-CHLOROPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
1,3-DICHLOROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
1,4-DICHLOROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
1,2-DICHLOROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
2-METHYLPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
2,2'-OXYBIS-1-CHLOROPROPANE	390 U	410 U	660 U	390 U	370 UJ	360 U
4-METHYLPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
N-NITROSO-DI-N-PROPYLAMINE	390 U	410 U	660 U	390 U	370 U	360 U
HEXACHLOROETHANE	390 U	410 U	660 U	390 U	370 U	360 U
NITROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
ISOPHORONE	390 U	410 U	660 U	390 U	370 U	360 U
2-NITROPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
2,4-DIMETHYLPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
BIS(2-CHLOROETHOXY)METHANE	390 U	410 U	660 U	390 U	370 U	360 U
2,4-DICHLOROPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
1,2,4-TRICHLOROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
NAPHTHALENE	390 U	410 U	660 U	390 U	370 U	360 U
4-CHLOROANILINE	390 U	410 U	660 U	390 U	370 U	360 U
HEXACHLOROBUTADIENE	390 U	410 U	660 U	390 U	370 U	360 U
4-CHLORO-3-METHYLPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
2-METHYLNAPHTHALENE	390 U	410 U	660 U	390 U	370 U	360 U
HEXACHLOROCYCLOPENTADIENE	390 U	410 U	660 U	390 U	370 U	360 U
2,4,6-TRICHLOROPHENOL	390 U	410 U	660 U	390 U	370 U	360 U
2,4,5-TRICHLOROPHENOL	940 U	1000 U	1600 U	940 U	900 U	870 U
2-CHLORONAPHTHALENE	390 U	410 U	660 U	390 U	370 U	360 U
2-NITROANILINE	940 U	1000 U	1600 U	940 U	900 U	870 U
DIMETHYL PHTHALATE	390 U	410 U	660 U	390 U	370 U	360 U
ACENAPHTHYLENE	390 U	410 U	660 U	390 U	370 U	360 U
2,6-DINITROTOLUENE	390 U	410 U	660 U	390 U	370 U	360 U
3-NITROANILINE	940 U	1000 U	1600 U	940 U	900 U	870 U
ACENAPHTHENE	390 U	410 U	660 U	390 U	370 U	360 U

SEMIVOLATILES (con't)

SAMPLE NO.	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB11-07	24-BM-SB14-04	24-BM-SB15-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	940 U	1000 U	1600 U	940 U	900 U	870 U
4-NITROPHENOL	940 U	1000 U	1600 U	940 U	900 R	870 U
DIBENZOFURAN	390 U	410 U	660 U	390 U	370 U	360 U
2,4-DINITROTOLUENE	390 U	410 U	660 U	390 U	370 U	360 U
DIETHYL PHTHALATE	390 U	410 U	660 U	390 U	370 U	360 U
4-CHLOROPHENYL PHENYL ETHER	390 U	410 U	660 U	390 U	370 U	360 U
FLUORENE	390 U	410 U	660 U	390 U	370 U	360 U
4-NITROANILINE	940 U	1000 U	1600 U	940 U	900 U	870 U
4,6-DINITRO-2-METHYLPHENOL	940 U	1000 U	1600 U	940 U	900 U	870 U
N-NITROSODIPHENYLAMINE	390 U	410 U	660 U	390 U	370 U	360 U
4-BROMOPHENYL PHENYL ETHER	390 U	410 U	660 U	390 U	370 U	360 U
HEXACHLOROBENZENE	390 U	410 U	660 U	390 U	370 U	360 U
PENTACHLOROPHENOL	940 U	1000 U	1600 U	940 U	900 U	870 U
PHENANTHRENE	390 U	410 U	660 U	390 U	370 U	360 U
ANTHRACENE	390 U	410 U	660 U	390 U	370 U	360 U
CARBAZOLE	390 U	410 U	660 U	390 U	370 U	360 U
DI-N-BUTYL PHTHALATE	390 U	410 U	660 U	390 U	370 U	360 U
FLUORANTHENE	390 U	410 U	660 U	390 U	370 U	360 U
PYRENE	390 U	410 U	660 U	390 U	370 U	360 U
BUTYL BENZYL PHTHALATE	390 U	410 U	660 U	390 U	370 U	360 U
3,3'-DICHLOROBENZIDINE	390 U	410 U	660 U	390 U	370 U	360 U
BENZO(A)ANTHRACENE	390 U	410 U	660 U	390 U	370 U	360 U
CHRYSENE	390 U	410 U	660 U	390 U	370 U	360 U
BIS(2-ETHYLHEXYL)PHTHALATE	51 J	170 J	660 U	390 U	44 J	200 J
DI-N-OCTYL PHTHALATE	390 U	410 U	660 U	390 U	370 U	360 U
BENZO(B)FLUORANTHENE	390 U	410 U	660 U	390 U	370 U	360 U
BENZO(K)FLUORANTHENE	390 U	410 U	660 U	390 U	370 U	360 U
BENZO(A)PYRENE	390 U	410 U	660 U	390 U	370 U	360 U
INDENO(1,2,3-CD)PYRENE	390 U	410 U	660 U	390 U	370 U	360 U
DIBENZ(A,H)ANTHRACENE	390 U	410 U	660 U	390 U	370 U	360 U
BENZO(GHI)PERYLENE	390 U	410 U	660 U	390 U	370 U	360 U

PESTICIDES/PCBS

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB11-07	24-BM-SB14-04	24-BM-SB15-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	2 U	2.2 U	2.7 UJ	2 UJ	2 U	1.9 U
BETA-BHC	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
DELTA-BHC	2 U	2.2 U	2.7 UJ	2 UJ	2 U	1.9 U
GAMMA-BHC	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
HEPTACHLOR	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
ALDRIN	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
HEPTACHLOR EPOXIDE	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
ENDOSULFAN I	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
DIELDRIN	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
4,4'-DDE	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
ENDRIN	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
ENDOSULFAN II	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
4,4'-DDD	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
ENDOSULFAN SULFATE	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
4,4'-DDT	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
METHOXYCHLOR	20 UJ	22 UJ	27 U	20 U	20 U	19 UJ
ENDRIN KETONE	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
ENDRIN ALDEHYDE	3.9 U	4.2 U	5.3 U	3.8 U	3.8 U	3.7 U
ALPHA-CHLORDANE	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
GAMMA-CHLORDANE	2 U	2.2 U	2.7 U	2 U	2 U	1.9 U
TOXAPHENE	200 U	220 U	270 U	200 U	200 U	190 U
AROCLOR-1016	39 U	42 U	53 U	38 U	38 U	37 U
AROCLOR-1221	80 U	86 U	110 U	78 U	78 U	74 U
AROCLOR-1232	39 U	42 U	53 U	38 U	38 U	37 U
AROCLOR-1242	39 U	42 U	53 U	38 U	38 U	37 U
AROCLOR-1248	39 U	42 U	53 U	38 U	38 U	37 U
AROCLOR-1254	39 U	42 U	53 U	38 U	38 U	37 U
AROCLOR-1260	39 U	42 U	53 U	38 U	38 U	37 U

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SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BM-SB15-06	24-SSA-SB01-03	24-SSA-SB01-05	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	12 U	11 U	12 U	12 U	12 U	11 U
BROMOMETHANE	12 U	11 U	12 U	12 U	12 U	11 U
VINYL CHLORIDE	12 U	11 U	12 U	12 U	12 U	11 U
CHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
METHYLENE CHLORIDE	25 U	14 U	12 U	90 U	12 U	19 U
ACETONE	180	33 U	56 U	170 U	160 U	11 U
CARBON DISULFIDE	12 U	11 U	12 U	5 J	12 U	11 U
1,1-DICHLOROETHENE	12 U	11 U	12 U	12 U	12 U	11 U
1,1-DICHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
1,2-DICHLOROETHENE (total)	12 U	11 U	12 U	12 U	12 U	11 U
CHLOROFORM	12 U	11 U	12 U	12 U	12 U	11 U
1,2-DICHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
2-BUTANONE	12 U	11 U	12 U	12 U	12 U	11 U
1,1,1-TRICHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
CARBON TETRACHLORIDE	12 U	11 U	12 U	12 U	12 U	11 U
BROMODICHLOROMETHANE	12 U	11 U	12 U	12 U	12 U	11 U
1,2-DICHLOROPROPANE	12 U	11 U	12 U	12 U	12 U	11 U
CIS-1,3-DICHLOROPROPENE	12 U	11 U	12 U	12 U	12 U	11 U
TRICHLOROETHENE	12 U	11 U	12 U	12 U	12 U	11 U
DIBROMOCHLOROMETHANE	12 U	11 U	12 U	12 U	12 U	11 U
1,1,2-TRICHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
BENZENE	12 U	11 U	12 U	12 U	12 U	11 U
TRANS-1,3-DICHLOROPROPENE	12 U	11 U	12 U	12 U	12 U	11 U
BROMOFORM	12 U	11 U	12 U	12 U	12 U	11 U
4-METHYL-2-PENTANONE	12 U	11 U	12 U	12 U	12 U	11 U
2-HEXANONE	12 U	11 U	12 U	12 U	12 U	11 U
TETRACHLOROETHENE	12 U	11 U	12 U	12 U	12 U	11 U
1,1,2,2-TETRACHLOROETHANE	12 U	11 U	12 U	12 U	12 U	11 U
TOLUENE	12 U	11 U	12 U	12 U	12 U	11 U
CHLOROBENZENE	12 U	11 U	12 U	12 U	12 U	11 U
ETHYLBENZENE	12 U	11 U	12 U	12 U	12 U	11 U
STYRENE	12 U	11 U	12 U	12 U	12 U	11 U
XYLENES (total)	12 U	11 U	12 U	12 U	12 U	11 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-BM-SB15-06	24-SSA-SB01-03	24-SSA-SB01-05	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	390 U	380 U	400 U	380 U	400 U	380 U
BIS(2-CHLOROETHYL)ETHER	390 U	380 U	400 U	380 U	400 U	380 U
2-CHLOROPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
1,3-DICHLOROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
1,4-DICHLOROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
1,2-DICHLOROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
2-METHYLPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
2,2'-OXYBIS-1-CHLOROPROPANE	390 U	380 U	400 U	380 U	400 U	380 UJ
4-METHYLPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
N-NITROSO-DI-N-PROPYLAMINE	390 U	380 U	400 U	380 U	400 U	380 U
HEXACHLOROETHANE	390 U	380 U	400 U	380 U	400 U	380 U
NITROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
ISOPHORONE	390 U	380 U	400 U	380 U	400 U	380 U
2-NITROPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
2,4-DIMETHYLPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
BIS(2-CHLOROETHOXY)METHANE	390 U	380 U	400 U	380 U	400 U	380 U
2,4-DICHLOROPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
1,2,4-TRICHLOROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
NAPHTHALENE	390 U	380 U	400 U	380 U	400 U	380 U
4-CHLOROANILINE	390 U	380 U	400 U	380 U	400 U	380 U
HEXACHLOROBUTADIENE	390 U	380 U	400 U	380 U	400 U	380 U
4-CHLORO-3-METHYLPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
2-METHYLNAPHTHALENE	390 U	380 U	400 U	380 U	400 U	380 U
HEXACHLOROCYCLOPENTADIENE	390 U	380 U	400 U	380 U	400 U	380 U
2,4,6-TRICHLOROPHENOL	390 U	380 U	400 U	380 U	400 U	380 U
2,4,5-TRICHLOROPHENOL	950 U	920 U	980 U	930 U	960 U	920 U
2-CHLORONAPHTHALENE	390 U	380 U	400 U	380 U	400 U	380 U
2-NITROANILINE	950 U	920 U	980 U	930 U	960 U	920 UJ
DIMETHYL PHTHALATE	390 U	380 U	400 U	380 U	400 U	380 U
ACENAPHTHYLENE	390 U	380 U	400 U	380 U	400 U	380 U
2,6-DINITROTOLUENE	390 U	380 U	400 U	380 U	400 U	380 U
3-NITROANILINE	950 U	920 U	980 U	930 U	960 U	920 U
ACENAPHTHENE	390 U	380 U	400 U	380 U	400 U	380 U

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SEMIVOLATILES (con't)

SAMPLE NO.	24-BM-SB15-06	24-SSA-SB01-03	24-SSA-SB01-05	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	950 U	920 U	980 U	930 U	960 U	920 U
4-NITROPHENOL	950 U	920 U	980 U	930 U	960 U	920 R
DIBENZOFURAN	390 U	380 U	400 U	380 U	400 U	380 U
2,4-DINITROTOLUENE	390 U	380 U	400 U	380 U	400 U	380 U
DIETHYL PHTHALATE	390 U	380 U	400 U	380 U	400 U	380 U
4-CHLOROPHENYL PHENYL ETHER	390 U	380 U	400 U	380 U	400 U	380 U
FLUORENE	390 U	380 U	400 U	380 U	400 U	380 U
4-NITROANILINE	950 U	920 U	980 U	930 U	960 U	920 U
4,6-DINITRO-2-METHYLPHENOL	950 U	920 U	980 U	930 U	960 U	920 U
N-NITROSODIPHENYLAMINE	390 U	380 U	400 U	380 U	400 U	380 U
4-BROMOPHENYL PHENYL ETHER	390 U	380 U	400 U	380 U	400 U	380 U
HEXACHLOROBENZENE	390 U	380 U	400 U	380 U	400 U	380 U
PENTACHLOROPHENOL	950 U	920 U	980 U	930 U	960 U	920 U
PHENANTHRENE	390 U	380 U	400 U	380 U	400 U	380 U
ANTHRACENE	390 U	380 U	400 U	380 U	400 U	380 U
CARBAZOLE	390 U	380 U	400 U	380 U	400 U	380 U
DI-N-BUTYL PHTHALATE	390 U	380 U	400 U	74 J	400 U	380 U
FLUORANTHENE	390 U	380 U	400 U	380 U	400 U	380 U
PYRENE	390 U	380 U	400 U	380 U	400 U	380 U
BUTYL BENZYL PHTHALATE	390 U	380 U	400 U	380 U	400 U	380 U
3,3'-DICHLOROBENZIDINE	390 UJ	380 U	400 U	380 U	400 U	380 U
BENZO(A)ANTHRACENE	390 U	380 U	400 U	380 U	400 U	380 U
CHRYSENE	390 U	380 U	400 U	380 U	400 U	380 U
BIS(2-ETHYLHEXYL)PHTHALATE	390 U	380 U	400 U	380 U	400 U	380 U
DI-N-OCTYL PHTHALATE	390 U	380 U	400 U	380 U	400 U	380 U
BENZO(B)FLUORANTHENE	390 U	380 U	400 U	380 U	400 U	380 U
BENZO(K)FLUORANTHENE	390 U	380 U	400 U	380 U	400 U	380 U
BENZO(A)PYRENE	390 U	380 U	400 U	380 U	400 U	380 U
INDENO(1,2,3-CD)PYRENE	390 U	380 U	400 U	380 U	400 U	380 U
DIBENZ(A,H)ANTHRACENE	390 U	380 U	400 U	380 U	400 U	380 U
BENZO(GHI)PERYLENE	390 U	380 U	400 U	380 U	400 U	380 U

PESTICIDES/PCBS

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-BM-SB15-06	24-SSA-SB01-03	24-SSA-SB01-05	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	2 U	2 U	2.1 U	2 U	2 U	1.9 UJ
BETA-BHC	2 U	2 U	2.1 U	2 U	2 U	1.9 U
DELTA-BHC	2 U	2 U	2.1 U	2 U	2 U	1.9 UJ
GAMMA-BHC	2 U	2 U	2.1 U	2 U	2 U	1.9 U
HEPTACHLOR	2 U	2 U	2.1 U	2 U	2 U	1.9 U
ALDRIN	2 U	2 U	2.1 U	2 U	2 U	1.9 U
HEPTACHLOR EPOXIDE	2 U	2 U	2.1 U	2 U	2 U	1.9 U
ENDOSULFAN I	2 U	2 U	2.1 U	2 U	2 U	1.9 U
DIELDRIN	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
4,4'-DDE	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
ENDRIN	3.9 U	3.8 UJ	4 UJ	3.8 U	4 U	3.7 U
ENDOSULFAN II	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
4,4'-DDD	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
ENDOSULFAN SULFATE	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
4,4'-DDT	3.9 U	3.8 U	4 U	3.8 U	4 J	3.7 U
METHOXYCHLOR	20 UJ	20 U	21 U	20 U	20 U	19 U
ENDRIN KETONE	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
ENDRIN ALDEHYDE	3.9 U	3.8 U	4 U	3.8 U	4 U	3.7 U
ALPHA-CHLORDANE	2 U	2 U	2.1 U	2 U	2 U	1.9 U
GAMMA-CHLORDANE	2 U	2 U	2.1 U	2 U	2 U	1.9 U
TOXAPHENE	200 U	200 U	210 U	200 U	200 U	190 U
AROCLOR-1016	39 U	38 U	40 U	38 U	40 U	37 U
AROCLOR-1221	80 U	77 U	82 U	78 U	81 U	76 U
AROCLOR-1232	39 U	38 U	40 U	38 U	40 U	37 U
AROCLOR-1242	39 U	38 U	40 U	38 U	40 U	37 U
AROCLOR-1248	39 U	38 U	40 U	38 U	40 U	37 U
AROCLOR-1254	39 U	38 U	40 U	38 U	40 U	37 U
AROCLOR-1260	39 U	38 U	40 U	38 U	40 U	37 U

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SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-SSA-SB03-06	24-SSA-SB04-04	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	11 U	12 U	62 UJ	1500 U
BROMOMETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
VINYL CHLORIDE	11 U	11 U	11 U	12 U	62 U	1500 U
CHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
METHYLENE CHLORIDE	44 U	23 U	33 B	15 U	71 U	1500 U
ACETONE	51 J	170 U	380 J	200 UJ	1800 J	1500 U
CARBON DISULFIDE	11 U	11 U	4 J	6 J	62 U	1500 U
1,1-DICHLOROETHENE	11 U	11 U	11 U	12 U	62 U	1500 U
1,1-DICHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
1,2-DICHLOROETHENE (total)	11 U	11 U	11 U	12 U	62 U	1500 U
CHLOROFORM	11 U	11 U	11 U	12 U	62 U	1500 U
1,2-DICHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
2-BUTANONE	11 U	11 U	11 U	12 UJ	62 UJ	480 J
1,1,1-TRICHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
CARBON TETRACHLORIDE	11 U	11 U	11 U	12 U	62 U	1500 U
BROMODICHLOROMETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
1,2-DICHLOROPROPANE	11 U	11 U	11 U	12 U	62 U	1500 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	12 U	62 U	1500 U
TRICHLOROETHENE	11 U	11 U	11 U	12 U	62 U	1500 U
DIBROMOCHLOROMETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
1,1,2-TRICHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
BENZENE	11 U	11 U	11 U	12 U	62 U	1500 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	12 U	62 U	1500 U
BROMOFORM	11 U	11 U	11 U	12 U	62 U	1500 U
4-METHYL-2-PENTANONE	11 U	11 U	11 U	12 U	62 U	1500 U
2-HEXANONE	11 U	11 U	11 U	12 U	62 UJ	1500 U
TETRACHLOROETHENE	11 U	11 U	11 U	12 U	62 U	1500 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	11 U	12 U	62 U	1500 U
TOLUENE	11 U	11 U	11 U	12 U	62 U	1500 U
CHLOROBENZENE	11 U	11 U	11 U	12 U	62 U	1500 U
ETHYLBENZENE	11 U	11 U	11 U	12 U	62 U	1500 U
STYRENE	11 U	11 U	11 U	12 U	62 U	1500 U
XYLENES (total)	11 U	11 U	11 U	12 U	62 U	1500 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
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SEMIVOLATILES

SAMPLE NO.	24-SSA-SB03-06	24-SSA-SB04-04	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	370 U	360 U	380 U	380 U	410 U	400 U
BIS(2-CHLOROETHYL)ETHER	370 U	360 U	380 U	380 U	410 U	400 U
2-CHLOROPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
1,3-DICHLOROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
1,4-DICHLOROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
1,2-DICHLOROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
2-METHYLPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
2,2'-OXYBIS-1-CHLOROPROPANE	370 U	360 U	380 U	380 U	410 U	400 U
4-METHYLPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
N-NITROSO-DI-N-PROPYLAMINE	370 U	360 U	380 U	380 U	410 U	400 U
HEXACHLOROETHANE	370 U	360 U	380 U	380 U	410 U	400 U
NITROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
ISOPHORONE	370 U	360 U	380 U	380 U	410 U	400 U
2-NITROPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
2,4-DIMETHYLPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
BIS(2-CHLOROETHOXY)METHANE	370 U	360 U	380 U	380 U	410 U	400 U
2,4-DICHLOROPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
1,2,4-TRICHLOROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
NAPHTHALENE	370 U	360 U	380 U	380 U	410 U	400 U
4-CHLOROANILINE	370 U	360 U	380 U	380 U	410 U	400 U
HEXACHLOROBUTADIENE	370 U	360 U	380 U	380 U	410 U	400 U
4-CHLORO-3-METHYLPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
2-METHYLNAPHTHALENE	370 U	360 U	380 U	380 U	410 U	400 U
HEXACHLOROCYCLOPENTADIENE	370 U	360 U	380 U	380 U	410 U	400 U
2,4,6-TRICHLOROPHENOL	370 U	360 U	380 U	380 U	410 U	400 U
2,4,5-TRICHLOROPHENOL	890 U	870 U	920 U	930 U	990 U	980 U
2-CHLORONAPHTHALENE	370 U	360 U	380 U	380 U	410 U	400 U
2-NITROANILINE	890 U	870 U	920 U	930 U	990 U	980 U
DIMETHYL PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
ACENAPHTHYLENE	370 U	360 U	380 U	380 U	410 U	400 U
2,6-DINITROTOLUENE	370 U	360 U	380 U	380 U	410 U	400 U
3-NITROANILINE	890 U	870 U	920 U	930 U	990 U	980 U
ACENAPHTHENE	370 U	360 U	380 U	380 U	410 U	400 U

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SEMIVOLATILES (con't)

SAMPLE NO.	24-SSA-SB03-06	24-SSA-SB04-04	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	890 U	870 U	920 U	930 U	990 U	980 U
4-NITROPHENOL	890 U	870 U	920 U	930 U	990 UJ	980 UJ
DIBENZOFURAN	370 U	360 U	380 U	380 U	410 U	400 U
2,4-DINITROTOLUENE	370 U	360 U	380 U	380 U	410 U	400 U
DIETHYL PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
4-CHLOROPHENYL PHENYL ETHER	370 U	360 U	380 U	380 U	410 U	400 U
FLUORENE	370 U	360 U	380 U	380 U	410 U	400 U
4-NITROANILINE	890 U	870 U	920 U	930 U	990 U	980 U
4,6-DINITRO-2-METHYLPHENOL	890 U	870 U	920 U	930 U	990 U	980 U
N-NITROSODIPHENYLAMINE	370 U	360 U	380 U	380 U	410 U	400 U
4-BROMOPHENYL PHENYL ETHER	370 U	360 U	380 U	380 U	410 U	400 U
HEXACHLOROBENZENE	370 U	360 U	380 U	380 U	410 U	400 U
PENTACHLOROPHENOL	890 U	870 U	920 U	930 U	990 U	980 U
PHENANTHRENE	370 U	360 U	380 U	380 U	410 U	400 U
ANTHRACENE	370 U	360 U	380 U	380 U	410 U	400 U
CARBAZOLE	370 U	360 U	380 U	380 U	410 U	400 U
DI-N-BUTYL PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
FLUORANTHENE	370 U	360 U	380 U	380 U	410 U	400 U
PYRENE	370 U	360 U	380 U	380 U	410 U	400 U
BUTYL BENZYL PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
3,3'-DICHLOROBENZIDINE	370 U	360 U	380 U	380 U	410 U	400 U
BENZO(A)ANTHRACENE	370 U	360 U	380 U	380 U	410 U	400 U
CHRYSENE	370 U	360 U	380 U	380 U	410 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
DI-N-OCTYL PHTHALATE	370 U	360 U	380 U	380 U	410 U	400 U
BENZO(B)FLUORANTHENE	370 U	360 U	380 U	380 U	410 U	400 U
BENZO(K)FLUORANTHENE	370 U	360 U	380 U	380 U	410 U	400 U
BENZO(A)PYRENE	370 U	360 U	380 U	380 U	410 U	400 U
INDENO(1,2,3-CD)PYRENE	370 U	360 U	380 U	380 U	410 U	400 U
DIBENZ(A,H)ANTHRACENE	370 U	360 U	380 U	380 U	410 U	400 U
BENZO(GHI)PERYLENE	370 U	360 U	380 U	380 U	410 U	400 U

PESTICIDES/PCBS

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SAMPLE NO.	24-SSA-SB03-06	24-SSA-SB04-04	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.8 UJ	1.8 U	2 U	2 U	2.1 U	2.1 U
BETA-BHC	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
DELTA-BHC	1.8 UJ	1.8 U	2 U	2 U	2.1 U	2.1 U
GAMMA-BHC	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
HEPTACHLOR	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
ALDRIN	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
HEPTACHLOR EPOXIDE	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
ENDOSULFAN I	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
DIELDRIN	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
4,4'-DDE	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
ENDRIN	3.5 U	3.6 U	3.8 U	3.8 UJ	4.1 UJ	4 U
ENDOSULFAN II	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
4,4'-DDD	3.5 U	3.6 U	3.8 U	4.4 J	6.4 J	9.1
ENDOSULFAN SULFATE	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
4,4'-DDT	3.5 U	3.6 U	3.8 U	100	210	12
METHOXYCHLOR	18 U	18 U	20 U	20 U	21 U	21 U
ENDRIN KETONE	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
ENDRIN ALDEHYDE	3.5 U	3.6 U	3.8 U	3.8 U	4.1 U	4 U
ALPHA-CHLORDANE	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
GAMMA-CHLORDANE	1.8 U	1.8 U	2 U	2 U	2.1 U	2.1 U
TOXAPHENE	180 U	180 U	200 U	200 U	210 U	210 U
AROCLOR-1016	35 U	36 U	38 U	38 U	41 U	40 U
AROCLOR-1221	71 U	73 U	77 U	78 U	83 U	82 U
AROCLOR-1232	35 U	36 U	38 U	38 U	41 U	40 U
AROCLOR-1242	35 U	36 U	38 U	38 U	41 U	40 U
AROCLOR-1248	35 U	36 U	38 U	38 U	41 U	40 U
AROCLOR-1254	35 U	36 U	38 U	38 U	41 U	40 U
AROCLOR-1260	35 U	36 U	38 U	38 U	41 U	40 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB08-03	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	12 U	12 U	12 U	12 U	12 U	12 U
BROMOMETHANE	12 U	12 U	12 U	12 U	12 U	12 U
VINYL CHLORIDE	12 U	12 U	12 U	12 U	12 U	12 U
CHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
METHYLENE CHLORIDE	14 U	14 U	12 U	18 U	13 U	120 J
ACETONE	82 UJ	120 J	270 U	97 J	130 J	59 U
CARBON DISULFIDE	12 U	12 U	12 U	12 U	12 U	12 U
1,1-DICHLOROETHENE	12 U	12 U	12 U	12 U	12 U	12 U
1,1-DICHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
1,2-DICHLOROETHENE (total)	12 U	12 U	12 U	12 U	12 U	12 U
CHLOROFORM	12 U	12 U	12 U	12 U	12 U	12 U
1,2-DICHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
2-BUTANONE	12 UJ	12 U	12 U	12 U	12 U	12 U
1,1,1-TRICHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
CARBON TETRACHLORIDE	12 U	12 U	12 U	12 U	12 U	12 U
BROMODICHLOROMETHANE	12 U	12 U	12 U	12 U	12 U	12 U
1,2-DICHLOROPROPANE	12 U	12 U	12 U	12 U	12 U	12 U
CIS-1,3-DICHLOROPROPENE	12 U	12 U	12 U	12 U	12 U	12 U
TRICHLOROETHENE	12 U	12 U	12 U	12 U	12 U	12 U
DIBROMOCHLOROMETHANE	12 U	12 U	12 U	12 U	12 U	12 U
1,1,2-TRICHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
BENZENE	12 U	12 U	12 U	12 U	12 U	12 U
TRANS-1,3-DICHLOROPROPENE	12 U	12 U	12 U	12 U	12 U	12 U
BROMOFORM	12 U	12 U	12 U	12 U	12 U	12 U
4-METHYL-2-PENTANONE	12 U	12 U	12 U	12 U	12 U	12 U
2-HEXANONE	12 U	12 U	12 U	12 U	12 U	12 U
TETRACHLOROETHENE	12 U	12 U	12 U	12 U	12 U	12 U
1,1,2,2-TETRACHLOROETHANE	12 U	12 U	12 U	12 U	12 U	12 U
TOLUENE	12 U	12 U	12 U	12 U	12 U	12 U
CHLOROBENZENE	12 U	12 U	12 U	12 U	12 U	12 U
ETHYLBENZENE	12 U	12 U	12 U	12 U	12 U	12 U
STYRENE	12 U	12 U	12 U	12 U	12 U	12 U
XYLENES (total)	12 U	12 U	12 U	12 U	12 U	12 U

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INDUSTRIAL FLY ASH DUMP
SUBSURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB08-03	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	390 U	400 U	400 U	410 U	400 U	390 U
BIS(2-CHLOROETHYL)ETHER	390 U	400 U	400 U	410 U	400 U	390 U
2-CHLOROPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
1,3-DICHLOROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
1,4-DICHLOROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
1,2-DICHLOROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
2-METHYLPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
2,2'-OXYBIS-1-CHLOROPROPANE	390 U	400 U	400 U	410 U	400 U	390 U
4-METHYLPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
N-NITROSO-DI-N-PROPYLAMINE	390 U	400 U	400 U	410 U	400 U	390 U
HEXACHLOROETHANE	390 U	400 U	400 U	410 U	400 U	390 U
NITROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
ISOPHORONE	390 U	400 U	400 U	410 U	400 U	390 U
2-NITROPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
2,4-DIMETHYLPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
BIS(2-CHLOROETHOXY)METHANE	390 U	400 U	400 U	410 U	400 U	390 U
2,4-DICHLOROPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
1,2,4-TRICHLOROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
NAPHTHALENE	390 U	400 U	400 U	410 U	400 U	390 U
4-CHLOROANILINE	390 U	400 U	400 U	410 U	400 U	390 U
HEXACHLOROBUTADIENE	390 U	400 U	400 U	410 U	400 U	390 U
4-CHLORO-3-METHYLPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
2-METHYLNAPHTHALENE	390 U	400 U	400 U	410 U	400 U	390 U
HEXACHLOROCYCLOPENTADIENE	390 U	400 U	400 U	410 U	400 U	390 U
2,4,6-TRICHLOROPHENOL	390 U	400 U	400 U	410 U	400 U	390 U
2,4,5-TRICHLOROPHENOL	940 U	960 U	980 U	1000 U	960 U	950 U
2-CHLORONAPHTHALENE	390 U	400 U	400 U	410 U	400 U	390 U
2-NITROANILINE	940 U	960 U	980 U	1000 U	960 U	950 U
DIMETHYL PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
ACENAPHTHYLENE	390 U	400 U	400 U	410 U	400 U	390 U
2,6-DINITROTOLUENE	390 U	400 U	400 U	410 U	400 U	390 U
3-NITROANILINE	940 U	960 U	980 U	1000 U	960 U	950 U
ACENAPHTHENE	390 U	400 U	400 U	410 U	400 U	390 U

SEMIVOLATILES (con't)

SAMPLE NO.	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB08-03	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	940 U	960 U	980 U	1000 U	960 U	950 U
4-NITROPHENOL	940 UJ	960 U	980 U	1000 U	960 U	950 U
DIBENZOFURAN	390 U	400 U	400 U	410 U	400 U	390 U
2,4-DINITROTOLUENE	390 U	400 U	400 U	410 U	400 U	390 U
DIETHYL PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
4-CHLOROPHENYL PHENYL ETHER	390 U	400 U	400 U	410 U	400 U	390 U
FLUORENE	390 U	400 U	400 U	410 U	400 U	390 U
4-NITROANILINE	940 U	960 U	980 U	1000 U	960 U	950 U
4,6-DINITRO-2-METHYLPHENOL	940 U	960 U	980 U	1000 U	960 U	950 U
N-NITROSODIPHENYLAMINE	390 U	400 U	400 U	410 U	400 U	390 U
4-BROMOPHENYL PHENYL ETHER	390 U	400 U	400 U	410 U	400 U	390 U
HEXACHLOROBENZENE	390 U	400 U	400 U	410 U	400 U	390 U
PENTACHLOROPHENOL	940 U	960 U	980 U	1000 U	960 U	950 U
PHENANTHRENE	390 U	400 U	400 U	410 U	400 U	390 U
ANTHRACENE	390 U	400 U	400 U	410 U	400 U	390 U
CARBAZOLE	390 U	400 U	400 U	410 U	400 U	390 U
DI-N-BUTYL PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
FLUORANTHENE	390 U	400 U	400 U	410 U	400 U	390 U
PYRENE	390 U	400 U	400 U	410 U	400 U	390 U
BUTYL BENZYL PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
3,3'-DICHLOROBENZIDINE	390 U	400 U	400 U	410 U	400 U	390 U
BENZO(A)ANTHRACENE	390 U	400 U	400 U	410 U	400 U	390 U
CHRYSENE	390 U	400 U	400 U	410 U	400 U	390 U
BIS(2-ETHYLHEXYL)PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
DI-N-OCTYL PHTHALATE	390 U	400 U	400 U	410 U	400 U	390 U
BENZO(B)FLUORANTHENE	390 U	400 U	400 U	410 U	400 U	390 U
BENZO(K)FLUORANTHENE	390 U	400 U	400 U	410 U	400 U	390 U
BENZO(A)PYRENE	390 U	400 U	400 U	410 U	400 U	390 U
INDENO(1,2,3-CD)PYRENE	390 U	400 U	400 U	410 U	400 U	390 U
DIBENZ(A,H)ANTHRACENE	390 U	400 U	400 U	410 U	400 U	390 U
BENZO(GHI)PERYLENE	390 U	400 U	400 U	410 U	400 U	390 U

PESTICIDES/PCBS

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MCB CAMP LEJEUNE, NORTH CAROLINA
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SAMPLE NO.	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB08-03	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	2 U	2 U	2.1 U	2.1 U	2 U	2 U
BETA-BHC	2 U	2 U	2.1 U	2.1 U	2 U	2 U
DELTA-BHC	2 U	2 U	2.1 U	2.1 U	2 U	2 U
GAMMA-BHC	2 U	2 U	2.1 U	2.1 U	2 U	2 U
HEPTACHLOR	2 U	2 U	2.1 U	2.1 U	2 U	2 U
ALDRIN	2 U	2 U	2.1 U	2.1 U	2 U	2 U
HEPTACHLOR EPOXIDE	2 U	2 U	2.1 U	2.1 U	2 U	2 U
ENDOSULFAN I	2 U	2 U	2.1 U	2.1 U	2 U	2 U
DIELDRIN	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
4,4'-DDE	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
ENDRIN	3.9 U	4 U	4 U	4.1 U	4 U	3.9 UJ
ENDOSULFAN II	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
4,4'-DDD	19	4 U	4 U	4.1 U	4 U	7.1
ENDOSULFAN SULFATE	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
4,4'-DDT	220	4 U	4 U	4.1 U	4 U	12
METHOXYCHLOR	20 U	20 U	21 U	21 U	20 U	20 U
ENDRIN KETONE	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
ENDRIN ALDEHYDE	3.9 U	4 U	4 U	4.1 U	4 U	3.9 U
ALPHA-CHLORDANE	2 U	2 U	2.1 U	2.1 U	2 U	2 U
GAMMA-CHLORDANE	2 U	2 U	2.1 U	2.1 U	2 U	2 U
TOXAPHENE	200 U	200 U	210 U	210 U	200 U	200 U
AROCLOR-1016	39 U	40 U	40 U	41 U	40 U	39 U
AROCLOR-1221	79 U	81 U	82 U	84 U	81 U	80 U
AROCLOR-1232	39 U	40 U	40 U	41 U	40 U	39 U
AROCLOR-1242	39 U	40 U	40 U	41 U	40 U	39 U
AROCLOR-1248	39 U	40 U	40 U	41 U	40 U	39 U
AROCLOR-1254	39 U	40 U	40 U	41 U	40 U	39 U
AROCLOR-1260	39 U	40 U	40 U	41 U	40 U	39 U

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REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-GW07-04	24-GW07-05	24-GW08-05	24-GW08-06	24-GW09-01	24-GW09-02
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	12 U	60 U	12 U	12 U
BROMOMETHANE	11 U	11 U	12 U	60 U	12 U	12 U
VINYL CHLORIDE	11 U	11 U	12 U	60 U	12 U	12 U
CHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
METHYLENE CHLORIDE	16 U	16 U	12 U	120 U	13 U	14 U
ACETONE	11 U	45 U	29 U	89 J	58 U	39 U
CARBON DISULFIDE	11 U	11 U	12 U	60 U	12 U	12 U
1,1-DICHLOROETHENE	11 U	11 U	12 U	60 U	12 U	12 U
1,1-DICHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
1,2-DICHLOROETHENE (total)	11 U	11 U	12 U	60 U	12 U	12 U
CHLOROFORM	11 U	11 U	12 U	60 U	12 U	12 U
1,2-DICHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
2-BUTANONE	11 U	11 U	12 U	60 U	12 U	12 U
1,1,1-TRICHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
CARBON TETRACHLORIDE	11 U	11 U	12 U	60 U	12 U	12 U
BROMODICHLOROMETHANE	11 U	11 U	12 U	60 U	12 U	12 U
1,2-DICHLOROPROPANE	11 U	11 U	12 U	60 U	12 U	12 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	12 U	60 U	12 U	12 U
TRICHLOROETHENE	11 U	11 U	12 U	60 U	12 U	12 U
DIBROMOCHLOROMETHANE	11 U	11 U	12 U	60 U	12 U	12 U
1,1,2-TRICHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
BENZENE	11 U	11 U	12 U	60 U	12 U	12 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	12 U	60 U	12 U	12 U
BROMOFORM	11 U	11 U	12 U	60 U	12 U	12 U
4-METHYL-2-PENTANONE	11 U	11 U	12 U	60 U	12 U	12 U
2-HEXANONE	11 U	11 U	12 U	60 U	12 U	12 U
TETRACHLOROETHENE	11 U	11 U	12 U	60 U	12 U	12 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	12 U	60 U	12 U	12 U
TOLUENE	11 U	11 U	12 U	60 U	12 U	12 U
CHLOROBENZENE	11 U	11 U	12 U	60 U	12 U	12 U
ETHYLBENZENE	11 U	11 U	12 U	60 U	12 U	12 U
STYRENE	11 U	11 U	12 U	60 U	12 U	12 U
XYLENES (total)	11 U	11 U	12 U	60 U	12 U	12 U

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SEMIVOLATILES

SAMPLE NO.	24-GW07-04	24-GW07-05	24-GW08-05	24-GW08-06	24-GW09-01	24-GW09-02
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	370 U	370 U	390 U	400 U	390 U	390 U
BIS(2-CHLOROETHYL)ETHER	370 U	370 U	390 U	400 U	390 U	390 U
2-CHLOROPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
1,3-DICHLOROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
1,4-DICHLOROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
1,2-DICHLOROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
2-METHYLPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
2,2'-OXYBIS-1-CHLOROPROPANE	370 U	370 U	390 U	400 U	390 U	390 U
4-METHYLPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
N-NITROSO-DI-N-PROPYLAMINE	370 U	370 U	390 U	400 U	390 U	390 U
HEXACHLOROETHANE	370 U	370 U	390 U	400 U	390 U	390 U
NITROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
ISOPHORONE	370 U	370 U	390 U	400 U	390 U	390 U
2-NITROPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
2,4-DIMETHYLPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
BIS(2-CHLOROETHOXY)METHANE	370 U	370 U	390 U	400 U	390 U	390 U
2,4-DICHLOROPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
1,2,4-TRICHLOROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
NAPHTHALENE	370 U	370 U	390 U	400 U	390 U	390 U
4-CHLOROANILINE	370 U	370 U	390 U	400 U	390 U	390 U
HEXACHLOROBUTADIENE	370 U	370 U	390 U	400 U	390 U	390 U
4-CHLORO-3-METHYLPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
2-METHYLNAPHTHALENE	370 U	370 U	390 U	400 U	390 U	390 U
HEXACHLOROCYCLOPENTADIENE	370 U	370 U	390 U	400 U	390 U	390 U
2,4,6-TRICHLOROPHENOL	370 U	370 U	390 U	400 U	390 U	390 U
2,4,5-TRICHLOROPHENOL	910 U	900 U	950 U	960 U	940 U	950 U
2-CHLORONAPHTHALENE	370 U	370 U	390 U	400 U	390 U	390 U
2-NITROANILINE	910 U	900 U	950 U	960 U	940 U	950 U
DIMETHYL PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
ACENAPHTHYLENE	370 U	370 U	390 U	400 U	390 U	390 U
2,6-DINITROTOLUENE	370 U	370 U	390 U	400 U	390 U	390 U
3-NITROANILINE	910 U	900 U	950 U	960 U	940 U	950 U
ACENAPHTHENE	370 U	370 U	390 U	400 U	390 U	390 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
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SEMIVOLATILES (con't)

SAMPLE NO.	24-GW07-04	24-GW07-05	24-GW08-05	24-GW08-06	24-GW09-01	24-GW09-02
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	910 U	900 U	950 U	960 U	940 U	950 U
4-NITROPHENOL	910 U	900 U	950 U	960 U	940 U	950 U
DIBENZOFURAN	370 U	370 U	390 U	400 U	390 U	390 U
2,4-DINITROTOLUENE	370 U	370 U	390 U	400 U	390 U	390 U
DIETHYL PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
4-CHLOROPHENYL PHENYL ETHER	370 U	370 U	390 U	400 U	390 U	390 U
FLUORENE	370 U	370 U	390 U	400 U	390 U	390 U
4-NITROANILINE	910 U	900 U	950 U	960 U	940 U	950 U
4,6-DINITRO-2-METHYLPHENOL	910 U	900 U	950 U	960 U	940 U	950 U
N-NITROSODIPHENYLAMINE	370 U	370 U	390 U	400 U	390 U	390 U
4-BROMOPHENYL PHENYL ETHER	370 U	370 U	390 U	400 U	390 U	390 U
HEXACHLOROBENZENE	370 U	370 U	390 U	400 U	390 U	390 U
PENTACHLOROPHENOL	910 U	900 U	950 U	960 U	940 U	950 U
PHENANTHRENE	370 U	370 U	390 U	400 U	390 U	390 U
ANTHRACENE	370 U	370 U	390 U	400 U	390 U	390 U
CARBAZOLE	370 U	370 U	390 U	400 U	390 U	390 U
DI-N-BUTYL PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
FLUORANTHENE	370 U	370 U	390 U	400 U	390 U	390 U
PYRENE	370 U	370 U	390 U	400 U	390 U	390 U
BUTYL BENZYL PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
3,3'-DICHLOROBENZIDINE	370 U	370 U	390 U	400 U	390 U	390 U
BENZO(A)ANTHRACENE	370 U	370 U	390 U	400 U	390 U	390 U
CHRYSENE	370 U	370 U	390 U	400 U	390 U	390 U
BIS(2-ETHYLHEXYL)PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
DI-N-OCTYL PHTHALATE	370 U	370 U	390 U	400 U	390 U	390 U
BENZO(B)FLUORANTHENE	370 U	370 U	390 U	400 U	390 U	390 U
BENZO(K)FLUORANTHENE	370 U	370 U	390 U	400 U	390 U	390 U
BENZO(A)PYRENE	370 U	370 U	390 U	400 U	390 U	390 U
INDENO(1,2,3-CD)PYRENE	370 U	370 U	390 U	400 U	390 U	390 U
DIBENZ(A,H)ANTHRACENE	370 U	370 U	390 U	400 U	390 U	390 U
BENZO(GHI)PERYLENE	370 U	370 U	390 U	400 U	390 U	390 U

PESTICIDES/PCBS

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-GW07-04	24-GW07-05	24-GW08-05	24-GW08-06	24-GW09-01	24-GW09-02
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
BETA-BHC	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
DELTA-BHC	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
GAMMA-BHC	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
HEPTACHLOR	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
ALDRIN	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
HEPTACHLOR EPOXIDE	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
ENDOSULFAN I	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
DIELDRIN	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
4,4'-DDE	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
ENDRIN	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
ENDOSULFAN II	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
4,4'-DDD	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	11
ENDOSULFAN SULFATE	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
4,4'-DDT	8.9	3.7 U	3.9 UJ	4 U	3.9 U	29
METHOXYCHLOR	19 U	19 UJ	20 UJ	20 UJ	20 UJ	20 UJ
ENDRIN KETONE	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
ENDRIN ALDEHYDE	3.7 U	3.7 U	3.9 UJ	4 U	3.9 U	3.9 U
ALPHA-CHLORDANE	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
GAMMA-CHLORDANE	1.9 U	1.9 U	2 UJ	2 U	2 U	2 U
TOXAPHENE	190 U	190 U	200 UJ	200 U	200 U	200 U
AROCLOR-1016	37 U	37 U	39 UJ	40 U	39 U	39 U
AROCLOR-1221	76 U	75 U	80 UJ	81 U	79 U	80 U
AROCLOR-1232	37 U	37 U	39 UJ	40 U	39 U	39 U
AROCLOR-1242	37 U	37 U	39 UJ	40 U	39 U	39 U
AROCLOR-1248	37 U	37 U	39 UJ	40 U	39 U	39 U
AROCLOR-1254	37 U	37 U	39 UJ	40 U	39 U	39 U
AROCLOR-1260	37 U	37 U	39 UJ	40 U	39 U	39 U

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VOLATILES

SAMPLE NO.	24-GW10-03	24-GW10-04
DEPTH		
UNITS	UG/KG	UG/KG
CHLOROMETHANE	12 U	12 U
BROMOMETHANE	12 U	12 U
VINYL CHLORIDE	12 U	12 U
CHLOROETHANE	12 U	12 U
METHYLENE CHLORIDE	29 U	12 U
ACETONE	12 J	18 U
CARBON DISULFIDE	12 U	12 U
1,1-DICHLOROETHENE	12 U	12 U
1,1-DICHLOROETHANE	12 U	12 U
1,2-DICHLOROETHENE (total)	12 U	12 U
CHLOROFORM	12 U	12 U
1,2-DICHLOROETHANE	12 U	12 U
2-BUTANONE	12 U	12 U
1,1,1-TRICHLOROETHANE	12 U	12 U
CARBON TETRACHLORIDE	12 U	12 U
BROMODICHLOROMETHANE	12 U	12 U
1,2-DICHLOROPROPANE	12 U	12 U
CIS-1,3-DICHLOROPROPENE	12 U	12 U
TRICHLOROETHENE	12 U	12 U
DIBROMOCHLOROMETHANE	12 U	12 U
1,1,2-TRICHLOROETHANE	12 U	12 U
BENZENE	12 U	12 U
TRANS-1,3-DICHLOROPROPENE	12 U	12 U
BROMOFORM	12 U	12 U
4-METHYL-2-PENTANONE	12 U	12 U
2-HEXANONE	12 U	12 U
TETRACHLOROETHENE	12 U	12 U
1,1,2,2-TETRACHLOROETHANE	12 U	12 U
TOLUENE	12 U	12 U
CHLOROBENZENE	12 U	12 U
ETHYLBENZENE	12 U	12 U
STYRENE	12 U	12 U
XYLENES (total)	12 U	12 U

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SEMIVOLATILES

SAMPLE NO.	24-GW10-03	24-GW10-04
DEPTH		
UNITS	UG/KG	UG/KG
PHENOL	390 U	410 U
BIS(2-CHLOROETHYL)ETHER	390 U	410 U
2-CHLOROPHENOL	390 U	410 U
1,3-DICHLOROBENZENE	390 U	410 U
1,4-DICHLOROBENZENE	390 U	410 U
1,2-DICHLOROBENZENE	390 U	410 U
2-METHYLPHENOL	390 U	410 U
2,2'-OXYBIS-1-CHLOROPROPANE	390 U	410 U
4-METHYLPHENOL	390 U	410 U
N-NITROSO-DI-N-PROPYLAMINE	390 U	410 U
HEXACHLOROETHANE	390 U	410 U
NITROBENZENE	390 U	410 U
ISOPHORONE	390 U	410 U
2-NITROPHENOL	390 U	410 U
2,4-DIMETHYLPHENOL	390 U	410 U
BIS(2-CHLOROETHOXY)METHANE	390 U	410 U
2,4-DICHLOROPHENOL	390 U	410 U
1,2,4-TRICHLOROBENZENE	390 U	410 U
NAPHTHALENE	390 U	410 U
4-CHLOROANILINE	390 U	410 U
HEXACHLOROBUTADIENE	390 U	410 U
4-CHLORO-3-METHYLPHENOL	390 U	410 U
2-METHYLNAPHTHALENE	390 U	410 U
HEXACHLOROCYCLOPENTADIENE	390 U	410 U
2,4,6-TRICHLOROPHENOL	390 U	410 U
2,4,5-TRICHLOROPHENOL	950 U	990 U
2-CHLORONAPHTHALENE	390 U	410 U
2-NITROANILINE	950 U	990 U
DIMETHYL PHTHALATE	390 U	410 U
ACENAPHTHYLENE	390 U	410 U
2,6-DINITROTOLUENE	390 U	410 U
3-NITROANILINE	950 U	990 U
ACENAPHTHENE	390 U	410 U

SEMIVOLATILES (con't)

SAMPLE NO.	24-GW10-03	24-GW10-04
DEPTH		
UNITS	UG/KG	UG/KG
2,4-DINITROPHENOL	950 U	990 U
4-NITROPHENOL	950 U	990 U
DIBENZOFURAN	390 U	410 U
2,4-DINITROTOLUENE	390 U	410 U
DIETHYL PHTHALATE	390 U	410 U
4-CHLOROPHENYL PHENYL ETHER	390 U	410 U
FLUORENE	390 U	410 U
4-NITROANILINE	950 U	990 U
4,6-DINITRO-2-METHYLPHENOL	950 U	990 U
N-NITROSODIPHENYLAMINE	390 U	410 U
4-BROMOPHENYL PHENYL ETHER	390 U	410 U
HEXACHLOROBENZENE	390 U	410 U
PENTACHLOROPHENOL	950 U	990 U
PHENANTHRENE	390 U	410 U
ANTHRACENE	390 U	410 U
CARBAZOLE	390 U	410 U
DI-N-BUTYL PHTHALATE	390 U	410 U
FLUORANTHENE	390 U	410 U
PYRENE	390 U	410 U
BUTYL BENZYL PHTHALATE	390 U	410 U
3,3'-DICHLOROBENZIDINE	390 U	410 U
BENZO(A)ANTHRACENE	390 U	410 U
CHRYSENE	390 U	410 U
BIS(2-ETHYLHEXYL)PHTHALATE	390 U	100 J
DI-N-OCTYL PHTHALATE	390 U	410 U
BENZO(B)FLUORANTHENE	390 U	410 U
BENZO(K)FLUORANTHENE	390 U	410 U
BENZO(A)PYRENE	390 U	410 U
INDENO(1,2,3-CD)PYRENE	390 U	410 U
DIBENZ(A,H)ANTHRACENE	390 U	410 U
BENZO(GHI)PERYLENE	390 U	410 U

PESTICIDES/PCBS

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SAMPLE NO.	24-GW10-03	24-GW10-04
DEPTH		
UNITS	UG/KG	UG/KG
ALPHA-BHC	2 U	2.1 U
BETA-BHC	2 U	2.1 U
DELTA-BHC	2 U	2.1 U
GAMMA-BHC	2 U	2.1 U
HEPTACHLOR	2 U	2.1 U
ALDRIN	2 U	2.1 U
HEPTACHLOR EPOXIDE	2 U	2.1 U
ENDOSULFAN I	2 U	2.1 U
DIELDRIN	3.9 U	4.1 U
4,4'-DDE	3.9 U	4.1 U
ENDRIN	3.9 UJ	4.1 UJ
ENDOSULFAN II	3.9 U	4.1 U
4,4'-DDD	3.9 U	4.1 U
ENDOSULFAN SULFATE	3.9 U	4.1 U
4,4'-DDT	3.9 U	4.1 U
METHOXYCHLOR	20 U	21 U
ENDRIN KETONE	3.9 U	4.1 U
ENDRIN ALDEHYDE	3.9 U	4.1 U
ALPHA-CHLORDANE	2 U	2.1 U
GAMMA-CHLORDANE	2 U	2.1 U
TOXAPHENE	200 U	210 U
AROCLOR-1016	39 U	41 U
AROCLOR-1221	80 U	83 U
AROCLOR-1232	39 U	41 U
AROCLOR-1242	39 U	41 U
AROCLOR-1248	39 U	41 U
AROCLOR-1254	39 U	41 U
AROCLOR-1260	39 U	41 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

	MINIMUM NONDETECTED MG/KG	MAXIMUM NONDETECTED MG/KG	MINIMUM DETECTED MG/KG	MAXIMUM DETECTED MG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
ALUMINUM	NA	NA	88.2	18700	24-BM-SB15-00	38 / 38
ANTIMONY	1.4 U	2.8 U	1.8 J	2.6 J	24-BM-SB02-00	4 / 38
ARSENIC	0.4 U	0.45 U	0.43 B	35.2 B	24-BM-SB03-00	31 / 38
BARIUM	NA	NA	4.4 B	502	24-BM-SB07-00	38 / 38
BERYLLIUM	0.2 U	0.29 U	0.2 B	4	24-BM-SB03-00	18 / 38
CADMIUM	1 U	1.5 U	1.6	1.9	24-BM-SB07-00	2 / 38
CALCIUM	4100 U	4100 U	73.2 B	356000 J	24-BM-SB02-00	37 / 38
CHROMIUM	2 U	2.3 U	2	23	24-BM-SB03-00	30 / 38
COBALT	1.6 U	2.3 U	2 B	14.4	24-BM-SB03-00	7 / 38
COPPER	NA	NA	0.45 B	314	24-BM-SB11-00	38 / 38
IRON	NA	NA	249	13900	24-BM-SB07-00	38 / 38
LEAD	NA	NA	1.5	393	24-BDA-SB09-00	38 / 38
MAGNESIUM	NA	NA	22.7 B	3330	24-BDA-SB02-00	38 / 38
MANGANESE	NA	NA	3 B	93.4 J	24-BM-SB07-00	38 / 38
MERCURY	0.09 U	0.15 U	0.15	1.2	24-BM-SB11-00	7 / 38
NICKEL	4 U	5.8 U	6 B	80.8	24-BM-SB11-00	6 / 38
POTASSIUM	19.2 U	20 U	24.8 B	1890	24-BM-SB06-00	36 / 38
SELENIUM	0.2 U	0.44 U	0.25 J	18 J	24-BM-SB03-00	18 / 38
SILVER	0.6 U	0.88 U	1.3 B	1.3 B	24-SSA-SB03-00	1 / 38
SODIUM	42.2 U	47.8 U	16.5 B	373 J	24-BDA-SB02-00	36 / 38
THALLIUM	0.2 U	0.29 U	0.22 B	1.4 B	24-BM-SB03-00	7 / 38
VANADIUM	NA	NA	1.3 J	634	24-BM-SB11-00	38 / 38
ZINC	12.5 U	16.3 U	2.4 J	93.8 J	24-BM-SB11-00	36 / 38
CYANIDE	0.49 U	0.71 U	0.72	1.3	24-BM-SB06-00	3 / 37

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB01-00	24-BDA-SB02-00	24-BDA-SB03-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB06-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	563	1320	2860	1450	5360	4340
ANTIMONY	1.5 UJ	1.5 UJ	2.3 UJ	2.1 UJ	1.6 UJ	1.5 UJ
ARSENIC	0.75 J	0.65 J	0.45 UJ	0.42 UJ	0.77 B	0.58 B
BARIUM	5.2 B	5.9 B	7.5 B	4.4 B	15.3 B	10.8 B
BERYLLIUM	0.21 B	0.21 B	0.23 B	0.21 U	0.23 U	0.22 B
CADMIUM	1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
CALCIUM	207000 J	214000 J	2840	361 B	1200 J	75300 J
CHROMIUM	8.4	6.9	3.4 J	4.6 J	2.7 J	8.6 J
COBALT	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U
COPPER	6.1	2.9 B	2 J	1.9 J	2.7 B	3.2 B
IRON	1840	2080	1130	702	1770	2500
LEAD	1.5	2.4	8.4	5.2	8	3.6
MAGNESIUM	2960	3330	124 B	77.5 B	177 B	1360
MANGANESE	31.4	32.9	6.6 J	3.8 J	25.3	19.9
MERCURY	0.1 U	0.09 U	0.1 U	0.1 U	0.15	0.1 U
NICKEL	4.2 U	4.2 U	4.5 U	4.2 U	4.6 U	4.3 U
POTASSIUM	206 B	258 B	82.2 B	66.3 B	160 B	242 B
SELENIUM	0.21 UJ	0.21 UJ	0.23 UJ	0.21 UJ	0.23 UJ	0.22 UJ
SILVER	0.63 U	0.63 U	0.68 U	0.63 U	0.68 U	0.65 U
SODIUM	363 J	373 J	47.8 U	42.2 U	45.3 B	141 B
THALLIUM	0.23 J	0.21 U	0.23 U	0.3 B	0.23 U	0.22 B
VANADIUM	8 B	7.1 B	4.3 B	3.2 B	9.6 B	8.4 B
ZINC	9.6	7.3	5.2 J	3.2 J	5.5	7.3
CYANIDE	0.52 U	0.49 U	0.56 U	0.49 U	0.54 U	0.54 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB07-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB10-00	24-BDA-SB11-00	24-BDA-SB12-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	3440 J	5170 J	6630	2470	705	7090 J
ANTIMONY	1.5 UJ	1.6 UJ	2.4 J	1.6 UJ	1.5 UJ	2 UJ
ARSENIC	0.43 U	1.1 J	1.5 B	1.2 J	0.42 U	2.3 B
BARIUM	5.5 B	7.9 B	15.8 B	6 B	6.3 B	38.2 B
BERYLLIUM	0.21 U	0.23 U	0.2 U	0.23 U	0.21 U	0.29 U
CADMIUM	1.1 U	1.1 U	1 U	1.6	1.1 U	1.5 U
CALCIUM	1040 B	485 B	8770	526 B	267 B	3050
CHROMIUM	4.9 J	5 J	9.4 J	6.2 J	3.4 J	9.3 J
COBALT	1.7 U	1.8 U	1.6 U	1.8 U	1.7 U	2.3 U
COPPER	1.5 B	1.4 B	3.6 B	1.8 J	0.85 B	5 B
IRON	1100 J	2620 J	2760	2110	411	3260 J
LEAD	5.3 J	9.7 J	393	7.2	4.9 J	24.4 J
MAGNESIUM	112 B	121 B	364 B	91.2 B	38.3 B	285 B
MANGANESE	3 B	7.4	12.8 J	5.5 J	15.6 J	16.1
MERCURY	0.09 U	0.2	0.1 U	0.09 U	0.1 U	0.15 U
NICKEL	4.3 U	4.5 U	4 U	4.6 U	4.2 U	5.8 U
POTASSIUM	157 B	163 B	256 B	222 B	40.8 B	325 B
SELENIUM	0.21 U	0.23 U	0.32 J	0.32 J	0.21 UJ	0.35 B
SILVER	0.64 U	0.68 U	0.6 U	0.69 U	0.63 U	0.88 U
SODIUM	22.2 B	20.7 B	69.6 B	41.7 B	34.9 B	58.4 B
THALLIUM	0.21 UJ	0.23 UJ	0.2 U	0.23 U	0.21 U	0.29 UJ
VANADIUM	7 B	7.2 B	12.6	8.9 B	3 B	17.8
ZINC	4.5	4.1 B	19.2	3.9 J	3.4 B	19.3
CYANIDE	0.55 U	0.53 U	0.51 U	0.58 U	0.52 U	0.71 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB03-00	24-BM-SB04-00	24-BM-SB05-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	3210	1150	88.2	10400	5410	3230
ANTIMONY	1.5 UJ	1.8 J	2.6 J	2.1 J	1.5 UJ	1.5 UJ
ARSENIC	0.61 B	0.88 B	0.4 U	35.2 B	1.1 B	0.5 B
BARIUM	9 B	45.2	31.7 B	230	24.5 B	8.4 B
BERYLLIUM	0.22 U	0.22 B	0.2 U	4	0.21 U	0.22 U
CADMIUM	1.1 U	1.1 U	1 U	1.4 U	1.1 U	1.1 U
CALCIUM	418 J	238000 J	356000 J	3380 J	44400	3520
CHROMIUM	2.2 UJ	2.2 U	2	23	7.6 J	2.2 UJ
COBALT	1.8 U	1.7 U	1.6 U	14.4	1.7 U	1.7 U
COPPER	1.5 B	5.2 B	3.6 B	39.7	3.4 B	1.3 B
IRON	1060	2210	2430	7480	2860 J	1390
LEAD	5.9	5.7	1.6	21	8.7 J	6 J
MAGNESIUM	110 B	785 B	722 B	611 B	608 B	108 B
MANGANESE	5.3	40.3	78.9	37.4	15.8 J	6.9 J
MERCURY	0.1 U	0.1 U	0.1 U	0.45	0.09 U	0.11 U
NICKEL	4.4 U	4.3 U	4 U	68.7	4.2 U	4.3 U
POTASSIUM	139 B	158 B	24.8 B	1880	212 B	99.4 B
SELENIUM	0.22 UJ	0.26 J	0.2 UJ	18 J	0.49 J	0.35 J
SILVER	0.66 U	0.65 U	0.61 U	0.86 U	0.63 U	0.65 U
SODIUM	44.6 B	120 B	120 B	261 B	98.8 B	45 B
THALLIUM	0.22 U	0.22 U	0.2 UJ	1.4 B	0.21 U	0.22 U
VANADIUM	6.6 B	19.8	2.8 B	253	10.6	6.3 B
ZINC	7.7	17.2	18	30.7	16.1	6.3
CYANIDE	0.52 U	0.54 U	0.51 U	0.72	0.52 U	0.54 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BM-SB06-00	24-BM-SB07-00	24-BM-SB08-00	24-BM-SB09-00	24-BM-SB10-00	24-BM-SB11-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	8580	7920	1990	14400	1770	3650
ANTIMONY	1.8 UJ	2.8 UJ	1.4 UJ	1.4 UJ	1.7 UJ	1.5 UJ
ARSENIC	21.8 J	13.8 J	1.2 B	3.3	0.49 B	10 J
BARIUM	142 J	502	40.4	48.6	26.8 B	111 J
BERYLLIUM	3.8	3.3	0.2 B	0.6 B	0.24 U	1.7
CADMIUM	1.3 UJ	1.9	1 U	1 U	1.2 U	1.1 UJ
CALCIUM	4560 J	3670	159000	1370	945 J	196000 J
CHROMIUM	8.6 J	9.7 J	2 UJ	19.4 J	2.9	8 J
COBALT	3.8 B	10.5 B	2.4 B	2 B	1.9 U	5 B
COPPER	26.5	50 J	6.6	8.2	2.7 B	314
IRON	6970 J	13900	2550	6450	945	7050 J
LEAD	6 J	7	5.9 J	24.8 J	13.1	41.5 J
MAGNESIUM	596 B	385 B	498 B	548 B	110 B	1350
MANGANESE	37.1 J	93.4 J	41.2 J	12.2 J	23.1	79.9 J
MERCURY	0.49	0.13 U	0.09 U	0.09 U	0.11 U	1.2
NICKEL	22.7	18.8	6 B	15.6	4.9 U	80.8
POTASSIUM	1890	1360 B	194 B	717 B	133 B	753 B
SELENIUM	4.5 J	3.6 J	0.32 J	0.58 J	0.29 J	3.5 J
SILVER	0.76 U	0.83 U	0.6 U	0.6 U	0.73 U	0.65 U
SODIUM	186 B	152 B	106 B	67 B	58.2 B	269 B
THALLIUM	1 B	1 B	0.2 U	0.2 U	0.24 U	0.37 B
VANADIUM	141	123	24.8	87.8	5.6 B	634
ZINC	13.9 J	12.4 J	23.6	32.2	10.2	93.8 J
CYANIDE	1.3	1.2	0.5 U	0.51 U	0.62 U	0.54 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-BM-SB12-00	24-BM-SB13-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	1960	8330	856	18700	3090	3090
ANTIMONY	1.6 UJ	1.7 UJ	1.5 UJ	1.6 UJ	1.5 UJ	1.7 UJ
ARSENIC	0.95 J	1.6 B	0.42 U	1.7 B	0.66 B	0.83 B
BARIUM	48.4 J	37 B	46.9	19.1 B	11.5 B	10.2 B
BERYLLIUM	0.47 B	0.24 B	0.21 U	0.23 B	0.22 B	0.24 B
CADMIUM	1.2 UJ	1.2 U	1 U	1.1 U	1.1 U	1.4 U
CALCIUM	1240 J	254 B	139 B	73.2 B	2020 J	2540 J
CHROMIUM	2.3 UJ	10.5 J	2.1 UJ	21.6 J	5.3	4.3
COBALT	1.9 U	2.2 B	1.7 U	1.8 U	1.8 U	1.9 U
COPPER	6.1	10.8	1.2 B	2.8 B	8.6	3.5 B
IRON	1530 J	3300 J	492 J	5210 J	1490	1790
LEAD	14.9 J	11 J	5.7 J	8.4 J	45.7	27.7 J
MAGNESIUM	204 B	273 B	44.2 B	592 B	132 B	114 B
MANGANESE	71.7 J	6 J	8.8 J	8.5 J	7.7	7.3
MERCURY	0.11 U	0.11 U	0.1 U	0.1 U	0.58	0.1 U
NICKEL	4.7 U	4.8 U	4.2 U	4.6 U	4.4 U	4.7 U
POTASSIUM	149 B	262 B	49.6 B	417 B	77.8 B	76.4 B
SELENIUM	0.79 J	0.72 J	0.25 J	0.48 J	0.33 U	0.24 U
SILVER	0.7 U	0.72 U	0.62 U	0.69 U	0.66 U	0.71 U
SODIUM	53.6 B	51.9 B	39.6 B	57.4 B	55.2 B	61.7 B
THALLIUM	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.24 U
VANADIUM	9.5 B	16	3.5 B	24.6	6 J	4.7 J
ZINC	80.1 J	31.5	5	6.7	57.2 J	16.5 J
CYANIDE	0.58 U	0.57 U	0.51 U	0.57 U	0.59 U	0.59 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-SSA-SB03-00	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00
DEPTH						
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM	2200	1790	3720	3540	4320	3440
ANTIMONY	1.5 UJ	1.5 UJ	1.6 UJ	1.6 UJ	1.5 UJ	1.6 UJ
ARSENIC	0.65 J	1.1 J	1.4 B	0.9 J	0.81 B	0.88 B
BARIUM	21.6 J	13.8 B	19.9 B	15.8 B	9 B	14.7 B
BERYLLIUM	0.22 B	0.22 U	0.23 B	0.24 U	0.22 U	0.23 U
CADMIUM	1.1 UJ	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U
CALCIUM	14400 J	117000 J	7620 J	4100 UJ	1240 J	11600 J
CHROMIUM	4.6 J	3.7	6.3	5.4	5.9	6.1
COBALT	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U
COPPER	7.2	4.4 B	5.2 B	2.6 B	1.1 B	4.5 B
IRON	1290 J	2000	2340	1540	1720	1910
LEAD	38.8 J	33.6 J	23.7 J	11.5 J	10.2 J	35.9
MAGNESIUM	158 B	453 B	184 B	191 B	117 B	259 B
MANGANESE	9.4 J	22.6	13.1	13.7	5.1	13.1
MERCURY	0.26	0.09 U	0.09 U	0.11 U	0.11 U	0.1 U
NICKEL	4.4 U	4.4 U	4.5 U	4.7 U	4.4 U	4.5 U
POTASSIUM	64.3 B	50.7 B	107 B	63.6 B	78.2 B	93.1 B
SELENIUM	0.41 J	0.44 U	0.36 U	0.38 U	0.22 U	0.23 U
SILVER	1.3 B	0.66 U	0.68 UJ	0.71 UJ	0.66 U	0.68 U
SODIUM	52.9 B	82.1 B	38.9 B	57.5 B	16.5 B	54.7 B
THALLIUM	0.22 U	0.22 U	0.23 U	0.24 U	0.22 U	0.23 U
VANADIUM	4.4 J	4.2 J	7.9 J	9.2 B	6.2 J	7 J
ZINC	27 J	16.7 J	16.3 UJ	12.5 UJ	7.5 J	19.7 J
CYANIDE	0.55 U		0.55 U	0.6 U	0.53 U	0.56 U

OPERABLE UNIT NO. 1 - SITE 78
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	24-SSA-SB09-00	24-SSA-SB10-00
DEPTH		
UNITS	MG/KG	MG/KG
ALUMINUM	596	1010
ANTIMONY	1.6 UJ	1.5 UJ
ARSENIC	0.45 U	0.43 B
BARIUM	8.7 B	4.9 B
BERYLLIUM	0.22 U	0.21 U
CADMIUM	1.1 U	1.1 U
CALCIUM	589 J	5210 J
CHROMIUM	2.2 U	2.1 U
COBALT	1.8 U	1.7 U
COPPER	0.45 B	1.3 B
IRON	249	555
LEAD	1.8 J	6.7 J
MAGNESIUM	22.7 B	98.3 B
MANGANESE	26.7	4.7
MERCURY	0.1 U	0.1 U
NICKEL	4.5 U	4.3 U
POTASSIUM	20 U	19.2 U
SELENIUM	0.22 U	0.21 U
SILVER	0.67 U	0.64 U
SODIUM	21.6 B	32.9 B
THALLIUM	0.22 U	0.21 U
VANADIUM	1.3 J	1.7 J
ZINC	2.4 J	5.1 J
CYANIDE	0.49 U	0.53 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
CHLOROMETHANE	10 U	22 U	ND	ND	ND	0 / 25
BROMOMETHANE	10 U	22 U	ND	ND	ND	0 / 25
VINYL CHLORIDE	10 U	22 U	ND	ND	ND	0 / 25
CHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
METHYLENE CHLORIDE	10 U	50 U	ND	ND	ND	0 / 25
ACETONE	11 U	210 U	14 J	780 J	24-SSA-SB10-00	8 / 25
CARBON DISULFIDE	10 U	22 U	ND	ND	ND	0 / 25
1,1-DICHLOROETHENE	10 U	22 U	ND	ND	ND	0 / 25
1,1-DICHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
1,2-DICHLOROETHENE (total)	10 U	22 U	ND	ND	ND	0 / 25
CHLOROFORM	10 U	22 U	ND	ND	ND	0 / 25
1,2-DICHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
2-BUTANONE	10 U	22 U	ND	ND	ND	0 / 25
1,1,1-TRICHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
CARBON TETRACHLORIDE	10 U	22 U	ND	ND	ND	0 / 25
BROMODICHLOROMETHANE	10 U	22 U	ND	ND	ND	0 / 25
1,2-DICHLOROPROPANE	10 U	22 U	ND	ND	ND	0 / 25
CIS-1,3-DICHLOROPROPENE	10 U	22 U	ND	ND	ND	0 / 25
TRICHLOROETHENE	10 U	22 U	ND	ND	ND	0 / 25
DIBROMOCHLOROMETHANE	10 U	22 U	ND	ND	ND	0 / 25
1,1,2-TRICHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
BENZENE	10 U	22 U	ND	ND	ND	0 / 25
TRANS-1,3-TRICHLOROPROPENE	10 U	22 U	ND	ND	ND	0 / 25
BROMOFORM	10 U	22 U	ND	ND	ND	0 / 25
4-METHYL-2-PENTANONE	10 U	22 U	ND	ND	ND	0 / 25
2-HEXANONE	10 U	22 U	ND	ND	ND	0 / 25
TETRACHLOROETHENE	10 U	22 U	ND	ND	ND	0 / 25
1,1,2,2-TETRACHLOROETHANE	10 U	22 U	ND	ND	ND	0 / 25
TOLUENE	10 U	22 U	ND	ND	ND	0 / 25
CHLOROBENZENE	10 U	22 U	ND	ND	ND	0 / 25
ETHYLBENZENE	10 U	22 U	ND	ND	ND	0 / 25
STYRENE	10 U	22 U	5 J	5 J	24-BM-SB14-00	1 / 25
XYLENES (total)	10 U	22 U	ND	ND	ND	0 / 25

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
PHENOL	330 U	400 U	ND	ND	ND	0 / 25
BIS(2-CHLOROETHYL)ETHER	330 U	400 U	ND	ND	ND	0 / 25
2-CHLOROPHENOL	330 U	400 U	ND	ND	ND	0 / 25
1,3-DICHLOROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
1,4-DICHLOROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
1,2-DICHLOROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
2-METHYLPHENOL	330 U	400 U	ND	ND	ND	0 / 25
2,2'-OXYBIS-1-CHLOROPROPANE	330 U	400 U	ND	ND	ND	0 / 25
4-METHYLPHENOL	330 U	400 U	ND	ND	ND	0 / 25
N-NITROSO-DI-N-PROPYLAMINE	330 U	400 U	ND	ND	ND	0 / 25
HEXACHLOROETHANE	330 U	400 U	ND	ND	ND	0 / 25
NITROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
ISOPHORONE	330 U	400 U	ND	ND	ND	0 / 25
2-NITROPHENOL	330 U	400 U	ND	ND	ND	0 / 25
2,4-DIMETHYLPHENOL	330 U	400 U	ND	ND	ND	0 / 25
BIS(2-CHLOROETHOXY)METHANE	330 U	400 U	ND	ND	ND	0 / 25
2,4-DICHLOROPHENOL	330 U	400 U	ND	ND	ND	0 / 25
1,2,4-TRICHLOROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
NAPHTHALENE	330 U	400 U	ND	ND	ND	0 / 25
4-CHLOROANILINE	330 U	400 U	ND	ND	ND	0 / 25
HEXACHLOROBUTADIENE	330 U	400 U	ND	ND	ND	0 / 25
4-CHLORO-3-METHYLPHENOL	330 U	400 U	ND	ND	ND	0 / 25
2-METHYLNAPHTHALENE	330 U	400 U	110 J	110 J	24-BM-SB11-00	1 / 25
HEXACHLOROCYCLOPENTADIENE	330 U	400 U	ND	ND	ND	0 / 25
2,4,6-TRICHLOROPHENOL	330 U	400 U	ND	ND	ND	0 / 25
2,4,5-TRICHLOROPHENOL	790 U	960 U	ND	ND	ND	0 / 25
2-CHLORONAPHTHALENE	330 U	400 U	ND	ND	ND	0 / 25
2-NITROANILINE	790 U	960 U	ND	ND	ND	0 / 25
DIMETHYL PHTHALATE	330 U	400 U	ND	ND	ND	0 / 25
ACENAPHTHYLENE	330 U	400 U	ND	ND	ND	0 / 25
2,6-DINITROTOLUENE	330 U	400 U	ND	ND	ND	0 / 25
3-NITROANILINE	790 U	960 U	ND	ND	ND	0 / 25
ACENAPHTHENE	330 U	400 U	68 J	68 J	24-BDA-SB09-00	1 / 25

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SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

PESTICIDES/PCBS

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
ALPHA-BHC	1.7 U	3.6 U	ND	ND	ND	0 / 25
BETA-BHC	1.7 U	3.6 U	ND	ND	ND	0 / 25
DELTA-BHC	1.7 U	3.6 U	ND	ND	ND	0 / 25
GAMMA-BHC	1.7 U	3.6 U	ND	ND	ND	0 / 25
HEPTACHLOR	1.7 U	3.6 U	1.8 J	1.8 J	24-BM-SB11-00	1 / 25
ALDRIN	1.7 U	3.6 U	ND	ND	ND	0 / 25
HEPTACHLOR EPOXIDE	1.7 U	3.6 U	5 J	5 J	24-BM-SB11-00	1 / 25
ENDOSULFAN I	1.7 U	3.6 U	ND	ND	ND	0 / 25
DIELDRIN	3.3 U	4 U	4.1 J	13 J	24-SSA-SB05-00	5 / 25
4,4'-DDE	3.3 U	4 U	8.4 J	350	24-SSA-SB03-00	9 / 25
ENDRIN	3.3 U	6.9 U	ND	ND	ND	0 / 25
ENDOSULFAN II	3.3 U	6.9 U	ND	ND	ND	0 / 25
4,4'-DDD	3.3 U	4 U	4.9 J	130 J	24-SSA-SB03-00	9 / 25
ENDOSULFAN SULFATE	3.3 U	6.9 U	ND	ND	ND	0 / 25
4,4'-DDT	3.3 U	4 U	5.2	320	24-SSA-SB05-00	10 / 25
METHOXYCHLOR	17 U	36 U	ND	ND	ND	0 / 25
ENDRIN KETONE	3.3 U	6.9 U	ND	ND	ND	0 / 25
ENDRIN ALDEHYDE	3.3 U	6.9 U	ND	ND	ND	0 / 25
ALPHA-CHLORDANE	1.7 U	2.1 U	2.2	26	24-BM-SB11-00	8 / 25
GAMMA-CHLORDANE	1.7 U	2.1 U	2.4	24 J	24-SSA-SB02-00	7 / 25
TOXAPHENE	170 U	360 U	ND	ND	ND	0 / 25
AROCLOR-1016	33 U	69 U	ND	ND	ND	0 / 25
AROCLOR-1221	68 U	140 U	ND	ND	ND	0 / 25
AROCLOR-1232	33 U	69 U	ND	ND	ND	0 / 25
AROCLOR-1242	33 U	69 U	ND	ND	ND	0 / 25
AROCLOR-1248	33 U	69 U	ND	ND	ND	0 / 25
AROCLOR-1254	33 U	69 U	85 NJ	85 NJ	24-BM-SB11-00	1 / 25
AROCLOR-1260	33 U	69 U	130 N J	130 NJ	24-BM-SB11-00	1 / 25

OPERABLE UNIT NO. 1 - SITE 24
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SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

	MINIMUM NONDETECTED UG/KG	MAXIMUM NONDETECTED UG/KG	MINIMUM DETECTED UG/KG	MAXIMUM DETECTED UG/KG	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
2,4-DINITROPHENOL	790 U	960 U	ND	ND	ND	0 / 25
4-NITROPHENOL	790 U	960 U	ND	ND	ND	0 / 22
DIBENZOFURAN	330 U	400 U	ND	ND	ND	0 / 25
2,4-DINITROTOLUENE	330 U	400 U	ND	ND	ND	0 / 25
DIETHYL PHTHALATE	330 U	400 U	ND	ND	ND	0 / 25
4-CHLOROPHENYL PHENYL ETHER	330 U	400 U	ND	ND	ND	0 / 25
FLUORENE	330 U	400 U	47 J	47 J	24-BDA-SB09-00	1 / 25
4-NITROANILINE	790 U	960 U	ND	ND	ND	0 / 25
4,6-DINITRO-2-METHYLPHENOL	790 U	960 U	ND	ND	ND	0 / 25
N-NITROSODIPHENYLAMINE	330 U	400 U	ND	ND	ND	0 / 25
4-BROMOPHENYL PHENYL ETHER	330 U	400 U	ND	ND	ND	0 / 25
HEXACHLOROBENZENE	330 U	400 U	ND	ND	ND	0 / 25
PENTACHLOROPHENOL	790 U	960 U	ND	ND	ND	0 / 25
PHENANTHRENE	330 U	400 U	380	380	24-BDA-SB09-00	1 / 25
ANTHRACENE	330 U	400 U	73 J	73 J	24-BDA-SB09-00	1 / 25
CARBAZOLE	330 U	400 U	36 J	36 J	24-BDA-SB09-00	1 / 25
DI-N-BUTYL PHTHALATE	330 U	400 U	ND	ND	ND	0 / 25
FLUORANTHENE	330 U	400 U	39 J	520 J	24-BDA-SB09-00	4 / 25
PYRENE	330 U	400 U	57 J	870	24-BDA-SB09-00	3 / 25
BUTYL BENZYL PHTHALATE	330 U	400 U	39 J	39 J	24-BDA-SB01-00	1 / 25
3,3'-DICHLOROBENZIDINE	330 U	400 U	ND	ND	ND	0 / 25
BENZO(A)ANTHRACENE	330 U	400 U	330 J	330 J	24-BDA-SB09-00	1 / 25
CHRYSENE	330 U	400 U	63 J	260 J	24-BDA-SB09-00	2 / 25
BIS(2-ETHYLHEXYL)PHTHALATE	330 U	400 U	36 J	60 J	24-SSA-SB03-00	2 / 25
DI-N-OCTYL PHTHALATE	330 U	400 U	ND	ND	ND	0 / 25
BENZO(B)FLUORANTHENE	330 U	400 U	91 J	350 J	24-BDA-SB09-00	2 / 25
BENZO(K)FLUORANTHENE	330 U	400 U	140 J	140 J	24-BDA-SB09-00	1 / 25
BENZO(A)PYRENE	330 U	400 U	240 J	240 J	24-BDA-SB09-00	1 / 25
INDENO(1,2,3-CD)PYRENE	330 U	400 U	240 J	240 J	24-BDA-SB09-00	1 / 25
DIBENZ(A,H)ANTHRACENE	330 U	400 U	ND	ND	ND	0 / 25
BENZO(GHI)PERYLENE	330 U	400 U	140 J	140 J	24-BDA-SB09-00	1 / 25

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SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BDA-SB01-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB11-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	11 U
BROMOMETHANE	11 U	11 U	11 U	11 U	11 U	11 U
VINYL CHLORIDE	11 U	11 U	11 U	11 U	11 U	11 U
CHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
METHYLENE CHLORIDE	11 U	15 U	13 U	20 U	11 U	11 U
ACETONE	61 J	25 U	11 U	67 J	44 J	11 U
CARBON DISULFIDE	11 U	11 U	11 U	11 U	11 U	11 U
1,1-DICHLOROETHENE	11 U	11 U	11 U	11 U	11 U	11 U
1,1-DICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
1,2-DICHLOROETHENE (total)	11 U	11 U	11 U	11 U	11 U	11 U
CHLOROFORM	11 U	11 U	11 U	11 U	11 U	11 U
1,2-DICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
2-BUTANONE	11 UJ	11 U	11 UJ	11 UJ	11 UJ	11 U
1,1,1-TRICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
CARBON TETRACHLORIDE	11 U	11 U	11 U	11 U	11 U	11 U
BROMODICHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	11 U
1,2-DICHLOROPROPANE	11 U	11 U	11 U	11 U	11 U	11 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	11 U	11 U	11 U
TRICHLOROETHENE	11 U	11 U	11 U	11 U	11 U	11 U
DIBROMOCHLOROMETHANE	11 U	11 U	11 U	11 U	11 U	11 U
1,1,2-TRICHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
BENZENE	11 U	11 U	11 U	11 U	11 U	11 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	11 U	11 U	11 U	11 U
BROMOFORM	11 U	11 U	11 U	11 U	11 U	11 U
4-METHYL-2-PENTANONE	11 U	11 U	11 U	11 U	11 U	11 U
2-HEXANONE	11 UJ	11 U	11 U	11 U	11 UJ	11 U
TETRACHLOROETHENE	11 U	11 U	11 U	11 U	11 U	11 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
TOLUENE	11 U	11 U	11 U	11 U	11 U	11 U
CHLOROBENZENE	11 U	11 U	11 U	11 U	11 U	11 U
ETHYLBENZENE	11 U	11 U	11 U	11 U	11 U	11 U
STYRENE	11 U	11 U	11 U	11 U	11 U	11 U
XYLENES (total)	11 U	11 U	11 U	11 U	11 U	11 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-BDA-SB01-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB11-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	340 U	360 U	370 U	370 U	350 U	340 U
BIS(2-CHLOROETHYL)ETHER	340 U	360 U	370 U	370 U	350 U	340 U
2-CHLOROPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
1,3-DICHLOROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
1,4-DICHLOROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
1,2-DICHLOROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
2-METHYLPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
2,2'-OXYBIS-1-CHLOROPROPANE	340 U	360 U	370 U	370 U	350 UJ	340 U
4-METHYLPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
N-NITROSO-DI-N-PROPYLAMINE	340 U	360 U	370 U	370 U	350 U	340 U
HEXACHLOROETHANE	340 U	360 U	370 U	370 U	350 U	340 U
NITROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
ISOPHORONE	340 U	360 U	370 U	370 U	350 U	340 U
2-NITROPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
2,4-DIMETHYLPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
BIS(2-CHLOROETHOXY)METHANE	340 U	360 U	370 U	370 U	350 U	340 U
2,4-DICHLOROPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
1,2,4-TRICHLOROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
NAPHTHALENE	340 U	360 U	370 U	370 U	350 U	340 U
4-CHLOROANILINE	340 U	360 UJ	370 U	370 U	350 U	340 U
HEXACHLOROBUTADIENE	340 U	360 U	370 U	370 U	350 U	340 U
4-CHLORO-3-METHYLPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
2-METHYLNAPHTHALENE	340 U	360 U	370 U	370 U	350 U	340 U
HEXACHLOROCYCLOPENTADIENE	340 U	360 U	370 U	370 U	350 U	340 U
2,4,6-TRICHLOROPHENOL	340 U	360 U	370 U	370 U	350 U	340 U
2,4,5-TRICHLOROPHENOL	830 U	860 U	900 U	900 U	840 U	830 U
2-CHLORONAPHTHALENE	340 U	360 U	370 U	370 U	350 U	340 U
2-NITROANILINE	830 U	860 U	900 U	900 UJ	840 U	830 U
DIMETHYL PHTHALATE	340 U	360 U	370 U	370 U	350 U	340 U
ACENAPHTHYLENE	340 U	360 U	370 U	370 U	350 U	340 U
2,6-DINITROTOLUENE	340 U	360 U	370 U	370 U	350 U	340 U
3-NITROANILINE	830 U	860 UJ	900 U	900 U	840 U	830 U
ACENAPHTHENE	340 U	360 U	370 U	370 U	68 J	340 U

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INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES (con't)

SAMPLE NO.	24-BDA-SB01-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB11-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	830 U	860 U	900 U	900 U	840 U	830 U
4-NITROPHENOL	830 U	860 U	900 U	900 UJ	840 R	830 U
DIBENZOFURAN	340 U	360 U	370 U	370 U	350 U	340 U
2,4-DINITROTOLUENE	340 U	360 U	370 U	370 U	350 U	340 U
DIETHYL PHTHALATE	340 U	360 U	370 U	370 U	350 U	340 U
4-CHLOROPHENYL PHENYL ETHER	340 U	360 U	370 U	370 U	350 U	340 U
FLUORENE	340 U	360 U	370 U	370 U	47 J	340 U
4-NITROANILINE	830 U	860 U	900 U	900 U	840 U	830 U
4,6-DINITRO-2-METHYLPHENOL	830 U	860 U	900 U	900 U	840 U	830 U
N-NITROSODIPHENYLAMINE	340 U	360 U	370 U	370 U	350 U	340 U
4-BROMOPHENYL PHENYL ETHER	340 U	360 U	370 U	370 U	350 U	340 U
HEXACHLOROBENZENE	340 U	360 U	370 U	370 U	350 U	340 U
PENTACHLOROPHENOL	830 U	860 U	900 U	900 U	840 U	830 U
PHENANTHRENE	340 U	360 U	370 U	370 U	380	340 U
ANTHRACENE	340 U	360 U	370 U	370 U	73 J	340 U
CARBAZOLE	340 U	360 U	370 U	370 U	36 J	340 U
DI-N-BUTYL PHTHALATE	340 U	360 U	370 U	370 U	350 U	340 U
FLUORANTHENE	340 U	360 U	370 U	370 U	520 J	340 U
PYRENE	340 U	360 U	370 U	370 U	870	340 U
BUTYL BENZYL PHTHALATE	39 J	360 U	370 U	370 U	350 U	340 U
3,3'-DICHLOROBENZIDINE	340 U	360 UJ	370 U	370 U	350 U	340 U
BENZO(A)ANTHRACENE	340 U	360 U	370 U	370 U	330 J	340 U
CHRYSENE	340 U	360 U	370 U	370 U	260 J	340 U
BIS(2-ETHYLHEXYL)PHTHALATE	340 U	360 U	370 U	370 U	350 U	340 U
DI-N-OCTYL PHTHALATE	340 U	360 U	370 U	370 U	350 UJ	340 U
BENZO(B)FLUORANTHENE	340 U	360 U	370 U	370 U	350 J	340 U
BENZO(K)FLUORANTHENE	340 U	360 U	370 U	370 U	140 J	340 U
BENZO(A)PYRENE	340 U	360 U	370 U	370 U	240 J	340 U
INDENO(1,2,3-CD)PYRENE	340 U	360 U	370 U	370 U	240 J	340 U
DIBENZ(A,H)ANTHRACENE	340 U	360 U	370 U	370 U	350 UJ	340 U
BENZO(GHI)PERYLENE	340 U	360 U	370 U	370 U	140 J	340 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
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PESTICIDES/PCBS

SAMPLE NO.	24-BDA-SB01-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB11-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
BETA-BHC	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
DELTA-BHC	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
GAMMA-BHC	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
HEPTACHLOR	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
ALDRIN	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
HEPTACHLOR EPOXIDE	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
ENDOSULFAN I	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
DIELDRIN	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
4,4'-DDE	3.5 U	3.5 U	3.7 UJ	3.7 U	20	3.5 U
ENDRIN	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
ENDOSULFAN II	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
4,4'-DDD	3.5 U	3.5 U	3.7 UJ	6.9 J	32	3.5 U
ENDOSULFAN SULFATE	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
4,4'-DDT	3.5 U	3.5 U	3.7 UJ	3.7 U	27	3.5 U
METHOXYCHLOR	18 UJ	18 UJ	19 UJ	19 UJ	18 UJ	18 UJ
ENDRIN KETONE	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
ENDRIN ALDEHYDE	3.5 U	3.5 U	3.7 UJ	3.7 U	3.5 U	3.5 U
ALPHA-CHLORDANE	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
GAMMA-CHLORDANE	1.8 U	1.8 U	1.9 UJ	1.9 U	1.8 U	1.8 U
TOXAPHENE	180 U	180 U	190 UJ	190 U	180 U	180 U
AROCLOR-1016	35 U	35 U	37 UJ	37 U	35 U	35 U
AROCLOR-1221	71 U	71 U	76 UJ	75 U	71 U	71 U
AROCLOR-1232	35 U	35 U	37 UJ	37 U	35 U	35 U
AROCLOR-1242	35 U	35 U	37 UJ	37 U	35 U	35 U
AROCLOR-1248	35 U	35 U	37 UJ	37 U	35 U	35 U
AROCLOR-1254	35 U	35 U	37 UJ	37 U	35 U	35 U
AROCLOR-1260	35 U	35 U	37 UJ	37 U	35 U	35 U

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SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB10-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	22 U	11 U	10 U	11 U	11 U	12 U
BROMOMETHANE	22 U	11 U	10 U	11 U	11 U	12 U
VINYL CHLORIDE	22 U	11 U	10 U	11 U	11 U	12 U
CHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
METHYLENE CHLORIDE	48 U	12 U	13 U	11 U	16 U	12 U
ACETONE	22 U	11 U	180	11 U	28 J	68 U
CARBON DISULFIDE	22 U	11 U	10 U	11 U	11 U	12 U
1,1-DICHLOROETHENE	22 U	11 U	10 U	11 U	11 U	12 U
1,1-DICHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
1,2-DICHLOROETHENE (total)	22 U	11 U	10 U	11 U	11 U	12 U
CHLOROFORM	22 U	11 U	10 U	11 U	11 U	12 U
1,2-DICHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
2-BUTANONE	22 UJ	11 U	10 U	11 U	11 U	12 U
1,1,1-TRICHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
CARBON TETRACHLORIDE	22 U	11 U	10 U	11 U	11 U	12 U
BROMODICHLOROMETHANE	22 U	11 U	10 U	11 U	11 U	12 U
1,2-DICHLOROPROPANE	22 U	11 U	10 U	11 U	11 U	12 U
CIS-1,3-DICHLOROPROPENE	22 U	11 U	10 U	11 U	11 U	12 U
TRICHLOROETHENE	22 U	11 U	10 U	11 U	11 U	12 U
DIBROMOCHLOROMETHANE	22 U	11 U	10 U	11 U	11 U	12 U
1,1,2-TRICHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
BENZENE	22 U	11 U	10 U	11 U	11 U	12 U
TRANS-1,3-DICHLOROPROPENE	22 U	11 U	10 U	11 U	11 U	12 U
BROMOFORM	22 U	11 U	10 U	11 U	11 U	12 U
4-METHYL-2-PENTANONE	22 U	11 U	10 U	11 U	11 U	12 U
2-HEXANONE	22 U	11 U	10 U	11 U	11 U	12 U
TETRACHLOROETHENE	22 U	11 U	10 U	11 U	11 U	12 U
1,1,2,2-TETRACHLOROETHANE	22 U	11 U	10 U	11 U	11 U	12 U
TOLUENE	22 U	11 U	10 U	11 U	11 U	12 U
CHLOROBENZENE	22 U	11 U	10 U	11 U	11 U	12 U
ETHYLBENZENE	22 U	11 U	10 U	11 U	11 U	12 U
STYRENE	22 U	11 U	10 U	11 U	11 U	12 U
XYLENES (total)	22 U	11 U	10 U	11 U	11 U	12 U

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REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
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SEMIVOLATILES

SAMPLE NO.	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB10-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	350 U	360 U	330 U	340 U	350 U	400 U
BIS(2-CHLOROETHYL)ETHER	350 U	360 U	330 U	340 U	350 U	400 U
2-CHLOROPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
1,3-DICHLOROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
1,4-DICHLOROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
1,2-DICHLOROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
2-METHYLPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
2,2'-OXYBIS-1-CHLOROPROPANE	350 U	360 U	330 U	340 U	350 U	400 U
4-METHYLPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
N-NITROSO-DI-N-PROPYLAMINE	350 U	360 U	330 U	340 U	350 U	400 U
HEXACHLOROETHANE	350 U	360 U	330 U	340 U	350 U	400 U
NITROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
ISOPHORONE	350 U	360 U	330 U	340 U	350 U	400 U
2-NITROPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
2,4-DIMETHYLPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
BIS(2-CHLOROETHOXY)METHANE	350 U	360 U	330 U	340 U	350 U	400 U
2,4-DICHLOROPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
1,2,4-TRICHLOROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
NAPHTHALENE	350 U	360 U	330 U	340 U	350 U	400 U
4-CHLOROANILINE	350 U	360 U	330 U	340 U	350 U	400 U
HEXACHLOROBUTADIENE	350 U	360 U	330 U	340 U	350 U	400 U
4-CHLORO-3-METHYLPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
2-METHYLNAPHTHALENE	350 U	360 U	330 U	340 U	350 U	400 U
HEXACHLOROCYCLOPENTADIENE	350 U	360 U	330 U	340 U	350 U	400 U
2,4,6-TRICHLOROPHENOL	350 U	360 U	330 U	340 U	350 U	400 U
2,4,5-TRICHLOROPHENOL	860 U	870 U	790 U	810 U	850 U	960 U
2-CHLORONAPHTHALENE	350 U	360 U	330 U	340 U	350 U	400 U
2-NITROANILINE	860 U	870 U	790 U	810 U	850 U	960 U
DIMETHYL PHTHALATE	350 U	360 U	330 U	340 U	350 U	400 U
ACENAPHTHYLENE	350 U	360 U	330 U	340 U	350 U	400 U
2,6-DINITROTOLUENE	350 U	360 U	330 U	340 U	350 U	400 U
3-NITROANILINE	860 U	870 U	790 U	810 U	850 U	960 U
ACENAPHTHENE	350 U	360 U	330 U	340 U	350 U	400 U

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SEMIVOLATILES (con't)

SAMPLE NO.	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB10-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	860 U	870 U	790 U	810 U	850 U	960 U
4-NITROPHENOL	860 U	870 U	790 U	810 U	850 U	960 U
DIBENZOFURAN	350 U	360 U	330 U	340 U	350 U	400 U
2,4-DINITROTOLUENE	350 U	360 U	330 U	340 U	350 U	400 U
DIETHYL PHTHALATE	350 U	360 U	330 U	340 U	350 U	400 U
4-CHLOROPHENYL PHENYL ETHER	350 U	360 U	330 U	340 U	350 U	400 U
FLUORENE	350 U	360 U	330 U	340 U	350 U	400 U
4-NITROANILINE	860 U	870 U	790 U	810 U	850 U	960 U
4,6-DINITRO-2-METHYLPHENOL	860 U	870 U	790 U	810 U	850 U	960 U
N-NITROSODIPHENYLAMINE	350 U	360 U	330 U	340 U	350 U	400 U
4-BROMOPHENYL PHENYL ETHER	350 U	360 U	330 U	340 U	350 U	400 U
HEXACHLOROBENZENE	350 U	360 U	330 U	340 U	350 U	400 U
PENTACHLOROPHENOL	860 U	870 U	790 U	810 U	850 U	960 U
PHENANTHRENE	350 U	360 U	330 U	340 U	350 U	400 U
ANTHRACENE	350 U	360 U	330 U	340 U	350 U	400 U
CARBAZOLE	350 U	360 U	330 U	340 U	350 U	400 U
DI-N-BUTYL PHTHALATE	350 U	360 U	330 U	340 U	350 U	400 U
FLUORANTHENE	39 J	360 U	330 U	340 U	350 U	400 U
PYRENE	350 U	360 U	330 U	340 U	350 U	400 U
BUTYL BENZYL PHTHALATE	350 U	360 U	330 U	340 U	350 U	400 U
3,3'-DICHLOROBENZIDINE	350 U	360 U	330 U	340 U	350 U	400 U
BENZO(A)ANTHRACENE	350 U	360 U	330 U	340 U	350 U	400 U
CHRYSENE	350 U	360 U	330 U	340 U	350 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	350 U	360 U	330 U	36 J	350 U	400 UJ
DI-N-OCTYL PHTHALATE	350 U	360 U	330 U	340 UJ	350 U	400 U
BENZO(B)FLUORANTHENE	350 U	360 U	330 U	340 U	350 U	400 U
BENZO(K)FLUORANTHENE	350 U	360 U	330 U	340 U	350 U	400 U
BENZO(A)PYRENE	350 U	360 U	330 U	340 U	350 U	400 U
INDENO(1,2,3-CD)PYRENE	350 U	360 U	330 U	340 U	350 U	400 U
DIBENZ(A,H)ANTHRACENE	350 U	360 U	330 U	340 U	350 U	400 U
BENZO(GHI)PERYLENE	350 U	360 U	330 U	340 U	350 U	400 U

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ORGANIC CHEMICALS

PESTICIDES/PCBS

SAMPLE NO.	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB10-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
BETA-BHC	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
DELTA-BHC	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
GAMMA-BHC	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
HEPTACHLOR	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
ALDRIN	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
HEPTACHLOR EPOXIDE	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
ENDOSULFAN I	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
DIELDRIN	3.6 UJ	3.5 U	3.3 U	3.5 U	3.6 U	4 U
4,4'-DDE	3.6 UJ	3.5 U	3.3 U	10	3.6 U	4 U
ENDRIN	3.6 UJ	3.5 U	3.3 U	3.5 U	3.6 U	4 U
ENDOSULFAN II	3.6 UJ	3.5 U	3.3 U	3.5 U	3.6 U	4 U
4,4'-DDD	3.6 UJ	3.5 U	3.3 U	110	3.6 U	4 U
ENDOSULFAN SULFATE	3.6 UJ	3.5 U	3.3 U	3.5 U	3.6 U	4 U
4,4'-DDT	3.6 UJ	3.5 U	3.3 U	17 J	5.2	4 U
METHOXYCHLOR	19 UJ	18 UJ	17 U	18 U	18 UJ	21 UJ
ENDRIN KETONE	3.6 UJ	3.5 U	3.3 UJ	3.5 U	3.6 U	4 U
ENDRIN ALDEHYDE	3.6 UJ	3.5 U	3.3 U	3.5 U	3.6 U	4 U
ALPHA-CHLORDANE	1.9 UJ	1.8 U	1.7 U	2.2	1.8 U	2.1 U
GAMMA-CHLORDANE	1.9 UJ	1.8 U	1.7 U	1.8 U	1.8 U	2.1 U
TOXAPHENE	190 UJ	180 U	170 U	180 U	180 U	210 U
AROCLOR-1016	36 UJ	35 U	33 U	35 U	36 U	40 U
AROCLOR-1221	74 UJ	72 U	68 U	71 U	73 U	82 U
AROCLOR-1232	36 UJ	35 U	33 U	35 U	36 U	40 U
AROCLOR-1242	36 UJ	35 U	33 U	35 U	36 U	40 U
AROCLOR-1248	36 UJ	35 U	33 U	35 U	36 U	40 U
AROCLOR-1254	36 UJ	35 U	33 U	35 U	36 U	40 U
AROCLOR-1260	36 UJ	35 U	33 U	35 U	36 U	40 U

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REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-BM-SB11-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	10 U	11 U	11 U	12 U	11 U
BROMOMETHANE	11 U	10 U	11 U	11 U	12 U	11 U
VINYL CHLORIDE	11 U	10 U	11 U	11 U	12 U	11 U
CHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
METHYLENE CHLORIDE	11 U	10 U	20 U	12 U	17 U	11 U
ACETONE	11 U	210 UJ	26 U	11 U	24 U	11 U
CARBON DISULFIDE	11 U	10 U	11 U	11 U	12 U	11 U
1,1-DICHLOROETHENE	11 U	10 U	11 U	11 U	12 U	11 U
1,1-DICHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
1,2-DICHLOROETHENE (total)	11 U	10 U	11 U	11 U	12 U	11 U
CHLOROFORM	11 U	10 U	11 U	11 U	12 U	11 U
1,2-DICHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
2-BUTANONE	11 U	10 U	11 U	11 U	12 U	11 U
1,1,1-TRICHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
CARBON TETRACHLORIDE	11 U	10 U	11 U	11 U	12 U	11 U
BROMODICHLOROMETHANE	11 U	10 U	11 U	11 U	12 U	11 U
1,2-DICHLOROPROPANE	11 U	10 U	11 U	11 U	12 U	11 U
CIS-1,3-DICHLOROPROPENE	11 U	10 U	11 U	11 U	12 U	11 U
TRICHLOROETHENE	11 U	10 U	11 U	11 U	12 U	11 U
DIBROMOCHLOROMETHANE	11 U	10 U	11 U	11 U	12 U	11 U
1,1,2-TRICHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
BENZENE	11 U	10 U	11 U	11 U	12 U	11 U
TRANS-1,3-DICHLOROPROPENE	11 U	10 U	11 U	11 U	12 U	11 U
BROMOFORM	11 U	10 U	11 U	11 U	12 U	11 U
4-METHYL-2-PENTANONE	11 U	10 U	11 U	11 U	12 U	11 U
2-HEXANONE	11 U	10 U	11 U	11 U	12 U	11 U
TETRACHLOROETHENE	11 U	10 U	11 U	11 U	12 U	11 U
1,1,2,2-TETRACHLOROETHANE	11 U	10 U	11 U	11 U	12 U	11 U
TOLUENE	11 U	10 U	11 U	11 U	12 U	11 U
CHLOROBENZENE	11 U	10 U	11 U	11 U	12 U	11 U
ETHYLBENZENE	11 U	10 U	11 U	11 U	12 U	11 U
STYRENE	11 U	5 J	11 U	11 U	12 U	11 U
XYLENES (total)	11 U	10 U	11 U	11 U	12 U	11 U

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INDUSTRIAL FLY ASH DUMP
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REMEDIAL INVESTIGATION CTO - 19177
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SEMIVOLATILES

SAMPLE NO.	24-BM-SB11-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	360 U	340 U	370 U	370 U	390 U	360 U
BIS(2-CHLOROETHYL)ETHER	360 U	340 U	370 U	370 U	390 U	360 U
2-CHLOROPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
1,3-DICHLOROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
1,4-DICHLOROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
1,2-DICHLOROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
2-METHYLPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
2,2'-OXYBIS-1-CHLOROPROPANE	360 U	340 UJ	370 U	370 U	390 U	360 UJ
4-METHYLPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
N-NITROSO-DI-N-PROPYLAMINE	360 U	340 U	370 U	370 U	390 U	360 U
HEXACHLOROETHANE	360 U	340 U	370 U	370 U	390 U	360 U
NITROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
ISOPHORONE	360 U	340 U	370 U	370 U	390 U	360 U
2-NITROPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
2,4-DIMETHYLPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
BIS(2-CHLOROETHOXY)METHANE	360 U	340 U	370 U	370 U	390 U	360 U
2,4-DICHLOROPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
1,2,4-TRICHLOROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
NAPHTHALENE	360 U	340 U	370 U	370 U	390 U	360 U
4-CHLOROANILINE	360 U	340 U	370 U	370 U	390 U	360 U
HEXACHLOROBUTADIENE	360 U	340 U	370 U	370 U	390 U	360 U
4-CHLORO-3-METHYLPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
2-METHYLNAPHTHALENE	110 J	340 U	370 U	370 U	390 U	360 U
HEXACHLOROCYCLOPENTADIENE	360 U	340 U	370 U	370 U	390 U	360 U
2,4,6-TRICHLOROPHENOL	360 U	340 U	370 U	370 U	390 U	360 U
2,4,5-TRICHLOROPHENOL	870 U	820 U	900 U	890 U	940 U	870 U
2-CHLORONAPHTHALENE	360 U	340 U	370 U	370 U	390 U	360 U
2-NITROANILINE	870 U	820 U	900 U	890 U	940 U	870 UJ
DIMETHYL PHTHALATE	360 U	340 U	370 U	370 U	390 U	360 U
ACENAPHTHYLENE	360 U	340 U	370 U	370 U	390 U	360 U
2,6-DINITROTOLUENE	360 U	340 U	370 U	370 U	390 U	360 U
3-NITROANILINE	870 U	820 U	900 U	890 U	940 U	870 U
ACENAPHTHENE	360 U	340 U	370 U	370 U	390 U	360 U

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SEMIVOLATILES (con't)

SAMPLE NO.	24-BM-SB11-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	870 U	820 U	900 U	890 U	940 U	870 U
4-NITROPHENOL	870 U	820 R	900 U	890 U	940 U	870 R
DIBENZOFURAN	360 U	340 U	370 U	370 U	390 U	360 U
2,4-DINITROTOLUENE	360 U	340 U	370 U	370 U	390 U	360 U
DIETHYL PHTHALATE	360 U	340 U	370 U	370 U	390 U	360 U
4-CHLOROPHENYL PHENYL ETHER	360 U	340 U	370 U	370 U	390 U	360 U
FLUORENE	360 U	340 U	370 U	370 U	390 U	360 U
4-NITROANILINE	870 U	820 U	900 U	890 U	940 U	870 U
4,6-DINITRO-2-METHYLPHENOL	870 U	820 U	900 U	890 U	940 U	870 U
N-NITROSODIPHENYLAMINE	360 U	340 U	370 U	370 U	390 U	360 U
4-BROMOPHENYL PHENYL ETHER	360 U	340 U	370 U	370 U	390 U	360 U
HEXACHLOROBENZENE	360 U	340 U	370 U	370 U	390 U	360 U
PENTACHLOROPHENOL	870 U	820 U	900 U	890 U	940 U	870 U
PHENANTHRENE	360 U	340 U	370 U	370 U	390 U	360 U
ANTHRACENE	360 U	340 U	370 U	370 U	390 U	360 U
CARBAZOLE	360 U	340 U	370 U	370 U	390 U	360 U
DI-N-BUTYL PHTHALATE	360 U	340 U	370 U	370 U	390 U	360 U
FLUORANTHENE	360 U	41 J	370 U	370 U	390 U	360 U
PYRENE	360 U	57 J	370 U	370 U	390 U	360 U
BUTYL BENZYL PHTHALATE	360 U	340 U	370 U	370 U	390 U	360 U
3,3'-DICHLOROBENZIDINE	360 U	340 U	370 UJ	370 U	390 U	360 U
BENZO(A)ANTHRACENE	360 U	340 U	370 U	370 U	390 U	360 U
CHRYSENE	360 U	340 U	370 U	370 U	390 U	360 U
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	340 U	370 U	370 U	390 U	60 J
DI-N-OCTYL PHTHALATE	360 U	340 UJ	370 U	370 U	390 U	360 U
BENZO(B)FLUORANTHENE	360 U	340 UJ	370 U	370 U	390 U	360 U
BENZO(K)FLUORANTHENE	360 U	340 UJ	370 U	370 U	390 U	360 U
BENZO(A)PYRENE	360 U	340 UJ	370 U	370 U	390 U	360 U
INDENO(1,2,3-CD)PYRENE	360 U	340 UJ	370 U	370 U	390 U	360 U
DIBENZ(A,H)ANTHRACENE	360 U	340 UJ	370 U	370 U	390 U	360 U
BENZO(GHI)PERYLENE	360 U	340 UJ	370 U	370 U	390 U	360 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

PESTICIDES/PCBS

SAMPLE NO.	24-BM-SB11-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.8 UJ	1.8 U	2 U	1.9 U	2 U	3.6 UJ
BETA-BHC	1.8 U	1.8 U	2 U	1.9 U	2 U	3.6 U
DELTA-BHC	1.8 UJ	1.8 U	2 U	1.9 U	2 U	3.6 UJ
GAMMA-BHC	1.8 U	1.8 U	2 U	1.9 U	2 U	3.6 U
HEPTACHLOR	1.8 J	1.8 U	2 U	1.9 U	2 U	3.6 U
ALDRIN	1.8 U	1.8 U	2 U	1.9 U	2 U	3.6 U
HEPTACHLOR EPOXIDE	5 J	1.8 U	2 U	1.9 U	2 U	3.6 U
ENDOSULFAN I	1.8 U	1.8 U	2 U	1.9 U	2 U	3.6 U
DIELDRIN	3.4 U	3.4 U	3.8 U	3.7 U	8.2 J	11 J
4,4'-DDE	8.4 J	3.4 U	3.8 U	22	33 J	350
ENDRIN	3.4 U	3.4 U	3.8 U	3.7 UJ	3.9 U	6.9 U
ENDOSULFAN II	3.4 U	3.4 U	3.8 U	3.7 U	3.9 U	6.9 U
4,4'-DDD	3.4 U	3.4 U	3.8 U	5.3 P	27 J	130
ENDOSULFAN SULFATE	3.4 U	3.4 U	3.8 U	3.7 U	3.9 U	6.9 U
4,4'-DDT	3.4 U	3.4 U	3.8 U	60	50 J	91
METHOXYCHLOR	18 U	18 U	20 UJ	19 U	20 U	36 U
ENDRIN KETONE	3.4 U	3.4 U	3.8 U	3.7 U	3.9 U	6.9 U
ENDRIN ALDEHYDE	3.4 U	3.4 U	3.8 U	3.7 U	3.9 U	6.9 U
ALPHA-CHLORDANE	26 J	1.8 U	2 U	4.1 J	20 J	25
GAMMA-CHLORDANE	20 J	1.8 U	2 U	2.5	24 J	23
TOXAPHENE	180 U	180 U	200 U	190 U	200 U	360 U
AROCLOR-1016	34 U	34 U	38 U	37 U	39 U	69 U
AROCLOR-1221	70 U	70 U	77 U	74 U	79 U	140 U
AROCLOR-1232	34 U	34 U	38 U	37 U	39 U	69 U
AROCLOR-1242	34 U	34 U	38 U	37 U	39 U	69 U
AROCLOR-1248	34 U	34 U	38 U	37 U	39 U	69 U
AROCLOR-1254	85 NJ	34 U	38 U	37 U	39 U	69 U
AROCLOR-1260	130	34 U	38 U	37 U	39 U	69 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CHLOROMETHANE	11 U	11 U	12 U	11 U	11 U	11 U
BROMOMETHANE	11 U	11 U	12 U	11 U	11 U	11 U
VINYL CHLORIDE	11 U	11 U	12 U	11 U	11 U	11 U
CHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
METHYLENE CHLORIDE	45 U	11 U	12 U	50 U	37 U	15 U
ACETONE	24 U	15 U	14 J	22 U	23 U	32 J
CARBON DISULFIDE	11 U	11 U	12 U	11 U	11 U	11 U
1,1-DICHLOROETHENE	11 U	11 U	12 U	11 U	11 U	11 U
1,1-DICHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
1,2-DICHLOROETHENE (total)	11 U	11 U	12 U	11 U	11 U	11 U
CHLOROFORM	11 U	11 U	12 U	11 U	11 U	11 U
1,2-DICHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
2-BUTANONE	11 U	11 U	12 U	11 U	11 U	11 U
1,1,1-TRICHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
CARBON TETRACHLORIDE	11 U	11 U	12 U	11 U	11 U	11 U
BROMODICHLOROMETHANE	11 U	11 U	12 U	11 U	11 U	11 U
1,2-DICHLOROPROPANE	11 U	11 U	12 U	11 U	11 U	11 U
CIS-1,3-DICHLOROPROPENE	11 U	11 U	12 U	11 U	11 U	11 U
TRICHLOROETHENE	11 U	11 U	12 U	11 U	11 U	11 U
DIBROMOCHLOROMETHANE	11 U	11 U	12 U	11 U	11 U	11 U
1,1,2-TRICHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
BENZENE	11 U	11 U	12 U	11 U	11 U	11 U
TRANS-1,3-DICHLOROPROPENE	11 U	11 U	12 U	11 U	11 U	11 U
BROMOFORM	11 U	11 U	12 U	11 U	11 U	11 U
4-METHYL-2-PENTANONE	11 U	11 U	12 U	11 U	11 U	11 U
2-HEXANONE	11 U	11 U	12 U	11 U	11 U	11 U
TETRACHLOROETHENE	11 U	11 U	12 U	11 U	11 U	11 U
1,1,2,2-TETRACHLOROETHANE	11 U	11 U	12 U	11 U	11 U	11 U
TOLUENE	11 U	11 U	12 U	11 U	11 U	11 U
CHLOROBENZENE	11 U	11 U	12 U	11 U	11 U	11 U
ETHYLBENZENE	11 U	11 U	12 U	11 U	11 U	11 U
STYRENE	11 U	11 U	12 U	11 U	11 U	11 U
XYLENES (total)	11 U	11 U	12 U	11 U	11 U	11 U

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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PHENOL	360 U	370 U	390 U	360 U	370 U	370 U
BIS(2-CHLOROETHYL)ETHER	360 U	370 U	390 U	360 U	370 U	370 U
2-CHLOROPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
1,3-DICHLOROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
1,4-DICHLOROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
1,2-DICHLOROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
2-METHYLPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
2,2'-OXYBIS-1-CHLOROPROPANE	360 U	370 U	390 U	360 U	370 U	370 U
4-METHYLPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
N-NITROSO-DI-N-PROPYLAMINE	360 U	370 U	390 U	360 U	370 U	370 U
HEXACHLOROETHANE	360 U	370 U	390 U	360 U	370 U	370 U
NITROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
ISOPHORONE	360 U	370 U	390 U	360 U	370 U	370 U
2-NITROPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
2,4-DIMETHYLPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
BIS(2-CHLOROETHOXY)METHANE	360 U	370 U	390 U	360 U	370 U	370 U
2,4-DICHLOROPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
1,2,4-TRICHLOROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
NAPHTHALENE	360 U	370 U	390 U	360 U	370 U	370 U
4-CHLOROANILINE	360 U	370 U	390 U	360 U	370 U	370 U
HEXACHLOROBUTADIENE	360 U	370 U	390 U	360 U	370 U	370 U
4-CHLORO-3-METHYLPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
2-METHYLNAPHTHALENE	360 U	370 U	390 U	360 U	370 U	370 U
HEXACHLOROCYCLOPENTADIENE	360 U	370 U	390 U	360 U	370 U	370 U
2,4,6-TRICHLOROPHENOL	360 U	370 U	390 U	360 U	370 U	370 U
2,4,5-TRICHLOROPHENOL	880 U	910 U	940 U	880 U	910 U	890 U
2-CHLORONAPHTHALENE	360 U	370 U	390 U	360 U	370 U	370 U
2-NITROANILINE	880 U	910 U	940 U	880 U	910 U	890 U
DIMETHYL PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
ACENAPHTHYLENE	360 U	370 U	390 U	360 U	370 U	370 U
2,6-DINITROTOLUENE	360 U	370 U	390 U	360 U	370 U	370 U
3-NITROANILINE	880 U	910 U	940 U	880 U	910 U	890 U
ACENAPHTHENE	360 U	370 U	390 U	360 U	370 U	370 U

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SEMIVOLATILES (con't)

SAMPLE NO.	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
2,4-DINITROPHENOL	880 U	910 U	940 U	880 U	910 U	890 U
4-NITROPHENOL	880 U	910 UJ	940 UJ	880 U	910 U	890 U
DIBENZOFURAN	360 U	370 U	390 U	360 U	370 U	370 U
2,4-DINITROTOLUENE	360 U	370 U	390 U	360 U	370 U	370 U
DIETHYL PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
4-CHLOROPHENYL PHENYL ETHER	360 U	370 U	390 U	360 U	370 U	370 U
FLUORENE	360 U	370 U	390 U	360 U	370 U	370 U
4-NITROANILINE	880 U	910 U	940 U	880 U	910 U	890 U
4,6-DINITRO-2-METHYLPHENOL	880 U	910 U	940 U	880 U	910 U	890 U
N-NITROSODIPHENYLAMINE	360 U	370 U	390 U	360 U	370 U	370 U
4-BROMOPHENYL PHENYL ETHER	360 U	370 U	390 U	360 U	370 U	370 U
HEXACHLOROBENZENE	360 U	370 U	390 U	360 U	370 U	370 U
PENTACHLOROPHENOL	880 U	910 U	940 U	880 U	910 U	890 U
PHENANTHRENE	360 U	370 U	390 U	360 U	370 U	370 U
ANTHRACENE	360 U	370 U	390 U	360 U	370 U	370 U
CARBAZOLE	360 U	370 U	390 U	360 U	370 U	370 U
DI-N-BUTYL PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
FLUORANTHENE	360 U	74 J	390 U	360 U	370 U	370 U
PYRENE	360 U	65 J	390 U	360 U	370 U	370 U
BUTYL BENZYL PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
3,3'-DICHLOROBENZIDINE	360 U	370 U	390 U	360 U	370 U	370 U
BENZO(A)ANTHRACENE	360 U	370 U	390 U	360 U	370 U	370 U
CHRYSENE	360 U	63 J	390 U	360 U	370 U	370 U
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
DI-N-OCTYL PHTHALATE	360 U	370 U	390 U	360 U	370 U	370 U
BENZO(B)FLUORANTHENE	360 U	91 J	390 U	360 U	370 U	370 U
BENZO(K)FLUORANTHENE	360 U	370 U	390 U	360 U	370 U	370 U
BENZO(A)PYRENE	360 U	370 U	390 U	360 U	370 U	370 U
INDENO(1,2,3-CD)PYRENE	360 U	370 U	390 U	360 U	370 U	370 U
DIBENZ(A,H)ANTHRACENE	360 U	370 U	390 U	360 U	370 U	370 U
BENZO(GHI)PERYLENE	360 U	370 U	390 U	360 U	370 U	370 U

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SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

PESTICIDES/PCBS

SAMPLE NO.	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00
DEPTH						
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
ALPHA-BHC	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
BETA-BHC	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
DELTA-BHC	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
GAMMA-BHC	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
HEPTACHLOR	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
ALDRIN	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
HEPTACHLOR EPOXIDE	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
ENDOSULFAN I	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
DIELDRIN	4.1 J	13 J	3.9 U	3.6 U	5.3 J	3.7 U
4,4'-DDE	21 J	31	3.9 U	3.6 U	33 J	3.7 U
ENDRIN	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U	3.7 U
ENDOSULFAN II	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U	3.7 U
4,4'-DDD	4.9 J	63	3.9 U	3.6 U	32 J	3.7 U
ENDOSULFAN SULFATE	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U	3.7 U
4,4'-DDT	16 J	320	15	3.6 U	13 J	3.7 U
METHOXYCHLOR	19 U	19 U	20 U	19 U	19 U	19 U
ENDRIN KETONE	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U	3.7 U
ENDRIN ALDEHYDE	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U	3.7 U
ALPHA-CHLORDANE	3.6 J	4.3	2 U	1.9 U	6.5 J	1.9 U
GAMMA-CHLORDANE	2.8 J	2.4	2 U	1.9 U	4.8 J	1.9 U
TOXAPHENE	190 U	190 U	200 U	190 U	190 U	190 U
AROCLOR-1016	36 U	37 U	39 U	36 U	37 U	37 U
AROCLOR-1221	74 U	76 U	79 U	74 U	76 U	74 U
AROCLOR-1232	36 U	37 U	39 U	36 U	37 U	37 U
AROCLOR-1242	36 U	37 U	39 U	36 U	37 U	37 U
AROCLOR-1248	36 U	37 U	39 U	36 U	37 U	37 U
AROCLOR-1254	36 U	37 U	39 U	36 U	37 U	37 U
AROCLOR-1260	36 U	37 U	39 U	36 U	37 U	37 U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

VOLATILES

SAMPLE NO.	24-SSA-SB10-00	
DEPTH		
UNITS	UG/KG	
CHLOROMETHANE	18	UJ
BROMOMETHANE	18	U
VINYL CHLORIDE	18	U
CHLOROETHANE	18	U
METHYLENE CHLORIDE	25	U
ACETONE	780	J
CARBON DISULFIDE	18	U
1,1-DICHLOROETHENE	18	U
1,1-DICHLOROETHANE	18	U
1,2-DICHLOROETHENE (total)	18	U
CHLOROFORM	18	U
1,2-DICHLOROETHANE	18	U
2-BUTANONE	18	UJ
1,1,1-TRICHLOROETHANE	18	U
CARBON TETRACHLORIDE	18	U
BROMODICHLOROMETHANE	18	U
1,2-DICHLOROPROPANE	18	U
CIS-1,3-DICHLOROPROPENE	18	U
TRICHLOROETHENE	18	U
DIBROMOCHLOROMETHANE	18	U
1,1,2-TRICHLOROETHANE	18	U
BENZENE	18	U
TRANS-1,3-DICHLOROPROPENE	18	U
BROMOFORM	18	U
4-METHYL-2-PENTANONE	18	U
2-HEXANONE	18	UJ
TETRACHLOROETHENE	18	U
1,1,2,2-TETRACHLOROETHANE	18	U
TOLUENE	18	U
CHLOROBENZENE	18	U
ETHYLBENZENE	18	U
STYRENE	18	U
XYLENES (total)	18	U

OPERABLE UNIT NO. 1 - SITE 24
INDUSTRIAL FLY ASH DUMP
SURFACE SOIL DATA AND FREQUENCY SUMMARY
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MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

SEMIVOLATILES

SAMPLE NO.	24-SSA-SB10-00	
DEPTH		
UNITS	UG/KG	
PHENOL	350	U
BIS(2-CHLOROETHYL)ETHER	350	U
2-CHLOROPHENOL	350	U
1,3-DICHLOROBENZENE	350	U
1,4-DICHLOROBENZENE	350	U
1,2-DICHLOROBENZENE	350	U
2-METHYLPHENOL	350	U
2,2'-OXYBIS-1-CHLOROPROPANE	350	U
4-METHYLPHENOL	350	U
N-NITROSO-DI-N-PROPYLAMINE	350	U
HEXACHLOROETHANE	350	U
NITROBENZENE	350	U
ISOPHORONE	350	U
2-NITROPHENOL	350	U
2,4-DIMETHYLPHENOL	350	U
BIS(2-CHLOROETHOXY)METHANE	350	U
2,4-DICHLOROPHENOL	350	U
1,2,4-TRICHLOROBENZENE	350	U
NAPHTHALENE	350	U
4-CHLOROANILINE	350	U
HEXACHLOROBUTADIENE	350	U
4-CHLORO-3-METHYLPHENOL	350	U
2-METHYLNAPHTHALENE	350	U
HEXACHLOROCYCLOPENTADIENE	350	U
2,4,6-TRICHLOROPHENOL	350	U
2,4,5-TRICHLOROPHENOL	850	U
2-CHLORONAPHTHALENE	350	U
2-NITROANILINE	850	U
DIMETHYL PHTHALATE	350	U
ACENAPHTHYLENE	350	U
2,6-DINITROTOLUENE	350	U
3-NITROANILINE	850	U
ACENAPHTHENE	350	U

SEMIVOLATILES (con't)

SAMPLE NO.	24-SSA-SB10-00
DEPTH	
UNITS	UG/KG
2,4-DINITROPHENOL	850 U
4-NITROPHENOL	850 U
DIBENZOFURAN	350 U
2,4-DINITROTOLUENE	350 U
DIETHYL PHTHALATE	350 U
4-CHLOROPHENYL PHENYL ETHER	350 U
FLUORENE	350 U
4-NITROANILINE	850 U
4,6-DINITRO-2-METHYLPHENOL	850 U
N-NITROSODIPHENYLAMINE	350 U
4-BROMOPHENYL PHENYL ETHER	350 U
HEXACHLOROBENZENE	350 U
PENTACHLOROPHENOL	850 U
PHENANTHRENE	350 U
ANTHRACENE	350 U
CARBAZOLE	350 U
DI-N-BUTYL PHTHALATE	350 U
FLUORANTHENE	350 U
PYRENE	350 U
BUTYL BENZYL PHTHALATE	350 U
3,3'-DICHLOROBENZIDINE	350 U
BENZO(A)ANTHRACENE	350 U
CHRYSENE	350 U
BIS(2-ETHYLHEXYL)PHTHALATE	350 U
DI-N-OCTYL PHTHALATE	350 U
BENZO(B)FLUORANTHENE	350 U
BENZO(K)FLUORANTHENE	350 U
BENZO(A)PYRENE	350 U
INDENO(1,2,3-CD)PYRENE	350 U
DIBENZ(A,H)ANTHRACENE	350 U
BENZO(GHI)PERYLENE	350 U

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REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
ORGANIC CHEMICALS

PESTICIDES/PCBS

SAMPLE NO.	24-SSA-SB10-00
DEPTH	
UNITS	UG/KG
ALPHA-BHC	1.8 U
BETA-BHC	1.8 U
DELTA-BHC	1.8 U
GAMMA-BHC	1.8 U
HEPTACHLOR	1.8 U
ALDRIN	1.8 U
HEPTACHLOR EPOXIDE	1.8 U
ENDOSULFAN I	1.8 U
DIELDRIN	3.5 U
4,4'-DDE	3.5 U
ENDRIN	3.5 UJ
ENDOSULFAN II	3.5 U
4,4'-DDD	3.5 U
ENDOSULFAN SULFATE	3.5 U
4,4'-DDT	3.5 U
METHOXYCHLOR	18 U
ENDRIN KETONE	3.5 U
ENDRIN ALDEHYDE	3.5 U
ALPHA-CHLORDANE	1.8 U
GAMMA-CHLORDANE	1.8 U
TOXAPHENE	180 U
AROCLOR-1016	35 U
AROCLOR-1221	71 U
AROCLOR-1232	35 U
AROCLOR-1242	35 U
AROCLOR-1248	35 U
AROCLOR-1254	35 U
AROCLOR-1260	35 U

TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X

Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-BDA-SB01	24-BDA-SB01	24-BDA-SB08	24-BDA-SB09	24-BDA-SB11	24-BDA-SB13	24-BM-SB02	24-BM-SB05	24-BM-SB05	24-BM-SB10	24-BM-SB11	24-BM-SB14	24-BM-SB15	24-BM-SB15	24-SSA-SB02
Sample ID			24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB08-01A	24-BDA-SB09-01	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB02-04	24-BM-SB05-04	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB14-04	24-BM-SB15-04	24-BM-SB15-06	24-SSA-SB02-04
Depth			6-8'	8-10'	0.5-2'	2-4'	4-6'	0.5-1.5'	8-10'	8-10'	10-12'	4-6'	12-14'	8-10'	8-10'	12-14'	8-10'
Chemical Name																	
Volatile Organic Compounds (UG/KG)																	
Acetone	2,800,000	610,000,000		60 J	70 J	140 J	63 J			19 J	78 J					180	
Carbon disulfide	72,000	3,000,000												8 J			5 J
2-Butanone	4,400,000	190,000,000															
Methylene chloride	9,100	54,000											120 J				
Semivolatile Organic Compounds (UG/KG)																	
Di-n-butyl phthalate	1,220,000	62,000,000															74 J
Fluoranthene	460,000	22,000,000						45 J									
bis(2-Ethylhexyl)phthalate	35,000	120,000				85 J			170 J	1000	51 J	170 J		44 J	200 J		
Pesticide/Polychlorinated Biphenyls (UG/KG)																	
4,4'-DDD	2,400	7,200				8.2 J											
4,4'-DDT	1,700	7,000	43 J	67 J													

Notes:

J - Analyte present, value may or may not be accurate or precise

U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X
Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB05	24-SSA-SB06	24-SSA-SB06	24-SSA-SB07	24-SSA-SB09	24-SSA-SB09	24-SSA-SB10	24-GW07	24-GW08
Sample ID			24-SSA-SB02-05	24-SSA-SB03-06	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04	24-SSA-SB06-06	24-SSA-SB07-04	24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03	24-GW07-04	24-GW08-06
Depth			10-12'	6-8'	8-10'	6-8'	10-12'	6-8'	12-14'	8-10'	6-8'	8-10'	6-8'	10-12'	12-14'
Chemical Name															
Volatile Organic Compounds (UG/KG)															
Acetone	2,800,000	610,000,000		51 J	380 J		1800 J			120 J	97 J	130 J			89 J
Carbon disulfide	72,000	3,000,000			4 J	6 J									
2-Butanone	4,400,000	190,000,000						480 J							
Methylene chloride	9,100	54,000			33 B								120 J		
Semivolatile Organic Compounds (UG/KG)															
Di-n-butyl phthalate	1,220,000	62,000,000													
Fluoranthene	460,000	22,000,000													
bis(2-Ethylhexyl)phthalate	35,000	120,000													
Pesticide/Polychlorinated Biphenyls (UG/KG)															
4,4'-DDD	2,400	7,200				4.4 J	6.4 J	9.1	19				7.1		
4,4'-DDT	1,700	7,000	4 J			100	210	12	220				12.0	8.9	

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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X
Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-GW09	24-GW10	24-GW10
Sample ID			24-GW09-02	24-GW10-03	24-GW10-04
Depth			4-6'	8-10'	8-10'
Chemical Name					
Volatile Organic Compounds (UG/KG)					
Acetone	2,800,000	610,000,000		12 J	
Carbon disulfide	72,000	3,000,000			
2-Butanone	4,400,000	190,000,000			
Methylene chloride	9,100	54,000			
Semivolatile Organic Compounds (UG/KG)					
Di-n-butyl phthalate	1,220,000	62,000,000			
Fluoranthene	460,000	22,000,000			
bis(2-Ethylhexyl)phthalate	35,000	120,000			100 J
Pesticide/Polychlorinated Biphenyls (UG/KG)					
4,4'-DDD	2,400	7,200	11		
4,4'-DDT	1,700	7,000	29		

Notes:
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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X
Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-BDA-SB01	24-BDA-SB02	24-BDA-SB03	24-BDA-SB04	24-BDA-SB05	24-BDA-SB06	24-BDA-SB07	24-BDA-SB08	24-BDA-SB09	24-BDA-SB10	24-BDA-SB11	24-BDA-SB12	24-BDA-SB13	24-BM-SB01	24-BM-SB02
Sample ID			24-BDA-SB01-00	24-BDA-SB02-00	24-BDA-SB03-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB06-00	24-BDA-SB07-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB10-00	24-BDA-SB11-00	24-BDA-SB12-00	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00
Depth			0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																	
Volatile Organic Compounds (UG/KG)																	
Acetone	2,800,000	610,000,000	61 J							67 J	44 J						180
Styrene	880,000	38,000,000															
Semivolatile Organic Compounds (UG/KG)																	
2-Methylnaphthalene	11,200	4,100,000															
Acenaphthene	740,000	33,000,000									68 J						
Fluorene	540,000	22,000,000									47 J						
Phenanthrene	NC	NC									380						
Anthracene	4,400,000	170,000,000									73 J						
Carbazole	NC	86,000									36 J						
Fluoranthene	460,000	22,000,000									520 J				39 J		
Pyrene	460,000	17,000,000									870						
Butyl benzyl phthalate	2,400,000	120,000,000	39 J														
Benzo(a)anthracene	22	2,100									330 J						
Chrysene	22,000	210,000									260 J						
Benzo(b)fluoranthene	220	2,100									350 J						
Benzo(k)fluoranthene	2,200	21,000									140 J						
Benzo(a)pyrene	22	210									240 J						
Indeno(1,2,3-cd)pyrene	220	2,100									240 J						
Benzo(ghi)perylene	NC	NC									140 J						
bis(2-Ethylhexyl)phthalate	35,000	120,000															
Pesticide/Polychlorinated Biphenyls (UG/KG)																	
4,4'-DDD	2,400	7,200								6.9 J	32						
4,4'-DDE	1,700	5,100									20						
4,4'-DDT	1,700	7,000									27						
Dieldrin	30	110															
alpha-Chlordane	1,600	6,500															
gamma-Chlordane	1,600	6,500															
Heptachlor	110	380															
Heptachlor epoxide	53	190															
Aroclor-1254	NC	740															
Aroclor-1260	NC	740															

Notes:
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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X

Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	NCSSL (May 2005)	RSLs Residential Soil Adjusted	24-BM-SB03	24-BM-SB04	24-BM-SB05	24-BM-SB06	24-BM-SB07	24-BM-SB08	24-BM-SB09	24-BM-SB10	24-BM-SB11	24-BM-SB12	24-BM-SB13	24-BM-SB14	24-BM-SB15	24-SSA-SB01	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB06
Sample ID			24-BM-SB03-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB06-00	24-BM-SB07-00	24-BM-SB08-00	24-BM-SB09-00	24-BM-SB10-00	24-BM-SB11-00	24-BM-SB12-00	24-BM-SB13-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00
Depth			0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																					
Volatile Organic Compounds (UG/KG)																					
Acetone	2,800,000	610,000,000			28 J																14 J
Styrene	880,000	38,000,000												5 J							
Semivolatile Organic Compounds (UG/KG)																					
2-Methylnaphthalene	11,200	4,100,000									110 J										
Acenaphthene	740,000	33,000,000																			
Fluorene	540,000	22,000,000																			
Phenanthrene	NC	NC																			
Anthracene	4,400,000	170,000,000																			
Carbazole	NC	86,000																			
Fluoranthene	460,000	22,000,000												41 J						74 J	
Pyrene	460,000	17,000,000												57 J						65 J	
Butyl benzyl phthalate	2,400,000	120,000,000																			
Benzo(a)anthracene	22	2,100																			
Chrysene	22,000	210,000																		63 J	
Benzo(b)fluoranthene	220	2,100																		91 J	
Benzo(k)fluoranthene	2,200	21,000																			
Benzo(a)pyrene	22	210																			
Indeno(1,2,3-cd)pyrene	220	2,100																			
Benzo(ghi)perylene	NC	NC																			
bis(2-Ethylhexyl)phthalate	35,000	120,000		36 J													60 J				
Pesticide/Polychlorinated Biphenyls (UG/KG)																					
4,4'-DDD	2,400	7,200		110												5.3	27 J	130	4.9 J	63	
4,4'-DDE	1,700	5,100		10							8.4 J					22	33 J	350	21 J	31	
4,4'-DDT	1,700	7,000		17 J	5.2											60	50 J	91	16 J	320	15
Dieldrin	30	110															8.2 J	11 J	4.1 J	13 J	
alpha-Chlordane	1,600	6,500		2.2							26 J					4.1 J	20 J	25	3.6 J	4.3	
gamma-Chlordane	1,600	6,500									20 J					2.5	24 J	23	2.8 J	2.4	
Heptachlor	110	380									1.8 J										
Heptachlor epoxide	53	190									5 J										
Aroclor-1254	NC	740									85 J										
Aroclor-1260	NC	740									130										

Notes:
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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X
Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-SSA-SB07	24-SSA-SB08	24-SSA-SB09	24-SSA-SB10
Sample ID			24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00	24-SSA-SB10-00
Depth			0-6"	0-6"	0-6"	0-6"
Chemical Name						
Volatile Organic Compounds (UG/KG)						
Acetone	2,800,000	610,000,000			32 J	780 J
Styrene	880,000	38,000,000				
Semivolatile Organic Compounds (UG/KG)						
2-Methylnaphthalene	11,200	4,100,000				
Acenaphthene	740,000	33,000,000				
Fluorene	540,000	22,000,000				
Phenanthrene	NC	NC				
Anthracene	4,400,000	170,000,000				
Carbazole	NC	86,000				
Fluoranthene	460,000	22,000,000				
Pyrene	460,000	17,000,000				
Butyl benzyl phthalate	2,400,000	120,000,000				
Benzo(a)anthracene	22	2,100				
Chrysene	22,000	210,000				
Benzo(b)fluoranthene	220	2,100				
Benzo(k)fluoranthene	2,200	21,000				
Benzo(a)pyrene	22	210				
Indeno(1,2,3-cd)pyrene	220	2,100				
Benzo(ghi)perylene	NC	NC				
bis(2-Ethylhexyl)phthalate	35,000	120,000				
Pesticide/Polychlorinated Biphenyls (UG/KG)						
4,4'-DDD	2,400	7,200		32 J		
4,4'-DDE	1,700	5,100		33 J		
4,4'-DDT	1,700	7,000		13 J		
Dieldrin	30	110		5.3 J		
alpha-Chlordane	1,600	6,500		6.5 J		
gamma-Chlordane	1,600	6,500		4.8 J		
Heptachlor	110	380				
Heptachlor epoxide	53	190				
Aroclor-1254	NC	740				
Aroclor-1260	NC	740				

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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X

Surface Soil Positive Metals Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	NCSSL (May2005)	RSLs Residential Soil Adjusted	Camp Lejeune Background SS 2X Mean	24-BDA-SB01	24-BDA-SB02	24-BDA-SB03	24-BDA-SB04	24-BDA-SB05	24-BDA-SB06	24-BDA-SB07	24-BDA-SB08	24-BDA-SB09	24-BDA-SB10	24-BDA-SB11	24-BDA-SB12	24-BDA-SB13	24-BM-SB01
Sample ID				24-BDA-SB01-00	24-BDA-SB02-00	24-BDA-SB03-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB06-00	24-BDA-SB07-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB10-00	24-BDA-SB11-00	24-BDA-SB12-00	24-BDA-SB13-00	24-BM-SB01-00
Depth				0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																	
Total Metals (MG/KG)																	
Aluminum				563	1320	2860	1450	5360	4340	3440 J	5170 J	6630	2470	705	7090 J	3210	1150
Antimony												2.4 J					1.8 J
Arsenic				0.75 J	0.65 J			0.77 B	0.58 B		1.1 J	1.5 B	1.2 J		2.3 B	0.61 B	0.88 B
Barium				5.2 B	5.9 B	7.5 B	4.4 B	15.3 B	10.8 B	5.5 B	7.9 B	15.8 B	6 B	6.3 B	38.2 B	9 B	45.2
Beryllium				0.21 B	0.21 B	0.23 B			0.22 B								0.22 B
Cadmium													1.6				
Calcium				207000 J	214000 J	2840	361 B	1200 J	75300 J	1040 B	485 B	8770	526 B	267 B	3050	418 J	238000 J
Chromium				8.4	6.9	3.4 J	4.6 J	2.7 J	8.6 J	4.9 J	5 J	9.4 J	6.2 J	3.4 J	9.3 J		
Cobalt																	
Copper				6.1	2.9 B	2 J	1.9 J	2.7 B	3.2 B	1.5 B	1.4 B	3.6 B	1.8 J	0.85 B	5 B	1.5 B	5.2 B
Iron				1840	2080	1130	702	1770	2500	1100 J	2620 J	2760	2110	411	3260 J	1060	2210
Lead				1.5	2.4	8.4	5.2	8	3.6	5.3 J	9.7 J	393	7.2	4.9 J	24.4 J	5.9	5.7
Magnesium				2960	3330	124 B	77.5 B	177 B	1360	112 B	121 B	364 B	91.2 B	38.3 B	285 B	110 B	785 B
Manganese				31.4	32.9	6.6 J	3.8 J	25.3	19.9	3 B	7.4	12.8 J	5.5 J	15.6 J	16.1	5.3	40.3
Mercury								0.15			0.2						
Nickel																	
Potassium				206 B	258 B	82.2 B	66.3 B	160 B	242 B	157 B	163 B	256 B	222 B	40.8 B	325 B	139 B	158 B
Selenium												0.32 J	0.32 J		0.35 B		0.26 J
Silver																	
Sodium				363 J	373 J			45.3 B	141 B	22.2 B	20.7 B	69.6 B	41.7 B	34.9 B	58.4 B	44.6 B	120 B
Thallium				0.23 J					0.22 B								
Vanadium				8 B	7.1 B	4.3 B	4.3 B	9.6 B	**8.4** B	7 B	7.2 B	12.6	8.9 B	3 B	17.8	6.6 B	19.8
Zinc				9.6	7.3	5.2 5	5.2 J	5.5	**7.3**	4.5	4.1 B	19.2	3.9 J	3.4 B	19.3	7.7	17.2
Cyanide																	

Notes:

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UG/KG - Micrograms per kilogram

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TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X

Surface Soil Positive Metals Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May2005)**	**RSLs Residential Soil Adjusted**	**Camp Lejeune Background SS 2X Mean**	24-BM-SB02	24-BM-SB03	24-BM-SB04	24-BM-SB05	24-BM-SB06	24-BM-SB07	24-BM-SB08	24-BM-SB09	24-BM-SB10	24-BM-SB11	24-BM-SB12	24-BM-SB13	24-BM-SB14	24-BM-SB15
Sample ID				24-BM-SB02-00	24-BM-SB03-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB06-00	24-BM-SB07-00	24-BM-SB08-00	24-BM-SB09-00	24-BM-SB10-00	24-BM-SB11-00	24-BM-SB12-00	24-BM-SB13-00	24-BM-SB14-00	24-BM-SB15-00
Depth				0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																	
Total Metals (MG/KG)																	
Aluminum				88.2	10400	5410	3230	8580	7920	1990	14400	1770	3650	1960	8330	856	18700
Antimony				2.6 J	2.1 J												
Arsenic					35.2 B	1.1 B	0.5 B	21.8 J	13.8 J	1.2 B	3.3	0.49 B	10 J	0.95 J	1.6 B		1.7 B
Barium				31.7 B	230	24.5 B	8.4 B	142 J	502	40.4	48.6	26.8 B	111 J	48.4 J	37 B	46.9	19.1 B
Beryllium					4			3.8	3.3	0.2 B	0.6 B		1.7	0.47 B	0.24 B		0.23 B
Cadmium									1.9								
Calcium				356000 J	3380 J	44400	3520	4560 J	3670	159000	1370	945 J	196000 J	1240 J	254 B	139 B	73.2 B
Chromium				2	23	7.6 J		8.6 J	9.7 J		19.4 J	2.9	8 J		10.5 J		21.6 J
Cobalt					14.4			3.8 B	10.5 B	2.4 B	2 B		5 B		2.2 B		
Copper				3.6 B	39.7	3.4 B	1.3 B	26.5	50 J	6.6	8.2	2.7 B	314	6.1	10.8	1.2 B	2.8 B
Iron				2430	7480	2860 J	1390	6970 J	13900	2550	6450	945	7050 J	1530 J	3300 J	492 J	5210 J
Lead				1.6	21	8.7 J	6 J	6 J	7	5.9 J	24.8 J	13.1	41.5 J	14.9 J	11 J	5.7 J	8.4 J
Magnesium				722 B	611 B	608 B	108 B	596 B	385 B	498 B	548 B	110 B	1350	204 B	273 B	44.2 B	592 B
Manganese				78.9	37.4	15.8 J	6.9 J	37.1 J	93.4 J	41.2 J	12.2 J	23.1	79.9 J	71.7 J	6 J	8.8 J	8.5 J
Mercury					0.45			0.49					1.2				
Nickel					68.7			22.7	18.8	6 B	15.6		80.8				
Potassium				24.8 B	1880	212 B	99.4 B	1890	1360 B	194 B	717 B	133 B	753 B	149 B	262 B	49.6 B	417 B
Selenium					18 J	0.49 J	0.35 J	4.5 J	3.6 J	0.32 J	0.58 J	0.29 J	3.5 J	0.79 J	0.72 J	0.25 J	0.48 J
Silver																	
Sodium				120 B	261 B	98.8 B	45 B	186 B	152 B	106 B	67 B	58.2 B	269 B	53.6 B	51.9 B	39.6 B	57.4 B
Thallium					1.4 B			1 B	1 B				0.37 B				
Vanadium				2.8 B	253	10.6	6.3 B	141	123	24.8	87.8	5.6 B	634	9.5 B	16	3.5 B	24.6
Zinc				18	30.7	16.1	6.3	13.9 J	12.4 J	23.6	32.2	10.2	93.8 J	80.1 J	31.5	5	6.7
Cyanide					0.72			1.3	1.2								

Notes:

J - Analyte present, value may or may not be accurate or precise

U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

TABLE 5-1
Surface Soil Analytical Results
Site 40 Preliminary Assessment/ Site Inspection
MCB Camp Lejeune, North Carolina

Table X

Surface Soil Positive Metals Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May2005)**	**RSLs Residential Soil Adjusted**	**Camp Lejeune Background SS 2X Mean**	24-SSA-SB01	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB06	24-SSA-SB07	24-SSA-SB08	24-SSA-SB09	24-SSA-SB10
Sample ID				24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00	24-SSA-SB10-00
Depth				0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name													
Total Metals (MG/KG)													
Aluminum				3090	3090	2200	1790	3720	3540	4320	3440	596	1,010
Antimony													
Arsenic				0.66 B	0.83 B	0.65 J	1.1 J	1.4 B	0.9 J	0.81 B	0.88 B		0.43 B
Barium				11.5 B	10.2 B	21.6 J	13.8 B	19.9 B	15.8 B	9 B	14.7 B	8.7 B	4.9 B
Beryllium				0.22 B	0.24 B	0.22 B		0.23 B					
Cadmium													
Calcium				2020 J	2540 J	14400 J	117000 J	7620 J		1240 J	11600 J	589 J	5,210 J
Chromium				5.3	4.3	4.6 J	3.7	6.3	5.4	5.9	6.1		
Cobalt													
Copper				8.6	3.5 B	7.2	4.4 B	5.2 B	2.6 B	1.1 B	4.5 B	0.45 B	1.3 B
Iron				1490	1790	1290 J	2000	2340	1540	1720	1910	249	555
Lead				45.7	27.7 J	38.8 J	33.6 J	23.7 J	11.5 J	10.2 J	35.9	1.8 J	6.7 J
Magnesium				132 B	114 B	158 B	453 B	184 B	191 B	117 B	259 B	22.7 B	98.3 B
Manganese				7.7	7.3	9.4 J	22.6	13.1	13.7	5.1	13.1	26.7	4.7
Mercury				0.58		0.26							
Nickel													
Potassium				77.8 B	76.4 B	64.3 B	50.7 B	107 B	63.6 B	78.2 B	93.1 B		
Selenium						0.41 J							
Silver						1.3 B							
Sodium				55.2 B	61.7 B	52.9 B	82.1 B	38.9 B	57.5 B	16.5 B	54.7 B	21.6 B	32.9 B
Thallium													
Vanadium				6 J	4.7 J	4.4 J	4.2 J	7.9 J	9.2 B	6.2 J	7 J	1.3 J	1.7 J
Zinc				57.2 J	16.5 J	27 J	16.7 J			7.5 J	19.7 J	2.4 J	5.1 J
Cyanide													

Notes:

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U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-1
Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	NCSSL (May 2005)	RSLs Residential Soil Adjusted	24-BDA-SB01	24-BDA-SB02	24-BDA-SB03	24-BDA-SB04	24-BDA-SB05	24-BDA-SB06	24-BDA-SB07	24-BDA-SB08	24-BDA-SB09	24-BDA-SB10	24-BDA-SB11	24-BDA-SB12	24-BDA-SB13	24-BM-SB01	24-BM-SB02
Sample ID			24-BDA-SB01-00	24-BDA-SB02-00	24-BDA-SB03-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB06-00	24-BDA-SB07-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB10-00	24-BDA-SB11-00	24-BDA-SB12-00	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00
Depth			0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																	
Volatile Organic Compounds (UG/KG)																	
Acetone	2,800,000	610,000,000	61 J							67 J	44 J						180
Styrene	880,000	38,000,000															
Semivolatile Organic Compounds (UG/KG)																	
2-Methylnaphthalene	11,200	4,100,000															
Acenaphthene	740,000	33,000,000									68 J						
Fluorene	540,000	22,000,000									47 J						
Phenanthrene	NC	NC									380						
Anthracene	4,400,000	170,000,000									73 J						
Carbazole	NC	86,000									36 J						
Fluoranthene	460,000	22,000,000									520 J				39 J		
Pyrene	460,000	17,000,000									870						
Butyl benzyl phthalate	2,400,000	120,000,000	39 J														
Benzo(a)anthracene	22	2,100									330 J						
Chrysene	22,000	210,000									260 J						
Benzo(b)fluoranthene	220	2,100									350 J						
Benzo(k)fluoranthene	2,200	21,000									140 J						
Benzo(a)pyrene	22	210									240 J						
Indeno(1,2,3-cd)pyrene	220	2,100									240 J						
Benzo(ghi)perylene	NC	NC									140 J						
bis(2-Ethylhexyl)phthalate	35,000	120,000															
Pesticide/Polychlorinated Biphenyls (UG/KG)																	
4,4'-DDD	2,400	7,200								6.9 J	32						
4,4'-DDE	1,700	5,100									20						
4,4'-DDT	1,700	7,000									27						
Dieldrin	30	110															
alpha-Chlordane	1,600	6,500															
gamma-Chlordane	1,600	6,500															
Heptachlor	110	380															
Heptachlor epoxide	53	190															
Aroclor-1254	NC	740															
Aroclor-1260	NC	740															

Notes:
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UJ - Analyte not detected, quantitation limit may be inaccurate
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram
Indicates exceedance of RSL criteria
Bold box indicates exceedance of NC SSL criteria
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Table B-1
Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	NCSSL (May 2005)	RSLs Residential Soil Adjusted	24-BM-SB03	24-BM-SB04	24-BM-SB05	24-BM-SB06	24-BM-SB07	24-BM-SB08	24-BM-SB09	24-BM-SB10	24-BM-SB11	24-BM-SB12	24-BM-SB13	24-BM-SB14	24-BM-SB15	24-SSA-SB01	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB06
Sample ID			24-BM-SB03-00	24-BM-SB04-00	24-BM-SB05-00	24-BM-SB06-00	24-BM-SB07-00	24-BM-SB08-00	24-BM-SB09-00	24-BM-SB10-00	24-BM-SB11-00	24-BM-SB12-00	24-BM-SB13-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00
Depth			0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																					
Volatile Organic Compounds (UG/KG)																					
Acetone	2,800,000	610,000,000			28 J																14 J
Styrene	880,000	38,000,000												5 J							
Semivolatile Organic Compounds (UG/KG)																					
2-Methylnaphthalene	11,200	4,100,000									110 J										
Acenaphthene	740,000	33,000,000																			
Fluorene	540,000	22,000,000																			
Phenanthrene	NC	NC																			
Anthracene	4,400,000	170,000,000																			
Carbazole	NC	86,000																			
Fluoranthene	460,000	22,000,000												41 J						74 J	
Pyrene	460,000	17,000,000												57 J						65 J	
Butyl benzyl phthalate	2,400,000	120,000,000																			
Benzo(a)anthracene	22	2,100																			
Chrysene	22,000	210,000																		63 J	
Benzo(b)fluoranthene	220	2,100																		91 J	
Benzo(k)fluoranthene	2,200	21,000																			
Benzo(a)pyrene	22	210																			
Indeno(1,2,3-cd)pyrene	220	2,100																			
Benzo(ghi)perylene	NC	NC																			
bis(2-Ethylhexyl)phthalate	35,000	120,000		36 J														60 J			
Pesticide/Polychlorinated Biphenyls (UG/KG)																					
4,4'-DDD	2,400	7,200		110												5.3	27 J	130	4.9 J	63	
4,4'-DDE	1,700	5,100		10							8.4 J					22	33 J	350	21 J	31	
4,4'-DDT	1,700	7,000		17 J	5.2											60	50 J	91	16 J	320	15
Dieldrin	30	110															8.2 J	11 J	4.1 J	13 J	
alpha-Chlordane	1,600	6,500		2.2							26 J					4.1 J	20 J	25	3.6 J	4.3	
gamma-Chlordane	1,600	6,500									20 J					2.5	24 J	23	2.8 J	2.4	
Heptachlor	110	380									1.8 J										
Heptachlor epoxide	53	190									5 J										
Aroclor-1254	NC	740									85 J										
Aroclor-1260	NC	740									130										

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UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-1
Surface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-SSA-SB07	24-SSA-SB08	24-SSA-SB09	24-SSA-SB10
Sample ID			24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00	24-SSA-SB10-00
Depth			0-6"	0-6"	0-6"	0-6"
Chemical Name						
Volatile Organic Compounds (UG/KG)						
Acetone	2,800,000	610,000,000			32 J	780 J
Styrene	880,000	38,000,000				
Semivolatile Organic Compounds (UG/KG)						
2-Methylnaphthalene	11,200	4,100,000				
Acenaphthene	740,000	33,000,000				
Fluorene	540,000	22,000,000				
Phenanthrene	NC	NC				
Anthracene	4,400,000	170,000,000				
Carbazole	NC	86,000				
Fluoranthene	460,000	22,000,000				
Pyrene	460,000	17,000,000				
Butyl benzyl phthalate	2,400,000	120,000,000				
Benzo(a)anthracene	22	2,100				
Chrysene	22,000	210,000				
Benzo(b)fluoranthene	220	2,100				
Benzo(k)fluoranthene	2,200	21,000				
Benzo(a)pyrene	22	210				
Indeno(1,2,3-cd)pyrene	220	2,100				
Benzo(ghi)perylene	NC	NC				
bis(2-Ethylhexyl)phthalate	35,000	120,000				
Pesticide/Polychlorinated Biphenyls (UG/KG)						
4,4'-DDD	2,400	7,200		32 J		
4,4'-DDE	1,700	5,100		33 J		
4,4'-DDT	1,700	7,000		13 J		
Dieldrin	30	110		5.3 J		
alpha-Chlordane	1,600	6,500		6.5 J		
gamma-Chlordane	1,600	6,500		4.8 J		
Heptachlor	110	380				
Heptachlor epoxide	53	190				
Aroclor-1254	NC	740				
Aroclor-1260	NC	740				

Notes:

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U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-2
Surface Soil Positive Metals Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	24-BDA-SB01	24-BDA-SB02	24-BDA-SB03	24-BDA-SB04	24-BDA-SB05	24-BDA-SB06	24-BDA-SB07	24-BDA-SB08	24-BDA-SB09	24-BDA-SB10	24-BDA-SB11	24-BDA-SB12	24-BDA-SB13	24-BM-SB01	24-BM-SB02	24-BM-SB03	24-BM-SB04
Sample ID	24-BDA-SB01-00	24-BDA-SB02-00	24-BDA-SB03-00	24-BDA-SB04-00	24-BDA-SB05-00	24-BDA-SB06-00	24-BDA-SB07-00	24-BDA-SB08-00	24-BDA-SB09-00	24-BDA-SB10-00	24-BDA-SB11-00	24-BDA-SB12-00	24-BDA-SB13-00	24-BM-SB01-00	24-BM-SB02-00	24-BM-SB03-00	24-BM-SB04-00
Depth	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																	
Total Metals (MG/KG)																	
Aluminum	563	1320	2860	1450	5360	4340	3440 J	5170 J	6630	2470	705	7090 J	3210	1150	88.2	10400	5410
Antimony									2.4 J					1.8 J	2.6 J	2.1 J	
Arsenic	0.75 J	0.65 J			0.77 B	0.58 B		1.1 J	1.5 B	1.2 J		2.3 B	0.61 B	0.88 B		35.2 B	1.1 B
Barium	5.2 B	5.9 B	7.5 B	4.4 B	15.3 B	10.8 B	5.5 B	7.9 B	15.8 B	6 B	6.3 B	38.2 B	9 B	45.2	31.7 B	230	24.5 B
Beryllium	0.21 B	0.21 B	0.23 B			0.22 B								0.22 B		4	
Cadmium										1.6							
Calcium	207000 J	214000 J	2840	361 B	1200 J	75300 J	1040 B	485 B	8770	526 B	267 B	3050	418 J	238000 J	356000 J	3380 J	44400
Chromium	8.4	6.9	3.4 J	4.6 J	2.7 J	8.6 J	4.9 J	5 J	9.4 J	6.2 J	3.4 J	9.3 J			2	23	7.6 J
Cobalt																14.4	
Copper	6.1	2.9 B	2 J	1.9 J	2.7 B	3.2 B	1.5 B	1.4 B	3.6 B	1.8 J	0.85 B	5 B	1.5 B	5.2 B	3.6 B	39.7	3.4 B
Iron	1840	2080	1130	702	1770	2500	1100 J	2620 J	2760	2110	411	3260 J	1060	2210	2430	7480	2860 J
Lead	1.5	2.4	8.4	5.2	8	3.6	5.3 J	9.7 J	393	7.2	4.9 J	24.4 J	5.9	5.7	1.6	21	8.7 J
Magnesium	2960	3330	124 B	77.5 B	177 B	1360	112 B	121 B	364 B	91.2 B	38.3 B	285 B	110 B	785 B	722 B	611 B	608 B
Manganese	31.4	32.9	6.6 J	3.8 J	25.3	19.9	3 B	7.4	12.8 J	5.5 J	15.6 J	16.1	5.3	40.3	78.9	37.4	15.8 J
Mercury					0.15			0.2								0.45	
Nickel																68.7	
Potassium	206 B	258 B	82.2 B	66.3 B	160 B	242 B	157 B	163 B	256 B	222 B	40.8 B	325 B	139 B	158 B	24.8 B	1880	212 B
Selenium									0.32 J	0.32 J		0.35 B		0.26 J		18 J	0.49 J
Silver																	
Sodium	363 J	373 J			45.3 B	141 B	22.2 B	20.7 B	69.6 B	41.7 B	34.9 B	58.4 B	44.6 B	120 B	120 B	261 B	98.8 B
Thallium	0.23 J					0.22 B										1.4 B	
Vanadium	8 B	7.1 B	4.3 B	4.3 B	9.6 B	**8.4** B	7 B	7.2 B	12.6	8.9 B	3 B	17.8	6.6 B	19.8	2.8 B	253	10.6
Zinc	9.6	7.3	5.2 5	5.2 J	5.5	**7.3**	4.5	4.1 B	19.2	3.9 J	3.4 B	19.3	7.7	17.2	18	30.7	16.1
Cyanide																0.72	

Notes:

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U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-2
Surface Soil Positive Metals Detection
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	24-BM-SB05	24-BM-SB06	24-BM-SB07	24-BM-SB08	24-BM-SB09	24-BM-SB10	24-BM-SB11	24-BM-SB12	24-BM-SB13	24-BM-SB14	24-BM-SB15	24-SSA-SB01	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB06	24-SSA-SB07	24-SSA-SB08	24-SSA-SB09	24-SSA-SB10
Sample ID	24-BM-SB05-00	24-BM-SB06-00	24-BM-SB07-00	24-BM-SB08-00	24-BM-SB09-00	24-BM-SB10-00	24-BM-SB11-00	24-BM-SB12-00	24-BM-SB13-00	24-BM-SB14-00	24-BM-SB15-00	24-SSA-SB01-00	24-SSA-SB02-00	24-SSA-SB03-00	24-SSA-SB04-00	24-SSA-SB05-00	24-SSA-SB06-00	24-SSA-SB07-00	24-SSA-SB08-00	24-SSA-SB09-00	24-SSA-SB10-00
Depth	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"
Chemical Name																					
Total Metals (MG/KG)																					
Aluminum	3230	8580	7920	1990	14400	1770	3650	1960	8330	856	18700	3090	3090	2200	1790	3720	3540	4320	3440	596	1,010
Antimony																					
Arsenic	0.5 B	21.8 J	13.8 J	1.2 B	3.3	0.49 B	10 J	0.95 J	1.6 B		1.7 B	0.66 B	0.83 B	0.65 J	1.1 J	1.4 B	0.9 J	0.81 B	0.88 B		0.43 B
Barium	8.4 B	142 J	502	40.4	48.6	26.8 B	111 J	48.4 J	37 B	46.9	19.1 B	11.5 B	10.2 B	21.6 J	13.8 B	19.9 B	15.8 B	9 B	14.7 B	8.7 B	4.9 B
Beryllium		3.8	3.3	0.2 B	0.6 B		1.7	0.47 B	0.24 B		0.23 B	0.22 B	0.24 B	0.22 B		0.23 B					
Cadmium			1.9																		
Calcium	3520	4560 J	3670	159000	1370	945 J	196000 J	1240 J	254 B	139 B	73.2 B	2020 J	2540 J	14400 J	117000 J	7620 J		1240 J	11600 J	589 J	5,210 J
Chromium		8.6 J	9.7 J		19.4 J	2.9	8 J		10.5 J		21.6 J	5.3	4.3	4.6 J	3.7	6.3	5.4	5.9	6.1		
Cobalt		3.8 B	10.5 B	2.4 B	2 B		5 B		2.2 B												
Copper	1.3 B	26.5	50 J	6.6	8.2	2.7 B	314	6.1	10.8	1.2 B	2.8 B	8.6	3.5 B	7.2	4.4 B	5.2 B	2.6 B	1.1 B	4.5 B	0.45 B	1.3 B
Iron	1390	6970 J	13900	2550	6450	945	7050 J	1530 J	3300 J	492 J	5210 J	1490	1790	1290 J	2000	2340	1540	1720	1910	249	555
Lead	6 J	6 J	7	5.9 J	24.8 J	13.1	41.5 J	14.9 J	11 J	5.7 J	8.4 J	45.7	27.7 J	38.8 J	33.6 J	23.7 J	11.5 J	10.2 J	35.9	1.8 J	6.7 J
Magnesium	108 B	596 B	385 B	498 B	548 B	110 B	1350	204 B	273 B	44.2 B	592 B	132 B	114 B	158 B	453 B	184 B	191 B	117 B	259 B	22.7 B	98.3 B
Manganese	6.9 J	37.1 J	93.4 J	41.2 J	12.2 J	23.1	79.9 J	71.7 J	6 J	8.8 J	8.5 J	7.7	7.3	9.4 J	22.6	13.1	13.7	5.1	13.1	26.7	4.7
Mercury		0.49					1.2					0.58		0.26							
Nickel		22.7	18.8	6 B	15.6		80.8														
Potassium	99.4 B	1890	1360 B	194 B	717 B	133 B	753 B	149 B	262 B	49.6 B	417 B	77.8 B	76.4 B	64.3 B	50.7 B	107 B	63.6 B	78.2 B	93.1 B		
Selenium	0.35 J	4.5 J	3.6 J	0.32 J	0.58 J	0.29 J	3.5 J	0.79 J	0.72 J	0.25 J	0.48 J			0.41 J							
Silver														1.3 B							
Sodium	45 B	186 B	152 B	106 B	67 B	58.2 B	269 B	53.6 B	51.9 B	39.6 B	57.4 B	55.2 B	61.7 B	52.9 B	82.1 B	38.9 B	57.5 B	16.5 B	54.7 B	21.6 B	32.9 B
Thallium		1 B	1 B				0.37 B														
Vanadium	6.3 B	141	123	24.8	87.8	5.6 B	634	9.5 B	16	3.5 B	24.6	6 J	4.7 J	4.4 J	4.2 J	7.9 J	9.2 B	6.2 J	7 J	1.3 J	1.7 J
Zinc	6.3	13.9 J	12.4 J	23.6	32.2	10.2	93.8 J	80.1 J	31.5	5	6.7	57.2 J	16.5 J	27 J	16.7 J			7.5 J	19.7 J	2.4 J	5.1 J
Cyanide		1.3	1.2																		

Notes:

J - Analyte present, value may or may not be accurate or precise

U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

MG/KG - Milligrams per kilogram

UG/KG - Micrograms per kilogram

Indicates exceedance of RSL criteria

Bold box indicates exceedance of NC SSL criteria

Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-3
Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	NCSSL (May 2005)	RSLs Residential Soil Adjusted	24-BDA-SB01	24-BDA-SB01	24-BDA-SB08	24-BDA-SB09	24-BDA-SB11	24-BDA-SB13	24-BM-SB02	24-BM-SB05	24-BM-SB05	24-BM-SB10	24-BM-SB11	24-BM-SB14
Sample ID			24-BDA-SB01-03	24-BDA-SB01-05	24-BDA-SB08-01A	24-BDA-SB09-01	24-BDA-SB11-02	24-BDA-SB13-01A	24-BM-SB02-04	24-BM-SB05-04	24-BM-SB05-05	24-BM-SB10-02	24-BM-SB11-06	24-BM-SB14-04
Depth			6-8'	8-10'	0.5-2'	2-4'	4-6'	0.5-1.5'	8-10'	8-10'	10-12'	4-6'	12-14'	8-10'
Chemical Name														
Volatile Organic Compounds (UG/KG)														
Acetone	2,800,000	610,000,000		60 J	70 J	140 J	63 J			19 J	78 J			
Carbon disulfide	72,000	3,000,000												8 J
2-Butanone	4,400,000	190,000,000												
Methylene chloride	9,100	54,000											120 J	
Semivolatile Organic Compounds (UG/KG)														
Di-n-butyl phthalate	1,220,000	62,000,000												
Fluoranthene	460,000	22,000,000						45 J						
bis(2-Ethylhexyl)phthalate	35,000	120,000				85 J			170 J	1000	51 J	170 J		44 J
Pesticide/Polychlorinated Biphenyls (UG/KG)														
4,4'-DDD	2,400	7,200				8.2 J								
4,4'-DDT	1,700	7,000	43 J	67 J										

Notes:
J - Analyte present, value may or may not be accurate or precise
U - The material was analyed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram
Indicates exceedance of RSL criteria
Bold box indicates exceedance of NC SSL criteria
Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-3
Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-BM-SB15	24-BM-SB15	24-SSA-SB02	24-SSA-SB02	24-SSA-SB03	24-SSA-SB04	24-SSA-SB05	24-SSA-SB05	24-SSA-SB06	24-SSA-SB06	24-SSA-SB07
Sample ID			24-BM-SB15-04	24-BM-SB15-06	24-SSA-SB02-04	24-SSA-SB02-05	24-SSA-SB03-06	24-SSA-SB04-06	24-SSA-SB05-03	24-SSA-SB05-06	24-SSA-SB06-04	24-SSA-SB06-06	24-SSA-SB07-04
Depth			8-10'	12-14'	8-10'	10-12'	6-8'	8-10'	6-8'	10-12'	6-8'	12-14'	8-10'
Chemical Name													
Volatile Organic Compounds (UG/KG)													
Acetone	2,800,000	610,000,000		180			51 J	380 J		1800 J			120 J
Carbon disulfide	72,000	3,000,000			5 J			4 J	6 J				
2-Butanone	4,400,000	190,000,000									480 J		
Methylene chloride	9,100	54,000						33 B					
Semivolatile Organic Compounds (UG/KG)													
Di-n-butyl phthalate	1,220,000	62,000,000			74 J								
Fluoranthene	460,000	22,000,000											
bis(2-Ethylhexyl)phthalate	35,000	120,000	200 J										
Pesticide/Polychlorinated Biphenyls (UG/KG)													
4,4'-DDD	2,400	7,200							4.4 J	6.4 J	9.1	19	
4,4'-DDT	1,700	7,000				4 J			100	210	12	220	

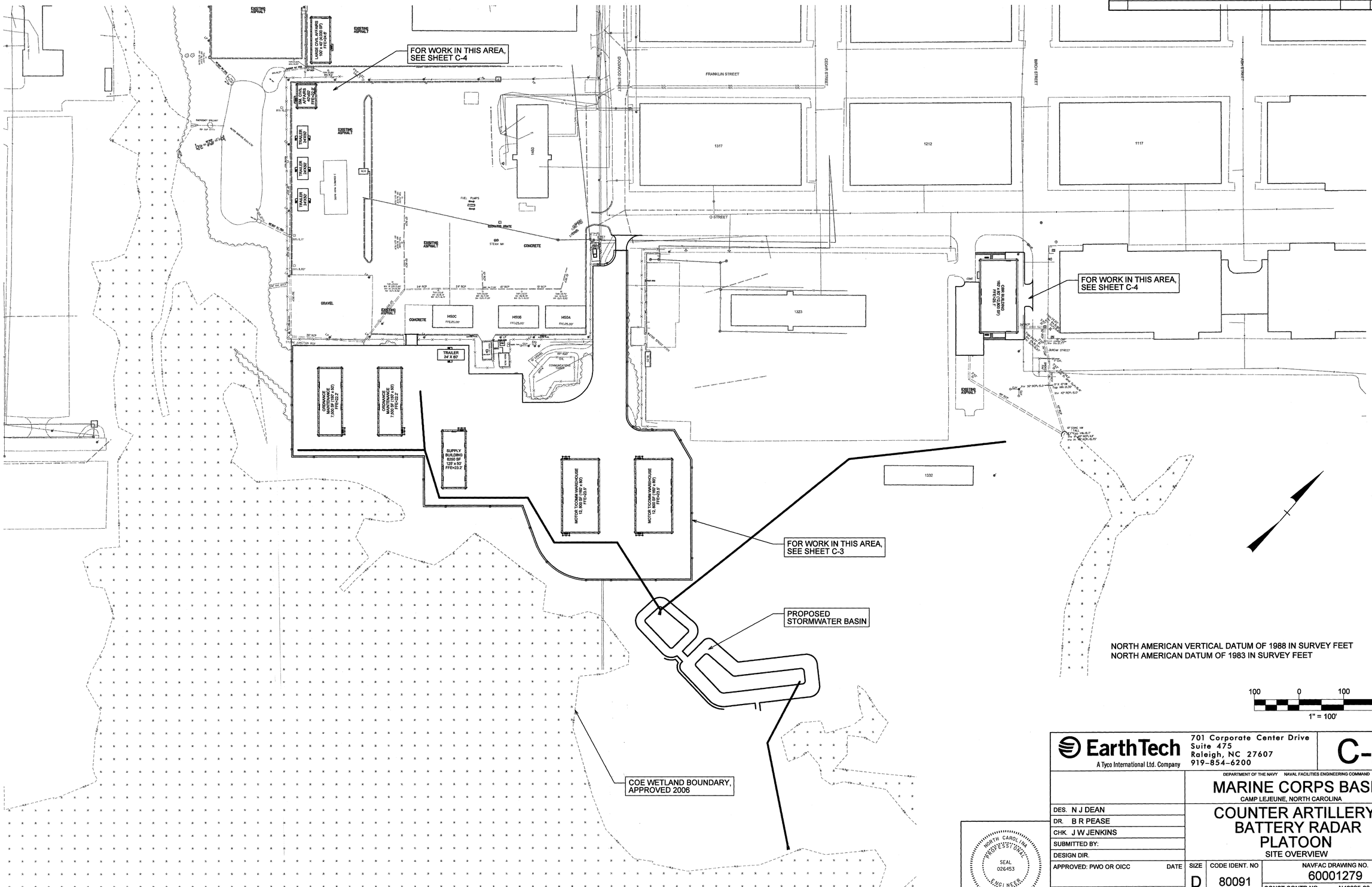
Notes:
J - Analyte present, value may or may not be accurate or precise
U - The material was analyed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram
Indicates exceedance of RSL criteria
Bold box indicates exceedance of NC SSL criteria
Bold text indicates exceedance of Camp Lejeune Background criteria

Table B-3
Suburface Soil Positive Detection Summary
Operable Unit No. 1 (Site 24)
Remedial Investigation CTO - 19177
MCB Camp Lejeune
North Carolina

Station ID	**NCSSL (May 2005)**	**RSLs Residential Soil Adjusted**	24-SSA-SB09	24-SSA-SB09	24-SSA-SB10	24-GW07	24-GW08	24-GW09	24-GW10	24-GW10
Sample ID			24-SSA-SB09-03	24-SSA-SB09-04	24-SSA-SB10-03	24-GW07-04	24-GW08-06	24-GW09-02	24-GW10-03	24-GW10-04
Depth			6-8'	8-10'	6-8'	10-12'	12-14'	4-6'	8-10'	8-10'
Chemical Name										
Volatile Organic Compounds (UG/KG)										
Acetone	2,800,000	610,000,000	97 J	130 J			89 J		12 J	
Carbon disulfide	72,000	3,000,000								
2-Butanone	4,400,000	190,000,000								
Methylene chloride	9,100	54,000			120 J					
Semivolatile Organic Compounds (UG/KG)										
Di-n-butyl phthalate	1,220,000	62,000,000								
Fluoranthene	460,000	22,000,000								
bis(2-Ethylhexyl)phthalate	35,000	120,000								100 J
Pesticide/Polychlorinated Biphenyls (UG/KG)										
4,4'-DDD	2,400	7,200			7.1			11		
4,4'-DDT	1,700	7,000			12.0	8.9		29		

Notes:
J - Analyte present, value may or may not be accurate or precise
U - The material was analyed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram
Indicates exceedance of RSL criteria
Bold box indicates exceedance of NC SSL criteria
Bold text indicates exceedance of Camp Lejeune Background criteria

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



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C-2

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

COUNTER ARTILLERY BATTERY RADAR PLATOON
SITE OVERVIEW

DES. N J DEAN
DR. B R PEASE
CHK. J W JENKINS
SUBMITTED BY:
DESIGN DIR.
APPROVED: PWO OR OICC DATE
SATISFACTORY TO: DATE

NORTH CAROLINA PROFESSIONAL SEAL 026453 ENGINEER NEIL J. DEAN 6/20/2008

SIZE	CODE IDENT. NO	NAVFAC DRAWING NO.
D	80091	60001279
		CONST.CONTR.NO. N40085-08-B-0025
SCALE: 1" = 100'	SPEC. 05-08-0025	SHEET 4 OF 137

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Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

06/11/08

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-SWMU 477

116759

Accutest Job Number: F57946

Sampling Date: 06/03/08

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 45

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Test results relate only to samples analyzed.

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Sample Summary

Shaw E & I, Inc.

Job No: F57946

Camp Lejeune-SWMU 477
Project No: 116759

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F57946-1	06/03/08	12:30 JC	06/04/08	SO	Soil	SWMU477-CS-001
F57946-2	06/03/08	12:45 JC	06/04/08	SO	Soil	SWMU477-CS-002
F57946-3	06/03/08	13:00 JC	06/04/08	SO	Soil	SWMU477-CS-003
F57946-4	06/03/08	13:10 JC	06/04/08	SO	Soil	SWMU477-CS-004
F57946-5	06/03/08	13:15 JC	06/04/08	SO	Soil	SWMU477-CS-005
F57946-6	06/03/08	13:30 JC	06/04/08	SO	Soil	SWMU477-CS-006

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-001		
Lab Sample ID:	F57946-1	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	91.4
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041774.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.54 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		56-136%
98-08-8	aaa-Trifluorotoluene	73%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-001		
Lab Sample ID:	F57946-1	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	91.4
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08883.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.0	5.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-002		
Lab Sample ID:	F57946-2	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	89.8
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041775.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.65 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.6	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		56-136%
98-08-8	aaa-Trifluorotoluene	71%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-002		
Lab Sample ID:	F57946-2	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	89.8
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08884.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.2	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-003		
Lab Sample ID:	F57946-3	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	92.1
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041776.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		56-136%
98-08-8	aaa-Trifluorotoluene	72%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-003		
Lab Sample ID:	F57946-3	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	92.1
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08887.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.0	5.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-004		
Lab Sample ID:	F57946-4	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	89.8
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041777.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.4	3.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		56-136%
98-08-8	aaa-Trifluorotoluene	72%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-004		
Lab Sample ID:	F57946-4	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	89.8
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08890.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.2	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-005		
Lab Sample ID:	F57946-5	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	91.7
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041782.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.98 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.9	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		56-136%
98-08-8	aaa-Trifluorotoluene	74%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-005		
Lab Sample ID:	F57946-5	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	91.7
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08891.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.1	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-006		
Lab Sample ID:	F57946-6	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 SW846 5030A	**Percent Solids:**	89.0
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR041783.D	1	06/05/08	AH	06/04/08 14:19	n/a	GQR1795
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.63 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		56-136%
98-08-8	aaa-Trifluorotoluene	73%		61-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SWMU477-CS-006		
Lab Sample ID:	F57946-6	**Date Sampled:**	06/03/08
Matrix:	SO - Soil	**Date Received:**	06/04/08
Method:	SW846 8015 M SW846 3550B	**Percent Solids:**	89.0
Project:	Camp Lejeune-SWMU 477		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY08892.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		49-108%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

F57946

COC Number:
116759-477-060308

Shaw
Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB:Accutest

Project Name	Project Location		
CAMP LEJEUNE -SWMU477	CAMP LEJEUNE, NC		
Project Number: 116759	Contact: Mark Martin	P.O. Number	Reviewed by
Client Rep: US NAVY - LANTDIV	Project Manager: Joe Colella		

Analysis Desired

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	DRO/GRO 3550/5030/8015
1	SWMU477-CS-001	6/3/08	1230		X	Location 1 Surface	2	X
2	SWMU477-CS-002	6/3/08	1245		X	Location 1 - 6" depth	2	X
3	SWMU477-CS-003	6/3/08	1300		X	Location 1 - 24" depth	2	X
4	SWMU477-CS-004	6/3/08	1310		X	Location 2 Surface	2	X
5	SWMU477-CS-005	6/3/08	1315		X	Location 2 - 6" depth	2	X
6	SWMU477-CS-006	6/3/08	1330		X	Location 2 - 24" depth	2	X
7								
8								
9								
10								
11								

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1-6	[signature]	FedEx 8626 7690 6931	6/3/08	16:00	5 Day TAT
2		FX	[signature]	6.4.08	0930	
3						

2.2

F57946: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F57946 CLIENT: Shaw PROJECT: Camp Lejeune-SMWU 477

DATE/TIME RECEIVED: 6-4-08 09:30 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2.2

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8626 7690 6931

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE RECEIVED IN COOLER

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS //
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? 6

NUMBER OF 5035 FIELD KITS ? 8

NUMBER OF LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS: All bottles no time on labels see coc for correct times

TECHNICIAN SIGNATURE/DATE E.T. 6-4-08 TECHNICIAN SIGNATURE/DATE JE 6-4-08 ASBD 12/17/07

F57946: Chain of Custody
Page 2 of 2

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR1795-MB	QR041772.D	1	06/05/08	AH	n/a	n/a	GQR1795

The QC reported here applies to the following samples: **Method:** SW846 8015

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	79%	56-136%
98-08-8	aaa-Trifluorotoluene	67%	61-121%

Blank Spike Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR1795-BS	QR041771.D	1	06/05/08	AH	n/a	n/a	GQR1795

The QC reported here applies to the following samples: **Method:** SW846 8015

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.0	85	74-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	56-136%
98-08-8	aaa-Trifluorotoluene	85%	61-121%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F57946-3MS	QR041778.D	1	06/05/08	AH	n/a	n/a	GQR1795
F57946-3MSD	QR041779.D	1	06/05/08	AH	n/a	n/a	GQR1795
F57946-3	QR041776.D	1	06/05/08	AH	n/a	n/a	GQR1795

The QC reported here applies to the following samples: **Method:** SW846 8015

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	F57946-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		25.3	17.8	70*	20.2	80	13	74-121/17

CAS No.	Surrogate Recoveries	MS	MSD	F57946-3	Limits
460-00-4	4-Bromofluorobenzene	89%	94%	83%	56-136%
98-08-8	aaa-Trifluorotoluene	85%	92%	72%	61-121%

Volatile Surrogate Recovery Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F57946-1	QR041774.D	82.0	73.0
F57946-2	QR041775.D	83.0	71.0
F57946-3	QR041776.D	83.0	72.0
F57946-4	QR041777.D	79.0	72.0
F57946-5	QR041782.D	84.0	74.0
F57946-6	QR041783.D	81.0	73.0
F57946-3MS	QR041778.D	89.0	85.0
F57946-3MSD	QR041779.D	94.0	92.0
GQR1795-BS	QR041771.D	96.0	85.0
GQR1795-MB	QR041772.D	79.0	67.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	56-136%
S2 = aaa-Trifluorotoluene	61-121%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Check Std:	GQR1795-CC1786	**Injection Date:**	06/05/08
Lab File ID:	QR041770.D	**Injection Time:**	10:01
Instrument ID:	GCQR	**Method:**	SW846 8015

	S1 [a] RT	S2 [a] RT
Check Std	11.58	7.80

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GQR1795-BS	QR041771.D	06/05/08	10:38	11.59	7.81
GQR1795-MB	QR041772.D	06/05/08	11:06	11.58	7.80
ZZZZZZ	QR041773.D	06/05/08	11:34	11.58	7.80
F57946-1	QR041774.D	06/05/08	12:01	11.58	7.80
F57946-2	QR041775.D	06/05/08	12:28	11.57	7.79
F57946-3	QR041776.D	06/05/08	12:55	11.57	7.79
F57946-4	QR041777.D	06/05/08	13:23	11.57	7.79
F57946-3MS	QR041778.D	06/05/08	13:50	11.57	7.79
F57946-3MSD	QR041779.D	06/05/08	14:17	11.57	7.79

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Check Std:	GQR1795-CC1786	**Injection Date:**	06/05/08
Lab File ID:	QR041780.D	**Injection Time:**	14:45
Instrument ID:	GCQR	**Method:**	SW846 8015

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.57	11.57	7.79	7.79

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F57946-5	QR041782.D	06/05/08	16:01		11.57		7.79
F57946-6	QR041783.D	06/05/08	16:29		11.57		7.79
GQR1795-ECC178	QR041784.D	06/05/08	16:57	11.57	11.57	7.79	7.79

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GQR1786-ICC1786
Lab FileID: QR041607.D

Response Factor Report VOA3

Method : C:\HPCHEM\1\METHODS\8015S-QR.M (Chemstation Integrator)
Title : SW846 8015 TPH by GC-FID
Last Update : Tue May 27 07:58:39 2008
Response via : Initial Calibration

Calibration Files
1 =QR041605.D 2 =QR041606.D 3 =QR041607.D 4 =QR041608.D
5 =QR041609.D 6 =QR041610.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) S a,a,a-TFT	6.270	6.351	6.466	6.840	7.174	7.329	6.738 E2	6.61
2) S BFB	1.772	1.786	1.845	1.882	1.924	1.964	1.862 E3	4.08
Signal #2								
4) S a,a,a-TFT #2	3.010	3.178	3.719	4.025	4.122	4.298	3.725 E4	14.13
5) S BFB #2	1.788	1.824	2.098	2.178	2.095	2.304	2.048 E4	9.89
6) H TPH-GRO (C6-C10)	3.448	3.103	3.028	2.796	2.953	2.911	3.040 E4	7.42

---- Linear regression ---- Coefficient = 0.9983
Response Ratio = 479054.78400 + 28515.06797 *A

(#) = Out of Range

8015S-QR.M Tue May 27 12:26:33 2008

Initial Calibration Verification

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GQR1786-ICV1786
Lab FileID: QR041611.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\052308\QR041611.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\052308\QR041611.D\FID2A.CH
Acq On : 23 May 2008 12:49 pm Operator: ArielH
Sample : ICV1786-3 Inst : VOA3
Misc : gc8581,gqr1786,5.00,,100,5.0,,soil Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8015S-QR.M (Chemstation Integrator)
Title : SW846 8015 TPH by GC-FID
Last Update : Tue May 27 07:58:39 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	a,a,a-TFT	20.000	19.629	1.9	102	0.00	7.66- 7.86
2 S	BFB	20.000	20.532	-2.7	104	0.00	11.45-11.65
*****	Signal #2 *****						
4 S	a,a,a-TFT #2	20.000	18.921	5.4	95	0.00	7.66- 7.86
5 S	BFB #2	20.000	20.225	-1.1	99	0.00	11.45-11.65
6 H	TPH-GRO (C6-C10)	400.000	367.644	8.1	91	0.00	4.39-12.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR041607.D 8015S-QR.M Tue May 27 12:25:21 2008

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GQR1795-CC1786
Lab FileID: QR041770.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\060508\QR041770.D\FID1B.CH  Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\060508\QR041770.D\FID2A.CH
Acq On    :  5 Jun 2008  10:01 am                    Operator: ArielH
Sample    : CC1786-4                                 Inst    : VOA3
Misc      : gc8611,gqr1795,5.00,,100,5.0,,soil       Multiplr: 1.00
IntFile Signal #1: PID.E        IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8015S-QR.M (Chemstation Integrator)
Title        : SW846 8015 TPH by GC-FID
Last Update  : Fri May 30 10:08:07 2008
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	a,a,a-TFT	20.000	21.778	-8.9	107	0.03	7.67- 7.87
2 S	BFB	20.000	24.482	-22.4#	121	0.03	11.45-11.65
*****	Signal #2 *****						
4 S	a,a,a-TFT #2	20.000	20.308	-1.5	94	0.04	7.67- 7.87
5 S	BFB #2	20.000	22.628	-13.1	106	0.03	11.45-11.65
6 H	TPH-GRO (C6-C10)	600.000	564.719	5.9	99	0.00	4.39-12.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR041608.D 8015S-QR.M Fri Jun 06 08:44:57 2008

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GQR1795-CC1786
Lab FileID: QR041780.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\060508\QR041780.D\FID1B.CH  Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\060508\QR041780.D\FID2A.CH
Acq On    :  5 Jun 2008   2:45 pm                        Operator: ArielH
Sample    : CC1786-3                                     Inst    : VOA3
Misc      : gc8611,gqr1795,5.00,,100,5.0,,soil           Multiplr: 1.00
IntFile Signal #1: PID.E        IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8015S-QR.M (Chemstation Integrator)
Title        : SW846 8015 TPH by GC-FID
Last Update  : Fri May 30 10:08:07 2008
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	a,a,a-TFT	20.000	19.781	1.1	103	0.02	7.67- 7.87
2	S	BFB	20.000	21.075	-5.4	106	0.03	11.45-11.65
*****		Signal #2 *****						
4	S	a,a,a-TFT #2	20.000	18.223	8.9	91	0.02	7.67- 7.87
5	S	BFB #2	20.000	19.504	2.5	95	0.03	11.45-11.65
6	H	TPH-GRO (C6-C10)	400.000	390.391	2.4	96	0.00	4.39-12.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR041607.D 8015S-QR.M Fri Jun 06 08:45:23 2008

4.6 4

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GQR1795-ECC1786
Lab FileID: QR041784.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\060508\QR041784.D\FID1B.CH  Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\060508\QR041784.D\FID2A.CH
Acq On    :  5 Jun 2008   4:57 pm                    Operator: ArielH
Sample    : ECC1786-3                                Inst    : VOA3
Misc      : gc8611,gqr1795,5.00,,100,5.0,,soil       Multiplr: 1.00
IntFile Signal #1: PID.E        IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8015S-QR.M (Chemstation Integrator)
Title        : SW846 8015 TPH by GC-FID
Last Update  : Fri May 30 10:08:07 2008
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	a,a,a-TFT	20.000	19.504	2.5	102	0.02	7.67- 7.87
2 S	BFB	20.000	20.476	-2.4	103	0.02	11.45-11.65
*****	Signal #2 *****						
4 S	a,a,a-TFT #2	20.000	17.681	11.6	89	0.02	7.67- 7.87
5 S	BFB #2	20.000	17.498	12.5	85	0.02	11.45-11.65
6 H	TPH-GRO (C6-C10)	400.000	379.569	5.1	93	0.00	4.39-12.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR041607.D 8015S-QR.M Fri Jun 06 08:45:23 2008

5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP25292-MB	YY08881.D	1	06/07/08	NY	06/05/08	OP25292	GYY307

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.3	5.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	92%	49-108%

Blank Spike Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP25292-BS	YY08880.D	1	06/07/08	NY	06/05/08	OP25292	GYY307

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	29.6	89	60-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	87%	49-108%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP25292-MS	YY08888.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
OP25292-MSD	YY08889.D	1	06/07/08	NY	06/05/08	OP25292	GYY307
F57946-3	YY08887.D	1	06/07/08	NY	06/05/08	OP25292	GYY307

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F57946-1, F57946-2, F57946-3, F57946-4, F57946-5, F57946-6

CAS No.	Compound	F57946-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		35.7	29.7	83	30.7	85	3	60-107/36

CAS No.	Surrogate Recoveries	MS	MSD	F57946-3	Limits
84-15-1	o-Terphenyl	85%	86%	91%	49-108%

Semivolatile Surrogate Recovery Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Method: SW846 8015 M **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F57946-1	YY08883.D	96.0
F57946-2	YY08884.D	76.0
F57946-3	YY08887.D	91.0
F57946-4	YY08890.D	84.0
F57946-5	YY08891.D	91.0
F57946-6	YY08892.D	79.0
OP25292-BS	YY08880.D	87.0
OP25292-MB	YY08881.D	92.0
OP25292-MS	YY08888.D	85.0
OP25292-MSD	YY08889.D	86.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	49-108%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Check Std:	GYY307-CC297	**Injection Date:**	06/07/08
Lab File ID:	YY08878.D	**Injection Time:**	01:09
Instrument ID:	GCYY	**Method:**	SW846 8015 M

	S1 [a] RT
Check Std	6.67

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP25292-BS	YY08880.D	06/07/08	01:59	6.67
OP25292-MB	YY08881.D	06/07/08	02:24	6.67
ZZZZZZ	YY08882.D	06/07/08	02:49	6.67
F57946-1	YY08883.D	06/07/08	03:14	6.67
F57946-2	YY08884.D	06/07/08	03:38	6.67

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Check Std:	GYY307-CC297	**Injection Date:**	06/07/08
Lab File ID:	YY08885.D	**Injection Time:**	04:03
Instrument ID:	GCYY	**Method:**	SW846 8015 M

	S1 [a] RT
Check Std	6.67

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F57946-3	YY08887.D	06/07/08	04:53	6.67
OP25292-MS	YY08888.D	06/07/08	05:18	6.67
OP25292-MSD	YY08889.D	06/07/08	05:43	6.67
F57946-4	YY08890.D	06/07/08	06:07	6.67
F57946-5	YY08891.D	06/07/08	06:32	6.67
F57946-6	YY08892.D	06/07/08	06:57	6.67
GYY307-ECC297	YY08893.D	06/07/08	07:22	6.67

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GYY297-ICC297
Lab FileID: YY08647.D

Response Factor Report FID 5

Method : C:\MSDCHEM\2\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Fri May 16 09:59:15 2008
Response via : Initial Calibration

Calibration Files
200 =YY08645.D 500 =YY08646.D 1000=YY08647.D 2000=YY08648.D
3000 =YY08649.D 4000 =YY08650.D

	Compound	200	500	1000	2000	3000	4000	Avg	%RSD
1) S	O-TERPHENYL	6.416	6.501	6.938	6.721	6.558	6.438	6.595 E4	3.03
2) H	TPH (C10-C28)	7.471	6.947	7.046	6.690	6.652	6.546	6.892 E4	4.94

(#) = Out of Range

F_DRO.M Fri May 16 10:12:24 2008

Initial Calibration Verification

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GYY297-ICV297
Lab FileID: YY08651.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\2\DATA\0515DRO\YY08651.D          Vial: 8
Acq On    : 5-15-08 04:42:35 PM                     Operator: natalyay
Sample    : icv297-1000                             Inst    : FID 5
Misc      : OP25058,gyy297,30.0,,,1,1,soil          Multiplr: 1.00
IntFile   : events.e

Method        : C:\MSDCHEM\2\METHODS\F_DRO.M (Chemstation Integrator)
Title         : TPH by SW846 8015B
Last Update   : Fri May 16 09:59:15 2008
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev  :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	----------NA----------					
2 H	TPH (C10-C28)	1000.000	982.253	1.8	96	0.00	3.45- 9.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
YY08647.D F_DRO.M Fri May 16 10:12:02 2008

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GYY307-CC297
Lab FileID: YY08878.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\2\DATA\0606DRO\YY08878.D          Vial: 19
Acq On    : 6-7-08 01:09:54 AM                          Operator: natalyay
Sample    : cc297-1000                                  Inst    : FID 5
Misc      : OP25267,gyy307,1040,,,1,1,water             Multiplr: 1.00
IntFile   : events.e

Method        : C:\MSDCHEM\2\METHODS\F_DRO.M (Chemstation Integrator)
Title         : TPH by SW846 8015B
Last Update   : Thu Jun 05 16:39:16 2008
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev  :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	O-TERPHENYL	25.000	26.011	-4.0	99	0.00	6.58- 6.78
2	H	TPH (C10-C28)	1000.000	1042.136	-4.2	102	0.00	3.60- 9.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
YY08647.D F_DRO.M Mon Jun 09 09:19:17 2008

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GYY307-CC297
Lab FileID: YY08885.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\2\DATA\0606DRO\YY08885.D          Vial: 19
Acq On    : 6-7-08 04:03:53 AM                          Operator: natalyay
Sample    : cc297-1000                                  Inst    : FID 5
Misc      : OP25292,gyy307,30.4,,,1,1,soil              Multiplr: 1.00
IntFile   : events.e

Method        : C:\MSDCHEM\2\METHODS\F_DRO.M (Chemstation Integrator)
Title         : TPH by SW846 8015B
Last Update   : Thu Jun 05 16:39:16 2008
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev  :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	O-TERPHENYL	25.000	25.904	-3.6	99	0.00	6.58- 6.78
2	H	TPH (C10-C28)	1000.000	1047.092	-4.7	102	0.00	3.60- 9.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
YY08647.D F_DRO.M Mon Jun 09 09:19:18 2008

Continuing Calibration Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: GYY307-ECC297
Lab FileID: YY08893.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\2\DATA\0606DRO\YY08893.D          Vial: 32
Acq On    : 6-7-8 07:22:32 AM                        Operator: natalyay
Sample    : ecc297-2000                              Inst    : FID 5
Misc      : OP25292,gyy307,29.9,,,1,1,soil           Multiplr: 1.00
IntFile   : events.e

Method       : C:\MSDCHEM\2\METHODS\F_DRO.M (Chemstation Integrator)
Title        : TPH by SW846 8015B
Last Update  : Thu Jun 05 16:39:16 2008
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	50.000	50.711	-1.4	100	0.00	6.58- 6.78
2 H	TPH (C10-C28)	2000.000	1997.021	0.1	103	0.00	3.60- 9.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
YY08648.D F_DRO.M Mon Jun 09 09:18:34 2008

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: F57946
Account: ITVAVAB Shaw E & I, Inc.
Project: Camp Lejeune-SWMU 477

Sample: F57946-1 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-001

Wet Weight (Total)	6.6	g
Tare Weight	1.03	g
Dry Weight (Total)	6.12	g
Solids, Percent	91.4	%

Sample: F57946-2 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-002

Wet Weight (Total)	7.37	g
Tare Weight	.99	g
Dry Weight (Total)	6.72	g
Solids, Percent	89.8	%

Sample: F57946-3 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-003

Wet Weight (Total)	7.23	g
Tare Weight	1.01	g
Dry Weight (Total)	6.74	g
Solids, Percent	92.1	%

Sample: F57946-4 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-004

Wet Weight (Total)	9.64	g
Tare Weight	1.02	g
Dry Weight (Total)	8.76	g
Solids, Percent	89.8	%

Sample: F57946-5 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-005

Wet Weight (Total)	7.37	g
Tare Weight	1	g
Dry Weight (Total)	6.84	g
Solids, Percent	91.7	%

Sample: F57946-6 **Analyzed:** 04-JUN-08 by AL **Method:** SM19 2540B M
ClientID: SWMU477-CS-006

Wet Weight (Total)	8.76	g
Tare Weight	1	g
Dry Weight (Total)	7.91	g
Solids, Percent	89	%

Camp Lejeune SWMU 477
Surface and Subsurface Soil Raw Analytical Results
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Station ID	SWMU477-001	SWMU477-002	SWMU477-003	SWMU477-004	SWMU477-005	SWMU477-006	SWMU477-007	SWMU477-008	SWMU477-009	SWMU477-010	SWMU477-011	SWMU477-012
Sample ID	SWMU477-HHRA-001	SWMU477-HHRA-002	SWMU477-HHRA-003	SWMU477-HHRA-004	SWMU477-HHRA-005	SWMU477-HHRA-006	SWMU477-HHRA-007	SWMU477-HHRA-008	SWMU477-HHRA-009	SWMU477-HHRA-010	SWMU477-HHRA-011	SWMU477-HHRA-012
Sample Date	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08
Chemical Name												
Total Metals (MG/KG)												
Aluminum	3,930 J	4,360 J	4,580 J	4,270 J	4,150 J	4,280 J	4,280 J	4,460 J	4,480 J	4,470 J	4,540 J	4,670 J
Antimony	12 UJ	1.20E+01 UJ	1.50E+00 J	12 UJ	1.1 J	1.7 J	1.20E+01 UJ	12 UJ	1.1 J	12 UJ	1.1 J	12 UJ
Arsenic	2.9	2.7	2.9	2.7	3.1	2.4	2.5	2.5	2.6	3.3	2.6	2.8
Barium	54.2 J	57 J	63.1 J	61.6 J	61.5 J	64.7 J	64.1 J	59 J	67.6 J	72.3 J	63.9 J	65.5 J
Beryllium	0.51	0.51	0.58	0.52	0.47	0.52	0.5	5.30E-01	0.55	0.54	0.53	0.54
Cadmium	0.18 J	0.18 J	0.2	0.17 J	0.19 J	0.17 J	0.18 J	0.2 J	0.2 J	0.17 J	0.21 J	0.17 J
Calcium	77,300 J	69,600 J	71,000 J	74,400 J	79,500 J	71,900 J	80,800 J	76,400 J	81,000 J	67,700 J	69,000 J	66,700 J
Chromium	5.4 J	5.4 J	6.1 J	5.2 J	5.7 J	5.3 J	5.3 J	6.2 J	5.9 J	5.7 J	6 J	6 J
Cobalt	0.97 J	0.97 J	1.1 J	1 J	1 J	1 J	0.99 J	1 J	1.1 J	1.1 J	1.2 J	1.1 J
Copper	9.9	9.7	11.3	10.4	10	10.8	10.3	10.2	10.6	10.8	13.6	10.2
Iron	2,630 J	2,670 J	3,160 J	2,670 J	2,780 J	2,940 J	2,800 J	2,810 J	2,910 J	2,830 J	3,300 J	3,040 J
Lead	38 J	59.5 J	52.3 J	54.3 J	45.8 J	56.4 J	44.3 J	47.7 J	51 J	53.5 J	63.6 J	65.1 J
Magnesium	786 J	614 J	695 J	686 J	932 J	640 J	672 J	908 J	739 J	683 J	713 J	651 J
Manganese	30.1 J	31.3 J	34 J	31.3 J	33.3 J	31.4 J	31.5 J	29.8 J	33.8 J	33.1 J	34.6 J	32.7 J
Mercury	0.12	0.11	0.2	0.098	0.11	0.1	0.087	0.12	0.1	0.15	0.13	0.15
Nickel	7.2 J	7.7 J	8.9 J	7.2 J	7.3 J	7.9 J	7.2 J	8 J	7.7 J	7.7 J	7.3 J	7.4 J
Potassium	633 J	622 J	679 J	651 J	715 J	690 J	687 J	690 J	729 J	666 J	642 J	656 J
Selenium	0.84 J	0.64 J	20 U	1.3 J	21 U	1.2 J	21 U	21 U	0.85 J	0.72 J	22 U	1.1 J
Silver	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.52 U	0.51 U	0.52 U	0.54 U	0.52 U
Sodium	238 J	202 J	254 J	192 J	244 J	234 J	220 J	264 J	248 J	250 J	221 J	236 J
Thallium	0.5 U	2 U	0.5 U	2 U	0.53 U	0.52 U	0.52 U	2.1 U	0.51 U	0.52 U	0.54 U	0.52 U
Vanadium	58.6 J	61.2 J	78 J	48 J	47.9 J	67.3 J	56.2 J	64.7 J	55.6 J	57.6 J	49.7 J	49.6 J
Zinc	29.9 J	35.1 J	39.5 J	36.8 J	31 J	30.7 J	29.7 J	32.3 J	40.6 J	38.2 J	42.2 J	44.1 J

Notes:

J - Analyte present, value may or may not be accurate or precise
NA - Not analyzed
U - The material was analyed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate

Camp Lejeune SWMU 477
Surface and Subsurface Soil Raw Analytical Results
June 2008

Station ID	SWMU477-013	SWMU477-014	SWMU477-015	SWMU477-016	SWMU477-017	SWMU477-018	SWMU477-019	SWMU477-020	SWMU477-021	SWMU477-022	SWMU477-023	SWMU477-024
Sample ID	SWMU477-HHRA-013	SWMU477-HHRA-014	SWMU477-HHRA-015	SWMU477-HHRA-016	SWMU477-HHRA-017	SWMU477-HHRA-018	SWMU477-HHRA-019	SWMU477-HHRA-020	SWMU477-HHRA-021	SWMU477-HHRA-022	SWMU477-HHRA-023	SWMU477-HHRA-024
Sample Date	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08
Chemical Name												
Total Metals (MG/KG)												
Aluminum	5,390 J	4,520 J	2,500 J	2,520 J	1,900 J	9,800 J	10,100 J	4,100 J	10,900	6,580	11,600	7,390
Antimony	1.30E+01 UJ	1.5 J	3.20E+00 UJ	2.60E-01 J	1.5 J	3.3 UJ	0.3 J	3.2 UJ	3.3 UJ	3.3 UJ	3.4 UJ	3.2 UJ
Arsenic	2.7	3.2	0.37 J	0.24 J	1.1 J	0.73	0.67	0.46	0.82	0.51	0.87	0.64
Barium	60.6 J	67.2 J	7.9 J	7.3 J	7.1 J	20.2 J	18.8 J	10.2 J	19.3	16.1	15.9	12.8
Beryllium	0.51	0.55	0.27 U	0.27 U	0.12 J	0.18 J	0.17 J	0.26 U	1.80E-01 J	1.30E-01 J	1.90E-01 J	1.30E-01 J
Cadmium	0.17 J	0.18 J	0.058 J	0.22 U	0.45	0.22 U	0.23 U	0.21 U	0.22 U	0.22 U	0.23 U	0.21 U
Calcium	57,800 J	76,600 J	659 J	540 J	67,700 J	371 J	230 J	200 J	378 J	249 J	592 J	561 J
Chromium	6.6 J	5.7 J	2.9 J	2.9 J	5.4 J	11 J	11.2 J	4.8 J	12.4	7.2	13	8.5
Cobalt	1.1 J	1 J	0.21 J	0.2 J	0.45 J	0.56 J	0.6 J	0.25 J	0.63 J	0.39 J	0.68 J	0.44 J
Copper	9.7	10	1.9	1.2 J	3.2	1.4	1.4	0.96 J	1.9	1.2 J	1.7	1.3
Iron	3,290 J	2,810 J	786 J	726 J	1,560 J	3,240 J	3,450 J	1,350 J	3,520 J	2,260 J	3,500 J	2,500 J
Lead	68.6 J	65.8 J	7.1 J	5.9 J	5.4 J	5 J	5.4 J	2.7 J	5.7 J	3.5 J	5.2 J	3.9 J
Magnesium	763 J	660 J	102 J	92.1 J	1,030 J	373 J	383 J	160 J	414	250 J	482	292
Manganese	35.7 J	32.6 J	5.9 J	5.6 J	42.7 J	3.8 J	3.8 J	1.9 J	4.1	2.7	4.5	3.2
Mercury	0.14	0.12	0.019 J	0.08 U	0.085 U	0.092 U	0.095 U	0.012 J	0.094 U	0.091 U	0.088 U	0.089 U
Nickel	7.3 J	7.7 J	0.9 J	0.82 J	1.7 J	1.9 J	2 J	0.82 J	2.2	1.4 J	2.4	1.5 J
Potassium	624 J	666 J	221 J	209 J	422 J	398 J	397 J	249 J	438 J	316 J	499 J	357 J
Selenium	0.77 J	21 U	0.31 J	0.17 J	20 U	0.24 J	0.39 J	5.3 U	0.31 J	5.4 U	0.24 J	0.19 J
Silver	0.52 U	0.52 U	0.53 U	0.54 U	0.51 U	0.55 U	0.56 U	0.53 U	0.55 U	0.54 U	0.56 U	0.53 U
Sodium	245 J	236 J	154 J	132 J	243 J	167 J	162 J	130 J	166 J	132 J	175 J	158 J
Thallium	0.52 U	0.52 U	2.1 U	2.2 U	2 U	0.55 U	0.56 U	0.53 U	2.2 U	2.2 U	2.2 U	2.1 U
Vanadium	47.4 J	52.2 J	4.5 J	4.4 J	8.8 J	13 J	13.2 J	6.1 J	14.1	8.7	14.3	9.9
Zinc	44.7 J	39.9 J	7.7 J	6.6 J	20.9 J	3.5 J	3.5 J	1.6 J	3.9	2.4	4.3	2.8

Notes:

J - Analyte present, value may or may not be accurate or precise

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U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

Camp Lejeune SWMU 477
Surface and Subsurface Soil Raw Analytical Results
June 2008

Station ID	SWMU477-025	SWMU477-026	SWMU477-027	SWMU477-028	SWMU477-029	SWMU477-030	SWMU477-031	SWMU477-032	SWMU477-033	SWMU477-034
Sample ID	SWMU477-HHRA-025	SWMU477-HHRA-026	SWMU477-HHRA-027	SWMU477-HHRA-028	SWMU477-HHRA-029	SWMU477-HHRA-030	SWMU477-HHRA-031	SWMU477-HHRA-032	SWMU477-HHRA-033	SWMU477-HHRA-034
Sample Date	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08	07/19/08
Chemical Name										
Total Metals (MG/KG)										
Aluminum	1,420	1,380	1,190	9,970	1,020	1,110	1,020	1,290	1,720	1,120
Antimony	3.1 UJ	3.20E+00 UJ	3.2 UJ	3.3 UJ	3.20E+00 UJ	0.29 J	3.3 UJ	3.2 UJ	3.20E+00 UJ	3.2 UJ
Arsenic	0.2 J	0.24 J	0.42 U	0.97	0.22 J	0.33 J	0.27 J	0.31 J	0.29 J	0.25 J
Barium	4.9 J	4.8 J	4.8 J	19.3	3.9 J	4.1 J	3.9 J	4.5 J	9.5 J	5.3 J
Beryllium	0.26 U	0.26 U	0.26 U	1.70E-01 J	0.27 U	0.26 U	2.70E-01 U	2.70E-01 U	0.14 J	2.60E-01 U
Cadmium	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U
Calcium	413 J	181 J	153 J	796 J	127 J	154 J	132 J	160 J	424 J	235 J
Chromium	1.5	1.6	1.4	11.3	1.3	1.6	1.4	1.5	2.2	1.6
Cobalt	0.14 J	0.15 J	0.1 J	0.7 J	0.14 J	0.12 J	0.14 J	0.13 J	0.11 J	0.066 J
Copper	0.9 J	0.9 J	0.76 J	2	0.9 J	0.85 J	0.84 J	0.87 J	0.82 J	0.68 J
Iron	631 J	623 J	585 J	4,760 J	518 J	584 J	507 J	625 J	924 J	861 J
Lead	2 J	1.9 J	1.4 J	4.7 J	1.4 J	1.7 J	1.4 J	1.5 J	5.8 J	1.7 J
Magnesium	58.2 J	57.3 J	47.5 J	358	47.4 J	47.3 J	42.8 J	54.6 J	66.2 J	45.6 J
Manganese	2.2	2	1.8	4.2	1.6	1.5	1.7	1.9	1.3	1.3
Mercury	0.081 U	0.088 U	0.092 U	0.093 U	0.091 U	0.09 U	0.087 U	0.014 J	0.092 U	0.085 U
Nickel	0.55 J	0.52 J	0.42 J	2.4	0.38 J	0.31 J	0.36 J	0.46 J	0.45 J	0.37 J
Potassium	179 J	180 J	173 J	477 J	178 J	181 J	177 J	182 J	204 J	175 J
Selenium	5.2 U	5.3 U	5.3 U	0.35 J	5.3 U	5.3 U	5.5 U	5.3 U	5.3 U	5.3 U
Silver	0.52 U	0.53 U	0.53 U	0.55 U	0.53 U	0.53 U	0.55 U	0.53 U	0.53 U	0.53 U
Sodium	132 J	141 J	115 J	166 J	137 J	132 J	143 J	144 J	135 J	125 J
Thallium	2.1 U	2.1 U	2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.1 U	2.1 U
Vanadium	3.1	2.4 J	2.5 J	15.3	2.1 J	2.2 J	4.7	2.5 J	3.6	6
Zinc	0.91 J	0.94 J	0.77 J	4.2	0.77 J	0.71 J	0.71 J	0.86 J	0.89 J	0.75 J

Notes:

J - Analyte present, value may or may not be accurate or precise

NA - Not analyzed

U - The material was analyed for, but not detected

UJ - Analyte not detected, quantitation limit may be inaccurate

LabLink Analytical Data Report
SWMU 477 TPH Soil Data
June 2008
MCB Camp Lejeune, North Carolina

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	DF	Client ID	Collected	Time
F57946-1	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9	1	SWMU477-CS-001	3-Jun-08	12:30
F57946-1	o-Terphenyl	84-15-1	SW846 8015 M	96		%		1	SWMU477-CS-001	3-Jun-08	12:30
F57946-1	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.5	1	SWMU477-CS-001	3-Jun-08	12:30
F57946-1	4-Bromofluorobenzene	460-00-4	SW846 8015	82		%		1	SWMU477-CS-001	3-Jun-08	12:30
F57946-1	aaa-Trifluorotoluene	98-08-8	SW846 8015	73		%		1	SWMU477-CS-001	3-Jun-08	12:30
F57946-1	Solids, Percent		SM19 2540B M	91.4		%		1	SWMU477-CS-001	3-Jun-08	12:30
F57946-2	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9.2	1	SWMU477-CS-002	3-Jun-08	12:45
F57946-2	o-Terphenyl	84-15-1	SW846 8015 M	76		%		1	SWMU477-CS-002	3-Jun-08	12:45
F57946-2	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.6	1	SWMU477-CS-002	3-Jun-08	12:45
F57946-2	4-Bromofluorobenzene	460-00-4	SW846 8015	83		%		1	SWMU477-CS-002	3-Jun-08	12:45
F57946-2	aaa-Trifluorotoluene	98-08-8	SW846 8015	71		%		1	SWMU477-CS-002	3-Jun-08	12:45
F57946-2	Solids, Percent		SM19 2540B M	89.8		%		1	SWMU477-CS-002	3-Jun-08	12:45
F57946-3	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9	1	SWMU477-CS-003	3-Jun-08	13:00
F57946-3	o-Terphenyl	84-15-1	SW846 8015 M	91		%		1	SWMU477-CS-003	3-Jun-08	13:00
F57946-3	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.3	1	SWMU477-CS-003	3-Jun-08	13:00
F57946-3	4-Bromofluorobenzene	460-00-4	SW846 8015	83		%		1	SWMU477-CS-003	3-Jun-08	13:00
F57946-3	aaa-Trifluorotoluene	98-08-8	SW846 8015	72		%		1	SWMU477-CS-003	3-Jun-08	13:00
F57946-3	Solids, Percent		SM19 2540B M	92.1		%		1	SWMU477-CS-003	3-Jun-08	13:00
F57946-4	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9.2	1	SWMU477-CS-004	3-Jun-08	13:10
F57946-4	o-Terphenyl	84-15-1	SW846 8015 M	84		%		1	SWMU477-CS-004	3-Jun-08	13:10
F57946-4	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	7.4	1	SWMU477-CS-004	3-Jun-08	13:10
F57946-4	4-Bromofluorobenzene	460-00-4	SW846 8015	79		%		1	SWMU477-CS-004	3-Jun-08	13:10
F57946-4	aaa-Trifluorotoluene	98-08-8	SW846 8015	72		%		1	SWMU477-CS-004	3-Jun-08	13:10
F57946-4	Solids, Percent		SM19 2540B M	89.8		%		1	SWMU477-CS-004	3-Jun-08	13:10
F57946-5	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9.1	1	SWMU477-CS-005	3-Jun-08	13:15
F57946-5	o-Terphenyl	84-15-1	SW846 8015 M	91		%		1	SWMU477-CS-005	3-Jun-08	13:15
F57946-5	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	5.9	1	SWMU477-CS-005	3-Jun-08	13:15
F57946-5	4-Bromofluorobenzene	460-00-4	SW846 8015	84		%		1	SWMU477-CS-005	3-Jun-08	13:15
F57946-5	aaa-Trifluorotoluene	98-08-8	SW846 8015	74		%		1	SWMU477-CS-005	3-Jun-08	13:15
F57946-5	Solids, Percent		SM19 2540B M	91.7		%		1	SWMU477-CS-005	3-Jun-08	13:15
F57946-6	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9.4	1	SWMU477-CS-006	3-Jun-08	13:30
F57946-6	o-Terphenyl	84-15-1	SW846 8015 M	79		%		1	SWMU477-CS-006	3-Jun-08	13:30
F57946-6	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.7	1	SWMU477-CS-006	3-Jun-08	13:30
F57946-6	4-Bromofluorobenzene	460-00-4	SW846 8015	81		%		1	SWMU477-CS-006	3-Jun-08	13:30
F57946-6	aaa-Trifluorotoluene	98-08-8	SW846 8015	73		%		1	SWMU477-CS-006	3-Jun-08	13:30
F57946-6	Solids, Percent		SM19 2540B M	89		%		1	SWMU477-CS-006	3-Jun-08	13:30

Table 1a
Step 1 Screening - Surface Soil (0-0.5 ft)
Site 477
MCB Camp Lejeune, Jacksonville, NC

Scenario Timeframe: Future
Medium: Surface Soil
Exposure Medium: Surface Soil (0-0.5 ft)

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
	Volatile Organic Compounds														
Surface Soil	67-64-1	Acetone	2.8E-02 J	6.7E-02 J	MG/KG	24-BDA-SB08-00	2/8	NA	6.7E-02	NA	6.1E+03 nc	2.8E+00	NCSSL	NO	BSL
	Semivolatile Organic Compounds														
	91-57-6	2-Methylnaphthalene	1.1E-01 J	1.1E-01 J	MG/KG	24-BM-SB11-00	1/8	NA	1.1E-01	NA	3.1E+01 nc	NA		NO	BSL
	Pesiticide/ Polychlorinated Biphenyls														
	72-54-8	4,4'-DDD	6.9E-03 J	6.9E-03 J	MG/KG	24-BDA-SB08-00	1/8	NA	6.9E-03	NA	2.0E+00 ca	1.3E-01	NCSSL	NO	BSL
	72-55-9	4,4'-DDE	8.4E-03 J	8.4E-03 J	MG/KG	24-BM-SB11-00	1/8	NA	8.4E-03	NA	1.4E+00 ca	NA		NO	BSL
	50-29-3	4,4'-DDT	5.2E-03	5.2E-03	MG/KG	24-BM-SB05-00	1/8	NA	5.2E-03	NA	1.7E+00 ca*	1.4E+00	NCSSL	NO	BSL
	5103-71-9	alpha-Chlordane	2.6E-02 J	2.6E-02 J	MG/KG	24-BM-SB11-00	1/8	NA	2.6E-02	NA	1.6E+00 ca*	1.0E-01	NCSSL	NO	BSL
	5103-74-2	gamma-Chlordane	2.0E-02 J	2.0E-02 J	MG/KG	24-BM-SB11-00	1/8	NA	2.0E-02	NA	1.6E+00 ca*	1.0E-01	NCSSL	NO	BSL
	76-44-8	Heptachlor	1.8E-03 J	1.8E-03 J	MG/KG	24-BM-SB11-00	1/8	NA	1.8E-03	NA	1.1E-01 nc	2.3E-03	NCSSL	NO	BSL
	1024-57-3	Heptachlor epoxide	5.0E-03 J	5.0E-03 J	MG/KG	24-BM-SB11-00	1/8	NA	5.0E-03	NA	5.3E-02 ca*	6.3E-03	NCSSL	NO	BSL
	11097-69-1	Aroclor-1254	8.5E-02 J	8.5E-02 J	MG/KG	24-BM-SB11-00	1/8	NA	8.5E-02	NA	2.2E-01 ca**	NA		NO	BSL
	11096-82-5	Aroclor-1260	1.3E-01	1.3E-01	MG/KG	24-BM-SB11-00	1/8	NA	1.3E-01	NA	2.2E-01 ca	NA		NO	BSL
	Metals														
	7440-38-2	Arsenic	3.7E-01 J	2.2E+01 J	MG/KG	24-BM-SB06-00	20/23	0.72 - 0.77	2.2E+01	6.3E-01	3.9E-01 ca	3.0E+01	NCSSL	YES	ASL
	7440-39-3	Barium	7.9E+00 J	5.0E+02	MG/KG	24-BM-SB07-00	19/23	0.5 - 0.54	5.0E+02	1.4E+01	1.5E+03 nc	8.5E+02	NCSSL	NO	BSL
	7440-43-9	Cadmium	5.8E-02 J	1.9E+00	MG/KG	24-BM-SB07-00	16/23	0.05 - 0.054	1.9E+00	3.3E-02	7.0E+00 nc	9.5E-01	NCSSL	NO	BSL
	7440-47-3	Chromium	2.9E+00	2.2E+01 J	MG/KG	24-BM-SB15-00	21/23	0.079 - 0.086	2.2E+01	6.1E+00	2.3E+01 nc	2.7E+01	NCSSL	NO	BSL
	7439-92-1	Lead	4.9E+00 J	6.9E+01 J	MG/KG	SWMU477-HHRA-013	23/23	0.89 - 0.97	6.9E+01	1.2E+01	4.0E+02 nc	2.7E+02	NCSSL	NO	BSL
	7439-97-6	Mercury	1.9E-02 J	1.2E+00	MG/KG	24-BM-SB11-00	18/23	0.011 - 0.013	1.2E+00	8.1E-02	2.3E+00 nc	1.5E-02	NCSSL	NO	BSL
	7782-49-2	Selenium	3.1E-01 J	4.5E+00 J	MG/KG	24-BM-SB06-00	15/23	0.62 - 0.67	4.5E+00	5.6E-01	3.9E+01 nc	1.2E+01	NCSSL	NO	BSL
	7440-22-4	Silver	NA	NA	MG/KG	NA	0/23	0.06 - 0.065			3.9E+01 nc	2.2E-01	NCSSL	NO	BSL

[1] Minimum/Maximum detected concentrations.
[2] Maximum concentration is used for screening.
[3] Background values are two times the arithmetic mean basewide background surface soil concentrations from the *Final Base Background Soil Study Report*, Marine Corps Base Camp Lejeune, North Carolina, Baker Environmental, April 25, 2001.
[4] Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. Residential. [Online]. September 2008.

RSL value for Chromium VI (particulates) used as surrogate for chromium.
The soil value of 400 mg/kg for lead is from the Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, USEPA, July 14, 1994.
RSL value for Mercury (inorganic salts) used as surrogate for mercury.
RSL value of Chlordane for alpha- and gamma-Chlordane
[5] Rationale Codes

Selection Reason: Above Screening Levels (ASL)
Deletion Reason: No Toxicity Information (NTX)
Essential Nutrient (NUT)

COPC = Chemical of Potential Concern
ARAR/TBC = Applicable or Relevant and Appropriate Requirement/ To Be Considered
J = Estimated Value
ca = Carcinogenic
ca* = nc SL < 100 x caSL
ca** = nc SL < 10 x < ca SL
nc = Noncarcinogenic
NCSSL = North Carolina Soil Screening Levels (NCDENR, June 2008)
NA = Not Avaliable

Table 1b
Step 1 Screening - Total Soil
Site 477
MCB Camp Lejeune, Jacksonville, NC

Scenario Timeframe: Future
Medium: Total Soil
Exposure Medium: Total Soil (0-14 ft)

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
	Volatile Organic Compounds														
Total Soil*	67-64-1	Acetone	2.8E-02 J	1.8E-01	MG/KG	24-BM-SB15-06	7/15	NA	1.8E-01	NA	6.1E+03 nc	2.8E+00	NCSSL	NO	BSL
	75-09-2	Methylene Chloride	1.2E-01 J	1.2E-01 J	MG/KG	24-BM-SB11-06	1/15	NA	1.2E-01	NA	1.1E+01 ca	2.0E-02	NCSSL	NO	BSL
	Semivolatile Organic Compounds														
	91-57-6	2-Methylnaphthalene	1.1E-01 J	1.1E-01 J	MG/KG	24-BM-SB11-00	1/15	NA	1.1E-01	NA	3.1E+01 nc	NA		NO	BSL
	117-81-7	Bis(2-ethylhexyl)phthalat	5.1E-02 J	1.0E+00	MG/KG	24-BM-SB05-04	3/15	NA	1.0E+00	NA	3.5E+01 ca	6.7E+00	NCSSL	NO	BSL
	Pesiticide/ Polychlorinated Biphenyls														
	72-54-8	4,4'-DDD	6.9E-03 J	6.9E-03 J	MG/KG	24-BDA-SB08-00	1/15	NA	6.9E-03	NA	2.0E+00 ca	1.3E-01	NCSSL	NO	BSL
	72-55-9	4,4'-DDE	8.4E-03 J	8.4E-03 J	MG/KG	24-BM-SB11-00	1/15	NA	8.4E-03	NA	1.4E+00 ca	NA		NO	BSL
	50-29-3	4,4'-DDT	5.2E-03	5.2E-03	MG/KG	24-BM-SB05-00	1/15	NA	5.2E-03	NA	1.7E+00 ca*	1.4E+00	NCSSL	NO	BSL
	5103-71-9	alpha-Chlordane	2.6E-02 J	2.6E-02 J	MG/KG	24-BM-SB11-00	1/15	NA	2.6E-02	NA	1.6E+00 ca*	1.0E-01	NCSSL	NO	BSL
	5103-74-2	gamma-Chlordane	2.0E-02 J	2.0E-02 J	MG/KG	24-BM-SB11-00	1/15	NA	2.0E-02	NA	1.6E+00 ca*	1.0E-01	NCSSL	NO	BSL
	76-44-8	Heptachlor	1.8E-03 J	1.8E-03 J	MG/KG	24-BM-SB11-00	1/15	NA	1.8E-03	NA	1.1E-01 nc	2.3E-03	NCSSL	NO	BSL
	1024-57-3	Heptachlor epoxide	5.0E-03 J	5.0E-03 J	MG/KG	24-BM-SB11-00	1/15	NA	5.0E-03	NA	5.3E-02 ca*	6.3E-03	NCSSL	NO	BSL
	11097-69-1	Aroclor-1254	8.5E-02 J	8.5E-02 J	MG/KG	24-BM-SB11-00	1/15	NA	8.5E-02	NA	2.2E-01 ca**	NA		NO	BSL
	11096-82-5	Aroclor-1260	1.3E-01	1.3E-01	MG/KG	24-BM-SB11-00	1/15	NA	1.3E-01	NA	2.2E-01 ca	NA		NO	BSL
	Metals														
	7440-38-2	Arsenic	2.0E-01 J	2.2E+01	MG/KG	24-BM-SB06-00	34/38	0.72 - 0.77	2.2E+01	6.3E-01	3.9E-01 ca	3.0E+01	NCSSL	YES	ASL
	7440-39-3	Barium	3.9E+00 J	5.0E+02 J	MG/KG	24-BM-SB07-00	34/38	0.5 - 0.54	5.0E+02	1.4E+01	1.5E+03 nc	8.5E+02	NCSSL	NO	BSL
	7440-43-9	Cadmium	5.8E-02 J	1.9E+00	MG/KG	24-BM-SB07-00	16/38	0.05 - 0.054	1.9E+00	3.3E-02	7.0E+00 nc	9.5E-01	NCSSL	NO	BSL
	7440-47-3	Chromium	1.3E+00	2.2E+01	MG/KG	24-BM-SB15-00	36/38	0.079 - 0.086	2.2E+01	6.1E+00	2.3E+01 nc	2.7E+01	NCSSL	NO	BSL
	7439-92-1	Lead	1.4E+00 J	6.9E+01 J	MG/KG	SWMU477-HHRA-013	38/38	0.89 - 0.97	6.9E+01	1.2E+01	4.0E+02 nc	2.7E+02	NCSSL	NO	BSL
	7439-97-6	Mercury	1.2E-02 J	1.2E+00	MG/KG	24-BM-SB11-00	19/38	0.011 - 0.013	1.2E+00	8.1E-02	2.3E+00 nc	1.5E-02	NCSSL	NO	BSL
	7782-49-2	Selenium	1.6E-01 J	4.5E+00 J	MG/KG	24-BM-SB06-00	21/38	0.62 - 0.67	4.5E+00	5.6E-01	3.9E+01 nc	1.2E+01	NCSSL	NO	BSL
	7440-22-4	Silver	NA	NA	MG/KG	NA	0/38	0.06 - 0.065	NA		3.9E+01 nc	2.2E-01	NCSSL	NO	BSL

* soil = combined surface and subsurface soil

[1] Minimum/Maximum detected concentrations.
[2] Maximum concentration is used for screening.
[3] Background values are two times the arithmetic mean basewide background surface soil concentrations from the *Final Base Background Soil Study Report*, Marine Corps Base Camp Lejeune, North Carolina, Baker Environmental, April 25, 2001.
[4] Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. Residential. [Online]. September 2008.

RSL value for Chromium VI (particulates) used as surrogate for chromium.
The soil value of 400 mg/kg for lead is from the Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, USEPA, July 14, 1994.
RSL value for Mercury (inorganic salts) used as surrogate for mercury.
RSL value of Chlordane for alpha- and gamma-Chlordane

[5] Rationale Codes
Selection Reason: Above Screening Levels (ASL)
Deletion Reason: No Toxicity Information (NTX)

COPC = Chemical of Potential Concern
ARAR/TBC = Applicable or Relevant and Appropriate Requirement/ To Be Considered
J = Estimated Value
ca = Carcinogenic
ca* = nc SL < 100 x caSL
ca** = nc SL < 10 x < ca SL
nc = Noncarcinogenic
NCSSL = North Carolina Soil Screening Levels (NCDENR, June 2008)
NA = Not Avaliable

Table 2a
Step 2 - Surface Soil (0-0.5 ft)
Site 477
Camp Lejeune, Jacksonville, NC

Analyte	Detection Frequency	Detected Concentration (Qualifier)	Sample	EPA Regional Screening Level	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)								
Arsenic	20 / 23	2.2E+01	24-BM-SB06-00	3.9E-01	1E-06		5.6E-05	
Cumulative Corresponding Hazard Index[c]								
Cumulative Corresponding Cancer Risk[d]							**5.6E-05**	

[a] Corresponding Hazard Index equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.
Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05, otherwise, constituent not selected as COPC.
Constituents selected as COPCs are indicated by shading.
COPC = Constituent of Potential Concern
HI = Hazard Index
J = Estimated Value
mg/kg = Milligrams per kilogram

Table 2b
Step 2 - Total Soil (0-14 ft)
Site 477
Camp Lejeune, Jacksonville, NC

Analyte	Detection Frequency	Detected Concentration (Qualifier)	Sample	EPA Regional Screening Level	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)								
Arsenic	34 / 38	2.2E+01	24-BM-SB06-00	3.9E-01	1E-06		5.6E-05	
Cumulative Corresponding Hazard Index[c]								
Cumulative Corresponding Cancer Risk[d]							**5.6E-05**	

[a] Corresponding Hazard Index equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.
Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05, otherwise, constituent not selected as COPC.
Constituents selected as COPCs are indicated by shading.
COPC = Constituent of Potential Concern
HI = Hazard Index
J = Estimated Value
mg/kg = Milligrams per kilogram

Table 3a
Step 3 - Surface Soil (0-0.5 ft)
Site 477
Camp Lejeune, Jacksonville, NC

Analyte	Detection Frequency	95% UCL		95% UCL Rationale	EPA Regional Screening Level	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)									
Arsenic	20 / 23	8.7E+00	95% KM	1	3.9E-01	1E-06		2.2E-05	
Cumulative Corresponding Hazard Index[c]									
Cumulative Corresponding Cancer Risk[d]								**2.2E-05**	

[a] Corresponding Hazard Index equals 95% UCL divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.

Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05,

Constituents selected as COPCs are indicated by shading.

ug/L = micrograms per liter

HI = Hazard Index

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the maximum value was used in the calculation.

ProUCL, Version 4.0 used to determine distribution of data and calculate 95% UCL, following recommendations

in users guide (USEPA. April 2007. ProUCL, Version 4.0. Prepared by Lockheed Martin Environmental Services).

Statstics: 95% Kaplan-Meier Chebyshev UCL (95% KM)

UCL Rationale:

(1) Shapiro-Wilk W Test/Lilliefors test indicates data are log-normally distributed.

(2) Shapiro-Wilk W Test/Lilliefors indicates data are normally distributed.

(3) Anderson-Darling Test indicates data are gamma distributed.

(4) Kolmogorov-Smirnov Test indicates data are gamma distributed.

(5) Distribution tests are inconclusive (data are not normal, log-normal, or gamma-distributed).

Table 3b
Step 3 - Total Soil (0-14 ft)
Site 477
Camp Lejeune, Jacksonville, NC

Analyte	Detection Frequency	95% UCL		95% UCL Rationale	EPA Regional Screening Level	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)									
Arsenic	34 / 38	6.9E+00	97.5% KM Cheb-m	1	3.9E-01	1E-06		1.8E-05	
Cumulative Corresponding Hazard Index[c]									
Cumulative Corresponding Cancer Risk[d]								**1.8E-05**	

[a] Corresponding Hazard Index equals 95% UCL divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.
Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05,
Constituents selected as COPCs are indicated by shading.
ug/L = micrograms per liter
HI = Hazard Index

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the maximum value was used in the calculation.
ProUCL, Version 4.0 used to determine distribution of data and calculate 95% UCL, following recommendations
in users guide (USEPA. April 2007. ProUCL, Version 4.0. Prepared by Lockheed Martin Environmental Services).
Statstics: 97.5% Kaplan Meier Chebyshev (mean, std) UCL (99% Cheb-m)
UCL Rationale:
(1) Shapiro-Wilk W Test/Lilliefors test indicates data are log-normally distributed.
(2) Shapiro-Wilk W Test/Lilliefors indicates data are normally distributed.
(3) Anderson-Darling Test indicates data are gamma distributed.
(4) Kolmogorov-Smirnov Test indicates data are gamma distributed.
(5) Distribution tests are inconclusive (data are not normal, log-normal, or gamma-distributed).

	A	B	C	D	E	F	G	H	I	J	K	L
1				General UCL Statistics for Data Sets with Non-Detects								
2			User Selected Options									
3			From File	WorkSheet.wst								
4			Full Precision	OFF								
5			Confidence Coefficient	95%								
6			Number of Bootstrap Operations	2000								
7												
8												
9	arsenic											
10												
11						General Statistics						
12						Number of Valid Samples	37			Number of Detected Data		34
13						Number of Unique Samples	29			Number of Non-Detect Data		3
14										Percent Non-Detects		8.11%
15												
16				Raw Statistics						Log-transformed Statistics		
17						Minimum Detected	0.2			Minimum Detected		-1.609
18						Maximum Detected	21.8			Maximum Detected		3.082
19						Mean of Detected	2.769			Mean of Detected		0.3
20						SD of Detected	4.338			SD of Detected		1.194
21						Minimum Non-Detect	0.42			Minimum Non-Detect		-0.868
22						Maximum Non-Detect	1.7			Maximum Non-Detect		0.531
23												
24	Note: Data have multiple DLs - Use of KM Method is recommended									Number treated as Non-Detect		20
25	For all methods (except KM, DL/2, and ROS Methods),									Number treated as Detected		17
26	Observations < Largest ND are treated as NDs									Single DL Non-Detect Percentage		54.05%
27												
28						UCL Statistics						
29				Normal Distribution Test with Detected Values Only						Lognormal Distribution Test with Detected Values Only		
30						Shapiro Wilk Test Statistic	0.554			Shapiro Wilk Test Statistic		0.934
31						5% Shapiro Wilk Critical Value	0.933			5% Shapiro Wilk Critical Value		0.933
32				Data not Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level		
33												
34				Assuming Normal Distribution						Assuming Lognormal Distribution		
35						DL/2 Substitution Method				DL/2 Substitution Method		
36						Mean	2.58			Mean		0.191
37						SD	4.204			SD		1.215
38						95% DL/2 (t) UCL	3.747			95% H-Stat (DL/2) UCL		3.586
39												
40						Maximum Likelihood Estimate(MLE) Method				Log ROS Method		
41						Mean	0.0201			Mean in Log Scale		0.194
42						SD	6.553			SD in Log Scale		1.201
43						95% MLE (t) UCL	1.839			Mean in Original Scale		2.576
44						95% MLE (Tiku) UCL	2.416			SD in Original Scale		4.205
45										95% Percentile Bootstrap UCL		3.834
46										95% BCA Bootstrap UCL		4.254
47												
48				Gamma Distribution Test with Detected Values Only						Data Distribution Test with Detected Values Only		
49						k star (bias corrected)	0.769			Data appear Lognormal at 5% Significance Level		
50						Theta Star	3.599					
51						nu star	52.32					
52												
53						A-D Test Statistic	1.486			Nonparametric Statistics		

	A	B	C	D	E	F	G	H	I	J	K	L
54					5% A-D Critical Value	0.784					Kaplan-Meier (KM) Method	
55					K-S Test Statistic	0.784					Mean	2.575
56					5% K-S Critical Value	0.156					SD	4.149
57		**Data not Gamma Distributed at 5% Significance Level**									SE of Mean	0.692
58											95% KM (t) UCL	3.744
59			**Assuming Gamma Distribution**								95% KM (z) UCL	3.714
60				Gamma ROS Statistics using Extrapolated Data							95% KM (jackknife) UCL	3.742
61					Minimum	0					95% KM (bootstrap t) UCL	4.957
62					Maximum	21.8					95% KM (BCA) UCL	3.886
63					Mean	2.558					95% KM (Percentile Bootstrap) UCL	3.741
64					Median	0.97					95% KM (Chebyshev) UCL	5.593
65					SD	4.216					97.5% KM (Chebyshev) UCL	6.899
66					k star	0.358					99% KM (Chebyshev) UCL	9.464
67					Theta star	7.153						
68					Nu star	26.46				**Potential UCLs to Use**		
69					AppChi2	15.74					97.5% KM (Chebyshev) UCL	6.899
70					95% Gamma Approximate UCL	4.302						
71					95% Adjusted Gamma UCL	4.402						
72	**Note: DL/2 is not a recommended method.**											
73												

	A	B	C	D	E	F	G	H	I	J	K	L
1				General UCL Statistics for Data Sets with Non-Detects								
2			User Selected Options									
3			From File	WorkSheet.wst								
4			Full Precision	OFF								
5			Confidence Coefficient	95%								
6			Number of Bootstrap Operations	2000								
7												
8												
9	arsenic											
10												
11						General Statistics						
12						Number of Valid Samples	22			Number of Detected Data		20
13						Number of Unique Samples	15			Number of Non-Detect Data		2
14										Percent Non-Detects		9.09%
15												
16				Raw Statistics						Log-transformed Statistics		
17						Minimum Detected	0.37			Minimum Detected		-0.994
18						Maximum Detected	21.8			Maximum Detected		3.082
19						Mean of Detected	4.346			Mean of Detected		1.065
20						SD of Detected	5.126			SD of Detected		0.877
21						Minimum Non-Detect	0.5			Minimum Non-Detect		-0.693
22						Maximum Non-Detect	1.7			Maximum Non-Detect		0.531
23												
24	Note: Data have multiple DLs - Use of KM Method is recommended									Number treated as Non-Detect		5
25	For all methods (except KM, DL/2, and ROS Methods),									Number treated as Detected		17
26	Observations < Largest ND are treated as NDs									Single DL Non-Detect Percentage		22.73%
27												
28						UCL Statistics						
29				Normal Distribution Test with Detected Values Only						Lognormal Distribution Test with Detected Values Only		
30						Shapiro Wilk Test Statistic	0.579			Shapiro Wilk Test Statistic		0.844
31						5% Shapiro Wilk Critical Value	0.905			5% Shapiro Wilk Critical Value		0.905
32				Data not Normal at 5% Significance Level						Data not Lognormal at 5% Significance Level		
33												
34				Assuming Normal Distribution						Assuming Lognormal Distribution		
35						DL/2 Substitution Method				DL/2 Substitution Method		
36						Mean	4.001			Mean		0.898
37						SD	5.003			SD		1.012
38						95% DL/2 (t) UCL	5.836			95% H-Stat (DL/2) UCL		5.522
39												
40						Maximum Likelihood Estimate(MLE) Method				Log ROS Method		
41						Mean	3.322			Mean in Log Scale		0.933
42						SD	5.669			SD in Log Scale		0.939
43						95% MLE (t) UCL	5.402			Mean in Original Scale		4.014
44						95% MLE (Tiku) UCL	5.394			SD in Original Scale		4.993
45										95% Percentile Bootstrap UCL		5.933
46										95% BCA Bootstrap UCL		6.351
47												
48				Gamma Distribution Test with Detected Values Only						Data Distribution Test with Detected Values Only		
49						k star (bias corrected)	1.207			Data do not follow a Discernable Distribution (0.05)		
50						Theta Star	3.601					
51						nu star	48.27					
52												
53						A-D Test Statistic	2.251			Nonparametric Statistics		

	A	B	C	D	E	F	G	H	I	J	K	L
54					5% A-D Critical Value	0.76					Kaplan-Meier (KM) Method	
55					K-S Test Statistic	0.76					Mean	3.999
56					5% K-S Critical Value	0.198					SD	4.889
57		**Data not Gamma Distributed at 5% Significance Level**									SE of Mean	1.07
58											95% KM (t) UCL	5.84
59			**Assuming Gamma Distribution**								95% KM (z) UCL	5.759
60				Gamma ROS Statistics using Extrapolated Data							95% KM (jackknife) UCL	5.811
61					Minimum	0					95% KM (bootstrap t) UCL	7.992
62					Maximum	21.8					95% KM (BCA) UCL	6.08
63					Mean	3.951					95% KM (Percentile Bootstrap) UCL	5.882
64					Median	2.7					95% KM (Chebyshev) UCL	8.661
65					SD	5.041					97.5% KM (Chebyshev) UCL	10.68
66					k star	0.29					99% KM (Chebyshev) UCL	14.64
67					Theta star	13.61						
68					Nu star	12.77				**Potential UCLs to Use**		
69					AppChi2	5.74					95% KM (Chebyshev) UCL	8.661
70					95% Gamma Approximate UCL	8.791						
71					95% Adjusted Gamma UCL	9.361						
72	**Note: DL/2 is not a recommended method.**											
73												

Table 1
Preliminary ecological risk screening for surface soil
Site 477
MCB Camp Lejeune, Jacksonville, NC

Exposure Medium	Chemical	Maximum Concentration Detected	Units	Location of Maximum Concentration	Detection Frequency	Ecological Screening Value	HQ	Camp Lejeune Background Value 2x Mean
Surface Soil	Acetone	0.067 J	MG/KG	24-BDA-SB08-00	4/8	NA	NA	NA
	2-Methylnaphthalene	0.11 J	MG/KG	24-BM-SB11-00	1/8	29	0.00	NA
	4,4'-DDD	0.0069 J	MG/KG	24-BDA-SB08-00	1/8	0.021	0.33	NA
	4,4'-DDE	0.0084 J	MG/KG	24-BM-SB11-00	1/8	0.021	0.40	NA
	4,4'-DDT	0.0052	MG/KG	24-BM-SB05-00	1/8	0.021	0.25	NA
	alpha-Chlordane	0.026 J	MG/KG	24-BM-SB11-00	1/8	NA	NA	NA
	gamma-Chlordane	0.02 J	MG/KG	24-BM-SB11-00	1/8	NA	NA	NA
	Heptachlor	0.0018 J	MG/KG	24-BM-SB11-00	1/8	0.1	0.02	NA
	Heptachlor epoxide	0.005 J	MG/KG	24-BM-SB11-00	1/8	0.1	0.05	NA
	Aroclor-1254	0.085 J	MG/KG	24-BM-SB11-00	1/8	0.02	4.25	NA
	Aroclor-1260	0.13	MG/KG	24-BM-SB11-00	1/8	0.02	6.50	NA
	Arsenic	21.8	MG/KG	24-BM-SB06-00	20/23	18	1.21	0.63
	Barium	502 J	MG/KG	24-BM-SB07-00	19/23	330	1.52	14.47
	Cadmium	1.9	MG/KG	24-BM-SB07-00	16/23	0.36	5.28	0.03
	Chromium	21.6	MG/KG	24-BM-SB15-00	21/23	26	0.83	6.05
	Lead	68.6 J	MG/KG	SWMU477-HHRA-013	23/23	11	6.24	12.28
	Mercury	1.2	MG/KG	24-BM-SB11-00	18/23	0.67	1.79	0.08
	Selenium	4.5 J	MG/KG	24-BM-SB06-00	15/23	0.63	7.14	0.56

J = Estimated Value
NA = Not Avaliable
MG/KG = Milligram per kilogram
HQ (Hazard Quotient) = Maximum Concentration Detected / Ecological Screening Value