

## Appendix S

## Sample Location Survey Data

C-Block Quarry

Load Line 12

Building 1200

Landfill North of Winklepeck Burning Grounds

Pistol Range

NACA Test Area

Load Line 5

Load Line 7

Load Line 8

Load Line 10

Wet Storage

Buildings F-15/F-16

Anchor Test Area

Atlas Scrap Yard

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-06 C Block Quarry	CBLmw-001-DUP	2343659.08	559405.12	OH83NFT
RVAAP-06 C Block Quarry	CBLmw-001-GW	2343659.08	559405.12	OH83NFT
RVAAP-06 C Block Quarry	CBLmw-002-GW	2343843.22	559046.48	OH83NFT
RVAAP-06 C Block Quarry	CBLmw-003-GW	2343967.67	559697.13	OH83NFT
RVAAP-06 C Block Quarry	CBLmw-004-GW	2343687.21	559950	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-001M-SD	2343750.45	561031.64	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-002D-DUP	2343856.01	560955.42	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-002D-SD	2343856.01	560955.42	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-002M-SD	2343853.69	560954.94	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-003M-SD	2344054.27	560468.23	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-004M-DUP	2344325.65	560316.32	OH83NFT
RVAAP-06 C Block Quarry	CBLsd-004M-SD	2344325.65	560316.32	OH83NFT
RVAAP-06 C Block Quarry	CBLss-001M-SO	2343729.56	559676.78	OH83NFT
RVAAP-06 C Block Quarry	CBLss-002M-SO	2343783.07	559529.95	OH83NFT
RVAAP-06 C Block Quarry	CBLss-003M-DUP	2343862.66	559403.71	OH83NFT
RVAAP-06 C Block Quarry	CBLss-003M-SO	2343862.66	559403.71	OH83NFT
RVAAP-06 C Block Quarry	CBLss-004M-SO	2343787.19	559376.27	OH83NFT
RVAAP-06 C Block Quarry	CBLss-005D-SO	2343841.80	559347.48	OH83NFT
RVAAP-06 C Block Quarry	CBLss-005M-SO	2343831.10	559399.59	OH83NFT
RVAAP-06 C Block Quarry	CBLss-006M-SO	2343707.60	559571.12	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-001-SW	2343750.45	561031.64	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-002-DUP	2343853.69	560954.94	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-002-SW	2343853.69	560954.94	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-003-SW	2344054.27	560468.23	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-004M-SW	2344325.65	560316.32	OH83NFT
RVAAP-06 C Block Quarry	CBLsw-004-SW	2344325.65	560316.32	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-12 Load Line 12	L12mw-088-GW	2368667.10	556393.61	OH83NFT
RVAAP-12 Load Line 12	L12mw-107-GW	2368595.04	556758.73	OH83NFT
RVAAP-12 Load Line 12	L12mw-113-GW	2368224.40	558345.62	OH83NFT
RVAAP-12 Load Line 12	L12mw-128-GW	2368292.51	557371.31	OH83NFT
RVAAP-12 Load Line 12	L12mw-153-GW	2368138.57	557823.69	OH83NFT
RVAAP-12 Load Line 12	L12mw-154-GW	2368184.17	557753.98	OH83NFT
RVAAP-12 Load Line 12	L12mw-183-GW	2369224.99	556067.67	OH83NFT
RVAAP-12 Load Line 12	L12mw-185-GW	2368830.45	556947.16	OH83NFT
RVAAP-12 Load Line 12	L12mw-186-GW	2367911.63	559065.62	OH83NFT
RVAAP-12 Load Line 12	L12mw-188-GW	2367909.04	558131.81	OH83NFT
RVAAP-12 Load Line 12	L12mw-189-GW	2367946.67	558569	OH83NFT
RVAAP-12 Load Line 12	L12mw-242-DUP	2368543.29	558022.51	OH83NFT
RVAAP-12 Load Line 12	L12mw-242-GW	2368543.29	558022.51	OH83NFT
RVAAP-12 Load Line 12	L12mw-243-GW	2368192.04	557374.32	OH83NFT
RVAAP-12 Load Line 12	L12mw-244-GW	2368753.42	557380.17	OH83NFT
RVAAP-12 Load Line 12	L12mw-245-GW	2368368.74	557042.55	OH83NFT
RVAAP-12 Load Line 12	L12mw-246-GW	2369434.17	556660.89	OH83NFT
RVAAP-12 Load Line 12	L12mw-182-DUP	2368853.04	555891.02	OH83NFT
RVAAP-12 Load Line 12	L12mw-182-GW	2368853.04	555891.02	OH83NFT
RVAAP-12 Load Line 12	L12mw-182-GW-DUP	2368853.04	555891.02	OH83NFT
RVAAP-12 Load Line 12	L12mw-184-GW	2368998.15	556399.95	OH83NFT
RVAAP-12 Load Line 12	L12mw-187-GW	2368524.71	557633.55	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-13 Building 1200	B12mw-010-GW	2371293.16	565828.9	OH83NFT
RVAAP-13 Building 1200	B12mw-011-DUP	2371415.07	565690.15	OH83NFT
RVAAP-13 Building 1200	B12mw-011-GW	2371415.07	565690.15	OH83NFT
RVAAP-13 Building 1200	B12mw-012-GW	2371429.64	565824.62	OH83NFT
RVAAP-13 Building 1200	B12sd-023M-DUP	2371977.19	565916.82	OH83NFT
RVAAP-13 Building 1200	B12sd-023M-SD	2371977.19	565916.82	OH83NFT
RVAAP-13 Building 1200	B12sd-024D-SD	2371746.21	565916.10	OH83NFT
RVAAP-13 Building 1200	B12sd-024M-SD	2371748.45	565916.23	OH83NFT
RVAAP-13 Building 1200	B12ss-013M-DUP	2371326.95	565682.19	OH83NFT
RVAAP-13 Building 1200	B12ss-013M-SO	2371326.95	565682.19	OH83NFT
RVAAP-13 Building 1200	B12ss-014M-SO	23713328.14	565719.92	OH83NFT
RVAAP-13 Building 1200	B12ss-015D-SO	2371354.65	565795.89	OH83NFT
RVAAP-13 Building 1200	B12ss-015M-SO	2371352.88	565803.04	OH83NFT
RVAAP-13 Building 1200	B12ss-016M-SO	2371383.53	565745.27	OH83NFT
RVAAP-13 Building 1200	B12ss-017M-SO	2371360.54	565756.47	OH83NFT
RVAAP-13 Building 1200	B12ss-018M-SO	2371354.65	565738.19	OH83NFT
RVAAP-13 Building 1200	B12ss-019M-SO	2371381.18	565775.33	OH83NFT
RVAAP-13 Building 1200	B12ss-020M-SO	2371427.75	565780.64	OH83NFT
RVAAP-13 Building 1200	B12ss-021M-SO	2371400.63	5665726.40	OH83NFT
RVAAP-13 Building 1200	B12ss-022M-SO	2372044.39	565760.60	OH83NFT
RVAAP-13 Building 1200	B12sw-025-DUP	2371748.45	565916.23	OH83NFT
RVAAP-13 Building 1200	B12sw-025-SW	2371748.45	565916.23	OH83NFT
RVAAP-13 Building 1200	B12sw-026-SW	2371977.19	565916.82	OH83NFT
RVAAP-13 Building 1200	BKGmw-010-GW	2371371.62	565540.14	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWmw-024-GW	2358401.21	564827.89	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWmw-025-GW	2358420.06	565069.92	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWmw-026-DUP	2358954.24	564656.16	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWmw-026-GW	2358954.24	564656.16	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWmw-027-GW	2358626.75	564519.41	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-053-SO	2358496.77	565032.33	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-054-SO	2358468.95	564996.75	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-055-SO	2358495.21	564929.29	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-056-DUP	2358503.97	564897.08	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-056-SO	2358503.97	564897.08	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-057-SO	2358543.07	564908.47	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-058-SO	2358562.85	564868.84	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-059-SO	2358590.02	564825.61	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-060-SO	2358603.95	564754.88	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-061-SO	2358577.78	564745.52	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-062-SO	2358623.20	564698.38	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-063-SO	2358654.31	564672.45	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-064-DUP	2358715.80	564578.27	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-064-SO	2358715.80	564578.27	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-065-SO	2358643.92	564624.66	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-066-SO	2358826.48	564579.35	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-067-SO	2358855.31	564565.60	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-068-SO	2358900.03	564624.18	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsb-069-SO	2358889.62	564701.04	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-043M-SD	2348643.48	565171.83	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-044D-SD	2358890.20	564921.62	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-044M-SD	2358746.68	565075.08	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-044-SD	2358746.68	565075.08	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-045M-DUP	2358871.39	564928.87	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-045M-SD	2358871.39	564928.87	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsd-046M-SD	2358940.19	564174.20	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-028M-DUP	2358318.81	565173.98	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-028M-SO	2358318.81	565173.98	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-029M-SO	2358370.42	565053.58	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-030M-SO	2358432.77	564918.12	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-031M-QA	2358594.02	564795.57	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-031M-SO	2358594.02	564795.57	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-032M-SO	2358615.53	564673.01	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-033M-SO	2358588.29	564551.18	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-034D-SO	2358804.68	564560.79	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-034M-SO	2358760.30	564548.31	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-035M-SO	2358556.76	564419.30	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-036M-SO	2358596.89	564313.23	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-037M-DUP	2358510.89	565150.33	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-037M-SO	2358510.89	565150.33	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-038M-SO	2358731.63	564883.72	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-039D-SO	2359020.76	564834.89	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-039M-SO	2359057.60	564867.77	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-040M-SO	2357929.98	563328.84	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-041M-SO	2357964.51	563286.57	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWss-042M-SO	2358116.71	564931.02	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-047-SW	2358398.36	565362.42	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-048-SW	2358643.48	565171.83	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-049-SW	2358746.68	565075.08	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-050-SW	2358871.39	564928.87	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-051-SW	2358940.19	564174.20	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-052-DUP	2358983.19	564679.46	OH83NFT
RVAAP-19 Landfill North of Winklepeck Burning Grounds	LNWsw-052-SW	2358983.19	564679.46	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-36 Pistol Range	PIR-001-WD	NA	NA	OH83NFT
RVAAP-36 Pistol Range	PIRsd-001D-DUP	2357396.96	56384.77	OH83NFT
RVAAP-36 Pistol Range	PIRsd-001D-SD	2357396.96	56384.77	OH83NFT
RVAAP-36 Pistol Range	PIRsd-001M-DUP	2357403.73	563848.01	OH83NFT
RVAAP-36 Pistol Range	PIRsd-001M-SD	2357403.73	563848.01	OH83NFT
RVAAP-36 Pistol Range	PIRsd-002M-SD	2357551.92	563839.64	OH83NFT
RVAAP-36 Pistol Range	PIRss-001M-SO	2357411.20	563735.97	OH83NFT
RVAAP-36 Pistol Range	PIRss-002M-SO	2357417.47	563887.45	OH83NFT
RVAAP-36 Pistol Range	PIRss-003D-SO	2357415.08	563921.95	OH83NFT
RVAAP-36 Pistol Range	PIRss-003M-SO	2357410.30	563925.09	OH83NFT
RVAAP-36 Pistol Range	PIRss-004M-SO	2357404.92	563967.22	OH83NFT
RVAAP-36 Pistol Range	PIRss-005M-DUP	2357398.65	563998.59	OH83NFT
RVAAP-36 Pistol Range	PIRss-005M-SO	2357398.65	563998.59	OH83NFT
RVAAP-36 Pistol Range	PIRss-006M-SO	2357393.27	564017.41	OH83NFT
RVAAP-36 Pistol Range	PIRsw-001-SW	2357452.68	563852.14	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-38 NACA Test Area	NTAmw-107-GW	2345432.73	551699.09	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-108-GW	2345782.17	551917.92	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-109-GW	2345996.99	551291.19	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-110-GW	2346436.82	551350.8	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-111-GW	2346640.16	551538.99	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-112-GW	2346889.01	551708.76	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-113-GW	2347081.15	551487.86	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-114-DUP	2347302.8	551590.76	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-114-GW	2347302.8	551590.76	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-115-GW	2347582.94	551793.39	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-116-DUP	2348196.78	551749.39	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-116-GW	2348196.78	551749.39	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-117-GW	2347994.79	551586.36	OH83NFT
RVAAP-38 NACA Test Area	NTAmw-118-GW	2347608.09	551333.89	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-39 Load Line 5	LL5mw-001-GW	2354627.07	554321.25	OH83NFT
RVAAP-39 Load Line 5	LL5mw-002-GW	2354573.52	554606	OH83NFT
RVAAP-39 Load Line 5	LL5mw-003-GW	2354962.47	554533.41	OH83NFT
RVAAP-39 Load Line 5	LL5mw-004-DUP	2355008.44	554071.73	OH83NFT
RVAAP-39 Load Line 5	LL5mw-004-GW	2355008.44	554071.73	OH83NFT
RVAAP-39 Load Line 5	LL5mw-005-GW	2354424.02	554154.73	OH83NFT
RVAAP-39 Load Line 5	LL5mw-006-GW	2354730	553981.82	OH83NFT
RVAAP-39 Load Line 5	LL5sd-002-DUP	2354606.15	554679.59	OH83NFT
RVAAP-39 Load Line 5	LL5sd-002-SD	2354606.15	554679.59	OH83NFT
RVAAP-39 Load Line 5	LL5sd-013-SD	2354394.20	554031.29	OH83NFT
RVAAP-39 Load Line 5	LL5ss-001M-SO	2354765.97	554401.15	OH83NFT
RVAAP-39 Load Line 5	LL5ss-002M-DUP	2354608.07	554401.15	OH83NFT
RVAAP-39 Load Line 5	LL5ss-002M-SO	2354608.07	554401.15	OH83NFT
RVAAP-39 Load Line 5	LL5ss-003M-SO	2354686.40	554321.58	OH83NFT
RVAAP-39 Load Line 5	LL5ss-004M-SO	2354569.53	554289.25	OH83NFT
RVAAP-39 Load Line 5	LL5ss-005D-SO	2354533.13	554220.74	OH83NFT
RVAAP-39 Load Line 5	LL5ss-005M-SO	2354513.59	554233.30	OH83NFT
RVAAP-39 Load Line 5	LL5ss-006M-SO	2354494.94	554128.87	OH83NFT
RVAAP-39 Load Line 5	LL5ss-007M-SO	2354409.15	554041.84	OH83NFT
RVAAP-39 Load Line 5	LL5ss-008M-SO	2354529.75	553977.19	OH83NFT
RVAAP-39 Load Line 5	LL5ss-009M-SO	2354619.26	554145.03	OH83NFT
RVAAP-39 Load Line 5	LL5ss-010M-DUP	2354666.51	554097.79	OH83NFT
RVAAP-39 Load Line 5	LL5ss-010M-SO	2354666.51	554097.79	OH83NFT
RVAAP-39 Load Line 5	LL5ss-011M-SO	2354761.00	554229.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-012D-SO	2354729.94	554032.55	OH83NFT
RVAAP-39 Load Line 5	LL5ss-012M-SO	2354754.78	554074.16	OH83NFT
RVAAP-39 Load Line 5	LL5ss-013M-SO	2354804.51	553953.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-014M-SO	2354853.00	554151.25	OH83NFT
RVAAP-39 Load Line 5	LL5ss-015M-SO	2354928.84	554069.19	OH83NFT
RVAAP-39 Load Line 5	LL5ss-016M-QA	2355024.57	554275.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-016M-SO	2355024.57	554275.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-017M-SO	2355080.52	554208.44	OH83NFT
RVAAP-39 Load Line 5	LL5ss-018D-SO	2354830.90	554742.50	OH83NFT
RVAAP-39 Load Line 5	LL5ss-018M-SO	2354830.90	554742.50	OH83NFT
RVAAP-39 Load Line 5	LL5ss-019M-SO	2354872.75	554531.16	OH83NFT
RVAAP-39 Load Line 5	LL5ss-020M-DUP	2355098.17	554314.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-020M-SO	2355098.17	554314.57	OH83NFT
RVAAP-39 Load Line 5	LL5ss-021M-DUP	2355310.73	554083.87	OH83NFT
RVAAP-39 Load Line 5	LL5ss-021M-SO	2355310.73	554083.87	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-39 Load Line 5	LL5ss-022M-SO	2354631.97	554574.52	OH83NFT
RVAAP-39 Load Line 5	LL5ss-023M-SO	2355135.92	554161.19	OH83NFT
RVAAP-39 Load Line 5	LL5ss-024M-SO	2354594.40	554368.96	OH83NFT
RVAAP-39 Load Line 5	LL5ss-025M-SO	2354499.36	554357.91	OH83NFT
RVAAP-39 Load Line 5	LL5ss-026M-QA	2354941.41	554083.83	OH83NFT
RVAAP-39 Load Line 5	LL5ss-026M-SO	2354941.41	554083.83	OH83NFT
RVAAP-39 Load Line 5	LL5ss-027M-SO	2354837.53	554050.68	OH83NFT
RVAAP-39 Load Line 5	LL5ss-028M-SO	2354673.97	553986.58	OH83NFT
RVAAP-39 Load Line 5	LL5ss-029M-SO	2354950.25	553716.93	OH83NFT
RVAAP-39 Load Line 5	LL5ss-030-DUP	2354618.65	554407.34	OH83NFT
RVAAP-39 Load Line 5	LL5ss-030-SO	2354618.65	554407.34	OH83NFT
RVAAP-39 Load Line 5	LL5sw-007-DUP	2354813.98	554051.14	OH83NFT
RVAAP-39 Load Line 5	LL5sw-007-SW	2354813.98	554051.14	OH83NFT
RVAAP-39 Load Line 5	LL5sw-008-SW	2354976.20	554210.91	OH83NFT
RVAAP-39 Load Line 5	LL5sw-009-SW	2354967.89	553908.79	OH83NFT
RVAAP-39 Load Line 5	LL5sw-010-SW	2355091.53	553665.52	OH83NFT
RVAAP-39 Load Line 5	LL5sw-011-DUP	2354440.22	554403.40	OH83NFT
RVAAP-39 Load Line 5	LL5sw-011-SW	2354440.22	554403.40	OH83NFT
RVAAP-39 Load Line 5	LL5sw-012-SW	2354506.15	554601.45	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-40 Load Line 7	LL7mw-001-GW	2352190.31	554927.56	OH83NFT
RVAAP-40 Load Line 7	LL7mw-002-GW	2351916.51	555124.46	OH83NFT
RVAAP-40 Load Line 7	LL7mw-003-DUP	2352349.51	555414.33	OH83NFT
RVAAP-40 Load Line 7	LL7mw-003-GW	2352349.51	555414.33	OH83NFT
RVAAP-40 Load Line 7	LL7mw-004-GW	2352036.23	555583.15	OH83NFT
RVAAP-40 Load Line 7	LL7mw-005-GW	2351740.29	555579.52	OH83NFT
RVAAP-40 Load Line 7	LL7mw-006-GW	2351881.62	555992.59	OH83NFT
RVAAP-40 Load Line 7	LL7sd-012M-DUP	2351996.85	555970.89	OH83NFT
RVAAP-40 Load Line 7	LL7sd-012M-SD	2351996.85	555970.89	OH83NFT
RVAAP-40 Load Line 7	LL7sd-029M-SD	2352020.38	554961.69	OH83NFT
RVAAP-40 Load Line 7	LL7ss-001M-SO	2352173.54	554739.84	OH83NFT
RVAAP-40 Load Line 7	LL7ss-002M-SO	2352375.33	555104.99	OH83NFT
RVAAP-40 Load Line 7	LL7ss-003M-DUP	2352391.35	555059.08	OH83NFT
RVAAP-40 Load Line 7	LL7ss-003M-SO	2352391.35	555059.08	OH83NFT
RVAAP-40 Load Line 7	LL7ss-004M-SO	2352092.40	555144.50	OH83NFT
RVAAP-40 Load Line 7	LL7ss-005D-SO	2352131.47	555229.009	OH83NFT
RVAAP-40 Load Line 7	LL7ss-005M-SO	2352125.49	555206.42	OH83NFT
RVAAP-40 Load Line 7	LL7ss-006M-SO	2351913.02	555094.32	OH83NFT
RVAAP-40 Load Line 7	LL7ss-007M-SO	2352169.27	555279.03	OH83NFT
RVAAP-40 Load Line 7	LL7ss-008M-SO	2352284.58	555322.80	OH83NFT
RVAAP-40 Load Line 7	LL7ss-009M-SO	2352179.95	555487.23	OH83NFT
RVAAP-40 Load Line 7	LL7ss-010M-SO	2351764.62	555425.30	OH83NFT
RVAAP-40 Load Line 7	LL7ss-011M-SO	2351800.56	555436.55	OH83NFT
RVAAP-40 Load Line 7	LL7ss-012M-SO	2351846.83	555454.13	OH83NFT
RVAAP-40 Load Line 7	LL7ss-013D-DUP	2351896.55	555498.13	OH83NFT
RVAAP-40 Load Line 7	LL7ss-013D-SO	2351896.55	555498.13	OH83NFT
RVAAP-40 Load Line 7	LL7ss-013M-DUP	2351913.02	555471.21	OH83NFT
RVAAP-40 Load Line 7	LL7ss-013M-SO	2351913.02	555471.21	OH83NFT
RVAAP-40 Load Line 7	LL7ss-014M-SO	2351895.94	555598.27	OH83NFT
RVAAP-40 Load Line 7	LL7ss-015M-SO	2352107.34	555726.39	OH83NFT
RVAAP-40 Load Line 7	LL7ss-016M-SO	2351812.66	555708.24	OH83NFT
RVAAP-40 Load Line 7	LL7ss-017M-SO	2351749.67	555874.80	OH83NFT
RVAAP-40 Load Line 7	LL7ss-018M-QA	2352015.52	555970.89	OH83NFT
RVAAP-40 Load Line 7	LL7ss-018M-SO	2352015.52	555970.89	OH83NFT
RVAAP-40 Load Line 7	LL7ss-019M-SO	2352063.77	556013.58	OH83NFT
RVAAP-40 Load Line 7	LL7ss-020M-SO	2352233.33	555980.68	OH83NFT
RVAAP-40 Load Line 7	LL7ss-021M-SO	2351666.88	556041.62	OH83NFT
RVAAP-40 Load Line 7	LL7ss-022M-SO	2351820.63	555617.39	OH83NFT
RVAAP-40 Load Line 7	LL7ss-023D-SO	2352086.72	555669.51	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-40 Load Line 7	LL7ss-023M-SO	2352048.94	555660.76	OH83NFT
RVAAP-40 Load Line 7	LL7ss-024M-DUP	252296.60	555750.37	OH83NFT
RVAAP-40 Load Line 7	LL7ss-024M-SO	252296.60	555750.37	OH83NFT
RVAAP-40 Load Line 7	LL7ss-025M-SO	2352411.15	555467.78	OH83NFT
RVAAP-40 Load Line 7	LL7ss-026M-SO	2352291.04	555386.10	OH83NFT
RVAAP-40 Load Line 7	LL7ss-027M-SO	2351937.10	555234.75	OH83NFT
RVAAP-40 Load Line 7	LL7ss-028M-SO	2351862.63	555070.60	OH83NFT
RVAAP-40 Load Line 7	LL7ss-030M-SO	2352182.93	555056.18	OH83NFT
RVAAP-40 Load Line 7	LL7ss-031M-SO	2352361.50	555205.93	OH83NFT
RVAAP-40 Load Line 7	LL7ss-032D-SO	2352385.28	555031.41	OH83NFT
RVAAP-40 Load Line 7	LL7ss-032M-SO	2352451.99	555065.79	OH83NFT
RVAAP-40 Load Line 7	LL7ss-033M-DUP	2351494.13	554394.92	OH83NFT
RVAAP-40 Load Line 7	LL7ss-033M-SO	2351494.13	554394.92	OH83NFT
RVAAP-40 Load Line 7	LL7ss-034M-SO	2351526.16	554497.42	OH83NFT
RVAAP-40 Load Line 7	LL7ss-035M-SO	2351565.67	554588.17	OH83NFT
RVAAP-40 Load Line 7	LL7ss-036M-QA	2351391.64	554423.75	OH83NFT
RVAAP-40 Load Line 7	LL7ss-036M-SO	2351391.64	554423.75	OH83NFT
RVAAP-40 Load Line 7	LL7ss-037M-SO	2351434.34	554531.59	OH83NFT
RVAAP-40 Load Line 7	LL7ss-038M-SO	2351468.51	554626.61	OH83NFT
RVAAP-40 Load Line 7	LL7ss-039M-SO	2351295.54	554452.58	OH83NFT
RVAAP-40 Load Line 7	LL7ss-040M-SO	2351333.98	554561.48	OH83NFT
RVAAP-40 Load Line 7	LL7ss-041-SO	2352271.91	555318.49	OH83NFT
RVAAP-40 Load Line 7	LL7ss-042M-SO	2351376.69	554657.57	OH83NFT
RVAAP-40 Load Line 7	LL7sw-001-SW	2352709.99	554283.18	OH83NFT
RVAAP-40 Load Line 7	LL7sw-002-SW	2352590.71	554296.50	OH83NFT
RVAAP-40 Load Line 7	LL7sw-003-DUP	2352268.34	554717.02	OH83NFT
RVAAP-40 Load Line 7	LL7sw-003-SW	2352268.34	554717.02	OH83NFT
RVAAP-40 Load Line 7	LL7sw-006-SW	2352166.50	554982.90	OH83NFT
RVAAP-40 Load Line 7	LL7sw-007-SW	2352062.51	555251.60	OH83NFT
RVAAP-40 Load Line 7	LL7sw-008-SW	2351984.96	555449.47	OH83NFT
RVAAP-40 Load Line 7	LL7sw-009-SW	2351898.38	555678.96	OH83NFT
RVAAP-40 Load Line 7	LL7sw-011-SW	2351854.75	555595.03	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-41 Load Line 8	LL8mw-001-DUP	2351664.36	552608.92	OH83NFT
RVAAP-41 Load Line 8	LL8mw-001-GW	2351664.36	552608.92	OH83NFT
RVAAP-41 Load Line 8	LL8mw-002-GW	2351009.3	552409.85	OH83NFT
RVAAP-41 Load Line 8	LL8mw-003-GW	2351360.48	552230.97	OH83NFT
RVAAP-41 Load Line 8	LL8mw-004-GW	2351263.66	551808.38	OH83NFT
RVAAP-41 Load Line 8	LL8mw-005-GW	2351750.66	551521.77	OH83NFT
RVAAP-41 Load Line 8	LL8mw-006-GW	2351483.72	551294.68	OH83NFT
RVAAP-41 Load Line 8	LL8sd-001D-SD	2351708.53	552629.02	OH83NFT
RVAAP-41 Load Line 8	LL8sd-001M-SD	2351642.86	552122.76	OH83NFT
RVAAP-41 Load Line 8	LL8sd-001-SD	2351708.53	552629.02	OH83NFT
RVAAP-41 Load Line 8	LL8sd-002M-DUP	2351467.23	551719.26	OH83NFT
RVAAP-41 Load Line 8	LL8sd-002M-SD	2351467.23	551719.26	OH83NFT
RVAAP-41 Load Line 8	LL8sd-003M-SD	2351529.48	551556.96	OH83NFT
RVAAP-41 Load Line 8	LL8sd-004D-SD	2351608.83	552239.75	OH83NFT
RVAAP-41 Load Line 8	LL8sd-004M-SD	2351308.27	551652.56	OH83NFT
RVAAP-41 Load Line 8	LL8sd-005M-SD	2351197.11	551777.06	OH83NFT
RVAAP-41 Load Line 8	LL8sd-005-SD	2351513.67	552201.90	OH83NFT
RVAAP-41 Load Line 8	LL8sd-006M-SD	2351276.04	551471.37	OH83NFT
RVAAP-41 Load Line 8	LL8sd-007-DUP	2351361.51	552064.97	OH83NFT
RVAAP-41 Load Line 8	LL8sd-007-SD	2351361.51	552064.97	OH83NFT
RVAAP-41 Load Line 8	LL8sd-009-SD	2351682.52	551773.65	OH83NFT
RVAAP-41 Load Line 8	LL8sd-010-SD	2351769.09	551548.21	OH83NFT
RVAAP-41 Load Line 8	LL8sd-011-SD	2352101.76	551582.71	OH83NFT
RVAAP-41 Load Line 8	LL8ss-001M-SO	2351656.32	552217.31	OH83NFT
RVAAP-41 Load Line 8	LL8ss-002M-SO	2351420.67	552292.90	OH83NFT
RVAAP-41 Load Line 8	LL8ss-003M-SO	2351349.53	552260.29	OH83NFT
RVAAP-41 Load Line 8	LL8ss-004M-SO	2351143.51	552238.06	OH83NFT
RVAAP-41 Load Line 8	LL8ss-005D-DUP	2351066.44	552234.53	OH83NFT
RVAAP-41 Load Line 8	LL8ss-005D-SO	2351066.44	552234.53	OH83NFT
RVAAP-41 Load Line 8	LL8ss-005M-DUP	2351069.40	552206.94	OH83NFT
RVAAP-41 Load Line 8	LL8ss-005M-SO	2351069.40	552206.94	OH83NFT
RVAAP-41 Load Line 8	LL8ss-006M-SO	2351325.81	552195.08	OH83NFT
RVAAP-41 Load Line 8	LL8ss-007M-SO	2351293.20	552120.97	OH83NFT
RVAAP-41 Load Line 8	LL8ss-008M-SO	2351153.89	552052.80	OH83NFT
RVAAP-41 Load Line 8	LL8ss-009M-SO	2351208.34	551921.35	OH83NFT
RVAAP-41 Load Line 8	LL8ss-010M-DUP	2351259.63	551941.87	OH83NFT
RVAAP-41 Load Line 8	LL8ss-010M-SO	2351259.63	551941.87	OH83NFT
RVAAP-41 Load Line 8	LL8ss-011M-SS	2351542.78	551911.09	OH83NFT
RVAAP-41 Load Line 8	LL8ss-012M-SS	2351592.02	551933.66	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-41 Load Line 8	LL8ss-013M-QA	2351645.95	551694.12	OH83NFT
RVAAP-41 Load Line 8	LL8ss-013M-SS	2351645.95	551694.12	OH83NFT
RVAAP-41 Load Line 8	LL8ss-014M-SO	2351352.49	551670.41	OH83NFT
RVAAP-41 Load Line 8	LL8ss-015D-SO	2351459.75	551420.84	OH83NFT
RVAAP-41 Load Line 8	LL8ss-015M-SO	2351444.38	551425.86	OH83NFT
RVAAP-41 Load Line 8	LL8ss-016M-SO	2351714.13	551531.09	OH83NFT
RVAAP-41 Load Line 8	LL8ss-017M-SO	2351219.35	552145.00	OH83NFT
RVAAP-41 Load Line 8	LL8ss-018M-SO	2351353.85	552011.60	OH83NFT
RVAAP-41 Load Line 8	LL8ss-019-SO	2351168.90	552021.80	OH83NFT
RVAAP-41 Load Line 8	LL8sw-002-SW	2351643.92	552429.35	OH83NFT
RVAAP-41 Load Line 8	LL8sw-003-DUP	2351551.81	552393.94	OH83NFT
RVAAP-41 Load Line 8	LL8sw-003-SW	2351551.81	552393.94	OH83NFT
RVAAP-41 Load Line 8	LL8sw-004-SW	2351608.83	552239.75	OH83NFT
RVAAP-41 Load Line 8	LL8sw-005-SW	2351513.67	552201.90	OH83NFT
RVAAP-41 Load Line 8	LL8sw-007-SW	2351361.51	552064.97	OH83NFT
RVAAP-41 Load Line 8	LL8sw-008-SW	2351596.10	551990.01	OH83NFT
RVAAP-41 Load Line 8	LL8sw-009-SW	2351682.52	551773.65	OH83NFT
RVAAP-41 Load Line 8	LL8sw-010-SW	2351769.09	551548.21	OH83NFT
RVAAP-41 Load Line 8	LL8sw-011-SW	2352101.76	551582.71	OH83NFT
RVAAP-41 Load Line 8	LL8sw-012-SW	2351642.86	552122.76	OH83NFT
RVAAP-41 Load Line 8	LL8sw-013-DUP	2351467.23	551719.26	OH83NFT
RVAAP-41 Load Line 8	LL8sw-013-SW	2351467.23	551719.26	OH83NFT
RVAAP-41 Load Line 8	LL8sw-014-SW	2351529.48	551556.96	OH83NFT
RVAAP-41 Load Line 8	LL8sw-015-SW	2351308.27	551652.56	OH83NFT
RVAAP-41 Load Line 8	LL8sw-016-SW	2351197.11	551777.06	OH83NFT
RVAAP-41 Load Line 8	LL8sw-017-SW	2351276.04	551471.37	OH83NFT
RVAAP-41 Load Line 8	LL8sw-018-SW	2351555.22	552424.54	OH83NFT
RVAAP-41 Load Line 8	LL8sw-019-SW	2351583.58	552348.19	OH83NFT

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SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-43 Load Line 10	L10mw-001-GW	2355272.22	555818.25	OH83NFT
RVAAP-43 Load Line 10	L10mw-002-GW	2355712.51	555525.36	OH83NFT
RVAAP-43 Load Line 10	L10mw-003-GW	2355387.92	555496.71	OH83NFT
RVAAP-43 Load Line 10	L10mw-004-GW	2355440,2	555234.59	OH83NFT
RVAAP-43 Load Line 10	L10mw-005-DUP	2355941.55	555382.53	OH83NFT
RVAAP-43 Load Line 10	L10mw-005-GW	2355941.55	555382.53	OH83NFT
RVAAP-43 Load Line 10	L10mw-006-GW	2355656.8	554997.25	OH83NFT
RVAAP-43 Load Line 10	L10sd-004-SD	2355515.34	555558.76	OH83NFT
RVAAP-43 Load Line 10	L10sd-005-SD	2355414.30	555339.84	OH83NFT
RVAAP-43 Load Line 10	L10sd-006-SD	2355468.69	555392.80	OH83NFT
RVAAP-43 Load Line 10	L10sd-012-SD	2355283.56	555642.14	OH83NFT
RVAAP-43 Load Line 10	L10sd-022-SD	2355875.53	555352.49	OH83NFT
RVAAP-43 Load Line 10	L10sd-024-SD	2355909.55	555638.07	OH83NFT
RVAAP-43 Load Line 10	L10ss-001M-SO	2355129.33	555657.78	OH83NFT
RVAAP-43 Load Line 10	L10ss-002M-SO	2355261.25	555668.27	OH83NFT
RVAAP-43 Load Line 10	L10ss-003M-SO	2355312.54	555718.25	OH83NFT
RVAAP-43 Load Line 10	L10ss-004M-SO	2355481.32	555716.44	OH83NFT
RVAAP-43 Load Line 10	L10ss-005M-DUP	2355567.06	555793.16	OH83NFT
RVAAP-43 Load Line 10	L10ss-005M-SO	2355567.06	555793.16	OH83NFT
RVAAP-43 Load Line 10	L10ss-006M-SO	2355403.70	555528.72	OH83NFT
RVAAP-43 Load Line 10	L10ss-007M-SO	2355492.15	555548.57	OH83NFT
RVAAP-43 Load Line 10	L10ss-008M-SO	2355564.35	555637.02	OH83NFT
RVAAP-43 Load Line 10	L10ss-009M-SO	2355660.01	555720.05	OH83NFT
RVAAP-43 Load Line 10	L10ss-010D-SO	2355365.74	555306.47	OH83NFT
RVAAP-43 Load Line 10	L10ss-010M-SO	2355362.18	555350.02	OH83NFT
RVAAP-43 Load Line 10	L10ss-011M-SO	2355418.14	555405.97	OH83NFT
RVAAP-43 Load Line 10	L10ss-012M-SO	2355466.88	555452.91	OH83NFT
RVAAP-43 Load Line 10	L10ss-013M-QA	2355426.26	555281.43	OH83NFT
RVAAP-43 Load Line 10	L10ss-013M-SO	2355426.26	555281.43	OH83NFT
RVAAP-43 Load Line 10	L10ss-014M-SO	2355488.54	555331.97	OH83NFT
RVAAP-43 Load Line 10	L10ss-015M-SO	2355542.69	555386.12	OH83NFT
RVAAP-43 Load Line 10	L10ss-016M-SO	2355642.87	555550.38	OH83NFT
RVAAP-43 Load Line 10	L10ss-017M-DUP	2355741.24	555637.02	OH83NFT
RVAAP-43 Load Line 10	L10ss-017M-SO	2355741.24	555637.02	OH83NFT
RVAAP-43 Load Line 10	L10ss-018M-SO	2355650.09	555292.26	OH83NFT
RVAAP-43 Load Line 10	L10ss-019M-SO	2355686.19	555250.74	OH83NFT
RVAAP-43 Load Line 10	L10ss-020M-SO	2355776.44	555239.01	OH83NFT
RVAAP-43 Load Line 10	L10ss-021D-SO	2355896.30	555316.21	OH83NFT
RVAAP-43 Load Line 10	L10ss-021M-SO	2355880.23	555374.39	OH83NFT
	1=1000 02 1111 00		300077.00	01100111

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-43 Load Line 10	L10ss-022M-SO	2355900.08	555505.25	OH83NFT
RVAAP-43 Load Line 10	L10ss-023M-SO	2355898.28	555665.90	OH83NFT
RVAAP-43 Load Line 10	L10ss-024M-SO	2355131.82	555566.21	OH83NFT
RVAAP-43 Load Line 10	L10ss-025M-SO	2355292.91	555598.70	OH83NFT
RVAAP-43 Load Line 10	L10ss-026M-SO	2355353.16	555708.32	OH83NFT
RVAAP-43 Load Line 10	L10ss-027D-SO	2355493.47	555786.31	OH83NFT
RVAAP-43 Load Line 10	L10ss-027M-DUP	2355482.44	555780.11	OH83NFT
RVAAP-43 Load Line 10	L10ss-027M-SO	2355482.44	555780.11	OH83NFT
RVAAP-43 Load Line 10	L10ss-028M-SO	2355689.57	555735.43	OH83NFT
RVAAP-43 Load Line 10	L10ss-029M-SO	2355595.48	555614.95	OH83NFT
RVAAP-43 Load Line 10	L10ss-030M-QA	2355389.26	555420.00	OH83NFT
RVAAP-43 Load Line 10	L10ss-030M-SO	2355389.26	555420.00	OH83NFT
RVAAP-43 Load Line 10	L10ss-031M-SO	2355367.60	555253.04	OH83NFT
RVAAP-43 Load Line 10	L10ss-032M-SO	2355451.98	555361.11	OH83NFT
RVAAP-43 Load Line 10	L10ss-033D-SO	2355497.84	555243.21	OH83NFT
RVAAP-43 Load Line 10	L10ss-033M-SO	2355542.69	555288.01	OH83NFT
RVAAP-43 Load Line 10	L10ss-034M-SO	2355631.36	555193.24	OH83NFT
RVAAP-43 Load Line 10	L10ss-035M-SO	2355987.63	555607.73	OH83NFT
RVAAP-43 Load Line 10	L10ss-036M-SO	2356012.45	555378.03	OH83NFT
RVAAP-43 Load Line 10	L10ss-037-DUP	2355120.07	555658.35	OH83NFT
RVAAP-43 Load Line 10	L10ss-037-SO	2355120.07	555658.35	OH83NFT
RVAAP-43 Load Line 10	L10ss-038-SO	2355394.89	555533.21	OH83NFT
RVAAP-43 Load Line 10	L10ss-039-SO	2355731.41	555624.02	OH83NFT
RVAAP-43 Load Line 10	L10ss-040M-SO	2355321.57	555075.24	OH83NFT
RVAAP-43 Load Line 10	L10sw-002-DUP	2355453.77	555619.34	OH83NFT
RVAAP-43 Load Line 10	L10sw-002-SW	2355453.77	555619.34	OH83NFT
RVAAP-43 Load Line 10	L10sw-004-SW	2355515.34	555558.76	OH83NFT
RVAAP-43 Load Line 10	L10sw-006-SW	2355468.69	555392.80	OH83NFT
RVAAP-43 Load Line 10	L10sw-007-SW	2355602.71	555471.13	OH83NFT
RVAAP-43 Load Line 10	L10sw-008-SW	2355751.54	555321.43	OH83NFT
RVAAP-43 Load Line 10	L10sw-009-SW	2355842.06	555229.69	OH83NFT
RVAAP-43 Load Line 10	L10sw-011-SW	2355196.81	555728.91	OH83NFT
RVAAP-43 Load Line 10	L10sw-012-SW	2355283.56	555642.14	OH83NFT
RVAAP-43 Load Line 10	L10sw-014-SW	2355462.99	555726.39	OH83NFT
RVAAP-43 Load Line 10	L10sw-015-SW	2355548.78	555801.66	OH83NFT
RVAAP-43 Load Line 10	L10sw-016-SW	2355665.57	555724.77	OH83NFT
RVAAP-43 Load Line 10	L10sw-017-SW	2355345.34	555361.13	OH83NFT
RVAAP-43 Load Line 10	L10sw-018-SW	2355397.89	555413.99	OH83NFT
RVAAP-43 Load Line 10	L10sw-019-DUP	2355450.78	555467.77	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-43 Load Line 10	L10sw-019-SW	2355450.78	555467.77	OH83NFT
RVAAP-43 Load Line 10	L10sw-020-SW	2355501.41	555303.78	OH83NFT
RVAAP-43 Load Line 10	L10sw-021-SW	2355555.00	555355.49	OH83NFT
RVAAP-43 Load Line 10	L10sw-022-SW	2355875.53	555352.49	OH83NFT
RVAAP-43 Load Line 10	L10sw-024-SW	2355909.55	555638.07	OH83NFT
RVAAP-43 Load Line 10	L10sw-025-SW	2355304.12	555477.38	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-45 Wet Storage Area	WSAss-001M-SO	2357002.48	559431.09	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-002M-SO	2357008.53	559256.30	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-003M-SO	2357007.67	559080.64	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-004D-SO	2357013.17	558926.23	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-004M-SO	2357007.67	558921.43	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-005M-DUP	2357449.84	559418.98	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-005M-SO	2357449.84	559418.98	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-006M-SO	2357457.63	558984.59	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-007M-SO	2357029.30	559512.43	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-008M-SO	2357002.48	559342.83	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-009M-SO	2357002.48	559298.70	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-010M-SO	2356954.88	559318.60	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-011D-SO	2356868.73	559386.87	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-011M-SO	2356877.01	559392.15	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-012M-SO	2356861.43	559235.53	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-013M-SO	2356843.26	559073.72	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-014M-DUP	2357005.07	559027.86	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-014M-SO	2357005.07	559027.86	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-015M-SO	2356999.88	558969.02	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-016M-QA	2356928.06	558977.67	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-016M-SO	2356928.06	558977.67	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-017M-SO	2356861.43	558932.67	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-020M-DUP	2357047.47	559131.69	OH83NFT
RVAAP-45 Wet Storage Area	WSAss-020M-SO	2357047.47	559131.69	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-46 Building F-15 and F-16	F15ss-001M-SO	2349293.22	563989.46	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-002M-SO	2349429.02	563940.15	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-003M-SO	2349517.65	563892.97	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-004M-SO	2349337.53	563812.92	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-005M-SO	2349420.44	563622.09	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-006D-SO	2349432.53	563916.06	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-006M-SO	2349429.73	563917.27	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-007M-SO	2349504.78	563812.21	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-008M-SO	2349352.54	563812.21	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-009M-DUP	2349341.11	563659.97	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-009M-SO	2349341.11	563659.97	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-010M-SO	2349464.04	563622.09	OH83NFT
RVAAP-46 Building F-15 and F-16	F15ss-011M-SO	2349509.07	563543.46	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sd-001M-DUP	2349471.09	562351.33	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sd-001M-SD	2349471.09	562351.33	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sd-002M-SD	2349586.79	562091.30	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-001M-SO	2349385.21	562461.06	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-002M-SO	2349553.39	562376.37	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-003M-SO	2349486.60	562222.51	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-004M-SO	2349366.13	562613.74	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-005D-SO	234955.37	562575.98	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-005M-SO	2349457.97	562576.76	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-006M-SO	2349535.50	562481.34	OH83NFT
RVAAP-46 Building F-15 and F-16	F16ss-007M-SO	2349405.49	562468.22	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sw-001-SW	2349471.09	562351.33	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sw-002-DUP	2349586.79	562091.30	OH83NFT
RVAAP-46 Building F-15 and F-16	F16sw-002-SW	2349586.79	562091.30	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-48 Anchor Test Area	ATAsb-001M-SO	2361590.74	556012.61	OH83NFT
RVAAP-48 Anchor Test Area	ATAsb-002M-SO	2361590.74	556012.61	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-001M-DUP	2361590.46	556017.63	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-001M-SO	2361590.46	556017.63	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-002M-SO	2361611.81	556016.80	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-003D-SO	2361570.61	556012.78	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-003M-SO	2361568.70	556016.39	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-004M-SO	2361590.87	556049.65	OH83NFT
RVAAP-48 Anchor Test Area	ATAss-005M-SO	2361494.40	556037.33	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-50 Atlas Scrap Yard	ASYmw-001-GW	2366262.85	558406.04	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-002-GW	2366168.86	557889.86	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-003-DUP	2366653.49	558013.94	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-003-GW	2366653.49	558013.94	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-004-GW	2367164.04	557642.81	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-005-GW	2367446.16	557785.01	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-006-GW	2366748.73	557255.72	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-007-GW	2366836.49	556820.08	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-008-GW	2367473.07	557085.66	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-009-GW	2366633.94	557605.68	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYmw-010-GW	2366983.37	557272.61	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-001-DUP	2365949.58	557002.92	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-001-SD	2365949.58	557002.92	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-002-SD	2366153.78	557094.56	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-008-SD	2366380.42	557510.45	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-010-SD	2366515.84	557197.95	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-011-SD	2366572.90	557065.00	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-012-DUP	2366602.07	556998.18	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-012-SD	2366602.07	556998.18	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-017-SD	2366623.84	558010.37	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsd-024M-SD	2367657.35	557598.24	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-001M-SO	2366235.71	558334.98	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-002M-SO	2366575.93	558104.93	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-003M-SO	2366702.30	558211.86	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-004D-SO	236677.83	558258.07	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-004M-SO	2366818.95	558228.06	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-005D-SO	2366986.26	557964.32	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-005M-SO	2366964.76	557985.04	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-006M-SO	2366708.78	557657.78	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-007M-DUP	2366546.77	557530.19	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-007M-SO	2366546.77	557530.19	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-008M-SO	2366573.50	557442.71	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-009M-SO	2366721.74	557442.71	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-010M-SO	2367279.06	557618.89	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-011M-SO	2367385.98	557618.89	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-012D-QA	2367015.79	557136.51	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-012D-SO	2367015.79	557136.51	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-012M-QA	2367015.79	557136.51	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-012M-SO	2367015.79	557136.51	OH83NFT

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SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-50 Atlas Scrap Yard	ASYss-013D-SO	2366546.77	556963.96	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-013M-SO	2366546.77	556963.96	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-014M-SO	2367533.33	556874.05	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-015D-SO	2366890.97	556952.00	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-015M-SO	2366886.99	556934.80	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-016M-SO	2366957.47	556968.82	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-017M-DUP	2367035.23	556973.68	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-017M-SO	2367035.23	556973.68	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-018M-SO	2367130.01	556973.68	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-019M-SO	2366634.25	556631.03	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-020M-SO	2366487.93	558500.50	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-021M-DUP	2367259.48	558510.49	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-021M-SO	2367259.48	558510.49	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-022M-QA	2367581.58	558163.41	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-022M-SO	2367581.58	558163.41	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-023M-SO	2367568.89	557697.82	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-025M-SO	2365656.46	557606.60	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-026M-SO	2367543.54	557497.43	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-027D-DUP	2367535.74	557200.57	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-027D-SO	2367535.74	557200.57	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-027M-DUP	2367535.74	557200.57	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-027M-SO	2367535.74	557200.57	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-028M-SO	2367524.15	556822.57	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-029M-SO	2366183.31	556954.91	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-030M-SO	2366520.39	556790.11	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-031M-SO	2367072.21	556700.23	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-032M-SO	2367416.78	556685.24	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-033M-SO	2367399.30	556780.13	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYss-034M-SO	2367334.38	556780.13	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-001-SW	2365949.58	557002.92	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-002-SW	2366153.78	557094.56	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-003-SW	2366088.86	557232.48	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-004-DUP	2366034.79	557360.01	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-004-SW	2366034.79	557360.01	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-005-SW	2366304.11	557612.61	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-006-SW	2366352.90	557500.17	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-007-SW	2366248.65	557738.29	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-008-SW	2366380.42	557510.45	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-009-SW	2366436.02	557380.58	OH83NFT

SiteOrArea	Sample Location ID	East	North	CoordinateSystem
RVAAP-50 Atlas Scrap Yard	ASYsw-010-SW	2366515.84	557197.95	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-011-SW	2366572.90	557065.00	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-012-DUP	2366602.07	556998.18	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-012-SW	2366602.07	556998.18	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-014-SW	2366623.84	558010.37	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-016-SW	2366818.95	558501.84	OH83NFT
RVAAP-50 Atlas Scrap Yard	ASYsw-017-SW	2365747.13	556916.25	OH83NFT



## Appendix T

## Geophysical Survey Report

Atlas Scrap Yard

# GEOPHYSICAL INVESTIGATION ATLAS SCRAP YARD, RAVENNA ARMY AMMUNITNION PLANT, RAVENNA, OHIO

Submitted to:

US ARMY TACOM
BRAC Technical Support Office
Rock Island, Illinois 61299-7630

Submitted by:

MKM Engineers, Inc. 4153 Bluebonnet Drive Stafford, Texas 77477

**November 10, 2004** 

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed — in whole or in part — for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of — or in connection with — the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in all sheets of this proposal.



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#### 1.0 Introduction

#### 1.1 Project Objectives

This report covers the procedures and results of an electromagnetic (EM) geophysical survey conducted in the Atlas Scrap Yard at Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio. The work was performed by MKM Engineers, Inc. (MKM) during August 2004.

The objective of the geophysical survey was to perform a non-intrusive investigation to locate subsurface metallic targets that could be underground storage tanks (USTs). Following the geophysical survey, a secondary objective was to provide a coordinate list for all possible USTs to support future verification by excavation activities planned at the site.

#### 1.2 Site Description

The survey area includes two sites that were previously occupied by filling stations. Photographs of the survey sites are located in Appendix A.

Site 1 is comprised of approximately 1.4 acres of open terrain. Cultural features present at the site include metal posts, an electrical box, and a pile of rocks and concrete. Additionally, numerous small metal items were scattered across the surface of the site at the time of the geophysical survey. Electromagnetic measurements are influenced by electrical power lines and surface metal. Because of this, it may not be possible to detect subsurface metallic items, such as USTs, that are buried in the vicinity of these items.

Site 2 is located north of Site 1. It comprises roughly one-half acre of partially wooded terrain. The surface is covered with similar metallic items as found in Site 1. Concrete slabs are present at the site.

An archival drawing of the filling stations is located in Appendix B. The drawing depicts the layout of the filling stations and their proximity to the roads. According to the drawing, three different types of storage tanks were located at the filling stations:

- Under Gas Tank, 1,000 gallons, approximately 10 feet by 7 feet in size;
- Under Kerosene and Fuel Oil Tank, combined total of 3,000 gallons, approximately 10 feet by 10 feet in size;
- Raised Supply Storage Gas Tank, 10,000 gallons, approximately 15 feet by 9 feet in size.



### 2.0 Survey Logistics

#### Equipment 2.1

#### 2.1.1 Geonics EM61 MK2

The Geonics EM61 MK2 is a time-domain electromagnetic (EM) metal detector which detects both ferrous and non-ferrous metal objects (Figure 2-1). It consists of a single set of one-half by onemeter coils. The transmitter generates a pulsed primary magnetic field in the earth which induces eddy currents in nearby metallic objects. The eddy current decay produces a secondary magnetic field which is measured by the receiver coils. The responses are recorded and displayed by an integrated data logger.

The EM61 MK2 is designed so that a low level and/or constant signal is received when no metal is present. When metal is present, an increased signal is received. This signal is generally highest when the coils are located directly over the metal object. Gridded and contoured EM61 data will produce a "bulls-eye" type anomaly for isolated metal objects.



Figure 2-1: EM61 MK2 and Operator

#### 2.1.2 Geonics EM31 MK2

The Geonics EM31 MK2 is an electromagnetic terrain conductivity meter (Figure 2-2). The EM31 maps geological variations, groundwater contaminants, or any subsurface feature associated with changes in ground conductivity. The instrument consists of a four meter boom with an internal transmitter coil on one end and a receiver coil on the other. The effective depth of exploration is about six meters.

Ground conductivity and in-phase measurements can be read directly from the data logger screen. Small changes in ground conductivity can be measured while the equipment operator traverses the survey area. The in-phase component is especially useful for detecting buried metal hazardous waste.



Figure 2-2: EM31 MK2 and Operator

#### 2.1.3 Global Positioning System (GPS)

The Trimble GPS Total Station 5700® with 5800 RTK Rover was used to provide survey control at the Atlas Scrap Yard (Figure 2-3). The GPS base station was located within one to two miles, line of site, from the survey area. The base station receiver was set up over a known control point and spatial positional corrections were transmitted in real time to the GPS rover receiver via a radio modem. This system can provide positional accuracy of about 3 cm for stacked, stationary readings.



Figure 2-3: Trimble 5700 Base Station

#### 2.2 Data Collection

A grid system measuring 100 feet by 100 feet was laid out at each survey site. The positions of the grid corners were collected with the Trimble 5700/5800 GPS System. One survey control point, labeled "NAVD88", was utilized during the survey. Site 1 was divided into six grids and Site 2 was divided into two grids. At Site 1, all twelve grid corners were measured with GPS. Because of dense tree cover at Site 2, only two grid points were measured with GPS (A201 and A202). Positions for the remaining stakes were obtained with a tape measure. A list containing the State Plane coordinates for each measured grid point is located in Appendix C.



Electromagnetic data were collected with the EM61 along N-S survey lines spaced five feet apart. Positional data for the survey were provided by an integrated wheel counter set to record distance traveled as a function of wheel rotation. With this system, a data point was collected every 0.6 feet along survey lines. During data processing, local grid coordinates were warped into State Plane coordinates using the grid corner positions acquired during the GPS survey. Positional accuracy for this system is estimated at about three feet along survey lines and five feet perpendicular to survey lines in areas of open terrain. A lesser degree of positional accuracy is expected for data collected in areas with thick brush and trees.

EM31 data were collected at two grids within Site 1 and one grid within Site 2. Survey grids were selected for EM31 data collection based on the expected location of USTs as well as the results of the EM61 survey. Data were collected with the EM31 along N-S lines spaced 5 feet apart with a data point collected every five feet. Supplementary EM31 data were collected along E-W survey lines. All E-W lines were spaced ten feet apart and a data point was collected every ten feet. Local grid coordinates were warped into State Plane coordinates during data processing. Positional accuracy for this system is estimated at about five to ten feet in areas of open terrain. A lesser degree of positional accuracy is expected for data collected in areas with thick brush and trees.

#### 2.3 Data Processing

Data were downloaded from the data loggers to a field laptop at the end of each day. The DAT61 and DAT31 software applications were used to set the survey geometry for each data file in local grid coordinates. Data were exported from DAT61 and DAT31 in xyz format and imported into Geosoft's Oasis montaj© mapping software for analysis. All data files were checked for correctness and completeness. Local coordinates were warped into Ohio State Plane coordinates utilizing the grid corner positions acquired during the GPS survey. A drift correction was applied to the EM61 data to remove the effects of DC bias and sensor drift. Since the EM31 provides a measurement of ground conductivity, no drift correction was applied to the EM31 data files.

All EM data were gridded and displayed as color maps for interpretation by the processor. Electromagnetic anomalies interpreted as buried metal were picked from the EM61 data. To accomplish this, a peak-picking algorithm with a threshold of 10mV was used. With this method, the peak positions of anomalies exhibiting readings of 10mV or higher were digitized. Anomalies exhibiting characteristics consistent with that of a UST were selected for further investigation. Because artifacts resulting from the gridding process can be misleading, data profiles were carefully examined during interpretation.



#### 3.0 Results

#### 3.1 General

Figures 3-1 through 3-6 show color maps of the electromagnetic data collected at two sites within the Atlas Scrap Yard. A total of 20 anomalies were selected for further investigation. It is expected that the EM response from a UST will result in an anomaly that is slightly larger in diameter than the UST itself. The size of the anomaly is dependent on the depth of the item. For example, a UST located at greater depth will produce an EM anomaly that is larger in diameter but smaller in magnitude than a similar size UST at a more shallow depth. Based on an archival drawing of the service station (Appendix B), the minimum tank size is expected to be about 10-feet by 7-feet. Because of this, all EM anomalies with a minimum diameter of about 12-feet by 10-feet were selected for further investigation. These anomalies are outlined on the figures. It is possible that some of these anomalies may correspond to surface metal items and can, therefore, be eliminated from further investigation.

Several smaller anomalies are also present in the data. Many of these anomalies are expected to correspond to surface or near-surface metal items. Even though these anomalies do not meet the size criteria of a possible UST, there is a possibility that they may be masking buried items, such as USTs, that are located at greater depth. A tabulated list of these anomalies can be found in Appendix D.

#### 3.2 Site 1

Figure 3-1 shows a color map of the EM61 data collected at Site 1. The figure depicts Channel 1 of the EM61 data in Ohio State Plane coordinates. The color scale has been selected in order to minimize the appearance of small anomalies that are not expected to correspond to possible USTs. A total of 371 anomalies were selected from the EM61 data. Eleven of the anomalies fit the size criteria for possible USTs and have been selected for further investigation. Table 1 provides details concerning these eleven anomalies. A list containing coordinates for the remaining anomalies can be found in Appendix D.

Table 1: Site 1 EM61 Anomalies Selected for Further Investigation

nomaly ID \*Easting \*Northing Amplitude Appr

Anomaly ID	*Easting	*Northing	Amplitude	Approx. Size
	(survey feet)	(survey feet)	(mV)	(feet)
1	2366986.75	557083.98	659.0	22 x 12
2	2367004.17	557097.45	790.9	20 x 18
3	2367046.20	557097.91	563.0	15 x 17
4	2367119.58	557103.02	138.0	22 x 12
5	2367061.99	557156.90	278.4	12 x 10
6	2367091.95	557163.40	293.3	25 x 10
7	2367107.04	557150.63	193.2	12 x 11
8	2367120.04	557169.21	1141.1	12 x 12
9	2367097.98	557216.35	2220.5	17 x 15
10	2367098.68	557313.65	800.0	30 x 15
11	2367006.49	557363.81	1417.9	17 x 15

<sup>\*</sup>NAD83 Ohio North Zone, State Plane Coordinates



The majority of anomalies selected for further investigation are located in the southern half of the site. It is possible that some of these anomalies are caused my multiple, closely spaced metal objects. The locations of anomalies 1 and 2 correspond to mapped surface features, but the size of the anomalies suggests that buried metal may also be present at these locations. Several of the anomalies (6, 7, 8, and 10) are located in areas where individual anomaly boundaries are difficult to define due to the presence of overlapping anomalies.

Figures 3-2 and 3-3 show color maps of the EM31 data collected over the two southern grids. Based on the location of the road and the results of the EM61 survey, it is believed that this portion of Site 1 represents the area that is most likely to contain USTs. On the maps, yellow and green colors represent background readings. Blue and pink colors indicate anomalously low or high readings associated with changes in subsurface conductivity. The anomalous high area along the western edge of the site corresponds to the location of the road. The locations of anomalies picked from the EM61 data are superimposed on the figures. No additional anomalies were selected from the EM31 data.

#### 3.3 Site 2

A color map of the EM61 data collected at Site 2 is displayed in Figure 3-4. There are two gaps in the data coverage due to the presence of surface obstacles. A total of 109 anomalies were selected from the EM61 data. Nine of the anomalies fit the size criteria for possible USTs and have been selected for further investigation. These anomalies are outlined on the figure and listed in Table 2. In addition, the outline of one anomaly picked from the EM31 is superimposed on the figure. A list containing coordinates for the remaining anomalies picked from the EM61 data can be found in Appendix D.

Anomaly ID	*Easting	*Northing	Amplitude	Approx. Size
	(survey feet)	(survey feet)	(mV)	(feet)
372	2366923.80	557960.63	165.6	22 x 8
373	2366928.51	557940.88	139.5	22 x 12
374	2366959.13	557938.89	349.5	16 x 12
375	2366948.08	557955.38	281.0	30 x 10
376	2366964.39	557985.46	533.9	15 x 12
377	2366945.36	557998.32	480.0	17 x 15
378	2366967.29	558008.65	131.3	12 x 10
379	2367006.07	557966.98	88.8	10 x 8

**Table 2: Site 2 EM61 Anomalies Selected for Further Investigation** 

557981.83 \*NAD83 Ohio North Zone, State Plane Coordinates

All but one of anomalies selected for further investigation are located in the western half of the site. It is possible that some of these anomalies are caused my multiple, closely spaced buried objects. Anomaly 379 is slightly smaller than the size criteria defined for possible USTs. However, this anomaly was selected for further investigation due to the limited EM61 data coverage near the anomaly and the fact that the EM31 data shows an anomaly in this area.

Figures 3-5 and 3-6 show color maps of the EM31 data collected at Site 2. One anomaly was selected from the EM31 data. Although the anomaly appears too large to be associated with a UST, the exact size cannot be determined because it appears to extend beyond the boundaries of the EM31 data collection. The EM61 data does not show an analogous anomaly at this location. It is possible

380

2367097.21

13 x 12



that the anomaly is the result of influence from a non-metallic buried feature that cannot be detected with the EM61, like a building foundation or non-metallic pipe. Another possibility is that the anomaly is caused by the influence of buried metal that is located beyond the depth detection capabilities of the EM61.



#### 4.0 Conclusions

A geophysical survey was performed at two sites within the Atlas Scrap Yard to locate subsurface metallic targets that could be underground storage tanks. The Geonics EM61 MK2 metal detector was used to map approximately 2 acres of terrain. Based on the results of the EM61 survey, approximately three-fourths of an acre was mapped with the Geonics EM31 terrain conductivity meter. Color maps of the EM data are shown in Figures 3-1 through 3-6. A total of 480 anomalies were picked from the EM61 data (Appendix D). Twenty anomalies fitting the size criteria for a possible UST were selected for further investigation (Tables 1 and 2). One additional anomaly was picked from the EM31 data collected at Site 2. Although this anomaly does not fit the expected size of a buried UST, it may correspond to remnants of structures associated with the filling station.



Photograph 1: Atlas Scrap Yard, Site 1.



Photograph 2: Metal Lids at Site 1.



Photograph 3: Pipe and electrical wire at Site 1.



Photograph 4: Pile of concrete and rocks at Site 1.



Photograph 5: Atlas Scrap Yard, Site 2.



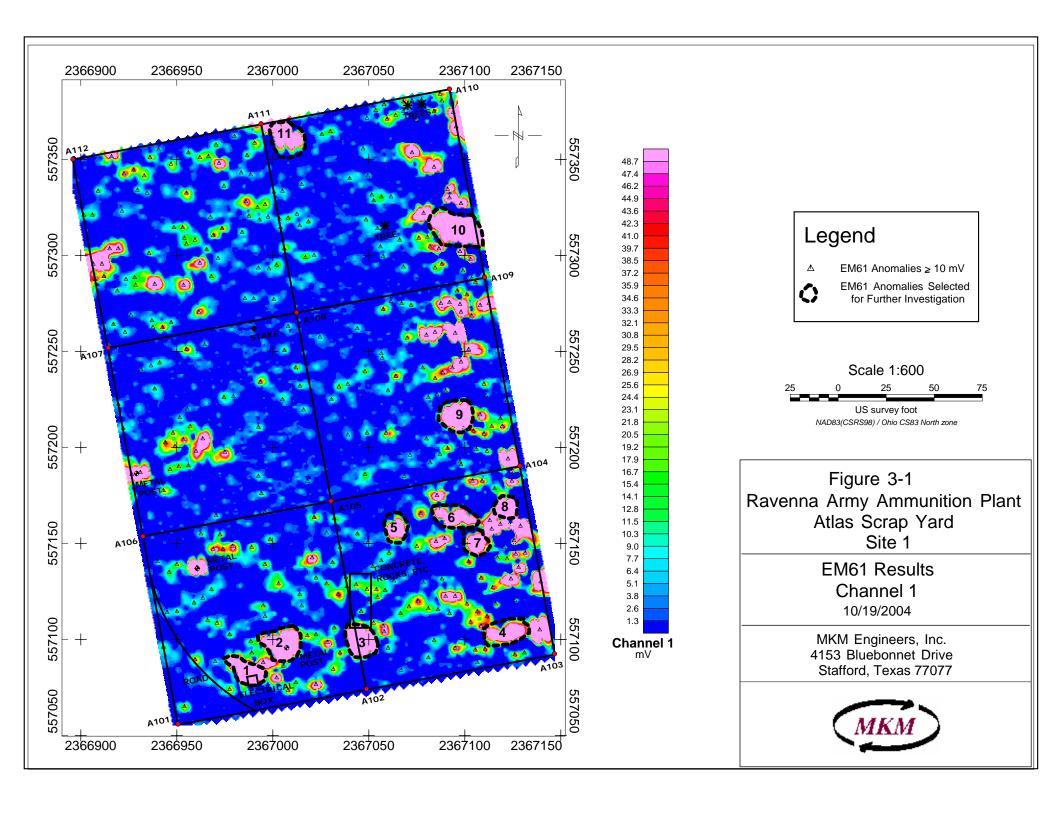
Photograph 6: Another View of Atlas Scrap Yard, Site 2.

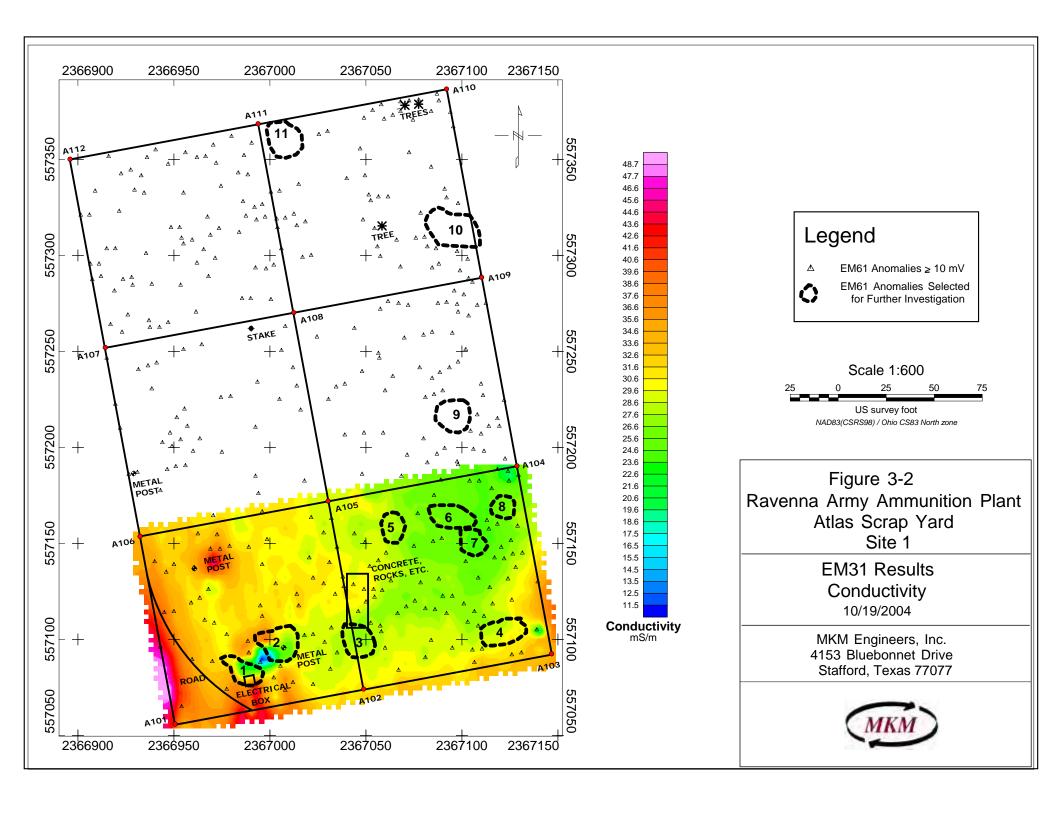


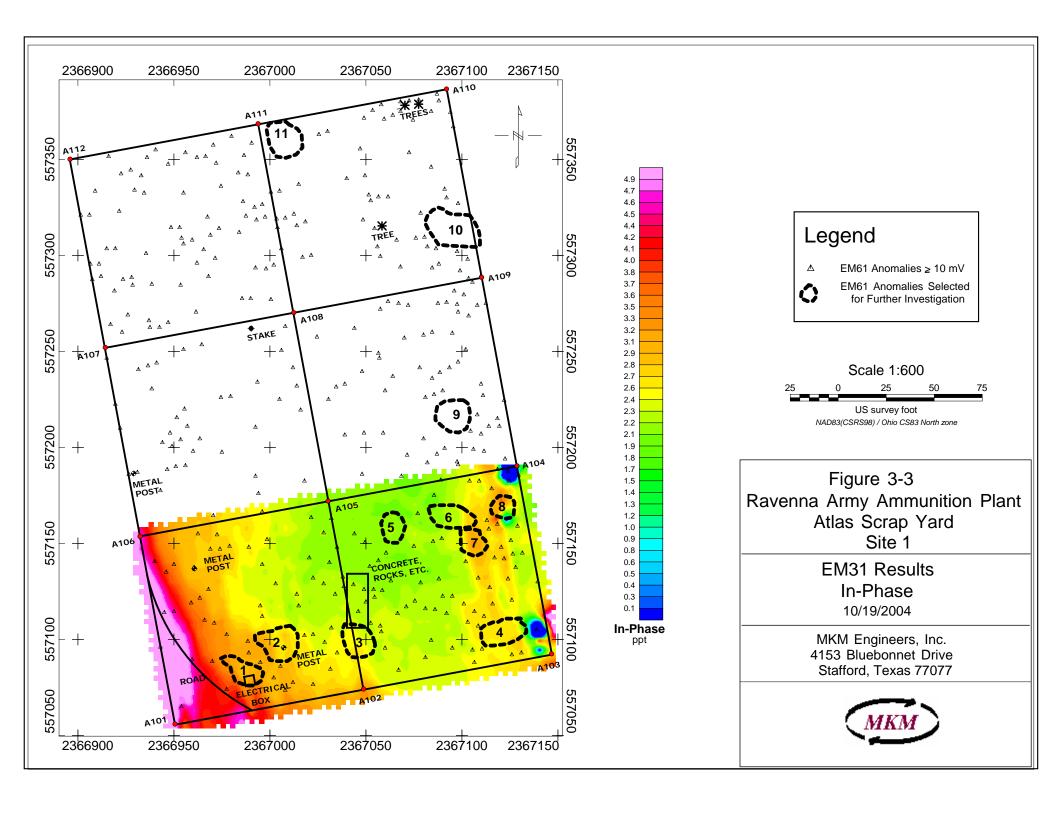
Photograph 7: Concrete pads at Site 2.

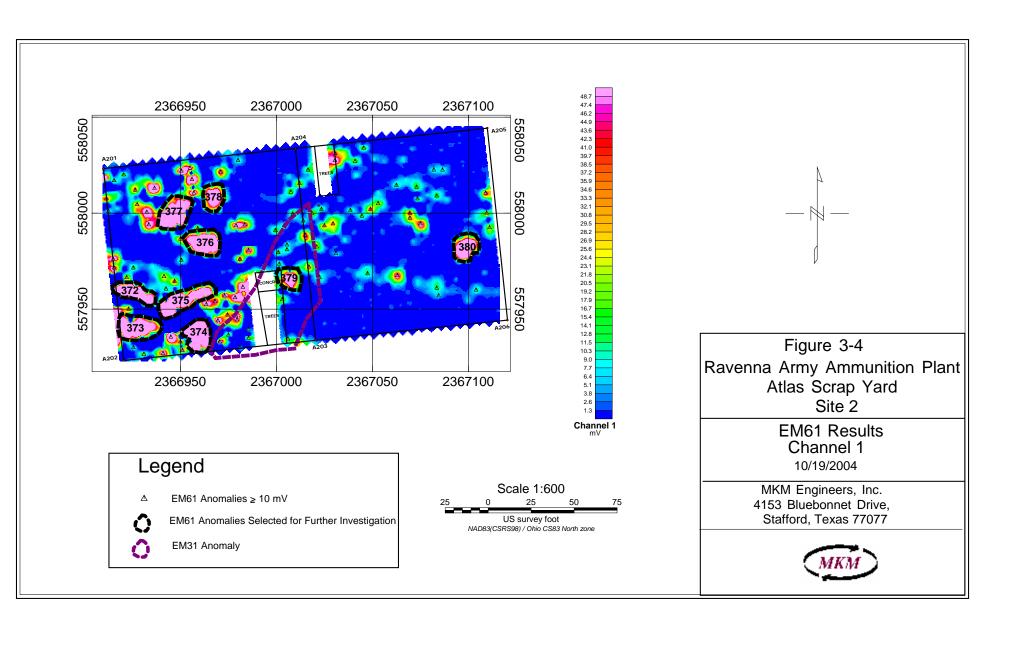


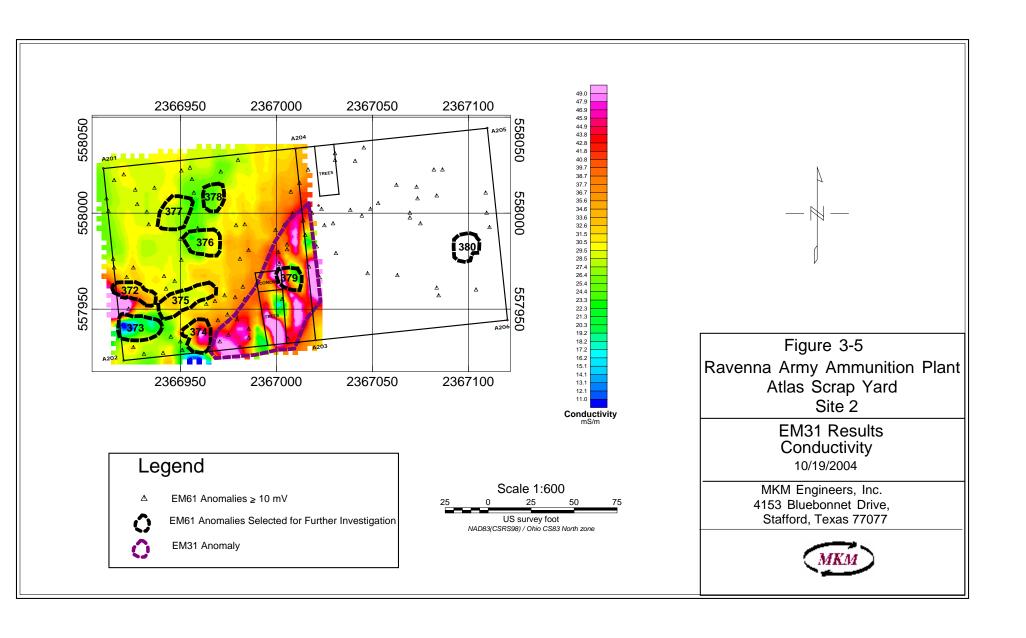
Photograph 8: Another view of concrete pads at Site 2.

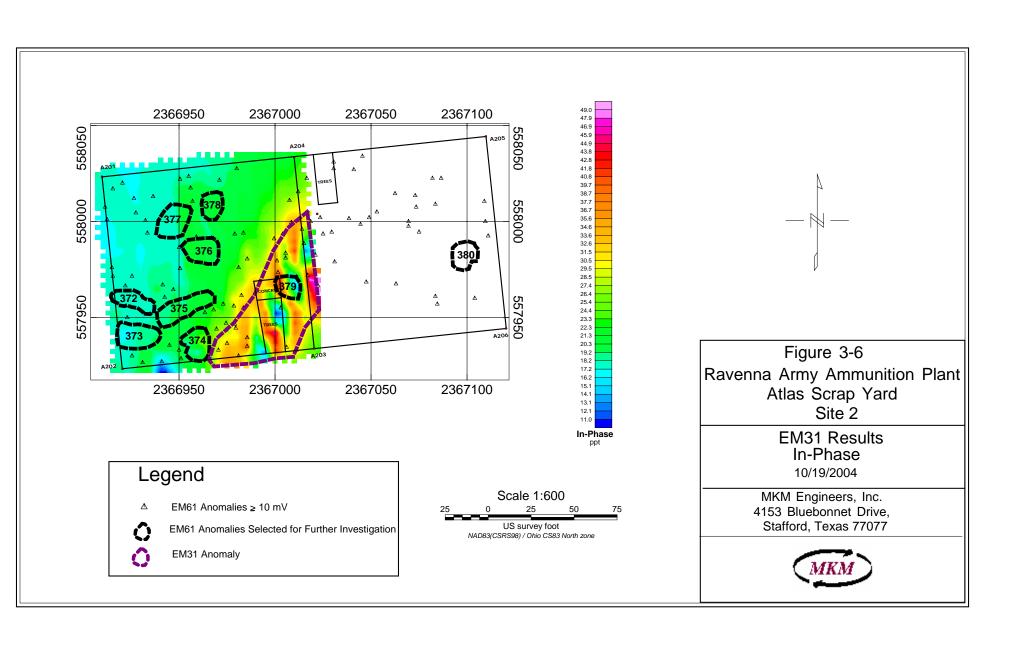


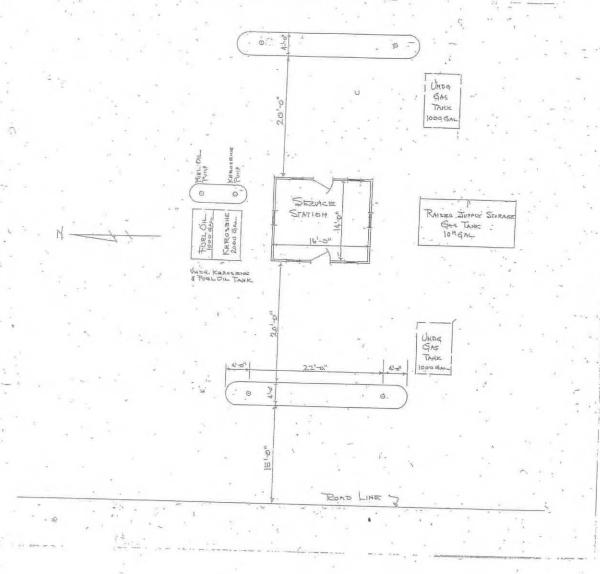












Scale 1/16" = 1'0"

Figure 7A: Underground Storage Tanks Associated with Service Stations at the Atlas Scrap Yard

Appendix C Atlas Scrap Yard Grid Coordinates

Point ID	*Easting	*Northing	*Elevation	Description
	(survey feet)	(survey feet)	(survey feet)	
NAVD88	2367417.83	555004.36	983.84	<b>GPS Base Station</b>
A101	2366950.59	557055.52	980.37	Site 1
A102	2367048.62	557073.70	980.07	Site 1
A103	2367146.38	557091.85	979.57	Site 1
A104	2367128.73	557189.83	979.45	Site 1
A105	2367030.49	557171.92	979.33	Site 1
A106	2366932.65	557153.79	980.72	Site 1
A107	2366914.35	557251.97	980.28	Site 1
A108	2367012.35	557270.27	979.42	Site 1
A109	2367110.35	557287.88	979.61	Site 1
A110	2367092.43	557386.48	979.50	Site 1
A111	2366993.71	557368.18	979.78	Site 1
A112	2366897.04	557350.22	981.31	Site 1
A201	2366909.90	558023.25	980.88	Site 2
A202	2366921.13	557923.34	988.87	Site 2

<sup>\*</sup>NAD83 Ohio North Zone, State Plane Coordinates

# $\begin{aligned} & \textbf{Appendix D} \\ & \textbf{Atlas Scrap Yard} \\ & \textbf{EM61 Anomalies} \geq \textbf{10mV} \end{aligned}$

Survey Feet   Survey Feet	Anomaly ID	*Easting	*Northing	Amplitude	Location
1         2366986.75         557083.98         659.0         Site 1           2         2367004.17         557097.45         790.9         Site 1           3         2367046.20         557097.91         563.0         Site 1           4         2367119.58         557103.02         138.0         Site 1           5         2367061.99         557163.40         293.3         Site 1           6         2367091.95         557163.40         293.3         Site 1           7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557163.51         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367098.68         557313.65         800.0         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557065.00         36.3         Site 1           14         2366975.00         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           15         2367022.50         557076.50 </th <th>momary 1D</th> <th>_</th> <th>_</th> <th></th> <th>Location</th>	momary 1D	_	_		Location
2         2367046.17         557097.45         790.9         Site I           3         2367046.20         557097.91         563.0         Site I           4         2367119.58         557103.02         138.0         Site I           5         2367061.99         55716.90         278.4         Site I           6         2367091.95         55716.90         278.4         Site I           7         2367107.04         55716.63         293.3         Site I           8         2367120.04         55716.63         193.2         Site I           9         2367097.98         557216.35         2220.5         Site I           10         2367098.68         557313.65         800.0         Site I           11         2367006.49         557363.81         1417.9         Site I           12         2366954.00         557065.00         36.3         Site I           13         2367008.00         557075.50         37.5         Site I           14         2366977.50         557074.00         33.7         Site I           15         2367022.50         557076.50         153.4         Site I           16         2367012.00         557084.00	1	` *	•		Site 1
3         2367046.20         557097.91         563.0         Site 1           4         2367119.58         557103.02         138.0         Site 1           5         2367061.99         557156.90         278.4         Site 1           6         2367091.95         557163.40         293.3         Site 1           7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367098.68         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367012.00         5570775.50         153.4         Site 1           16         2367012.00         557076.50         153.3         Site 1           17         2367002.50         557080.					
4         2367119.58         557103.02         138.0         Site 1           5         2367061.99         557156.90         278.4         Site 1           6         2367091.95         557163.40         293.3         Site 1           7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367006.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557065.00         33.7         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367022.50         557076.50         153.4         Site 1           17         2367020.00         557084.00         11.3         Site 1           18         2367021.00         557084.5					
5         2367061.99         557156.90         278.4         Site 1           6         2367091.95         557163.40         293.3         Site 1           7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367006.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557076.50         153.4         Site 1           17         236702.00         557084.00         11.3         Site 1           18         2367031.50         557084.50         34.8         Site 1           20         2367031.50         557088.00					
6         2367091.95         557163.40         293.3         Site 1           7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367096.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         236708.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           20         2367005.50         557088.00         153.2         Site 1           21         2366995.00         557088.0					
7         2367107.04         557150.63         193.2         Site 1           8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367096.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         5570776.50         15.3         Site 1           17         236702.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557088.50         153.2         Site 1           20         2367905.50         557088.00         152.2         Site 1           21         2366995.00         557088					
8         2367120.04         557169.21         1141.1         Site 1           9         2367097.98         557216.35         2220.5         Site 1           10         2367098.68         557313.65         800.0         Site 1           11         2367006.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557075.00         37.5         Site 1           14         2366977.50         557076.50         153.4         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         5570780.00         151.3         Site 1           17         236702.00         557080.00         151.3         Site 1           18         2367067.00         557084.50         34.8         Site 1           20         2367031.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           21         2366970.00         557088.00         15.2         Site 1           22         2367106.50         55708					
9 2367097.98 557216.35 2220.5 Site 1 10 2367098.68 557313.65 800.0 Site 1 11 2367006.49 557363.81 1417.9 Site 1 12 2366954.00 557065.00 36.3 Site 1 13 2367008.00 557073.50 37.5 Site 1 14 2366977.50 557074.00 33.7 Site 1 15 2367022.50 557076.50 153.4 Site 1 16 2367012.00 557075.0 153.4 Site 1 17 2367002.00 557080.00 151.3 Site 1 18 2367067.00 557084.00 11.3 Site 1 19 2367031.50 557084.50 34.8 Site 1 20 236705.50 557086.00 22.9 Site 1 21 2366995.00 557088.00 153.2 Site 1 22 2367106.50 557088.00 153.2 Site 1 23 2366970.00 557088.00 153.2 Site 1 24 2366959.50 557088.50 15.2 Site 1 25 236706.50 557088.50 10.7 Site 1 24 2366959.50 557088.50 10.7 Site 1 25 2367081.00 557090.50 15.4 Site 1 26 2367126.00 557090.50 15.4 Site 1 27 2366989.00 557093.00 27.0 Site 1 28 2367131.00 557093.00 24.1 Site 1 29 2367131.00 557093.00 24.1 Site 1 30 2367105.50 557094.50 44.2 Site 1 31 2367105.50 557094.50 44.2 Site 1 32 2366943.00 557095.50 13.1 Site 1 33 2367095.00 557095.50 13.1 Site 1 34 2366943.00 557095.50 15.5 Site 1 35 2367088.50 557095.50 55.0 Site 1 36 2366988.50 557095.50 55.0 Site 1 37 2366988.50 557095.50 55.0 Site 1 38 2367084.00 557095.50 15.8 Site 1 39 2366975.50 557095.50 55.3 Site 1 30 2367055.00 557095.50 55.8 Site 1 31 2367105.50 557095.50 55.0 Site 1 32 2366988.50 557095.50 55.3 Site 1 33 2367095.00 557095.50 55.3 Site 1 34 2366988.50 557095.50 55.3 Site 1 35 2367084.00 557095.50 55.8 Site 1 36 2366988.50 557095.50 55.8 Site 1 37 2367084.00 557095.50 55.3 Site 1 38 2367018.00 557095.50 55.3 Site 1 39 2366977.50 557102.50 23.3 Site 1 40 2367058.00 557102.50 23.3 Site 1 40 2367058.00 557105.00 92.6 Site 1					
10         2367098.68         557313.65         800.0         Site 1           11         2367006.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.00         11.3         Site 1           20         2367005.50         557084.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366995.00         557088.50         10.7         Site 1           24         2366970.00         557088.50					
11         2367006.49         557363.81         1417.9         Site 1           12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557075.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         153.2         Site 1           23         23669950.00         557088.00         153.2         Site 1           24         2366959.50         557088.00         15.4         Site 1           25         2367081.00         557089.					
12         2366954.00         557065.00         36.3         Site 1           13         2367008.00         557073.50         37.5         Site 1           14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557088.00         153.2         Site 1           21         2366995.00         557088.00         153.2         Site 1           21         2366995.00         557088.00         15.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366997.00         557088.50         10.7         Site 1           24         2366959.50         557088.50         10.7         Site 1           25         2367081.00         557099.50 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
13         2367008.00         557073.50         37.5         Site I           14         2366977.50         557074.00         33.7         Site I           15         2367022.50         557076.50         153.4         Site I           16         2367012.00         557077.50         15.3         Site I           17         2367002.00         557080.00         151.3         Site I           18         2367067.00         557084.00         11.3         Site I           19         2367031.50         557084.50         34.8         Site I           20         2367005.50         557086.00         22.9         Site I           21         2366995.00         557088.00         153.2         Site I           22         2367106.50         557088.00         153.2         Site I           23         2366970.00         557088.00         15.2         Site I           24         2366995.50         557089.50         40.0         Site I           25         2367081.00         557092.00         56.0         Site I           26         2367126.00         557093.00         27.0         Site I           27         2366989.00         557093.00 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
14         2366977.50         557074.00         33.7         Site 1           15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         236695.50         557089.50         40.0         Site 1           25         2367081.00         557099.50         15.4         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00 <td></td> <td></td> <td></td> <td></td> <td></td>					
15         2367022.50         557076.50         153.4         Site 1           16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         2366959.50         557089.50         40.0         Site 1           25         2367081.00         557099.50         15.4         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00         27.0         Site 1           30         2367110.50         557094.50 <td></td> <td></td> <td></td> <td></td> <td></td>					
16         2367012.00         557077.50         15.3         Site 1           17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         2366959.50         557089.50         40.0         Site 1           25         2367081.00         557092.00         56.0         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00         27.0         Site 1           29         2367131.00         557093.00         24.1         Site 1           30         236705.50         557094.50					
17         2367002.00         557080.00         151.3         Site 1           18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         2366959.50         557089.50         40.0         Site 1           25         2367081.00         557099.50         15.4         Site 1           25         2367081.00         557099.00         56.0         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00         24.1         Site 1           29         2367110.50         557094.50         44.2         Site 1           30         236705.50         557095.00					
18         2367067.00         557084.00         11.3         Site 1           19         2367031.50         557084.50         34.8         Site 1           20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         2366959.50         557089.50         40.0         Site 1           25         2367081.00         557099.50         15.4         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00         27.0         Site 1           29         2367131.00         557093.00         24.1         Site 1           30         2367105.50         557094.50         44.2         Site 1           31         2367060.00         557095.50         13.1         Site 1           32         2367060.00         557095.50					
19       2367031.50       557084.50       34.8       Site 1         20       2367005.50       557086.00       22.9       Site 1         21       2366995.00       557088.00       153.2       Site 1         22       2367106.50       557088.00       15.2       Site 1         23       2366970.00       557088.50       10.7       Site 1         24       2366959.50       557089.50       40.0       Site 1         25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       27.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367105.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       236705.00       557095.50       75.1       Site 1         34       2366943.00       557095.50					
20         2367005.50         557086.00         22.9         Site 1           21         2366995.00         557088.00         153.2         Site 1           22         2367106.50         557088.00         15.2         Site 1           23         2366970.00         557088.50         10.7         Site 1           24         2366959.50         557089.50         40.0         Site 1           25         2367081.00         557090.50         15.4         Site 1           26         2367126.00         557092.00         56.0         Site 1           27         2366989.00         557093.00         27.0         Site 1           28         2367035.00         557093.00         27.0         Site 1           29         2367131.00         557093.00         24.1         Site 1           30         2367105.50         557094.50         44.2         Site 1           31         2367105.50         557095.00         55.0         Site 1           32         2367060.00         557095.50         75.1         Site 1           33         2367095.00         557095.50         75.1         Site 1           34         2366943.00         557096.00					
21       2366995.00       557088.00       153.2       Site 1         22       2367106.50       557088.00       15.2       Site 1         23       2366970.00       557088.50       10.7       Site 1         24       2366959.50       557089.50       40.0       Site 1         25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       27.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367105.50       557095.00       55.0       Site 1         32       2367060.00       557095.00       55.0       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557095.50       75.1       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       236988.50       557099.50					
22       2367106.50       557088.00       15.2       Site 1         23       2366970.00       557088.50       10.7       Site 1         24       2366959.50       557089.50       40.0       Site 1         25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367105.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.50       15.3       Site 1         37       2367084.00       557102.00					
23       2366970.00       557088.50       10.7       Site 1         24       2366959.50       557089.50       40.0       Site 1         25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       75.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557102.00       34.3       Site 1         38       23670718.00       557102.50					
24       2366959.50       557089.50       40.0       Site 1         25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       75.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50					
25       2367081.00       557090.50       15.4       Site 1         26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.50       23.3       Site 1         40       2367022.50       557102.50       23.3       Site 1         40       2367058.00       557104.00					
26       2367126.00       557092.00       56.0       Site 1         27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         40       2367022.50       557102.50       23.3       Site 1         40       2367058.00       557104.00       92.6       Site 1         41       2367139.00       557105.00					
27       2366989.00       557093.00       27.0       Site 1         28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00					
28       2367035.00       557093.00       45.0       Site 1         29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
29       2367131.00       557093.00       24.1       Site 1         30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
30       2367105.50       557094.50       44.2       Site 1         31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
31       2367110.50       557095.00       55.0       Site 1         32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
32       2367060.00       557095.50       13.1       Site 1         33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
33       2367095.00       557095.50       75.1       Site 1         34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
34       2366943.00       557096.00       15.5       Site 1         35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
35       2367028.50       557098.50       95.8       Site 1         36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
36       2366988.50       557099.00       15.8       Site 1         37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
37       2367084.00       557099.50       15.3       Site 1         38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
38       2367018.00       557102.00       34.3       Site 1         39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
39       2366977.50       557102.50       23.3       Site 1         40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
40       2367022.50       557102.50       19.6       Site 1         41       2367058.00       557104.00       92.6       Site 1         42       2367139.00       557105.00       4230.0       Site 1					
41 2367058.00 557104.00 92.6 Site 1 42 2367139.00 557105.00 4230.0 Site 1					
42 2367139.00 557105.00 4230.0 Site 1					
43 2367032.00 557106.00 23.0 Site 1					
44 2367057.50 557107.00 89.1 Site 1	44	2367057.50	557107.00	89.1	Site 1

A nomely ID	*Easting	*Northing	Amplitude	Location
Anomaly ID	(survey feet)	(survey feet)	Ampiitude (mV)	Location
45	2367108.50	557107.00	61.6	Site 1
46	2366971.00	557108.50	33.1	Site 1
47	2367052.50	557108.50	28.2	Site 1
48	2367103.00	557109.00	39.0	Site 1
49	2366966.00	557110.00	17.8	Site 1
50	2366996.00	557112.00	12.2	Site 1
51	2367111.50	557112.00	42.7	Site 1
52	2367066.50	557113.50	18.0	Site 1
53	2367092.00	557113.50	19.9	Site 1
54	2366945.00	557114.00	11.8	Site 1
55	2366950.00	557114.50	16.1	Site 1
56	2367046.00	557114.50	31.4	Site 1
57	2367106.50	557114.50	54.8	Site 1
58	2367086.00	557115.50	13.9	Site 1
59	2367081.00	557116.00	25.8	Site 1
60	2367071.00	557117.00	32.0	Site 1
61	2366995.00	557117.50	35.5	Site 1
62	2367015.00	557117.50	12.0	Site 1
63	2367101.00	557118.50	38.1	Site 1
64	2367116.00	557118.50	33.4	Site 1
65	2366959.00	557119.00	14.6	Site 1
66	2367050.00	557119.50	14.6	Site 1
67	2367075.50	557120.00	51.9	Site 1
68	2367126.00	557120.50	13.1	Site 1
69	2366963.50	557121.50	10.2	Site 1
70	2367054.50	557122.00	30.7	Site 1
71	2367090.00	557122.50	163.5	Site 1
72	2367095.00	557122.50	133.9	Site 1
73	2367014.00	557123.50	17.0	Site 1
74	2367034.00	557123.50	50.7	Site 1
75	2367058.50	557125.50	14.5	Site 1
76	2366968.00	557126.00	12.6	Site 1
77	2367049.00	557126.00	25.2	Site 1
78	2367054.00	557126.00	37.1	Site 1
79	2367114.50	557127.00	70.3	Site 1
80	2367038.50	557127.50	17.3	Site 1
81	2367043.50	557128.50	34.5	Site 1
82	2367003.00	557129.00	35.7	Site 1
83	2367028.00	557129.00	26.5	Site 1
84	2367078.50	557129.50	10.0	Site 1
85	2367139.50	557130.00	389.5	Site 1
86	2367063.00	557130.50	13.0	Site 1
87	2367088.00	557131.50	20.6	Site 1
88	2367124.00	557131.50	278.4	Site 1
89	2367022.50	557132.00	20.7	Site 1
90	2367108.50	557132.00	62.7	Site 1
91	2367038.00	557132.50	20.7	Site 1
92	2366946.00	557135.00	16.9	Site 1
/ <del>-</del>		2272200		·

Anomal-: ID	*Faction	*Nouth	A mulitu- 4 a	Location
Anomaly ID	*Easting (survey feet)	*Northing (survey feet)	Amplitude (mV)	Location
93	2366960.50	557137.50	2464.0	Site 1
94	2367128.00	557137.50	283.0	Site 1
95	2367052.00	557137.50	14.9	Site 1
96	2366950.00	557139.00	30.6	Site 1
97	2366996.00	557139.00	37.2	Site 1
98	2367031.00	557140.00	20.4	Site 1
99	2366940.00	557140.50	10.2	Site 1
100	2367102.00	557140.50	50.4	Site 1
101	2367056.50	557141.00	13.8	Site 1
102	2367122.00	557142.00	29.9	Site 1
103	2367020.50	557142.50	122.2	Site 1
104	2367117.00	557142.50	26.8	Site 1
105	2367126.50	557144.50	130.6	Site 1
106	2367060.50	557145.00	20.2	Site 1
107	2367131.50	557145.00	97.0	Site 1
108	2366969.00	557147.00	94.9	Site 1
109	2366974.00	557147.00	48.0	Site 1
110	2366989.00	557148.00	33.9	Site 1
111	2367035.00	557148.00	12.1	Site 1
112	2367120.50	557148.00	11.9	Site 1
113	2366979.00	557148.50	70.9	Site 1
114	2367075.00	557148.50	29.4	Site 1
115	2367073.00	557150.50	10.0	Site 1
116	2367049.30	557151.00	202.7	Site 1
117	2367125.50	557151.50	82.7	Site 1
117	2366998.50	557152.00	23.3	Site 1
119	2367089.50	557152.50	165.7	Site 1
120	2366972.50	557154.50	38.3	Site 1
120	2366962.50	557155.00	29.0	Site 1
121	2367044.00	557155.00	16.2	Site 1
122		557155.50	10.2	Site 1
123	2367028.00 2367114.00	557157.50	523.9	Site 1
		557159.00		Site 1
125 126	2367129.00 2367118.50	557160.00	691.0 248.8	Site 1
120	2367113.00	557162.00		Site 1
			123.0	
128	2367032.00	557163.00	26.2	Site 1 Site 1
129	2367021.50	557163.50	55.0	
130	2366970.50	557164.50	10.9	Site 1
131	2367077.00	557165.50	63.9	Site 1 Site 1
132	2366996.00	557166.50	15.3	
133	2366004.00	557175.00 557176.00	240.2	Site 1
134	2366994.00	557176.00	23.4	Site 1
135	2366943.00	557177.50	42.5	Site 1
136	2367115.50	557178.50	16.3	Site 1
137	2367018.00	557182.50	11.6	Site 1
138	2367104.00	557182.50	107.4	Site 1
139	2367109.00	557182.50	69.1	Site 1
140	2367124.50	557182.50	251.2	Site 1

Anomaly ID	*Easting	*Northing	Amplitude	Location
	(survey feet)	(survey feet)	(mV)	
141	2367089.00	557183.00	25.8	Site 1
142	2366992.50	557185.00	11.5	Site 1
143	2367068.50	557185.00	13.2	Site 1
144	2367129.50	557185.50	14.9	Site 1
145	2366926.50	557186.00	661.0	Site 1
146	2367048.00	557186.00	18.0	Site 1
147	2366931.00	557187.00	492.8	Site 1
148	2367124.00	557187.50	73.2	Site 1
149	2366946.50	557188.50	21.6	Site 1
150	2367118.50	557188.50	41.3	Site 1
151	2366951.00	557190.00	29.7	Site 1
152	2366956.00	557190.50	18.9	Site 1
153	2367098.00	557191.00	13.3	Site 1
154	2367082.00	557192.00	12.8	Site 1
155	2367097.50	557192.50	14.7	Site 1
156	2367122.50	557194.00	1643.7	Site 1
157	2367071.50	557196.00	11.5	Site 1
157	2367087.00	557196.50	11.9	Site 1
159	2366975.00	557197.50	89.0	Site 1
160	2366960.00	557198.00	64.3	Site 1
161			32.4	Site 1
	2367111.50	557198.00		
162	2367106.00	557199.00	19.2	Site 1
163	2367091.00	557199.50	52.9	Site 1
164	2366949.00	557200.50	32.9	Site 1
165	2366944.00	557202.50	49.3	Site 1
166	2366953.50	557204.00	75.4	Site 1
167	2366963.50	557204.50	157.5	Site 1
168	2367080.00	557204.50	19.5	Site 1
169	2367039.00	557206.50	11.7	Site 1
170	2367110.00	557207.00	62.7	Site 1
171	2366948.00	557207.50	34.5	Site 1
172	2367049.00	557207.50	20.8	Site 1
173	2367059.00	557207.50	74.4	Site 1
174	2367104.50	557208.50	53.4	Site 1
175	2366922.00	557210.00	14.3	Site 1
176	2366992.50	557210.50	16.5	Site 1
177	2366957.00	557211.00	30.5	Site 1
178	2367114.00	557211.00	39.6	Site 1
179	2367119.50	557211.00	61.6	Site 1
180	2367118.50	557215.00	17.8	Site 1
181	2366951.50	557215.50	13.7	Site 1
182	2367108.00	557217.00	103.3	Site 1
183	2367016.00	557219.50	12.0	Site 1
184	2366955.50	557220.00	11.2	Site 1
185	2366919.50	557222.50	16.2	Site 1
186	2367122.00	557224.50	12.1	Site 1
187	2367005.00	557225.00	16.1	Site 1
188	2367030.50	557225.00	17.8	Site 1

Anomaly ID	*Easting	*Northing	Amplitude	Location
Anomaly ID	(survey feet)	(survey feet)	Ampiitude (mV)	Location
189	2366974.50	557226.00	17.0	Site 1
190	2367081.00	557226.00	18.2	Site 1
191	2366979.50	557226.50	11.8	Site 1
192	2367111.00	557227.00	11.3	Site 1
193	2367085.50	557227.50	10.5	Site 1
194	2367060.00	557229.50	12.0	Site 1
195	2367090.00	557229.50	23.4	Site 1
196	2366938.50	557230.50	17.4	Site 1
197	2367034.50	557231.50	31.6	Site 1
198	2367014.00	557232.00	13.2	Site 1
199	2367039.00	557233.00	13.9	Site 1
200	2367110.00	557233.00	40.5	Site 1
201	2366993.50	557234.00	61.3	Site 1
201	2367084.50	557236.00	33.5	Site 1
202	2367064.00	557237.00	52.8	Site 1
203	2367084.00		32.8 72.1	Site 1
204		557239.00 557239.50	27.7	
	2367048.00		16.2	Site 1 Site 1
206	2366931.50	557240.50		
207	2367012.00	557241.50	26.9	Site 1
208	2367078.00	557241.50	17.7	Site 1
209	2367093.50	557241.50	125.8	Site 1
210	2366936.50	557242.50	10.4	Site 1
211	2366941.00	557244.00	17.2	Site 1
212	2367098.00	557244.50	264.9	Site 1
213	2366915.00	557246.50	12.2	Site 1
214	2367057.00	557246.50	12.6	Site 1
215	2367056.50	557249.00	11.7	Site 1
216	2367006.00	557250.50	18.0	Site 1
217	2366955.00	557251.00	55.3	Site 1
218	2367102.00	557251.00	199.8	Site 1
219	2366964.50	557253.50	14.2	Site 1
220	2367070.00	557257.00	37.0	Site 1
221	2367024.50	557257.50	11.6	Site 1
222	2367080.00	557258.50	355.9	Site 1
223	2367095.00	557259.50	1992.0	Site 1
224	2366923.00	557260.00	13.7	Site 1
225	2367084.50	557260.00	219.9	Site 1
226	2367044.00	557262.00	13.1	Site 1
227	2366937.50	557262.50	29.5	Site 1
228	2366942.50	557262.50	51.4	Site 1
229	2367008.00	557263.00	10.2	Site 1
230	2366917.00	557264.00	16.6	Site 1
231	2366947.00	557265.00	15.1	Site 1
232	2366937.00	557266.00	13.8	Site 1
233	2367103.50	557268.50	98.5	Site 1
234	2366926.00	557269.00	13.6	Site 1
235	2366961.50	557270.50	77.8	Site 1
236	2367098.00	557270.50	151.3	Site 1

Anomal-: ID	*Faction	*Nouth	A mulitu- 4 a	Location
Anomaly ID	*Easting (survey feet)	*Northing (survey feet)	Amplitude (mV)	Location
237	2367057.50	557272.00	45.1	Site 1
238	2367077.00	557274.00	22.6	Site 1
239	2367108.00	557274.00	123.6	Site 1
240	2367097.50	557274.50	214.7	Site 1
241	2367067.00	557275.00	21.9	Site 1
242	2367087.50	557275.00	106.4	Site 1
243	2367112.50	557275.00	214.4	Site 1
244	2367092.00	557275.50	134.6	Site 1
245	2367061.50	557276.00	11.2	Site 1
246	2367001.50	557277.00	13.2	Site 1
247	2366985.50	557277.50	12.8	Site 1
248	2366990.00	557277.50	10.7	Site 1
249	2367101.00	557279.50	40.7	Site 1
250	2366919.00	557281.50	18.6	Site 1
251	2367096.00	557281.50	50.6	Site 1
252	2366928.50	557284.50	25.3	Site 1
253	2366953.50	557284.50	127.2	Site 1
254	2366938.50	557285.00	245.3	Site 1
255	2367105.50	557286.00	79.2	Site 1
256	2366907.50	557287.50	65.5	Site 1
257	2366923.50	557287.50	10.5	Site 1
258	2367103.50	557288.00	11.9	Site 1
259	2366928.00	557288.50	15.6	Site 1
260	2366912.00	557289.00	44.6	Site 1
261	2366968.00	557289.00	23.5	Site 1
262	2367110.00	557289.50	47.8	Site 1
263	2367099.00	557292.00	35.9	Site 1
264	2366998.00	557293.00	12.9	Site 1
265	2366992.50	557293.50	11.1	Site 1
266	2367084.50	557293.50	22.4	Site 1
267	2367068.00	557294.00	13.8	Site 1
268	2367003.00	557295.00	19.9	Site 1
269	2366906.50	557295.50	103.6	Site 1
270	2366911.00	557295.50	195.7	Site 1
271	2367088.00	557295.50	51.4	Site 1
272	2366962.00	557296.00	114.0	Site 1
273	2367103.00	557298.00	90.7	Site 1
274	2366971.50	557298.50	12.9	Site 1
275	2367017.00	557299.00	26.8	Site 1
276	2367017.00	557299.50	11.8	Site 1
277	2367037.50	557300.00	12.4	Site 1
277	2366935.50	557301.00	30.7	Site 1
278 279	2367097.50	557302.00	30.7 171.0	Site 1
280	2366965.50	557303.00	171.0	Site 1
280	2366915.00	557303.50	71.9	Site 1
281	2366919.50	557303.50	71.9 71.4	Site 1
282	2367006.00	557303.50	30.1	Site 1
283 284	2367006.00	557303.50		Site 1
∠0 <b>4</b>	2307080.30	337303.30	103.6	Site 1

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Anomaly ID	*Easting	*Northing	Amplitude	Location
285	(survey feet) 2367056.00	(survey feet) 557304.50	( <b>mV</b> ) 11.9	Site 1
286	2367082.00	557304.50	56.0	Site 1
287	2366955.00	557306.00	26.2	Site 1
288	2366959.50	557308.00	30.5	Site 1
289	2367066.00	557308.00	14.2	Site 1
290	2366954.00	557309.00	23.6	Site 1
291	2367076.00	557309.00	33.7	Site 1
292	2367070.00	557309.50	31.8	Site 1
293	2366969.00	557310.50	46.8	Site 1
293 294	2366984.00	557312.00	40.8 14.1	Site 1
294 295	2366973.50	557314.00	51.5	Site 1
296	2367054.50	557314.00 557314.50	14.7	Site 1
297	2366948.50		13.7	Site 1
298	2366953.00	557314.50	41.9	Site 1
299	2367004.00	557314.50	14.7	Site 1
300	2367014.00	557315.50	10.8	Site 1
301	2367018.50	557317.50	19.3	Site 1
302	2366993.00	557318.50	13.6	Site 1
303	2367048.50	557318.50	12.5	Site 1
304	2367003.50	557319.00	10.3	Site 1
305	2367008.00	557319.50	21.4	Site 1
306	2366967.50	557320.00	19.8	Site 1
307	2366997.50	557320.00	12.8	Site 1
308	2366987.50	557320.50	20.5	Site 1
309	2366901.50	557321.00	18.1	Site 1
310	2366906.00	557321.00	15.7	Site 1
311	2367012.50	557321.50	13.3	Site 1
312	2367078.50	557322.00	426.7	Site 1
313	2366921.50	557323.00	10.4	Site 1
314	2366992.00	557325.00	22.7	Site 1
315	2366996.00	557326.50	28.1	Site 1
316	2367098.00	557327.00	211.3	Site 1
317	2366986.00	557328.00	61.5	Site 1
318	2367052.50	557328.50	15.6	Site 1
319	2367092.00	557330.00	377.5	Site 1
320	2367056.50	557330.50	17.6	Site 1
321	2367061.50	557330.50	12.3	Site 1
322	2367051.50	557331.50	15.5	Site 1
323	2366934.50	557332.50	11.3	Site 1
324	2366955.00	557332.50	45.7	Site 1
325	2367000.50	557333.00	14.4	Site 1
326	2366909.00	557333.50	20.5	Site 1
327	2367005.00	557333.50	10.3	Site 1
328	2366929.50	557334.00	13.5	Site 1
329	2367091.00	557334.50	177.5	Site 1
330	2366974.50	557336.00	15.8	Site 1
331	2367015.00	557337.00	11.8	Site 1
332	2367040.00	557340.00	11.9	Site 1

Anomaly ID	*Easting	*Northing	Amplitude	Location
•	(survey feet)	(survey feet)	(mV)	
333	2366933.00	557341.50	28.1	Site 1
334	2367049.50	557341.50	11.5	Site 1
335	2366988.50	557342.00	11.8	Site 1
336	2366922.50	557342.50	66.4	Site 1
337	2366983.50	557343.00	12.9	Site 1
338	2366927.50	557344.50	47.9	Site 1
339	2367084.00	557346.00	302.0	Site 1
340	2366947.00	557347.50	28.2	Site 1
341	2366972.00	557348.00	150.7	Site 1
342	2366936.00	557351.00	35.1	Site 1
343	2366962.00	557351.00	28.4	Site 1
344	2366916.00	557351.50	171.2	Site 1
345	2366966.50	557351.50	26.4	Site 1
346	2366986.50	557352.00	18.5	Site 1
347	2366956.00	557353.50	16.3	Site 1
348	2367072.50	557353.50	247.8	Site 1
349	2366940.50	557355.00	10.1	Site 1
350	2367047.00	557355.50	16.1	Site 1
351	2366970.50	557357.50	24.1	Site 1
352	2366990.50	557358.50	40.3	Site 1
353	2366980.00	557362.00	15.7	Site 1
354	2367025.50	557363.00	14.6	Site 1
355	2367030.00	557364.50	31.6	Site 1
356	2367095.50	557367.00	427.6	Site 1
357	2366999.00	557368.00	909.6	Site 1
358	2367074.50	557370.50	31.1	Site 1
359	2367059.50	557371.00	38.2	Site 1
360	2367049.00	557371.50	11.4	Site 1
361	2367064.00	557373.00	24.9	Site 1
362	2367094.00	557374.50	364.2	Site 1
363	2367068.00	557375.00	13.9	Site 1
364	2367084.00	557375.00	47.9	Site 1
365	2367053.50	557375.50	26.7	Site 1
366	2367058.00	557378.50	24.5	Site 1
367	2367068.00	557380.00	81.7	Site 1
368	2367072.50	557380.50	16.9	Site 1
369	2367088.00	557380.50	26.3	Site 1
370	2367077.50	557381.00	25.1	Site 1
371	2367087.00	557384.00	126.7	Site 1
372	2366923.80	557960.63	165.6	Site 2
373	2366928.51	557940.88	139.5	Site 2
373	2366959.13	557938.89	349.5	Site 2
375	2366948.08	557955.38	281.0	Site 2
376	2366964.39	557985.46	533.9	Site 2
377	2366945.36	557998.32	480.0	Site 2
378	2366967.29	558008.65	131.3	Site 2
379	2367006.07	557966.98	88.8	Site 2
380	2367006.07	557981.83	00.0 163.1	Site 2

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Anomaly ID	*Easting	*Northing	Amplitude	Location
381	(survey feet) 2366931.00	(survey feet) 557926.50	( <b>mV</b> ) 32.0	Site 2
382	2366941.00	557927.00	105.9	Site 2
383	2366951.00	557928.50	75.7	Site 2
384	2366925.50	557930.00	13.4	Site 2
385	2366981.00	557930.00	10.2	Site 2
386	2366950.00	557933.00	40.6	Site 2
387	2366970.50	557933.00	77.0	Site 2
388	2367011.00	557933.00	38.3	Site 2
389	2367006.00	557934.50	36.3 47.9	Site 2
390	2366985.50	557935.00	31.9	Site 2
390 391	2366945.00	557935.50	227.4	Site 2
391 392	2366975.00	557936.50	14.1	
392 393			14.1	Site 2 Site 2
	2366985.50	557939.50		
394	2366974.50	557943.50	40.1	Site 2
395	2366969.50	557944.00	105.8	Site 2
396	2366979.50	557944.50	81.5	Site 2
397	2366979.00	557946.50	74.3	Site 2
398	2366974.50	557947.00	37.2	Site 2
399	2366923.00	557950.00	37.2	Site 2
400	2366963.50	557952.50	173.0	Site 2
401	2366968.00	557954.00	55.1	Site 2
402	2366983.50	557955.00	213.4	Site 2
403	2367003.00	557955.00	22.0	Site 2
404	2366978.50	557956.00	77.6	Site 2
405	2366973.00	557957.00	79.6	Site 2
406	2367084.50	557957.00	10.1	Site 2
407	2367104.00	557960.00	12.8	Site 2
408	2366942.50	557960.50	11.7	Site 2
409	2367083.50	557961.00	13.2	Site 2
410	2366982.50	557961.50	140.4	Site 2
411	2366947.00	557964.50	47.5	Site 2
412	2366922.00	557966.50	29.8	Site 2
413	2367022.50	557966.50	12.1	Site 2
414	2366941.50	557967.00	27.0	Site 2
415	2367063.00	557967.50	68.9	Site 2
416	2367047.50	557968.50	15.0	Site 2
417	2366915.50	557971.50	95.8	Site 2
418	2366925.50	557971.50	14.5	Site 2
419	2367017.00	557972.00	35.5	Site 2
420	2367001.50	557973.50	15.5	Site 2
421	2366950.50	557975.50	17.9	Site 2
422	2366915.00	557976.00	114.0	Site 2
423	2366981.00	557976.00	55.7	Site 2
424	2367031.00	557979.00	13.0	Site 2
425	2367001.00	557979.50	21.5	Site 2
426	2366985.50	557980.50	97.0	Site 2
427	2367005.50	557981.00	13.3	Site 2
428	2367021.00	557982.50	25.5	Site 2

A 1 ID	ψT: 4°	ψ <b>λ</b> Ι .1 .	A 1'4 1	T 4.
Anomaly ID	*Easting (survey feet)	*Northing (survey feet)	Amplitude	Location
429	2367005.50	557983.50	( <b>mV</b> ) 15.3	Site 2
430	2366950.00	557986.50	32.3	Site 2
431	2367015.00	557988.50	52.7	Site 2
432	2366999.50	557991.00	18.0	Site 2
433	2366959.00	557992.00	35.2	Site 2
434	2367111.00	557992.50	24.4	Site 2
435	2366979.00	557993.50	107.8	Site 2
436	2367004.00	557993.50	13.8	Site 2
437	2367004.00	557993.50	34.9	Site 2
438	2366933.50	557994.00	78.5	Site 2
439	2366983.50	557994.00	59.8	Site 2
440	2367029.50	557994.50	42.9	Site 2
441	2367029.30	557994.50	73.1	Site 2
442	2367073.00	557996.00	10.1	Site 2
443	2367014.00	557997.50	36.2	Site 2
444 445	2367044.50	557998.50	16.7	Site 2 Site 2
	2367008.50	557999.50	16.7	
446	2367018.50	558000.00	24.7	Site 2
447	2367069.50	558000.00	47.5	Site 2
448	2367109.50	558000.00	31.2	Site 2
449	2366932.50	558000.50	97.2	Site 2
450	2366912.50	558001.00	11.4	Site 2
451	2367038.50	558001.50	15.0	Site 2
452	2367023.50	558002.00	18.0	Site 2
453	2367049.00	558002.00	54.1	Site 2
454	2366927.50	558004.50	30.8	Site 2
455	2367053.00	558005.00	23.9	Site 2
456	2366911.50	558007.50	58.9	Site 2
457	2367073.50	558007.50	24.4	Site 2
458	2367083.50	558009.00	16.5	Site 2
459	2366957.00	558010.50	124.9	Site 2
460	2367109.00	558010.50	50.1	Site 2
461	2367007.50	558011.00	22.3	Site 2
462	2366926.50	558012.00	40.0	Site 2
463	2366936.50	558013.00	176.4	Site 2
464	2367073.00	558013.50	19.3	Site 2
465	2367062.50	558014.50	13.9	Site 2
466	2367012.00	558015.50	35.6	Site 2
467	2366915.50	558017.00	15.2	Site 2
468	2366956.00	558017.50	197.9	Site 2
469	2366920.50	558020.00	28.5	Site 2
470	2366971.00	558021.50	53.2	Site 2
471	2366950.50	558022.00	170.8	Site 2
472	2367016.50	558022.50	17.7	Site 2
473	2367082.00	558022.50	12.5	Site 2
474	2367086.50	558022.50	10.9	Site 2
475	2366955.00	558023.50	56.6	Site 2
476	2367041.00	558027.00	23.3	Site 2

Anomaly ID	*Easting	*Northing	Amplitude	Location
	(survey feet)	(survey feet)	(mV)	
477	2366980.00	558027.50	12.9	Site 2
478	2367030.50	558027.50	94.2	Site 2
479	2367030.50	558031.00	67.1	Site 2
480	2367045.50	558034.00	25.1	Site 2

<sup>-</sup> Anomalies Selected for Further Investigation



## Appendix U

IDW

General



McCutcheon Enterprises, Inc. 250 Park Road Apollo, PA 15613 (724)568-3623 Fax (724)568-2571 www.completewastemgmt.com

NH034

-	and the same of the same of		·				1111001
		y market company of a company of the		anifest iment No.	2. Pa of	ge 1	
TOTAL PROPERTY.	3.	Generator's Name and Mailing Address Research ARmy Bonnamition Plan 8451 State Route 5 Revence, OH 49156 8297	nt		-		a Hamites? the th
		8451 State Route 5 Rovenno, OH 49166-8297			B. St	M C カリ/ ate Generator's ID	133
The special features of	4.	Generator's Phone ( タダツ) 358- 237/		and the services that the fall and the services			
	5.	Transporter 1 Company Name M'Cuts Heon Extensions Inc.	6. US EPA ID Number		C St	ate Trans. ID	
	7.	Transporter 2 Company Name	8. US EPA ID Number		â		(734)368-3623
	9.	Designated Facility Name and Site Address	10. US EPA ID Number	<u>                                     </u>	E. Sta	ate Trans. ID	
	0.	Designated Facility Name and Site Address  17 Sunt Sheon Knt caprise Mic Solids  250 Ponk Rd	TREATMENT FACILITY		F. Tra	ansporter's Phone	( )
		Apollo, PA 15613	19,010,011,318,216	. 2.417		ate Facility's ID	and the state of t
	-11			12. Conta	<u></u>	13.	47) 56 &-3623   14.
		US DOT Description (Including Proper Shipping Name, Haz		No.	Туре	Total Quantity	Unit Wt/Vol Waste No.
G	a.	Non Regulated Material	(Soil )	j	CA	15	Rome
N E R					هم ماسية		
A	b.						
O R							
	C.						
ON STREET, STR					·	· 	
dayway	d.					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- Consequence of the Consequence
		*					
	J.	Additional Descriptions for Materials Listed Above		· · · · ·	K. Hai	ndling Codes for W	/astes Listed Above
	a.	020905-00978 c.			a.		c.
201103-00103	b.				b.		d.
A		Special Handling Instructions and Additional Information	3123 21/hour				G
DECOMMENT OF THE PERSONS		Emengency plane 224-568-	The same and the s				
		W/0 33 883					
DOCUMENT OF THE PERSON NAMED IN COLUMN	16.	<b>GENERATOR'S CERTIFICATION:</b> I hereby declare that the and are classified, packaged, marked and labeled, and are inational governmental regulations.					
	<b>%</b>	reby certify that the above-named material is not hazardous w	waste as defined by 40 CFR Part 261 or a	ny applicabl	e state I	aw.	
Y : :	* \	Printed/Typed Name RVING VCNGEA	Signature	V. E. Sign	40		Month Day Year
	7.						
		Printed/Typed Name	Signature A	ndl	or L	1	Month Day Year
		Insporter 2 Acknowledgement of Receipt of Materials					
		'ed/Typed Name	Signature				Month Day Year
		ancy Indication Space					
	1						
				ood of the second of the secon			
		r Operator: Certification of receipt of non-haz	zardous materials covered by this manifes	t except as i	noted in	Item 19.	Month Day Year
			2.9				onui Day rear



McCutcheon Enterprises, Inc. 250 Park Road Apollo, PA 15613 (724)568-3623 Fax (724)568-2571 www.completewastemgmt.com



	-	Waste Hamfest 01		10 No. 2 2 0 2 3 6	Manifest Document No		NHO3	and the second of the second o
CHARGEROPEE	3.	Generator's Name and Mailing Address Reteand M. Roy Americantion. 8451 State Route S	Plant	ingularan wat karan dan kawa sendi masa milijuga mana Piri	de Management e verma mont de securito de la companya de la companya de la companya de la companya de la compa	1	2 44 1003 PM C 341 124	arrive But , the
NO MANAGEMENT	Tales von constitution and	Rave and 135 41364-3397 Generator's Phone (330) 358-7311				B. State Gene		
de de de de de de de		Transporter 1 Company Name	6. <sub></sub>	US EPA ID I	Vumber	Action of the second		
1000		M' Cutcheon Enterprise Inc.	1/1/	90,01,38	CONTRACTOR OF THE PROPERTY OF	C. State Tran		
20020-00-00-00-00-00-00-00-00-00-00-00-0	7.	Transporter 2 Company Name	8.	US EPA ID I	Number	D. Transporte E. State Tran		1 1 1 1 1 1 1
	9.	Designated Facility Name and Site Address	Henent 210.	US EPAID N	lumber	2. 0.0.0 170.1	0.10	
To the same of the	ALL CONTRACTOR OF THE PERSON NAMED IN COLUMN N	Designated Facility Name and Site Address TRea				F. Transporte G. State Facil		)
	open mentage	Aprillo, PA 15613		09138	3618147		hone ( 🌃 )	568-3623
	11.	US DOT Description (Including Proper Shipping Name	e, Hazard Class, and	d ID Number)	12. Conta No.	iners Type Qu	13. 14. Total Unit Jantity Wt/V	L Waste No.
G	a.	Non Regulated Mat	erio! (Soil	)	NO.	71-1	Est	None
E	an resultant res					CH	-/3 X	
RA	D.							
A T O R								
ri	C.							
	S0000000000000000000000000000000000000							
	d.							
	J.	Additional Descriptions for Materials Listed Above		· · · · · · · · · · · · · · · · · · ·		K. Handling C	odes for Wastes	Listed Above
		020905-00778						,
	a.		C.			a.	C.	
	b. 15	Special Handling Instructions and Additional Information	d.			b.	d.	
		Emergency And Take	1-548-36	23 24 1	1011r			
	Š	W/0 33884 4I /4	soil					
	16.	GENERATOR'S CERTIFICATION: I hereby declare the						
		and are classified, packaged, marked and labeled, and national governmental regulations.					o applicable inter	national and
A COLUMN TO THE PERSON NAMED IN COLU		reby certify that the above-named material is not hazard Printed/Typed Name	dous waste as define	ed by 40 GFR Part 2 Signature	61 or any applicable	e state law.		Month Day Year.
	A MARKAGE PRODUCTION	Printed/Typed Name RAING B. VENGEN		JANES	Marja	7		0722805
T R		Transporter 1 Acknowledgement of Receipt of Material Printed/Typed Name	s	Signature /	· dan	· A	10	Month Day Year
SP	M. PORTENTICO PRO	Printed/Typed Name Lee Marshall		"Kela-	ng/TV4	udal	1	022805
O R T		Transporter 2 Acknowledgement of Receipt of Material Printed/Typed Name	S	Signature		· · · · · · · · · · · · · · · · · · ·		Month Day Year
E R					Maintan and the second and the secon			I I I I I I
	19.	Discrepancy Indication Space						
AC								
	20	Facility Owner or Operator: Certification of receipt of no	on-hazardous materi	als covered by this p	nanifest evcent as r	noted in Item 10		chiya muu uu aaya uu ee aya gaaya maa u da uu uu ee aya aa aadaa da ah ilida B
Y		Printed/Typed Name	in nazardous materi	Signature	annest except ds I	loted at Helli 19	•	Month Day Year

STI, Chicago

SEVERN ST	L	Report To:						Dilli Dilli	To:								Page1of2
		Contact:		Eric E	111-			Cont				ء لم ۲	Ellis			7	Lab Lot # 233/68
STL Chicago		Company:		KM Engine		nø.		_	pany:		4612		ineers			4	Lau Lot # J J V O
2417 Bond St.		Address:		8451 State					1986:				ineers te Rou			-{	Historia de la companya della companya della companya de la companya de la companya della compan
University Park, IL 60488		LMAIR-99	·······························					AUUI	<b>599</b> .						······································	-	Package Sealed Samples Sealed
•		Phone:		Ravenna, Ol		OD		Phor					OH 4	~		┦.	Yes No Yes No
708-534-5200				330-358-									58-292			-	Received on ice Samples intact
Fax. 708-534-5211		Fax:		330-358-				Fax:				330-3	58-292	+		-	Yes No Yes No
Onnales Names		Email:	enc.e	ilis@mkme	іділее	rs.con	<u>R</u>	PO #				***				4	Temperature C of Cooler
Sampler Name:		EUCEUS						Quol	P#:							ا	Harry State Control of the Control o
Sampler Signature:		- Real						4									Willin Held Time
Project Name:		aracterization of RV	AAP 14 AC	Cs				4									Yes No
Project Number:		02-0030	·····					_]									Preserv Indicated
Project Location:		AAP - Ravenna, Ohi	0					╛									Yes No N/A
Lab PM:	Nan	cy McDonald						]									pH Check OK
													_				Yes No NA
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					100 100 170	Serv.		98			372.32		44. B		1 3	130	Yes No COC not present
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Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Сопр/Grab	NOC	SVOC	Explosives	TAL Metals	Ntroglycerin	69040sad	Witrate	9+JO	Total Susp. Solids (TSS)	TCLP % Solids	Additional Analyses / Remarks
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1448 H. 42 & Hing		LL5mw-005-GW	01-04-05	0940	W	G	×	х	×	x		ж	×			Ī	
		LL5mw-004-ER	01-04-05	0840	W	G	ж	ж	×	×		X	×				
4		LL5mw-004-GW	01-04-05	1415	W	G	X	X	X	×		×	X		·	<del>                                     </del>	
		LL5mw-004-DUP	01-04-05	1415	W	G	x	×	×	×		X	×			<del>                                     </del>	~
27	×	LL5mw-004-MS/MSD	01-04-05	1415	W	G	×	X	×	×		X	x			<del>                                     </del>	
6		RVAAP14-001-WW	01-04-05	1330	W	G	×	×	×	×	×			×	×	×	Continued on and some 10015 half discourse
		RVAAP14-001-WD	01-04-05	1305	5	G	<del>  ^</del> -	<del>  ^</del> -	<del>^</del>	<del>  ^</del>	×				<del>  ^</del>	+^	Continued on next page (Cr+6-hold time!)
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W - Water		WW - Wastewater	DL - Drum L	iquid	A Air					Please	call if	sedim	ent qua	intity is	s not s	ufficie	nt - (limited
S - Sail		SE - Sediment	DS - Drum S	iolid	OL -	ON .					liment s				_	,	Courier:
SL - Sludge		L - Leachate	W - Wipe		٥												Hand Delivered:
SO - Solid		M - Miscellaneous								L							Bill of Lading:

STL Chicago

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	Contact:		Éric El	N.			_	To:			<b>-</b>				٦ .	Lab Lot # 233/68
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	Email:	enic.e	llis@mkmen	gineer	rs.com	]	PO#	<u>;</u>								Temperature C of Cooler
Sampler Name:	oric puis						Quot	e #:								
Sampler Signature:	GRA														-	Within Hold Time
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Laboratory tD	Client Sample ID	. Sampling Date	Sampling Time	Matrix	Comp/Grab	TPH GRO (8015)	TPH DRO (8015)	Reactive CN & Suffide	Reactivity	Соповічну	Ignitability	Full TCLP (Metals,	Pesticides, SVOC, VOC)	Pesticides	PCBs	Additional Analyses / Remarks
	RVAAP14-001-WW	01-04-05	1330	w	G	×	×	×	<del>                                     </del>	х	×	,	,	×	x	Waste Characterization
7	RVAAP14-001-WD	01-04-05	1305	s	G	×	×	+-	X	×	<del> </del>	, x			X	Waste Characterization
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S - Soil	SE - Sediment	DS - Drum S		OL - (												Courier:
SL - Sludge	L - Leachate	W - Wipe		0_												Hand Delivered:
SO - Solid	M - Misceltaneous															Bill of Lading:

Job Sam r.: 233168 Location.: 57222 Check Job ID Job umber.: 20004694 Project Description.:	V2  Date of the Report: 01/18/2005  Project Manager: nsm
Questions ? (Y/N) Comments	
Chain-of-Custody Present? Y	To a second
Were samples dropped off at or picked up by STL? N	
Custody seal on shipping container? Y	
If Myes", custody seal intact? y	
Custody seals on sample containers?N	
If "yes", custody seal intact?	
Samples iced?	
Temperature of cooler acceptable? (4 deg C +/- 2). Y 3.6,2.8,3.0,2.6,2.0,2.4,2.8	
Samples received intact (good condition)? Y	
Volatile samples acceptable? (no headspace) Y .	-
Correct containers used? γ	
Adequate sample volume provided? Y	
Samples preserved correctly? Y	
Samples received within holding-time? Y	
Agreement between COC and sample labels? Y	
Radioactivity at or below background levels? y	
A Sample Discrepancy Report (SDR) was needed? N	
If samples were shipped was there an air bill #? Y	
Sample Custodian Signature/Date Y	

Page 1

EVERN ST	1	Report To: Contact:		Eric E	ille			Bill 1				Eric E	llie				Lab Lot#		
				VKM Engine		DC.	· · · · · · · · · · · · · · · · · · ·	Comp			MKM	Engin		inc.		-			•
L Sacramento		Company:		8451 State			·	Addre				State					Package Scaled	Samples S	ealed
O Riverside Parkway		Address:		Ravenna. O				-	<del></del>	·····		nna, (					Yes N	Yes	
est Sacramento, CA 95605		Phone:		330-358-		.00		Phone				30-356		200	$\dashv$		Received on Ice		
10) 373-5600				330-358-				Fax:				30-358		<del></del>	$\dashv$		Yes N		
x. (916) 372-1059		Fax:						PO#:				30-300	72324			1	Temperature C of	Thelor	
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ampler Name:		sec Eus					····	Coole	#.								Within Hold Time		derste de 1900 blad
ampler Signature:	Δh.	racterization of RVA	AD 44 AO	<u> </u>				1									Yes I		
oject Name:			AP 14 AU	US				1									Preserv Indicated		7
roject Number:		02-0030	***************************************					1									Yes		
roject Location:	-	AAP - Ravenna, Ohio						-									pH Check OK		
ib PM:	KODE	ert Hbarak						1									rea N	o NA	
		Date Required	T		Ref		Spl. Post	Ci spinin	i s.c.	race)			Z.lu.d			circii Lita	Res CL2 Check		
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i - Soil		SE - Sediment	DS - Drum		OL-												Cou		
SL - Sludge		L - Leachate	W - Wipe		0_													d Delivered:	
SO - Solid		M - Miscellaneous								L							Billio	of Lading:	



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	GSA-1402	08 PH		·	initials	Date
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DELIVERED BY	☐ FEDEX		ERNIGHT NSTATE	CLIENT		
		☐ BAX €	li si	☐ DHL☐ GO-GETTERS	.	
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SHORT HOLD TEST N	IOTIFICATION		SAME	LE RECEIVING	·	
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COMPLETE SHIPN APPROPRIATE TE	MENT RECEIVED IN	GOOD COND NTAINERS, P	TION WITH	. □ N/A	-	
☐ Clouseau	TEMPER/	ATURE EXCE	DED:(2 °C	.6 °C)*1		<b>—</b>
☐ WET ICE		1	l) ,	COOLING AGENT	'S USED	PM NOTIFIED
Notes:	. ***				<u> </u>	:
*1 Acceptable tempera	ture range for State	of Wisconsin s	nples is<4°	•		
140208		STL Sacra	nento (916) 31	3 - 5600	מורה י י י י י	5 of 103

### RVAAP 14 - IDW Soil

STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 233168

LABORATORY TEST RESULTS

Date:01/24/2005

CUSTOMER: NKM Engineers, Inc.

PROJECT: USACE RVAAP 14 AOCS

ATTN: Eric Etlis

Customer Sample ID: RVAAP14-001-WD Date Sampled.....: 01/04/2005 Time Sampled.....: 13:05 Laboratory Sample ID: 233168-7 Date Received.....: 01/05/2005

Sample Matrix....: 15:05

Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL.	RL.	DILUTION	UNITS	BATCH	DT	DATE/TI	ME	TECH
8082	PCB Analysis Araclor 1016, 3541 Solid* Araclor 1221, 3541 Solid* Araclor 1232, 3541 Solid* Araclor 1242, 3541 Solid* Araclor 1248, 3541 Solid* Araclor 1254, 3541 Solid*	42 42 21 42 21 42	0 0 0 0	11 5.9 5.8 6.3 4.7 5.8	42 42 21 42 21 42	1.00000 1.00000 1.00000 1.00000 1.00000	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	139333 139333 139333 139333 139333 139333		01/10/05 01/10/05 01/10/05 01/10/05 01/10/05 01/10/05	1636 1636 1636 1636	bjt bjt bjt bjt
	Aroclor 1260, 3541 Solid*	42	U	16	<u> 42</u>	1.00000	ug/Kg	139333		01/10/05	1636	bjt
8015B MDRO	TPH - Diesel Range Organics (DRO) Diesel Range Organics (DRO), 3541 Solid*	40		3.2	5.1	1.00000	mg/Kg	139639		01/11/05	1748	pjg
Method	% Solids Determination % Solids, Solid % Moisture, Solid	77.6 22,4		0.10 0.10	0.10 0.10	1 1 1	% %	138806 138806		01/05/05 01/05/05		_
80158 MGRO	TPH - Gasoline Range Organics (GRO) Gasoline Range Organics (GRO), Solid*	64	U	7.0	64	1.00000	ug/Kg	139477		01/14/05	; 0724 <sup>:</sup>	wre
7.3.3.2/9014	Reactivity, Cyanide Reactivity, Cyanide, Solid	1.8	u.	1.8	1.8	1	mg/Kg	138891		01/06/05	1225	mtb
7196A	Hexavalent Chromium Hexavalent Chromium, Solid*	2.5	ָ ֖֖֖֖֖֖֖֖֖֓	0.62	2.5	i	mg/Kg	139592		01/18/05	0815	pmf
1010	   [gnitability (Pensky-Martens Closed-Cup)   [gnitability (Flashpoint), Solid	>200				1	<b>d</b> egrees f	138854		01/06/05	0750	jmk
9045¢	рН (Scil) Corrosivity (рН Solid), Solid	8.6		0.2	0.2	1	pH Units	139019		01/07/05	1547	pmf

<sup>\*</sup> In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 233168 Date:01/24/2005

CUSTOMER: MKM Engineers, Inc. ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WD Date Sampled.....: 01/04/2005 Time Sampled.....: 13:05

Sample Matrix....: Soil

Laboratory Sample ID: 233168-7
Date Received.....: 01/05/2005
Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	MDL	RL	DIEUTION	UNITS	BATCH	DI DATE/TIME	TEC
7.3.4.2/9034	Reactivity, Sulfide Reactivity, Sulfide, Solid	220	U	60	220	1	mg/Kg	139198	01/11/05 09	38 mtb
8330	Explosives by 8330 (MPLC) HMX, Solid RDX, Solid 1,3,5-Trinitrobenzene, Solid 1,3-Dinitrobenzene, Solid Nitrobenzene, Solid 2,4,6-TNT, Solid Tetryl, Solid 2,4-Dinitrotoluene, Solid 2,6-Dinitrotoluene, Solid 2-Amino-4,6-Dinitrotoluene, Solid 4-Amino-2,6-Dinitrotoluene, Solid 2-Nitrotoluene, Solid 4-Nitrotoluene, Solid 3-Nitrotoluene, Solid	0.20 0.20 0.098 0.098 0.098 0.098 0.39 0.098 0.20 0.20 0.29 0.20		0.055 0.062 0.032 0.023 0.021 0.023 0.12 0.025 0.048 0.045 0.093 0.047 0.049	0.20 0.20 0.098 0.098 0.098 0.39 0.098 0.20 0.20 0.20 0.20	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	139533 139533 139533 139533 139533 139533 139533 139533 139533 139533 139533 139533	01/11/05 16 01/11/05 16	46 san 46 san 46 san 46 san 46 san 46 san 46 sar 46 sar 46 sar 46 sar
8332M	NG/PETN by 8332M (HPLC) Nitroglycerine, Solid	0.50	u	0.12	0.50	1.00000	mg/Kg	139541	01/14/05 01	57 sar
8081A	Organochlorine Pesticide Analysis gamma-BMC (Lindane), TCLP Leach Heptachlor, TCLP Leach Heptachlor epoxide, TCLP Leach Endrin, TCLP Leach Methoxychlor, TCLP Leach Toxaphene, TCLP Leach	5.0 5.0 5.0 5.0 25 50	U U U U U	0.50 0.50 0.50 0.50 2.5 5.0	5.0 5.0 5.0 5.0 25	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L ug/L	139631 139631 139631 139631 139631 139631	01/12/05 22 01/12/05 22 01/12/05 22 01/12/05 22 01/12/05 22 01/12/05 22	57 kd 57 kd 57 kd 57 kd

<sup>\*</sup> In Description = Dry Wgt.

#### STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 233168

LABORATORY TEST RESULTS

Date:01/24/2005

CUSTOMER: NKM Engineers, Inc.

PROJECT: USACE RVAAP 14 AOCS

ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WD Date Sampled.....: 01/04/2005 Time Sampled.....: 13:05 Sample Matrix....: Soil Laboratory Sample ID: 233168-7 Date Received.....: 01/05/2005 Time Received.....: 10:35

TEST METHOD PARAMETER/TEST DESCRIPTION SAMPLE RESULT 19 FLAGS MDL: RI: DILUTION UNITS BATCH DT DATE/TIME TECH Chlordane, TELP Leach 10 1.0 10 1.00000 ug/L 139631 01/12/05 2257 kdt 7470A Leachable, Mercury (CVAA) 01/11/05 1438 gok Mercury, ICLP Leach 2.0 2.0 2.0 ug/L 139174 60108 Leachable, Metals Analysis (ICAP) Arsenic, TCLP Leach 0.10 0.010 0.10 mg/L 139524 01/14/05 1741 tds 01/14/05 1741 tds 0.010 139524 Barium, ICLP Leach 0.46 1.0 mq/L ט ע 01/14/05 1741 tds 0.050 0.002 0.050139524 Cadmium, TCLP Leach mg/L 01/14/05 1741 tds Chromium, TCLP Leach 0.050 0.010 0.050 mg/L 139524 lυ 0.050 0.00500.050 mg/L 139524 01/14/05 1741 tds Lead, TCLP Leach U 01/14/05 1741 tds 139524 Selenium, TCLP Leach 0.10 0.010 0.10 mg/L Silver, TCLP Leach 0.050 0.005 0.050 mg/L 139524 01/14/05 1741 tds 8270¢ Semivolatile Organics 200 200 200 1.00000 139423 01/13/05 1540 dpk Pyridine, TCLP Leach ug/L 139423 01/13/05 1540 dpk 100 100 100 1.00000 ug/L 1.4-Dichlorobenzene, TCLP Leach u 100 1.00000 139423 01/13/05 1540 dpk 2-Methylphenol (o-cresol), TCLP Leach 100 100 ug/L U 01/13/05 1540 dpk Hexachloroethane, TCLP Leach 100 100 100 1.00000 ug/L 139423 100 100 1.00000 139423 01/13/05 1540 dpk 100 ug/L 4-Methylphenol (m/p-cresol), ICLP Leach 01/13/05 1540 dpk Nitrobenzene, ICLP Leach 100 100 100 1.00000 ug/L 139423 01/13/05 1540 dpk 100 100 100 1.00000 139423 Hexachlorobutadiene, TCLP Leach ug/L 01/13/05 1540 dpk 100 មេ: 100 100 1.00000 ug/L 139423 2,4,6-Trichlorophenol, TCLP Leach 2,4,5-Trichlorophenol, TCLP Leach 500 500 500 1.00000 ug/L 139423 01/13/05 1540 dpk 01/13/05 1540 dpk 139423 2.4-Dinitrotoluene, TCLP Leach 100 100 100 1.00000 ug/L ug/L 01/13/05 1540 dpk 100 100 1.00000 139423 Hexachlorobenzene, TCLP Leach 100 500 500 500 1.00000 139423 01/13/05 1540 dpk Pentachlorophenol, TCLP Leach ug/L Volatile Organics 8260B 25 100 1.0000 ug/L 139428 01/13/05 1256 jdn 100 Vinyl chloride, TCLP Leach

<sup>\*</sup> In Description = Dry Wgt.

#### STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS

Job Number: 233168 Date:01/24/2005

CUSTOMER: NKM Engineers, Inc. PROJECT: USACE RVAAD 14 ACCS

Customer Sample ID: RVAAP14-001-WD Date Sampled....: 01/04/2005

Time Sampled....: 13:05
Sample Matrix....: Soil

Laboratory Sample ID: 233168-7
Date Received.....: 01/05/2005
Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	<b>JO</b> L .	RL	DILUTION	LNITS	BATCH	DT DATE/TIME	TECH
	1,1-Dichloroethene, TCLP Leach 2-Butamone (MEK), TCLP Leach Chloroform, TCLP Leach Carbon tetrachloride, TCLP Leach Benzene, TCLP Leach 1,2-Dichloroethane, TCLP Leach Trichloroethene, TCLP Leach Tetrachloroethene, TCLP Leach Chlorobenzene, TCLP Leach	100 100 100 100 100 100 100 100	000000000000000000000000000000000000000	25 25 25 25 25 25 25 25 25 25	100 100 100 100 100 100 100 100	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	139428 139428 139428 139428 139428 139428 139428 139428 139428	01/13/05 12 01/13/05 12 01/13/05 12 01/13/05 12 01/13/05 12 01/13/05 12 01/13/05 12 01/13/05 12	256 jdn 256 jdn 256 jdn 256 jdn 256 jdn 256 jdn 256 jdn 256 jdn
			E. S.							

<sup>\*</sup> In Description = Dry Wgt.

#### STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS

Job Number: 233168

Date:01/19/2005

CUSTGMER: MKM Engineers, Inc. PROJECT: USACE RVAAP 14 ADCS ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WD Date Sampled.....: 01/04/2005 Time Sampled.....: 13:05

Laboratory Sample ID: 233168-7 Date Received.....: 01/05/2005 Time Received.....: 10:35

Sample Matrix....: Soil

TEST METHOD PARAMETER/TEST DESCRIPTION SAMPLE RESULT OF LACS MOL REDUCTION UNITS BATCH DT DATE/TIME TECH

Method % Solids Determination

EST ME HOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MOL		DILUTION	UNITS	BATCH	pr	DATE/TI	(ME	TECH
Method	% Solids Determination % Solids, Solid % Moisture, Solid	77.6 22.4			0.10 0.10	0.10 0.10	1	X X	138806 138806	12233	01/05/05 01/05/05	1310 1310	daj daj
7470A	Leachable, Mercury (CVAA) Mercury, TCLP Leach	2.0	U		2.0	2.0	!  1	ug/L	139174		01/11/05	1438	gok
60108	Leachable, Metals Analysis (ICAP) Arsenic, TCLP Leach Barium, TCLP Leach Cadmium, TCLP Leach Chromium, TCLP Leach Lead, TCLP Leach Selenium, TCLP Leach Silver, TCLP Leach	0.10 0.46 0.050 0.050 0.050 0.10 0.050			0.010 0.010 0.002 0.010 0.0050 0.010 0.005	0.10 1.0 0.050 0.050 0.050 0.10 0.050	111111111111111111111111111111111111111	mg/L mg/L mg/L mg/L mg/L mg/L	139524 139524 139524 139524 139524 139524 139524		01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05	1741 1741 1741 1741 1741	tds tds tds tds tds

<sup>\*</sup> In Description = Dry Wgt.

Page 14

#### STL CHICAGO

### Client Sample ID: RVAAP14-001-WD

### Trace Level Organic Compounds

Lot-Sample #: Date Sampled: Prep Date:	01/04/05 13:05	Work Order #: G15W51 Date Received: 01/05/ Analysis Date: 01/18/	05	SOLID
Prep Batch #: Dilution Factor:	5017478	Initial Wgt/Vol: 2 g	Final Wgt/Vol:	10 mL

DETECTION

PARAMETER	RESULT	LIMIT	UNITS	METHOD
			/1	NONE UV/HPLC per
Nitroguanidine	ND .	0.25	mg/kg	MOME OALHERO Der

#### STL CHICAGO

#### Client Sample ID: RVAAP14-001-WD

#### General Chemistry

Matrix..... SOLID Work Order #...: G15W5 Lot-Sample #...: G5A050217-003 Date Received..: 01/05/05 Date Sampled...: 01/04/05 PREPARATION-PREP ANALYSIS DATE BATCH # METHOD RL\_\_\_\_ UNITS PARAMETER RESULT 01/10-01/12/05 5011311 2.0 mg/kg MCAWW 353.2 0.68 B,J Nitrocellulose MDL..... 0.57

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.



McCutcheon Enterprises, Inc. 250 Park Road Apolio, PA 15613 (724)568-3623 Fax (724)568-2571 www.completewastemgmt.com

1. Generator's US EPA ID No. Manifest 2. Page 1 NON-WARROWS Document No. WASTE MANUFEST Lot-6th/dbab736 Generator's Name and Mailing Address A. Nan-Hazardous Merifest Document No. MC24121 Reverso Army Americanidan Pant 8451 State Route 5 B. State Generator's ID Generator's Phone (22) US EPA ID Number Transporter 1 Company Name C. State Trans. ID plantistrated? Niet Carrieron Erdantalises kar Transporter 2 Company Name US EPA ID Number D. Transporter's Phone ( E. State Trans, ID US EPA ID Number Designated Facility Name and Site Address F. Transporter's Phone ( McCutcheon Ent. Biosofish Treatment Fedility G. State Facility's ID CHIS Charl Charl H. Facility's Phone ( Apollo, PA 15613 12. Containers 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) Waste No. Quantity No. Type HM a. NONE Nen-regulated Material (purgo water), G ń 77 ERATOR b. c. d. K. Handling Codes for Wastes Listed Above Additional Descriptions for Materials Listed Above A Secondar CAME-OUT T 15. Special Handling Instructions and Additional Information De con water from RUAAP RI 14 ADC 1 contest - 724-568-3623 24 hrs. 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. Month Day Year Printed/Typed Name Signature 101212191015 DULLE BVENEZA 17. Transporter 1 Acknowledgement of Receipt of Materials Day Year Printed/Typed Name Signáture Month ANSPORTER 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Signature Month Day 19. Discrepancy Indication Space 20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest except as noted in Item 19. Month Day Signature Year Printed/Typed Name



McCutcheon Enterprises, Inc. 250 Park Road Apollo, PA 15613 (724)568-3623 Fax (724)568-2571 www.completewastemgmt.com

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		Additional Descriptions for Materials Listed Above  ### Standard Residence   Property	aste N	0.									
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	J.	Additional Descriptions for Materials Listed Abo	ove				K Ha	Indling Cod	des for M	lastes Lis	stad Abo		
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		Emergency Conto	2 - T	34-568-3	Document of 1  A. North-texandous Manifest Document 242622  B. State Generator's ID  US EPA ID Number  C. State Trans. ID  US EPA ID Number  E. State Trans. ID  US EPA ID Number  F. Transporter's Phone ( 724568-35)  G. State Facility's ID  H. Facility's Phone ( 724568-35)  H. Facility's Phone ( 724568-35)  And ID Number)  12. Containers  13. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14								
		and are classified, packaged, marked and labe	A. Nort-Hazardous Wastes Listed Above  B. US EPA ID Number  C. State Generator's ID  D. Transporter's Phone (724,568,582)  E. State Trans. ID  D. Transporter's Phone (724,568,582)  E. State Trans. ID  J. Transporter's Phone (724,568,582)  F. Transporter's Phone (724,568,582)  Part Facility  Deping Name, Hazard Class, and ID Number)  D. Transporter's Phone (724,568,582)  Total Unit Unit Unit Unit Unit Unit Unit Unit	ime, id									
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d.  J. Additional Descriptions for Materials Listed Above  a. 20005-20177  c. a.  b. d.  15. Special Handling instructions and Additional Information  Page & Descriptions for Materials Listed Above  16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport by highway according to apple national governmental regulations.  I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261 or any applicable state law.  Printed/Typed Name  Signature  17. Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  18. Transporter 2 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Signature  Signature  19. Discrepancy Indication Space			Month	Day	Year								
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3. Generator's Name and Maling Address Reservance Amy Agrantaction Plants 2451 State Phone (2.3) 4. Generator's Phone (2.3) 5. Transporter 1 Company Name 8. U  9. Designated Facility Name and Site Address Apollo, PA 25513  11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number Hall Company Name)  a. Part to be a proper of the proper Shipping Name, Hazard Class, and ID Number Hall Company Name  b. D. Description (Including Proper Shipping Name, Hazard Class, and ID Number Hall Company Name)  c. D. Description (Including Proper Shipping Name, Hazard Class, and ID Number Hall Company Name)  c. D. Description (Including Proper Shipping Name, Hazard Class, and ID Number Hall Company Name)  c. D. Description (Including Proper Shipping Name, Hazard Class, and ID Number Hall Company Name)  d. D. Descriptions for Materials Listed Above  a. COMPANY Name Company Name  For g. a. D. Descriptions for Materials Listed Above  16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consign and are classified, packaged, marked and labeled, and are in all respects in proper on atlonal governmental regulations.  1 hereby certify that the above-named material is not hazardous waste as defined by 40 C Printed/Typed Name  First Printed/Typed Name  Signature  19. Discrepancy Indication Space  20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered to the printed of		Webs	The state of the s					-					
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STL, Chicago

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STL Chicago			Company:		KM Engine		ne		_	pany:		NI M		Ellis			-	Tap To	1 7	<u> </u>	<u>Ψ</u> 0	,
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Sampler Name:			EUCBUS						Quot	le #:							╛			ligit din		
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STL Chicago

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Actor (to the contraction)		Contact:	·	Eric El	lle			Cont				E-1-	: Ellis		٦	Lab Lot#	22	2/10	١ 🛭
STL Chicago		Company:		KM Engine					pany:		111/				4	ran rot #	<u> </u>	260	20
2417 Bond SL		Address:		6451 State F				Addr					ineers, inc. te Route 5		-	A SILIUS AND	14,270,11	Da terr	<u> </u>
University Park, IL 60466		Address.	·					AGOI	e68:						4	Package Seali	7.1	Samples	
		Dhano		Ravenna, Oi		00					Ka		OH 44266		4	Yes		Yes	
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rax, 100-934-9211												330-3	58-2924		4	r Yes		788	No
Sampler Name:		Email:	enc.e	llis@mkmen	nnee	rs.com		PO #							┨	Temperature C	or Cook		ajilah balan ka Masabah
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Sampler Signature:	7 h	are 1	1404440	· ·				-								Within Held Ti	11.11.11.11		
Project Name:		aracterization of RV	AAP 14 AU	<u> </u>				-									No		77
Project Number:		02-0030		<del></del>				4								Preserv. Indica			
Project Location:		AAP - Ravenna, Ohi	D					4							-	Yes	No	N/A	1
Lab PM:	Nan-	cy McDonald	·					J								pH Check OK	No	N <b>A</b>	
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					Pre	serv.					17.5				7,02	Yes	No	COCh	ot present
Laboratory ID	WS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	TPH GRO (8015)	TPH DRO (8015)	Reactive CN & Suffide	Reactivity	Corrosivity	<b>Egnitability</b>	Full TCLP (Metals, Pesticides, SVOC, VOC)	Pesticides	PCBs	Ārkitio	nel Anels	rses / Rem	:: !
	_	RVAAP14-001-WW	01-04-05	1330	W	G			) DZ	ļ <u>.</u>	├	<del>  _</del> _		<del> </del>			***************************************	Ses / Rem	iants
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Relinquished by		Company: MKM Engineers	Date:	5	Time	: 130			Recei	ved By	<b>'</b> :	•	-11-11-	Comp STL		h Canton (C		Date:	Time:
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S - Soil		SE - Sediment	DS - Drum S		QL - (											Cou	rier:		
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SO - Solid		M - Miscellaneous															of Lading		

Job Number.: 233168 Location.: 57222 Check List Number.: 1 Description.: Customer Job ID: Job Check List Date: 01/05/2005 Date		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Project Number:: 20004694 Project Description:: USACE RVAAP 14 AOCS Project Sustomer: MKM Engineers, Inc. Contact:: Eric Ellis	e of the Report ject Manager:	: 01/18/200 : nsm
Questions ? (Y/N) Comments		
Chain-of-Custody Present?, Y		
Were samples dropped off at or picked up by STL? N		
Custody seal on shipping container? Y		
If "yes", custody seal intact? Y		
Custody seals on sample containers?N	,	
If "yes", custody seal intact?		
Samples iced?		
emperature of cooler acceptable? (4 deg C +/- 2). Y 3.6,2.8,3.0,2.6,2.0,2.4,2.8	•	
amples received intact (good condition)? Y		
clatile samples acceptable? (no headspace) Y .	,	
Correct containers used? γ	•	
dequate sample volume provided?Y		
amples preserved correctly? Y		
amples received within holding-time? Y		
greement between COC and sample labels? Y		
adioactivity at or below background levels? Y		
Sample Discrepancy Report (SDR) was needed? N		
f samples were shipped was there an air b{ll #? Y		
ample Custodian Signature/Date γ		

Page 1

STL Chicago

	Report To:		Eric El	lis			Bill T				Eric E	Ilis			1	Lab Lot#	<u> </u>
			MKM Engine		nc.		Compa			MKM	Engin		nc.		_		<del>_</del>
	Company:		8451 State				Addres				1 State				Ī	Package Sealed Sample	es Sealed
	Address:		Ravenna, O				7.00.00				enna, C			$\neg$	ŀ	Yes No Ye	s No
· ·	Phone:		330-358-				Phone				30-358		_	$\neg \uparrow$			es intect
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Project Number: 0 Project Location: R Lab PM: Ro  Lab PM: Ro  Relinquished by: Relinquished by: Relinquished by: Relinquished by:	Fax:	200	eilis@mkme		vrc co	<b>Y</b>	PO#:									Temperature C of Choler	
Name -	Email:	enc.	Bills(Qitikities	IUITOL	13.00	4	Quote	#							1		
						······	1000	***								Within Hold Time	
	haracterization of RV	AAD 14 AO	Ce				1									Yes No	
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7,000,140,11,0011	VAAP - Ravenna, Ohio	<u> </u>					1									Yes No N	
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DPM: RO	bert Hbarak	<del></del>														Yes No N	A
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		Sampling	Sampling		8	Prop (Nitrogu										Additional Analyses /	Remarks
		Date	Time	-	<u> </u>		<del>-</del>		<del> </del>				-			Additional Atlanyaba /	TOTAL
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telinguished by:	Company:	Date:		Tim				Rec	eived E	ly:					pany:	Date	e: Time:
202	MKM Engineers	1/4 0	<u> </u>		163	0		1_								th Canton (Courier)	
elinquished by:	Company:	Date:		Tim	e:			Rec	eived E	ly:	-		1		pany;	Date	e: Time:
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1		DI -	لداريسا ا		. i				Con	ments	i:					Date Neverved	
		DL - Drum		A A								•				Courier:	
/ - Water	WW - Wastewater	TIQ - Drum	Solid	(11.													
Ratrix Key V - Water 5 - Soll SL - Sludge	WW - Wastewater SE - Sediment L - Leachate	DS > Drum W - Wipe	Solid	OL-	- On											Hand Delivered Bill of Lading:	

# TRENT

## LOT RECEIPT CHECKLIST STL Sacramento

	•		,		
ED YM NOTHED	NO COOLING AGENTS USED	CK L N	CE CEL P	. □ BLUE ICE	WET ICE
	6 °C)" [X"N/A		2	TEMPE	
+	ES		ONTAINERS, P	APPROPRIATE TEMPERATURES, CONTAINERS, P	APPROPRIATE TI
	:	HIM NO!	N COOD COND	MENT RECEIVED I	COMPLETE SHIPMENT RECEIVED IN COOD COND
	L KINA	AL & EMA	SERVE VIA VER	D OF FILTER/PRE	METALS NOTIFIED OF FILTER/PRESERVE VIA VER AL & EMA
	VOA-ENCORES N/A	VOA-			
	HEM 🚫 N/A	WETCHEM	i in a care		
	SAMFLE RECEIVING	SAME		NOTIFICATION	SHORT HOLD TEST NOTIFICATION
			XI-NA	Y	ABELS CHECKED BY
					LABELED BY
	XI N/A	ANOMALY	☐ YES ☐		pH MEASURED
	□ Not on COC	COC	Nerified from		COLLECTOR'S NAME:
			5.0		SAMPLE TEMPERATURE
			2	NK	TEMPERATURE BLANK
			NA		COC #(S)
	OTHER		1 □	)RD (IN °C) IR	TEMPERTURE RECORD (IN °C)
	<b>D</b>		(S) CLIEN	Ner(s) 🗌 stl	SHIPPPING CONTAINER(S)
			AL2519	615266	CUSTODY SEAL #(S)
		N N	T ☐ BROK	ATUS MINTACT	CUSTODY SEAL STATUS
3	;	3		OTHER	
	MAND	RS ON DEMAND	R COUR	STL COURIER	
·	CO-GETTERS	OBAL	□BAX	□ups	•
	□ DHC	NSTATE	<b>□</b> со⊥в	AIRBORNE	
	CLIENT	ERNIGHT	☐ cA o	<b>⊠</b> FEDEX	DELIVERED BY
Gc 1-2-25	0930	0	TIME RECEI	1-5-05	DATE RECEIVED
Initials Date			208 PH/W/W	GSA14208	
LOCATION W21B	40857	QUOTE	G54050717	.*	LOT# (QUANTIMS ID)
30306	PM PH LOG #			ST-CHICARO	CLIENT ST-C+
		- Gran			

### RVAAP 14- IDW WATER

STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 233168

LABORATORY TEST RESULTS

Date:01/24/2005

CUSTOMER: MKM Engineers; Inc.

PROJECT: USACE RVAAP 14 AOCS

ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WW Date Sampled.....: 01/04/2005 Time Sampled.....: 13:30

Laboratory Sample ID: 233168-6 Date Received.....: 01/05/2005 Time Received.....: 10:35

Sample Matrix....: Water

TEST: METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	o FLAGS	MDL	RL.	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
8081A	Organochlorine Pesticide Analysis		1			* [ ]		+	
	alpha-BHC	0.15	U U	0.047	0.15	1.00000	ug/L	139633	01/08/05 0752 kdL
	beta-BHC	0.099	ย	0.028	0.099	1.00000	ug/L	139633	01/08/05 0752 kdt
	delta-BHC	0.099	เข เข	0.025	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	gamma-BHC (Lindane)	0.15		0.042	0.15	1.00000	ug/L	139633	01/08/05 0752 kdt
	Heptachlor	0.15	U	0.041	0.15	1.00000	ug/L	139633	01/08/05 0752:kdl
	Aldrin	0,099	U	0.028	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	Heptachtor epoxide	0.15	บ บ บ	0.036	0.15	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endosulfan I Dieldrin	0_099	[V]	0.021	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
		0.099	וטן	0.018	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	4,41-DDE	0.099	[ט]	0.023	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endrin	0.099		0.017	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endosulfan II	0.15	0 0 0 0 0	0.042	0.15	1.00000	ug/L	139633	01/08/05 0752 kdl
	4,41-DDD	0.11	เกิ	0.036	0.11	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endosulfan sulfate	0.15	ען	0.044	0.15	1.00000	ug/L	139633	01/08/05 0752 kdl
	4,41-DDT	0.15	lul	0.049	0.15	1.00000	ug/L	139633	01/08/05 0752 kdL
	Methoxychlor	0.59	П	0.17	0.59	1.00000	ug/L	139633	01/08/05 0752 kdl
	alpha-Chlordane	0.050	U	0.016	0.050	1.00000	ug/L	139633	01/08/05 0752 kdl
	garma-Chilordane	0.099	u	0.017	0.099	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endrin aldehyde	0.15	Ū	0.035	0.15	1.00000	ug/L	139633	01/08/05 0752 kdl
	Endrin ketone	0.099	U	0.029	0.099	1.00000	ug/L	139633	01/08/05 0752 kdt
	Texaphene	0.50		0.14	0.50	1.00000	ug/L	139633	01/08/05 0752 kdl
8082	PCB Analysis								
	Aroclor 1016	0.59	u	0.18	0.59	1.00000	ug/L	139331	01/10/05 1343 bjt
	Aroclor 1221	1.3	u	0.42	1.3	1.00000	ug/L	139331	01/10/05 1343 bjt
	Aroclor 1232	1.3	u	0.35	1.3	1.00000	ug/L	139331	01/10/05 1343 bjt
	Aroclor 1242	1.3	u	0.43	1.3	1.00000	ug/L	139331	01/10/05 1343 bjt
	Aroclor 1248	1.5	u	0.48	1.5	1.00000	ug/L	139331	01/10/05 1343 bit
							-3, -		
								1.	1 :

<sup>\*</sup> In Description = Dry Wgt.

LABORATORY TEST RESULTS Job Number: 233168

Date:01/24/2005

CUSTOMER: MKM Engineers, Inc. ATTN: Eric ELLIS

Customer Sample ID: RVAAP14-001-WW Date Sampled....: 01/04/2005

Time Sampled....: 13:30 Sample Matrix...: Water Laboratory Sample 10: 233168-6
Date Received.....: 01/05/2005
Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	O FLAGS	MDL	RL.	DILUTION	UNITS	BATCH	DT	DATE/TIME	TEC
	Aroclor 1254 Aroclor 1260	1.3 0.59	ប	0.35 0.17	1.3 0.59	1.00000 1.00000		139331 139331		01/10/05 13 01/10/05 13	
80158 MDRO	TPH - Diesel Range Organics (DRO) 'Diesel Range Organics (DRO)	0_26		0.029	0 <b>.1</b> 2	1.00000	mg/L	139639		01/11/05 15	57 pjg
8015B MGRO	:TPH - Gasoline Range Organics (GRO) :Gasoline Range Organics (GRO)	50	บ	16	50	1.00000	ug/L	139475		01/14/05 10	ı17 wre
9014/90108	Cyanide (Colorimetric) Cyanide, Total	0.010	u	0.0044	0.010	1	mg/L	138894		01/06/05 12	:27 mtb
7.3.3.2/9014	Reactivity, Cyanide Reactivity, Cyanide	0.01	U	0.01	0.01	1	mg/L	138891		01/06/05 12	:27 mtb
71 <del>96</del> A	Hexavalent Chromium Hexavalent Chromium	0.010	П	0.0016	0.010	1	mg/L	138811		01/05/05 12	:27 pmf
1010	Ignitability (Pensky-Martens Closed-Cup) Ignitability (Flashpoint)	>200				1	degrees F	139323		01/12/05 13	i00 jmk
9040B	pH (Liquid) Corrosivity (pH-Liquids)	7.88		0.20	0.20	1	p# Units	139020		01/07/ <b>0</b> 5 15	i49 pmf
7.3.4.2/9034	Reactivity, Sulfide Reactivity, Sulfide	1.0		1.0	1.0	1	mg/L	139080		01/10/05 11	15 mtb
160.2	Solids, Total Suspended (TSS) Solids, Total Suspended (TSS)	10,000		80	100	1	mg/L	139081		01/10/05 09	?50 jmak

<sup>\*</sup> In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 233168 Date:01/24/2005

Customer Sample 10: RVAAP14-001-WW Date Sampled.....: 01/04/2005
Time Sampled.....: 13:30
Sample Matrix....: Water

Laboratory Sample 10: 233168-6 Date Received.....: 01/05/2005 Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	MDĽ	RL	DILUTION	UNITS	BATCH	DT DATE/1	1ME T	ECH
8330	Explosives by 8330 (HPLC)		i								
	HMX .	0.31	u	0.068	0.31	1.00000	ug/L	139536	01/14/05		
	RDX	0.20	U	0.064	0.20	1.00000	ug/L	139536	01/14/05		
	1,3,5-Trinitrobenzene	0.20	U	0.058	0.20	1.00000	ug/L	139536	01/14/05		
	1,3-Dinitrobenzene	0.20	U	0.055	0.20	1.00000	ug/L	139536	01/14/05		
	Nitrobenzene	0.16	U U	0.044	0.16	1.00000	ug/L	139536	01/14/05		
	2,4,6-TNT	0.25	u	0.078	0.25	1.00000	ug/L	139536	01/14/05		
	Tetryl	0.78	[2]	0.16	0.78	1.00000	ug/L	139536	01/14/05		
	2,4-Dinitrotoluene	0.36		0.12	0.36	1.00000	ug/L	139536	01/14/05		
	2,6-Dinitrotoluene	0.43	U	0.14	0.43	1.00000	ug/L	139536			
	2-Amino-4,6-Dinitrotoluene	0.36	U	0.12	0.36	1.00000	ug/L	139536	01/14/05		
	4-Amino-2,6-Dinitrotaluene	0.33	U	0.11	0.33	1.00000	ug/L	139536 139536	01/14/05		
	2-Nitrotoluene	0.31 0.31	u   U <sub>1</sub>	0.093 0.10	0.31 0.31	1.00000	ug/L	139536	01/14/09		
	4-Nitrotoluene		lu:			1.00000	ug/L ug/L	139536			
	3-Nitrotoluene	0.31	"	0.10	0.31	1.00000	ug/t	1 124230	0171470	2 2140 5	an
8332M	NG/PETN by 8332M (HPLC)							ì			
	Nitroglycerine	1.0	U	0.15	1.0	1.00000	ug/L	139539	01/13/0	5 2335 s	an
7041	Antimony (GFAA)								1		
	Antimony	7.5	U	2.5	7.5	1	ug/L	139271	01/11/0	5 1431 d	ia j
7060A	Arsenic (GFAA)			· ·					;	ŀ	
	Arsenic	230		10	40	20	ug/L	139527	01/13/0	5 1716 d	ja j
7421	Lead (GFAA)										
1751	Lead	270		7.9	30	10	ug/L	139356	01/12/0	5 1532 d	j ak
						1	•				
7841	Thallium (GFAA)	1 , 0	1	1 7	1 , 0	1,	1,000	170747	03/33/0	; <b>5 2221</b> d	dai
	Thallium	4.0	U	1.3	4.0	1'	ug/L	139367	01/12/0	ی جمد ر <sub>:</sub> ط	acti j

<sup>\*</sup> In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 233168

Date:01/24/2005

CUSTOMER: MKM Engineers, Inc. ATTW: Enic Ellis

Customer Sample (D: RVAAP14-001-WW Date Sampled....: 01/04/2005
Time Sampled....: 13:30
Sample Matrix....: Water

Laboratory Sample 1D: 233168-6 Date Received.....: 01/05/2005 Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT .	DATE/TI	ME.	TECH
7470A	Mercury (CVAA)								;			
	Mercury	2.3		0.063	0.20	1	ug/L	138921	01	1/06/05	1453	gok
6010B	Metals Analysis ([CAP Trace)			İ								!
	Atuminum	190000	1	24	150	1	ug/L	139714		1/18/05		
	Barium	840	1	1.3	10	1	ug/L	139714		1/ <b>1</b> 8/05		
	Beryllium	9.8	i	0.25	2.0	1	ug/L	139714	01	1/18/05	1149	tds
	Cadmium	4.9	1	0.25	2.0	1	ug/L	139714		1/18/05		
	Calcium	170000		9.5	100	1	ug/L	139714		1/18/05		
	Chromium	<b>310</b>		1.1	10	1	ug/L	139714		1/18/05		
	Cobalt	150	1 1	0.80	5.0	1	ug/L	139714		1/18/05		
	Copper	390		2.2	10	1	ug/L	139714		1/18/05		
	[ron	280000		38	120	1	ug/L	139710	0.	1/18/05	1748	tds
	Magnes i um	90000		8.1	100	[1	ug/L	139714	0.	1/18/05	1149	tds
	Manganese	5700		0.41	10	1	ug/L	139714	0'	1/18/05	1149	tds
	Nickel	370	1 1	1.0	10	1	ug/L	139714		1/18/05		
	Potassium	48000	<b> </b>	66	500	1	ug/L	139714		1/18/05		
	Selenium	3.6	B	3.0	15	1	ug/L	139710	lo.	1/18/05	1748	tds
	Silver	1.0	B	0.72	10	1	ug/L	139714		1/18/05		
	Sodium	31000		490	1500	1	ug/L	139710		1/18/05		
	Vanadi un	290		1.0	10	11	ug/L	139714		1/18/05		
	Zinc	1100		1.6	30	]1	ug/L	139714		1/18/05	1149	tds
8260B	Volatile Organics		it.					-				
	Chloromethane	1.0	[0]	0.080	1.0	1.00000	ug/L	139434	0	1/07/05	2331	jdn
	Vinyl chloride	1.0	U	0.080	1.0	1.00000	ug/L	139434	0	1/07/05	2331	jdn
	Bromomethane	1.0	U	0.10	1.0	1.00000	t/g/L	139434	0	1/07/05	2331	jdn
	Chloroethane	1.0	ט	0.080	1.0	1.00000	ug/L	139434		1/07/05		
	:1.1-Dichloroethene	1.0	u	0.12	1.0	1.00000	ug/L	139434	0	1/07/05	2331	jdn
				-								

<sup>\*</sup> In Description = Dry Wgt.

Job Number: 233168

LABORATORY TEST RESULTS

CUSTOMER: MKM Engineers, Inc. PROJECT: USAGE RWARP 14 AOCS

Date:01/24/2005

ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WW

Date Sampled....: 01/04/2005 Time Sampled....: 13:30

Sample Matrix....: Water

Laboratory Sample ID: 233168-6 Date Received.....: 01/05/2005

Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	O FLAGS	MOL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIM	E TECH
	Carbon disulfide	5.0	U	0.20	5.0	1.00000	ug/L	139434		01/07/05 2	331 jdn
	Acetone	9.5	J	1.8	10	1.00000	ug/L	139434		01/07/05 2	
	Methylene chloride	1.5	u	0.35	1.5	1.00000	∪g/L	139434		01/07/05 Z	
	trans-1,2-Dichloroethene	1.0	U	0.14	1.0	1.00000	ug/L	139434		01/07/05 2	
:	1,1-Dichloroethane	1.0	u	0.11	1.0	1.00000	ug/L	139434		01/07/05 2	
į	cis-1,2-Dichlaroethene	1.0	ป	0.090	1.0	1.00000	ug/L	139434		01/07/05 2	
	2-Butanone (MEK)	10	บ	1.2	10	1.00000	ug/L	139434		01/07/05 2	
1	Bromochloromethane	1.0	u	0.10	1.0	1.00000	ug/L	139434		01/07/05 2	
	Chlaroform	1.8	ļ	0.11	1.0	1.00000	ug/L	139434		01/07/05 2	
	1,1,1-Trichloroethane	1.0	u į	0.080	1.0	1.00000	ug/L	139434		01/07/05 2	
	Carbon tetrachloride		U	0,13	1.0	1.00000	⊔g/L	139434		01/07/05 2	
	Benzene		ប	0.090		1.00000	ug/L	139434		01/07/05 2	
	1,2-Dichloroethane	1.0	V	0.090		1.00000	ug/L	139434		01/07/05 2	
	Trichloroethene		ט	0.10	1.0	1,00000	ug/L	139434		01/07/05 2	
	1,2-Dichloropropane	1.0	V	0.12	1.0	1.00000	ug/L	139434		01/07/05 2	
	Bromodichloromethane	1.0	u	0.11	1.0	1.00000	ug/L	139434		01/07/05 2	
İ	cis-1,3-Dichloropropene	1.0	u	0.12	1.0	1.00000	ug/L	139434		01/07/05 2	
	4-Methyl-2-pentanone (MIBK)	10	u	0,65	10	1.00000	ug/L	139434		01/07/05 2	
	Toluene	1.0	U	0.10	1.0	1.00000	ug/L	139434		01/07/05 2	
•	trans-1,3-Dichloropropene	1.0	U	0.15	1.0	1.00000	ug/L	139434		01/07/05 2	
	1,1,2-Trichloroethane	1.0	U	0.15	1.0	1.00000	ug/L	139434		01/07/05 2	
	Tetrachloroethene	1.0	U	0.090	1.0	1.00000	ug/L	139434		01/07/05 2	
	2-Hexanone	10	lu !	0.53	10	1.00000	ug/L	139434		01/07/05 2	
	Dibromochloromethane	1.0	Uj	0.060	1.0	1.00000	ug/L	139434		01/07/05 2	
	1,2-Dibromoethane (EDB)	1.0	U	0.13	1.0	1.00000	ug/L	139434		01/07/05	
	Chlorobenzene	1.0	U	0.080	1.0	1.00000	ug/L	139434		01/07/05	
	Ethylbenzene	1.0	[U]	0.070	1.0	1.00000	ug/L	139434		01/07/05	
!	m&p-Xylenes	2.0	ט	0.18	2.0	11.00000	ug/L	139434		01/07/05 ( 01/07/05 (	
i	o-Xylene	1.0	u	0.080	1.0	1.00000	ug/L	139434		01/01/02	المصادحة

<sup>\*</sup> In Description = Dry Wgt.

Job Number: 233168

LABORATORY TEST RESULTS

Date: 01/24/2005

CUSTOMER: MKM Engineers, Inc.

PROJECT: USACE RVAAP 14 ACCS

ATTN: Eric Ellis

Customer Sample ID: RVAAP14-001-WW Date Sampled.....: 01/04/2005 Time Sampled.....: 13:30 Sample Matrix....: Water Laboratory Sample ID: 233168-6 Date Received....: 01/05/2005

Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FL	AGS	MD1.	RL.	DILUTION	UNITS	BATCH	Dī	DATE/TI	ME	TECH
	Styrene	1.0	υ		0.13	1.0	1.00000	ug/L	139434	Į.	01/07/05	2331	jdn
	Bromoform	1.0	u		0.11	1.0	1.00000	ug/L	139434		01/07/05		
	1,1,2,2-Tetrachloroethane	1.0	U		0.090	1.0	1.00000	ug/L	139434		01/07/05		
	1,2-Dichloroethene (total)	1.0	u		0.23	1.0	1,00000	ug/L	139434		01/07/05		1 '
	Xylenes (total)	1.0	u		0.28	1.0	1.00000	ug/L	139434		01/07/05	2551	Jdn
8270c	Semivolatile Organics			Į								47/0	١.,
	Phenol, Low Level Water	5.5	U	ĺ	0.38	5.5	1.00000	ug/L	139616		01/14/05		
	Bis(2-chloroethyl)ether, Low Level Water	2.2	u	1	0.33	2.2	1.00000	ug/L	139616		01/14/05		
	1,3-Dichlorobenzene, Law Level Water	2.2	U		0.47	2.2	1.00000	ug/L	139616		01/14/05		
	1,4-Dichlorobenzene, Low Level Water	2.2	រូប		0,36	2.2	1.00000	ug/L	139616		01/14/05		
	1,2-Dichlorobenzene, Low Level Water	2.2	]U		0.38	2.2	1.00000	ug/L	139616		01/14/05		
	Benzyl alcohol, Low Level Water	22	U		2.4	22	1.00000	ug/L	139616		01/14/05		
	2-Methylphenol (o-cresol), Low Level Water	2.2	U		0.29	2.2	1.00000	ug/L	139616		01/14/05		
	2,2-oxybis (1-chloropropane), Law Level Water	2.2	ΙV		0.31	2.2	1.00000	ug/L	139616		01/14/05		
	n-Nitroso-di-n-propylamine, Low Level Water	0.55	U		0.089	0.55	1.00000	ug/L	139616		01/14/05		
	Hexachtoroethane, Low Level Water	5.5	u		0,67	5.5	1.00000	ug/L	139616		01/14/05		
	4-Methylphenol (m/p-cresol), Low Level Water	2.2	u		0.11	2.2	1.00000	ug/L	139616		01/14/05		
	2-Chlorophenol, Low Level Water	5.5	4		0.13	5.5	1.00000	ug/L	139616		01/14/05		
	Nitrobenzene, Low Level Water	1.1	u		0.18	1.1	1.00000	ug/L	139616		01/14/05		
	Bis(2-chloroethoxy)methane, Low Level Water	2.2	u		0.34	2.2	1.00000	ug/L	139616		01/14/05		
	1,2,4-Trichlorobenzene, Low Level Water	2.2	u		0.37	2.2	1.00000	ug/L	139616		01/14/05		
	Benzoic acid, Low Level Water	22	u		3.3	22	1.00000	ug/L	139616		01/14/05		
	Isophorone, Low Level Water	2.2	Ψį		0.29	2,2	1.00000	ug/L	139616		01/14/05		
	2,4-Dimethylphenol, Low Level Water	11	U		1.4	11	1.00000	ug/L	139616		01/14/05		
	Hexachlorobutadiene, Low Level Water	5.5	3 <b>U</b>		0.70	5.5	1.00000	ug/L	139616		01/14/05		
	Naphthalene, Low Level Water	1.1	U		0.18	1.1	1.00000	ug/L	139616		01/14/05		
	2,4-Dichlorophenol, Low Level Water	11			1.0	11	1.00000	ug/L	139616		01/14/05		
	4-Chloroaniline, Low Level Water	11	U		3.1	11	1.00000	ug/L	139616		01/14/05	1540	/ apx
							1						

<sup>\*</sup> In Description = Dry Wgt.

Job Number: 233168

LABORATORY TEST RESULTS

Date:01/24/2005

CUSTOMER: MKM Engineers, Inc. Attm: Eric Ellis

Customer Sample ID: RVAAP14-001-WW Date Sampled.....: 01/04/2005 Time Sampled.....: 13:30 Sample Matrix....: Water

Laboratory Sample 10: 233168-6
Date Received.....: 01/05/2005
Time Received.....: 10:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	MOL	RL	DILUTION	UNITS	BATCH	DΤ	DATE/T	IME TECH
	2,4,6-Trichlorophenol, Low Level Water	5.5	U	0.23	5.5	1,00000	ug/L	139616		01/14/05	1340 dpk
	2,4,5-Trichtorophenol, Low Level Water	11	U	1.5	11	1.00000	ug/L	139616			1340 dpk
	Hexachlorocyclopentadiene, Low Level Water	į <b>22</b>	ย	0.71	22	1.00000	ug/L	139616			1340 dpk
	-2-Methylnaphthalene, Low Level Water	0.55	Ψ	0.14	0.55	1.00000	ug/L	139616			1340 dipk
	,2-Nitroaniline, Low Level Water	5.5	U	0.24	5.5	1.00000	ug/L	139616		81/14/05	1340 dapk
	2-Chloronaphthalene, Low Level Water	2.2	U	0.29	2.2	1.00000	ug/L	139616			1340 dok
	4-Chloro-3-methylphenol, Low Level Water	j 11	υl	2.6	11	1.00000	ug/L	139616			1340 dpk
	2,6-Dinitrotoluene, Low Level Water	0,55	U	0.12	0,55	1.00000	ug/L	139616			1340 dipk
	2-Nitrophenol, Low Level Water	11	υl	0.90	11	1.00000	ug/L	139616			1340 dpk
	3-Mitroaniline, Low Level Water	11	U	2.3	11	1.00000	ug/L	139616			1340 dpk
	Dimethyl phthalate, Low Level Water	2.2	U	0.23	2.2	1.00000	ug/L	139616			1340 dpk
	2,4-Dinitrophenol, Low Level Water	22	u	3.6	22	1.00000	ug/L	139616			1340 dpk
	Acenaphthylene, Low Level Water	1.1	U	0,13	1.1	1.00000	ug/L	139616			1340 dpk
	2,4-Dinitrotoluene, Low Level Water	1.1	U	0.14	1.1	1.00000	ug/L	139616			1340 dpk
	Acenaphthene, Low Level Water	1.1	uļ	0.13	1.1	1.00000	ug/L	139616			1340 dpk
	Dibenzofuran, Low Level Water	2.2	u	0.14	2.2	1.00000	ug/L	139616			1340 dpk
	4-Nitrophenol, Low Level Water	22	ļu	4,1	22	1.00000	ug/L	139616			1340 dpk
	Fluorene, Low Level Water		U	0.14	1.1	1.00000	ug/L	139616			1340 dpk
	4-Nitroaniline, Low Level Water	11	10	2.5	11	1.00000	ug/L	139616			1340 dpk
	4-Bromophenyl phenyl ether, Low Level Water	5.5	U	0.21	5.5	1.00000	ug/L	139616			1340 dpk
1	Hexachlorobenzene, Low Level Water	0.55	U	0.11	0.55	1.00000	ug/L	139616			1340 dpk
:	Diethyl phthalate, Low Level Water	2.2	[9]	0.16	2.2	1.00000	ug/L ·	139616			1340 dpk
:	4-Chlorophenyl phenyl ether, Low Level Water	5.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.82	5.5	1.00000	ug/L	139616	İ		1340 dpk
	Pentachlorophenol, Low Level Water	11	וטו	1.9	11	1.00000	ug/L	139616			1340 dpk
	n-Mitrosodiphenylamine, Low Level Water	1.1		0.14	1.1	1.00000	ug/L	139616			1340 dpk
	4,6-Dinitro-2-methylphenol, Low Level Water	22	[2]	2.6	22	1.00000	ug/L	139616			1340 dpk
	Phenanthrene, Low Level Water		U	0.15	1.1	1.00000	ug/L	139616			1340 dpk
	Anthracene, Low Level Water	1.1	U	0.16	1.1	1.00000	ug/L	139616			1340 dpk
	Carbazole, Low Level Water	5.5	u	0.32	5.5	1.00000	ug/L	139616		V 1/ 14/05	i 1340 dpk

<sup>\*</sup> In Description = Dry Wgt.

Job Number: 233168

LABORATORY TEST RESULTS

CUSTOMER: MKH Engineers, Inc.) ATTN: Eric ELLIs

Customer Sample ID: RVAAP14-001-WW Date Sampled....: 01/04/2005

Time Sampled....: 13:30 Sample Matrix....: Water

Laboratory Sample ID: 233168-6 Date Received.....: 01/05/2005 Time Received.....: 10:35 Date:01/24/2005

TEST METHOD PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MOL	RL	DILUTION	UNITS	BATCH	ÞΤ	DATE/TI	ME T	ECH
Di-n-butyl phthalate, Low Level Water Fluoranthene, Low Level Water Pyrene, Low Level Water Butyl benzyl phthalate, Low Level Water Benzo(a)anthracene, Low Level Water Chrysene, Low Level Water 3,3-Bichlorobenzidine, Low Level Water Bis(2-ethylhexyl)phthalate, Low Level Water Benzo(b)fluoranthene, Low Level Water Benzo(b)fluoranthene, Low Level Water Benzo(a)pyrene, Low Level Water Benzo(a)pyrene, Low Level Water Indeno(1,2,3-cd)pyrene, Low Level Water Dibenzo(a,h)anthracene, Low Level Water Benzo(ghi)perylene, Low Level Water	5.5 1.1 1.1 2.2 0.22 0.55 5.5 16 11 0.44 0.44 0.44 0.44 1.1	*	0.40 0.15 0.13 0.43 0.054 0.049 0.79 4.3 2.7 0.074 0.079 0.092 0.095 0.14 0.21	5.5 1.1 1.1 2.2 0.22 0.55	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	139616 139616 139616 139616 139616 139616 139616 139616 139616 139616 139616 139616	THE REPORT OF THE PARTY OF THE	01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05 01/14/05	1340 c 1340 c 1340 c 1340 c 1340 c 1340 c 1340 c 1340 c 1340 c 1340 c	

<sup>\*</sup> In Description = Dry Wgt.

### STL CHICAGO

### Client Sample ID: RVAAP14-001-WW

### Trace Level Organic Compounds

Lot-Sample #: Date Sampled: Prep Date:	01/04/05 13:30	Work Order #: Date Received: Analysis Date:	01/05/05	Matrix WATER	
Prep Batch #: Dilution Factor:		Initial Wgt/Vol:	10 mL	Final Wgt/Vol: 10 mL	
PARAMETER		RESULT	DETECTION LIMIT	UNITS METHOD  WONE DV/HPIC Del	 r

15 J

20

ug/L

NOTE (S):

Nitroguanidine

NONE UV/HPLC per

J Estimated result. Result is less than the reporting limit.

### STL CHICAGO

### Client Sample ID: RVAAP14-001-WW

### General Chemistry

Lot-Sample #...: G5A050217-002 Work Order #...: G15W4 Date Sampled...: 01/04/05

Date Received..: 01/05/05

PREP PREPARATION-

Matrix..... WATER

ANALYSIS DATE BATCH # RESULT METHOD RL UNITS PARAMETER 01/17-01/18/05 5017497 MCAWW 353.2 ND 0.50 mg/L Nitrocellulose

MDL..... 0.12