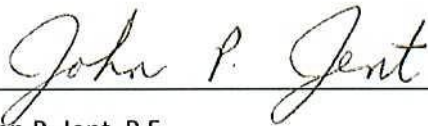


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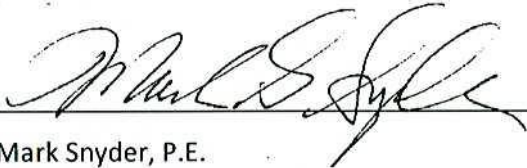
Prudent Technologies, Incorporated (Prudent) has completed the Project Management Plan and Work Plan for the Sampling and Closure of Load Lines 1, 2, 3, 4, 12 and Others at the Ravenna Army Ammunition Plant, Ravenna, Ohio. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of data quality objectives; technical assumptions; methods, procedures, and materials to be used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing United States Army Corps of Engineers policy.



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March 5, 2010

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Final Sampling Report of Surface and Subsurface Incremental Sampling Methodology at Load Lines 1, 2, 3, and 4 (RVAAP-08, 09, 10, and 11)

Volume One – Main Text, Appendices A and B

Ravenna Army Ammunition Plant

Ravenna, Ohio

Contract No. W912QR-10-P-0037

Prepared for:



**US Army Corps
of Engineers®**

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March 5, 2011

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COR – Contracting Officer’s Representative
USACE – U.S. Army Corps of Engineers
RVAAP – Ravenna Army Ammunition Plant
OHARNG – Ohio Army National Guard
OHEPA – Ohio Environmental Protection Agency
REIMS – Ravenna Environmental Information System
USAEC – U.S. Army Environmental Command

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APPENDIX

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Appendix K – Comment Response Tables from Draft Review

ACRONYMS AND ABBREVIATIONS

ACSIM	Assistant Chief of Staff for Installation Management
ADR	Automated Data Review
AEC	Army Environmental Command
AOC	Area of Concern
bgs	Below ground surface
BRACD	Base Realignment and Closure Division
Camp Ravenna	Camp Ravenna for Ravenna Military Joint Training Center
CCV	Continuing Calibration Verification
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COR	Contracting Officer Representative
CSM	Conceptual Site Model
CUG	Clean-up Goal
CUGadj	Cleanup Goal, adjusted
CUGIROD	Cleanup Goal from IROD
CPR	Cardio Pulmonary Resuscitation
DFFOs	Director's Final Findings and Orders
DNT	Dinitrotoluene, also 2,4-Dinitrotoluene
DOD	Department of Defense
DOT	Department of Transportation
DQO	Data Quality Objective
DMM	Discarded Military Munitions
DU	Decision Unit
EDD	Electronic Data Deliverable
EPA	Environmental Protection Agency
eQAPP	electronic Quality Assurance Project Plan
ESS	Explosives Safety Submission
FS	Feasibility Study
FSP	Field Sampling Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
FWSHP	Facility-Wide Safety and Health Plan
GPS	Global Positioning System
HASP	Health and Safety Plan (or Safety and Health Plan)
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICV	Initial Calibration Verification
IDW	Investigation-Derived Waste
IROD	Interim Record of Decision
IRP	Installation Restoration Program
ISM	Incremental Sampling Methodology
JOAAP	Joliet Army Ammunition Plant
JSA	Job Safety Analysis
LCS	Laboratory Control Sample
LDC	Laboratory Data Consultants
MDL	Method Detection Limit
MEC	Munitions and Explosives of Concern
MRS	Munitions Response Site
MS/MSD	Matrix Spike/Matrix Spike Duplicate

NGB	National Guard Bureau
OHARNG	Ohio Army National Guard
OHEPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCP	Project Coordination Plan
PPE	Personal Protective Equipment
PID	Photo Ionization Detector
PIKA	PIKA International, Inc.
PRGs	Preliminary Remediation Goals
Prudent	Prudent Technologies Inc.
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RDX	Royal Demolition Explosive (1,3,5-Trinitroperhydro-1,3,5 triazine; Cyclotrimethylenetrinitramine)
REIMS	Ravenna Environmental Information Management System
RI	Remedial Investigation
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
RSD%	Relative Standard Deviation Percent
RSL	Regional Screening Level
RVAAP	Ravenna Army Ammunition Plant
SAP	Sampling and Analysis Plan
SRC	Site-Related Contaminant
SSHP	Site Safety and Health Plan
SVOC	Semi-volatile organic compound
SWPPP	Storm Water Pollution Prevention Plan
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TNT	Trinitrotoluene (2,4,6-Trinitrotoluene)
SOW	Scope of Work
UCL	Upper Confidence Level
USACE	United States Army Corps of Engineers
USATCES	United States Army Technical Center for Explosives Safety
USP&FO	United States Property and Fiscal Officer
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

Introduction

In 1999 and 2007 the buildings at Load Line 1 and Load Lines 2, 3, and 4, respectively, were demolished. The floor slabs and foundations were left in place due to lack of funding for their removal. Remedial investigations of Load Line 1 and Load Lines 2, 3, and 4 were completed in 2003 and 2004, respectively. The subsequent feasibility study, record of decision, remedial action work plan and remedial action for all four load lines were based on a future land use of the Ohio Army National Guard (OHARNG) training under a set of exposure assumptions. In 2007, remediation of areas outside of the building footprints was conducted to facilitate training of the OHARNG per the initial training exposure assumptions. As that remediation was being completed, additional Army funding became available which allowed for the removal of the building floor slabs and foundations in 2008 and 2009. Additionally, the set of assumptions associated with the OHARNG training had to be modified to account for changes in mission and training. Concurrent with the floor slab and foundation removal, URS Corporation determined levels of residual contamination in the soil below the floor slabs, and where those levels were above the project cleanup goals, removed those areas of soil. The subsurface characterization performed after the floor slabs were removed extended to a depth of four feet below ground surface (bgs) and the resulting subsurface samples were field screened only.

Prudent Technologies Inc. (Prudent) was contracted performed sampling and characterization of deeper subsurface soils beneath the former building slabs via subsurface soil Incremental Sampling Methodology (ISM). Laboratory analysis was used to determine if contamination was present in soils. Subsequent to this sampling and analyses, Prudent in the follow-on Land Use Control Assessment will compile all current and previous environmental sampling data and evaluate these against a more stringent set of cleanup goals that may reduce land use restrictions for the OHARNG. Prudent will then perform additional characterization, if needed, and conduct additional remediation if warranted. The results of these activities will be presented in a summary document with the goal of achieving Unrestricted Ohio Army National Guard Use.

December 2009 Surface Soil ISM Sampling

During December 2009, members of the USACE - Louisville District and Ohio Environmental Protection Agency (OHEPA) collected and analyzed surface soil ISM samples around selected former building floor slabs at Load Lines 1, 2, 3, 4 and Buildings F-15 and F-16 to determine if contamination was spread during the demolition of buildings at these areas of concern (AOCs). Additional surface soil ISM samples in former coal and ore storage areas at Load Lines 1, 2, 3, 4, 12, and Buildings F-15 and F-16 were collected and analyzed to provide preliminary data for a future remedial investigation of these sites. This investigation was conducted as prescribed in a Technical Memorandum dated November 20, 2009. The results of this surface soil ISM will be included in the Land Use Control assessment to characterize soil contamination adjacent to the former coal and ore storage areas at Load Lines 1, 2, 3, and 4. Explosives were the primary contaminants of concern in the sampled areas. The explosives analyses included trinitrotoluene (TNT), which is the only contaminant that warranted removal actions during URS's under-slab investigations. Previously, a remedial action was completed for areas outside of the building footprints before the buildings and/or slabs were demolished. There were several remediation areas containing high concentrations of metals. Due to these findings, USACE analyzed 100 percent of the samples for explosives. One hundred percent of the samples taken around the melt pour buildings were analyzed for target analyte list (TAL) metals, and ten percent of the samples were analyzed for the

full suite, as required by the Ravenna Facility-Wide Sampling and Analysis Plan (FWSAP). The full suite of analyses at RVAAP includes TAL metals, mercury, explosives, propellants, semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), and volatile organic compounds (VOCs). Samples for VOCs analyses were taken from the approximate middle of the associated ISM sampling areas. The sampling of surface soils at these AOCs was done using ISM samples with a minimum of 30 aliquots taken within each sampling area at a depth of 0 to 1.0 feet below ground surface, unless refusal was encountered prior to reaching a depth of 1.0 feet. Where refusal was encountered prior to reaching a depth of 1.0 feet bgs, the sample was collected to the depth below ground surface at which refusal was encountered. The aliquots were collected in a systematic random manor. Additional sampling of these areas may be required after the results of this sampling effort have been assessed.

Within Load Line 1, the coal storage area associated with the powerhouse CC-1 was sampled. Within Load Line 2, the coal storage area associated with powerhouse DC-1 was sampled. Within Load Line 4, the coal storage area associated with powerhouse G-4 was sampled. Within Load Line 12, two coal storage areas were sampled. Within the Buildings F-15 and F-16 AOCs, coal storage areas associated with the two buildings were sampled. Samples collected from the coal storage areas were analyzed for TAL metals and SVOCs. Additionally, 10 percent of the samples from each AOC were tested for the full analytical suite, in accordance with the FWSAP.

August 2010 Subsurface Soil ISM Sampling

Subsurface soil ISM was conducted by Prudent in August and September of 2010 beneath the footprints of the previously determined high priority buildings at Load Lines 1, 2, 3, and 4 to determine if there was residual soil contamination above project specific cleanup goals over the depth range of 1.0 to 7.0 feet bgs. The goal at each planned Geoprobe boring location was to advance the boring to a depth of seven feet bgs. This would allow subsurface soil horizontal ISM samples to be collected over depth ranges of from 1 to 3, 3 to 5, and 5 to 7 feet bgs. It would also allow a set of subsurface soil vertical ISM samples, one from each Geoprobe boring within a sample area, to be collected. A Geoprobe Model 6620 T (track-mounted) drilling rig was used to perform all drilling associated with this project. Surface maneuvering of the drilling rig was controlled remotely by the driller and the unit was easily positioned over the planned boring locations.

The goals of the processing of the Geoprobe samples were to prepare one set of representative, repeatable horizontal ISM and vertical ISM subsurface soil samples for VOC analyses (methanol preserved) and another set of representative and repeatable subsurface soil samples for non-VOC analyses. Additionally, the materials contained within the Geoprobe tubes were logged geotechnically.-

The general process to collect subsurface soil ISM samples for VOC analysis was to collect nominal 5-gram plugs of soil via Terra Core® samplers immediately after opening the Geoprobe tubes, then placing the plugs of soil into bottles containing methanol to prevent release of VOCs prior to their analyses. The jars of methanol and soil were then maintained on ice until they were received at the laboratory.

The general process to collect horizontal subsurface soil ISM samples for non-VOC analysis was to utilize aluminum wedge samplers to collect portions of material over an entire two-foot interval, either 1 to 3, 3 to 5, or 5 to 7 feet, and place that material into a five-gallon bucket. The bucket was lined with a plastic garbage disposal bag containing materials from the other borings within that sample area (building) from only the designated depth interval. Thus for each sample area, there were three five-gallon buckets, one designated for each of the three depth intervals, into which materials from the designated depths over all the borings within that sample area were collected. Generally, two runs down

a 2-foot interval were taken and placed in the appropriate bucket. The wedge sampler itself was a 9 to 10-inch long piece of ½-inch by ½-inch aluminum channel with a sharp point at one end of the piece. The wedge sampler proved to be very effective in collecting small soil size materials within the encountered matrix of debris, slag, large gravel, and rock fragments and in cutting hard clay.

The general process to collect vertical subsurface soil ISM samples for non-VOC analysis was similar to that used for horizontal subsurface soil ISM samples except that lesser amounts of material were collected down the entire length of a boring. A plastic coffee can, lined with a one-gallon Ziploc® bag, was used to collect vertical samples. Approximately the same amount of material from each 2-foot interval was added to the lined coffee can. At the completion of the sample collection, the one-gallon Ziploc® bag was removed from the coffee can, labeled, wrapped with a rubber band and placed in another similar Ziploc® bag with a second identical label and again wrapped with a rubber band. Finally, it was placed in a cooler of ice for subsequent shipment to the laboratory.

All horizontal subsurface soil ISM samples were analyzed for explosives and TAL metals. At least 10 percent of the horizontal subsurface soil ISM samples were analyzed for the Ravenna full suite set of analyses. Vertical subsurface soil ISM samples in a given sample area were only analyzed if one of the corresponding horizontal subsurface soil ISM samples in that sample area had exceedances of the project cleanup goals.

Sampling Results

All results were compared with the minimum of the appropriate sets of cleanup goals (CUGs) for the National Guard Trainee and Resident Adult Farmer or the Regional Screening Level (RSL) where no CUGs are in place.

December 2009 Surface Soil ISM Results

Load Line 1 Surface Soil ISM Results

Only the SVOCs (benzo (a) pyrene and dibenzo (a,h) anthracene) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- SVOCs were detected in Buildings CB-4/CB-4WS and CB-4A/CB-4AWN. For Building CB-4/CB-4WS all three samples (primary, field duplicate, and blind duplicate) were above the CUGs for benzo (a) pyrene and dibenzo (a,h) anthracene. Benzo (a) pyrene ranged from 0.24 mg/kg for the primary, which carried a J flag qualifier, 0.52 mg/kg for the field duplicate, and 0.36 mg/kg for the blind duplicate sample. For Building CB-4A/CB-4AWN, only the field duplicate sample was above the CUG for benzo (a) pyrene at 0.38 mg/kg.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

Load Line 2 Surface Soil ISM Results

Only SVOCs (benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, and n-nitroso-di-n-propylanine) and PCBs (Aroclor 1524) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- SVOCs were detected in Buildings DB-4A/DB-4AWS and DB-4/DB-4WS. For Building DB-4A/DB-4AWS only the primary and blind duplicate samples were above the CUG for benzo (a) pyrene at 0.24 and 0.25 mg/kg; however, these results carry a J flagged qualifier. For Building DB-4/DB-4WS only the primary sample was above the CUG for benzo (a) anthracene, benzo (a) pyrene, and benzo (b) fluoranthene, at 3.9 mg/kg, 3.8 mg/kg, and 5.1 mg/kg.
- Pesticides and PCBs were detected at Building DB-4/DB-4WS. Only the primary sample was above the CUG at 13 mg/kg for Aroclor 1254.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.

Load Line 3 Surface Soil ISM Results

Only Aroclor 1254 was detected above the CUG. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- SVOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- Pesticides and PCBs were detected at Building EB-4/EB-4WS/EB-4WN. Only the field duplicate sample was above the CUG at 3.4 mg/kg for Aroclor 1254. Both the primary and blind duplicate samples were below the CUG.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.

Load Line 4 Surface Soil ISM Results

- None of the chemicals were detected above the CUGs in any of the samples collected from the buildings at Load Line 4.

Coal Storage Areas Surface Soil ISM Results

Only SVOCs (benzo (a) pyrene, and benzo (b) fluoranthene) were detected above the CUG. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.

- Explosives were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.
- SVOCs were detected in Building CC-1 for Load Line 1 and DC-1 for Load Line 2. For Load Line 1 Building CC-1 primary sample was above the CUG for benzo (a) pyrene at 0.84 mg/kg; however, these results carry a J flag qualifier.
- For Load Line 2 Building DC-1 all three samples (primary, field duplicate, and blind duplicate) were above the CUG for benzo (a) pyrene 1.4 mg/kg, 1.6 mg/kg, and 1.1 mg/kg respectively; however, these results carry a J flag qualifier. The DC-1 result for benzo (b) fluoranthene was reported at 2.5 mg/kg, which is also above the CUG.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.
- VOCs were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.

August 2010 Subsurface Soil ISM Results

Load Line 1 Subsurface Soil ISM Results

Only SVOCs (benzo (a) pyrene, benzo (a) anthracene, and benzo (b) fluoranthene) and the explosive trinitrotoluene (TNT) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- TNT was detected in the samples from Building CB-4A with a maximum concentration of 17,000 mg/kg.
- Propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- SVOCs were detected in Building CA-6 with maximum concentrations of 5.5 mg/kg of benzo (a) pyrene, 3.5 mg/kg of benzo (a) anthracene, and 5.5 mg/kg of benzo (b) fluoranthene.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

Load Line 2 Subsurface Soil ISM Results

Only the explosive TNT was detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- TNT was detected in the samples from Building DA-6 with a maximum concentration of 230 mg/kg.
- Propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.

- SVOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.

Load Line 3 Subsurface Soil ISM Results

Only arsenic and benzo (a) pyrene were detected above the CUGs. Below is a brief summary of results:

- Arsenic was detected in Buildings EA-6 and EB-10 with a maximum concentration of 30.3 mg/kg. No other metals were detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- The SVOC benzo (a) pyrene was detected above its CUG at Building EB-10 with a maximum concentration of 1.6 mg/kg.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.

Load Line 4 Subsurface Soil ISM Results

Only the SVOCs (benzo (a) pyrene, benzo (a) anthracene, benzo (b) fluoranthene, benzo (k) fluoranthene, dibenzo (a,h) anthracene, and indeno (a,2,3-cd) pyrene) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- SVOCs were detected in Building G-8 with maximum concentrations of 51 mg/kg of benzo (a) pyrene, 54 mg/kg of benzo (a) anthracene, 61 mg/kg of benzo (b) fluoranthene, 27 mg/kg of benzo (k) fluoranthene, 0.48 mg/kg of dibenzo (a,h) anthracene, and 29 mg/kg of indeno (a,2,3-cd) pyrene.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.

Quality Control

To statistically and comprehensively evaluate the total sampling and analysis repeatability for each sample area/decision unit (DU), completely separate, replicate ISM samples (collected from a set of systematic random or stratified random locations within the DU that are different from those used for the initial ISM samples) were collected from selected DUs (see *Hawaii Dept. of Health, Technical Guidance*

Manual for the Implementation of the Hawaii State Contingency Plan). The replicate surface and subsurface soil ISM samples that were sent to the primary laboratory were called the Field Blanks, and the second replicate surface and subsurface soil ISM samples that were sent to the quality assurance laboratory were called the Duplicates. The replicates were made up of the same number of aliquots as the initial or primary sample. The replicate samples were prepared and analyzed in the same manner as carried out for the initial sample. Triplicate samples (i.e., initial ISM sample plus two replicates) are preferred and more useful than duplicates for statistical evaluation. The Primary and Field Blank samples were sent to the primary laboratory, and the Duplicate samples were sent to a second independent laboratory. The relative standard deviations (RSDs) of the triplicate sets of values were used to evaluate repeatability. RSDs were only calculated for a given chemical when there were detections in the primary, field duplicate, and blind duplicate samples. An average of the RSDs associated with a given analysis was then calculated.

The average metals RSD of 25 percent for surface soil ISM samples and 28 percent for subsurface soil ISM samples are below the 35 percent threshold generally accepted as indicating repeatability. The much larger RSDs for the other contaminant groups reflect averages based on few detections of generally very low values.

Conclusions

Of the total of 411 (81 horizontal and 330 vertical) planned subsurface soil ISM samples, a total of 86 horizontal subsurface soil ISM samples and 314 vertical subsurface soil ISM samples were collected over a period of 13 work days.

The tools and procedures utilized to prepare subsurface soil ISM samples from the Geoprobe liners for both VOC and non-VOC analyses worked well. The Geoprobe rig successfully collected subsurface materials down to a depth below ground surface of seven feet through original clays and fill over weathered rock in most cases, and generally to depths at least several feet into weathered rock.

Triplicate surface and subsurface ISM sample results used to evaluate repeatability indicated repeatability when there were at least ten detections that occurred in the primary, field blank, and duplicate samples.

1.0 BACKGROUND

1.1 FACILITY DESCRIPTION

When the RVAAP Installation Restoration Program (IRP) began in 1989, the Ravenna Army Ammunition Plant (RVAAP) was identified as a 21,419-acre installation. The property boundary was resurveyed by the Ohio Army National Guard (OHARNG) over a two year period (2002 and 2003) and the actual total acreage of the property was found to be 21,8683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683-acre RVAAP have been transferred to the U.S. Property and Fiscal Officer for Ohio and subsequently licensed to the OHARNG for use as a military training site. The current RVAAP consist of 1,280 acres scattered throughout the OHARNG Camp Ravenna Joint Military Training Center (Camp Ravenna). Camp Ravenna is located in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 kilometers (3 miles) east-northeast of the City of Ravenna and approximately 1.6 kilometers (1 mile) northwest of the City of Newton Falls. The RVAAP portions of the property are solely located within Portage County. The Camp Ravenna/RVAAP is a parcel of property approximately 17.7 kilometers (11 miles) long and 5.6 kilometers (3.5 miles) wide. It is bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east. Several communities surround Camp Ravenna: Windham on the north; Garrettsville 9.6 kilometers (6 miles) to the northwest; Newton Falls 1.6 kilometers (1 mile) to the southeast; Charlestown to the southwest; and Wayland 4.8 kilometers (3 miles) to the south. When RVAAP was operational, Camp Ravenna did not exist and the entire 21,683-acre parcel was a government-owned, contractor-operated industrial facility. The RVAAP IRP encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP and therefore references to the RVAAP in this document are considered to be inclusive of the historical extent of the RVAAP, which is inclusive of the combined acreages of the current Camp Ravenna and RVAAP, unless otherwise specifically stated.

1.2 PURPOSE AND SCOPE

In 1999 and 2007 the buildings at Load Line 1 and Load Lines 2, 3, and 4, respectively, were demolished. The floor slabs and foundations were left in place due to lack of funding for their removal. Remedial investigations of Load Line 1 and Load Lines 2, 3, and 4 were completed in 2003 and 2004, respectively. The subsequent feasibility study, record of decision, remedial action work plan and remedial action for all four load lines were based on a future land use of the Ohio Army National Guard (OHARNG) training under a set of exposure assumptions. In 2007, remediation of areas outside of the building footprints was conducted to facilitate training of the OHARNG per the initial training exposure assumptions. As that remediation was being completed, additional Army funding became available which allowed for the removal of the building floor slabs and foundations in 2008 and 2009. Additionally, the set of assumptions associated with the OHARNG training had to be modified to account for changes in mission and training. Concurrent with the floor slab and foundation removal, URS Corporation determined levels of residual contamination in the soil below the floor slabs, and where those levels were above the project cleanup goals, removed those areas of soil. The subsurface characterization performed after the floor slabs were removed extended to a depth of four feet below ground surface (bgs) and the resulting subsurface samples were field screened only.

During December 2009, members of the USACE - Louisville District and Ohio Environmental Protection Agency (OHEPA) collected and analyzed surface soil ISM samples around selected former building floor slabs at Load Lines 1, 2, 3, 4 and Buildings F-15 and F-16 to determine if contamination was spread during the demolition of buildings at these areas of concern (AOCs). Additional surface soil ISM samples in former coal and ore storage areas at Load Lines 1, 2, 4, 12, and Buildings F-15 and F-16 were collected and analyzed to provide preliminary data for a future remedial investigation of these sites.

Prudent Technologies Inc. (Prudent) was contracted performed sampling and characterization of deeper subsurface soils beneath the former building slabs via subsurface soil Incremental Sampling Methodology (ISM). Laboratory analysis was used to determine if contamination was present in soils. Subsequent to this sampling and analyses, Prudent in the follow-on Land Use Control Assessment will compile all current and previous environmental sampling data and evaluate these against a more stringent set of cleanup goals that may reduce land use restrictions for the OHARNG. Prudent will then perform additional characterization, if needed, and conduct additional remediation if warranted. The results of these activities will be presented in a summary document with the goal of achieving Unrestricted Ohio Army National Guard Use.

1.3 PROJECT MANAGEMENT PLAN AND WORK PLAN

A Project Management Plan (Prudent, 2010a) and a Work Plan (Prudent, 2010b) were developed to prescribe the manner in which the individual tasks associated with this project were to be conducted. Specifically, the work plan included the following appendices:

- A Field Sampling Plan (FSP) Addendum
- B Quality Assurance Project Plan (QAPP) Addendum
- C Munitions and Explosives of Concern (MEC) Anomaly Avoidance Plan
- D Site Safety and Health Plan (SSHP) Addendum
- E Storm Water Pollution Prevention Plan
- F Contractor Quality Assurance Plan

Work activities were conducted in accordance with the Project management Plan and Work Plan.

1.4 DATA QUALITY OBJECTIVES

The major project data quality objective (DQO) is to provide representative, repeatable, high quality characterization of soil contamination over a depth range of 1.0 to 7.0 feet bgs via subsurface ISM sampling below the footprints of selected former buildings at Load Lines 1, 2, 3, and 4.

1.4.1 Conceptual Site Model

The facility-wide conceptual site model (CSM) for all media except subsurface soil for RVAAP, presented in the Facility-Wide Sampling and Analysis Plan (FWSAP), is applicable to Load Lines 1, 2, 3, 4, and 12 based on current knowledge. The conceptual site model for subsurface soil is described in the FSP Addendum for this project. The historical production activities at each of the load lines are documented in the archives. Environmental contamination of subsurface materials is discussed below (Brockman and Szabo, Christy Forsyth, and Weatherington-Rice, 1999).

1.4.2 Defining the Problem

Comprehensive surface soil (0 to 1.0 foot) bgs sampling has been accomplished within the footprints of recently demolished buildings at Load Lines 1, 2, 3, and 4 to characterize contamination within surface soils. Discrete subsurface core sampling to characterize contamination in the subsurface was taken to a depth of only four feet, and those samples were subjected to field screening only. Based on the laboratory analytical results of the ISM surface soil samples and the field screening results of the discrete subsurface samples, removal of soil having levels of contaminants in excess of the cleanup goals (CUGs) was performed by others. Additional comprehensive ISM push probe subsurface soil sampling was performed as discussed herein to better characterize soil contamination, if any, within the non-remediated subsurface zones. The results of the URS sampling conducted after removal of the slabs and foundations of the buildings at Load Lines 1, 2, 3, and 4 are summarized in Section 1.4 of the Work Plan. The data obtained from the subsurface ISM sampling is needed to develop and plan for potential future remedial actions or controls with the goal of attaining Unrestricted OHARNG Use for these AOCs.

1.4.3 Remedial Action Objectives

Remedial action objectives are being prepared by the Ravenna Stakeholders in a guidance document for the Evaluation of Land Use Controls.

1.4.4 Identify Decisions

The sampling and characterization of subsurface soil during this project will help to determine and evaluate if Unrestricted OHARNG use can be achieved. There is also the possibility that any remaining contamination at the subject AOCs is sufficiently limited that unrestricted resident adult farmer land use could be justified.

1.4.5 Define the Study Boundaries

The investigation areas for the subject load lines were defined as the footprints below selected former buildings at Load Lines 1, 2, 3, and 4. These areas were established and set forth in the project Scope of Work (SOW) by the U.S. Army Corps of Engineers (USACE, 2010a). These areas encompass all known or suspected historical operations areas and adjacent support areas and are inclusive of Load Lines 1, 2, 3, and 4 only.

1.4.6 Identify Decision Rules

Decision rules used to guide remediation decisions will be determined in the Land Use Control Assessment Report.

1.4.7 Identify Inputs to the Decisions

Inputs to the decision process are the analytical results of previous and current sampling, the types and extent of previous remediation activities, the planned future use(s) of the OHARNG, the costs of any required environmental remediation efforts, and the costs and constraints of any required land use controls.

1.4.8 Specify Limits on the Decision Error

Limits on decision errors are addressed in Section 3.2.8 of the FWSAP.

1.5 SUBSURFACE ISM SAMPLE DESIGN

Typically, a minimum of 30 subsurface samples is used for ISM sampling. For subsurface ISM sampling, fewer numbers of subsamples may be adequate; 11 were used in the pioneering investigation by Bigl, Hewitt, and Ramsey, 2009. Moreover, the Hawaii Department of Health, in its Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan recognized that while the use of 30 subsamples for subsurface ISM sampling would be ideal, “reducing the number of increments collected in the decision unit(s) may be the only option available.”

Much thought was given to the number and locations of the planned 4.0-foot cores in the previous URS work. Since the results of those investigations appeared to justify those selections, and because the Ravenna stakeholders agreed with both the rationale of selecting the high potential buildings and the sampling designs for those buildings, the same sets of buildings and the same sampling plan for those buildings were utilized for the subsurface ISM sampling described herein. Subsurface ISM sampling was also conducted at the Shell Receiving Buildings at Load Lines 1, 2, and 3 because the use of volatile organic compounds (VOCs) was greater at these types of buildings than at any of the other types of buildings.

Per the data quality objective of determining contamination (if any) within zones of non-remediated subsurface materials, no push probe subsurface borings were taken within remediated areas. Additional push probe borings were taken within the sampling/exposure area in zones of no remediation to account for the boring locations initially located in zones of remediated soils.

Figure 1-1 shows generic plans for the subsurface sampling of the high potential buildings, within the shell-receiving buildings at Load Lines 1, 2, and 3 added.

Table 1-1 provides a summary of the subsurface ISM sampling performed. Final locations and depths of the subsurface ISM sampling are described in Section 4. Figures 1-2 through 1-5 show the buildings where subsurface ISM sampling was conducted. More detailed drawings are provided in Section 4.

Sampling ID tables for the planned and completed subsurface push probe borings are provided as Tables 4-2 through 4-5 in Section 4. A discussion of the sampling identification protocols is provided prior to these tables.

1.6 INVESTIGATION OF FORMER COAL & ORE STORAGE AREAS AT LL 1 - 4 AND 12

During December 2009, members of the USACE - Louisville District and Ohio Environmental Protection Agency (OHEPA) collected and analyzed surface soil ISM samples around selected former building floor slabs at Load Lines 1, 2, 3, 4 and Buildings F-15 and F-16 to determine if contamination was spread during the demolition of buildings at these AOCs. Additional surface soil ISM samples in former coal and ore storage areas at Load Lines 1, 2, 4, 12, and Buildings F-15 and F-16 were collected and analyzed to provide preliminary data for a RI of these sites. This investigation was conducted as prescribed in a Technical Memorandum dated November 20, 2009. Details of this study are presented in Section 2 and analytical results are presented in Section 8. The results of this surface soil ISM sampling will be included in the Land Use Control assessment to characterize soil adjacent to the former coal and ore storage areas at Load Lines 1,2,3, and 4.

Figure 1-1: Schematic of Proposed Subsurface ISM Sampling Locations

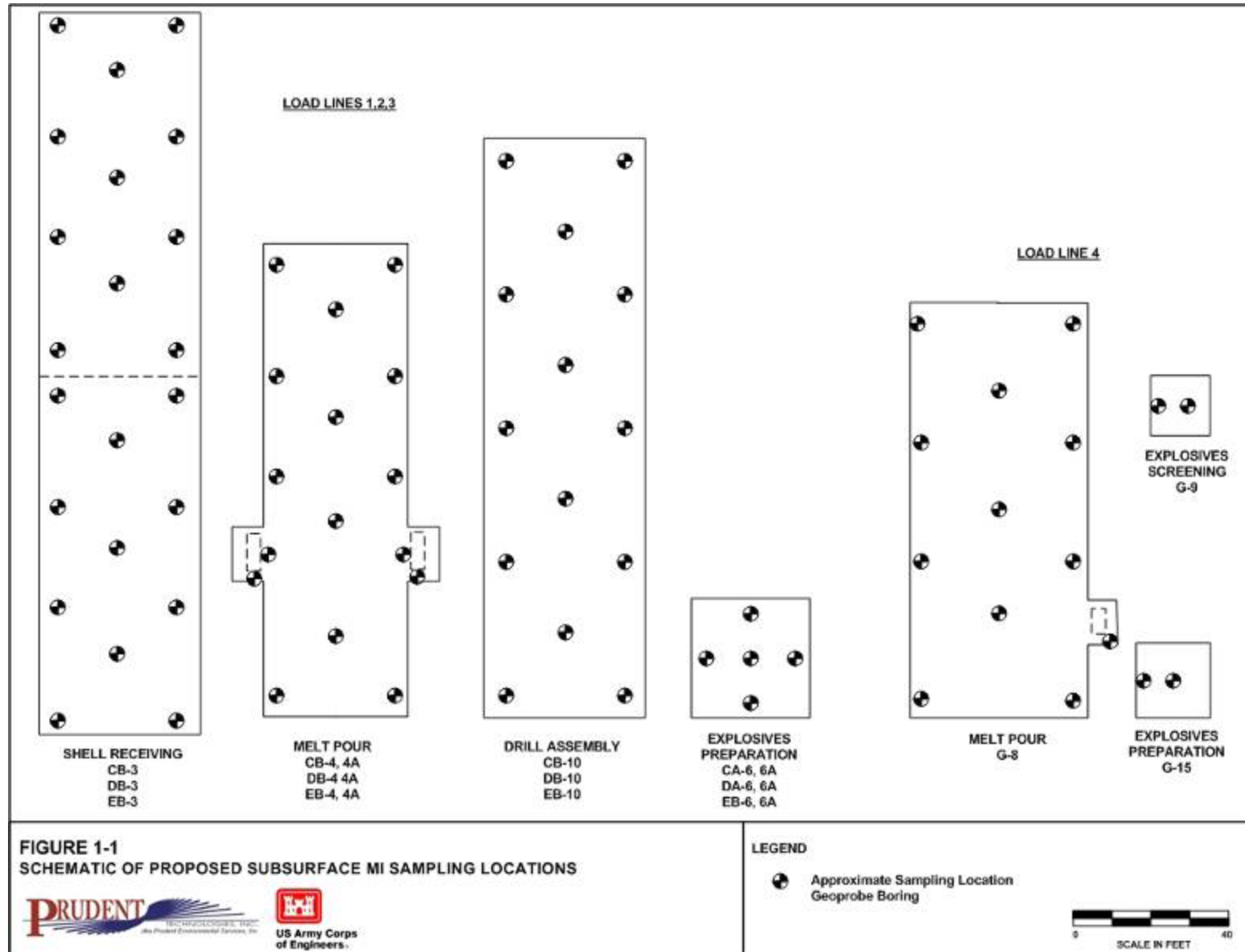


Table 1-1: Load Lines 1-4 Sampling Summaries

Load Line	Building No.	Type	Length (ft)	Width (ft)	Total No. Geoprobe Holes	Triplicate Geoprobe Holes	Estimated Geoprobe Depth (ft)	Number Primary Horizontal MI Samples	Number Triplicate Horizontal MI Samples	Total Geoprobe Footage (ft)	Number Vertical MI Samples	Analyses	
1	CB-3	Shell Receiving Bldg-1	350	50	11		5	2		55	11	Met, Expl, VOC	1 Bldg per load line gets SVOCs/ Propel Pesti/VOCs/ PCBs
		Shell Receiving Bldg-2			11		5	2		55	11	Met, Expl, VOC	
	CA-6	Explosives Preparation	40	40	5	10	5	2	4	75	15	Metals, Explos	
	CA-6A	Explosives Preparation	40	40	5		5	2		25	5	Metals, Explos	
	CB-4	Melt Pour	210	50	16		5	2		80	16	Metals, Explos	
	CB-4A	Melt Pour	210	50	16		5	2		80	16	Metals, Explos	
	CB-10	Drill & Assembly	300	50	14		5	2		70	14	Metals, Explos	
Top/Rock Varies (0.0' - 6.1') per well logs					78			14		440	88		
2	DB-3	Shell Receiving Bldg-1	350	50	11		7	3		77	11	Met, Expl, VOC	1 Bldg per load line gets SVOCs/ Propel Pesti/VOCs/ PCBs
		Shell Receiving Bldg-2			11	22	7	3	6	231	33	Met, Expl, VOC	
	DA-6	Explosives Preparation	40	40	5		7	3		35	5	Metals, Explos	
	DA-6A	Explosives Preparation	40	40	5		7	3		35	5	Metals, Explos	
	DB-4	Melt Pour	210	50	16		7	3		112	16	Metals, Explos	
	DB-4A	Melt Pour	210	50	16		7	3		112	16	Metals, Explos	
	DB-10	Drill & Assembly	300	50	14		7	3		98	14	Metals, Explos	
Top/Rock Varies (0.7' - 18.6') per well logs					78			21		700	100		
3	EB-3	Shell Receiving Bldg-1	350	50	11		7	3		77	11	Met, Expl, VOC	1 Bldg per load line gets SVOCs/ Propel Pesti/VOCs/ PCBs
		Shell Receiving Bldg-2			11		7	3		77	11	Met, Expl, VOC	
	EA-6	Explosives Preparation	40	40	5		7	3		35	5	Metals, Explos	
	EA-6A	Explosives Preparation	40	40	5		7	3		35	5	Metals, Explos	
	EB-4	Melt Pour	210	48	16		7	3		112	16	Metals, Explos	
	EB-4A	Melt Pour	210	48	16		7	3		112	16	Metals, Explos	
	EB-10	Drill & Assembly	300	48	14	28	7	3	6	294	42	Metals, Explos	
Top/Rock Varies (1.5' - 15.5') per well logs					78			21		742	106		
4	G-8	Melt Pour	171	71	12	24	7	3	6	252	36	Full Suite	

246	84		59	22	2134	330
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Total Number of Horizontal Samples = 81

Total Number of Vertical Samples = 330

Total Number of Collected Samples = 411

Figure 1-2: Building Location Map for LL1

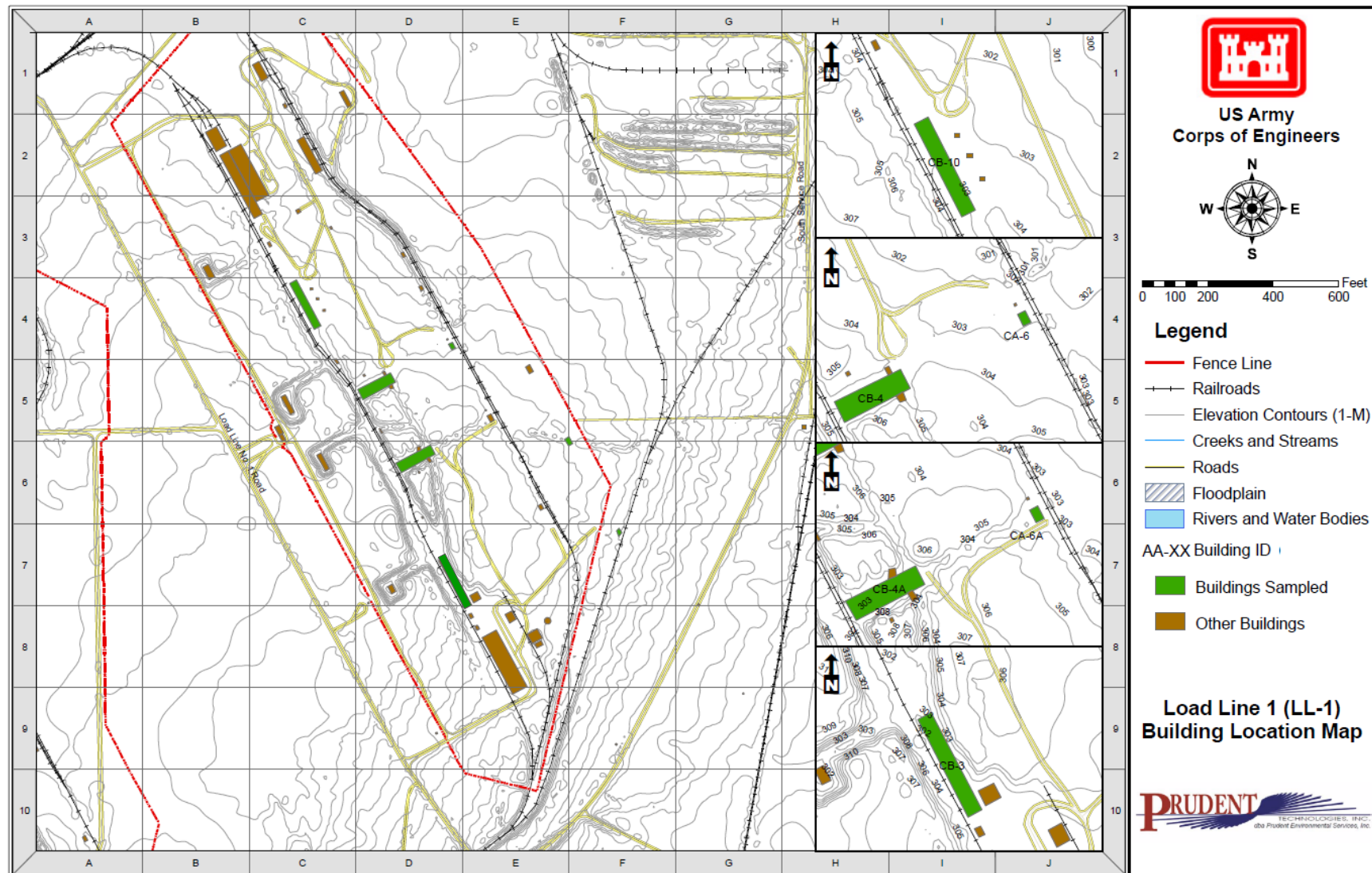


Figure 1-3: Building Location Map for LL2



Figure 1-4: Building Location Map for LL3

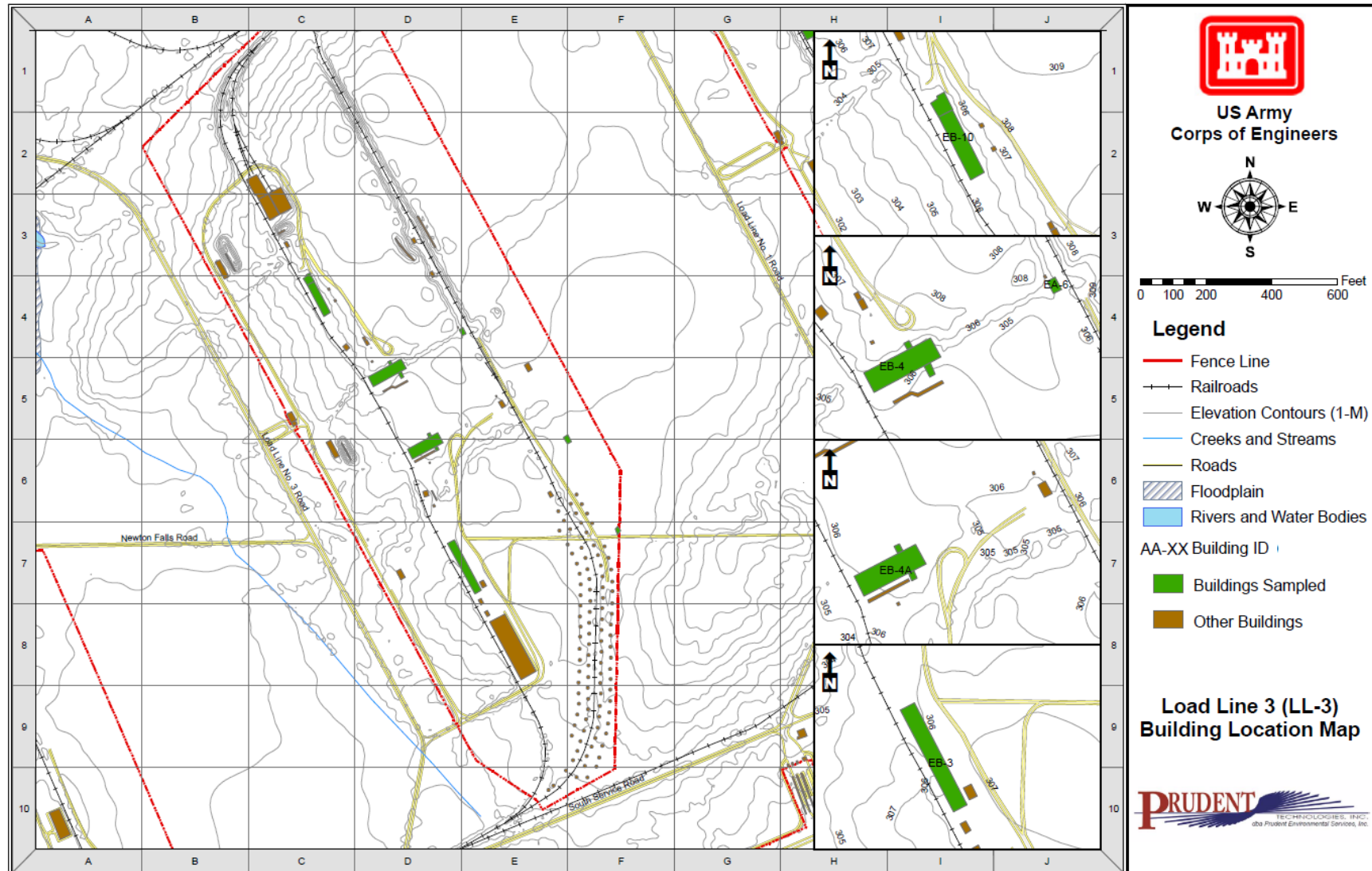
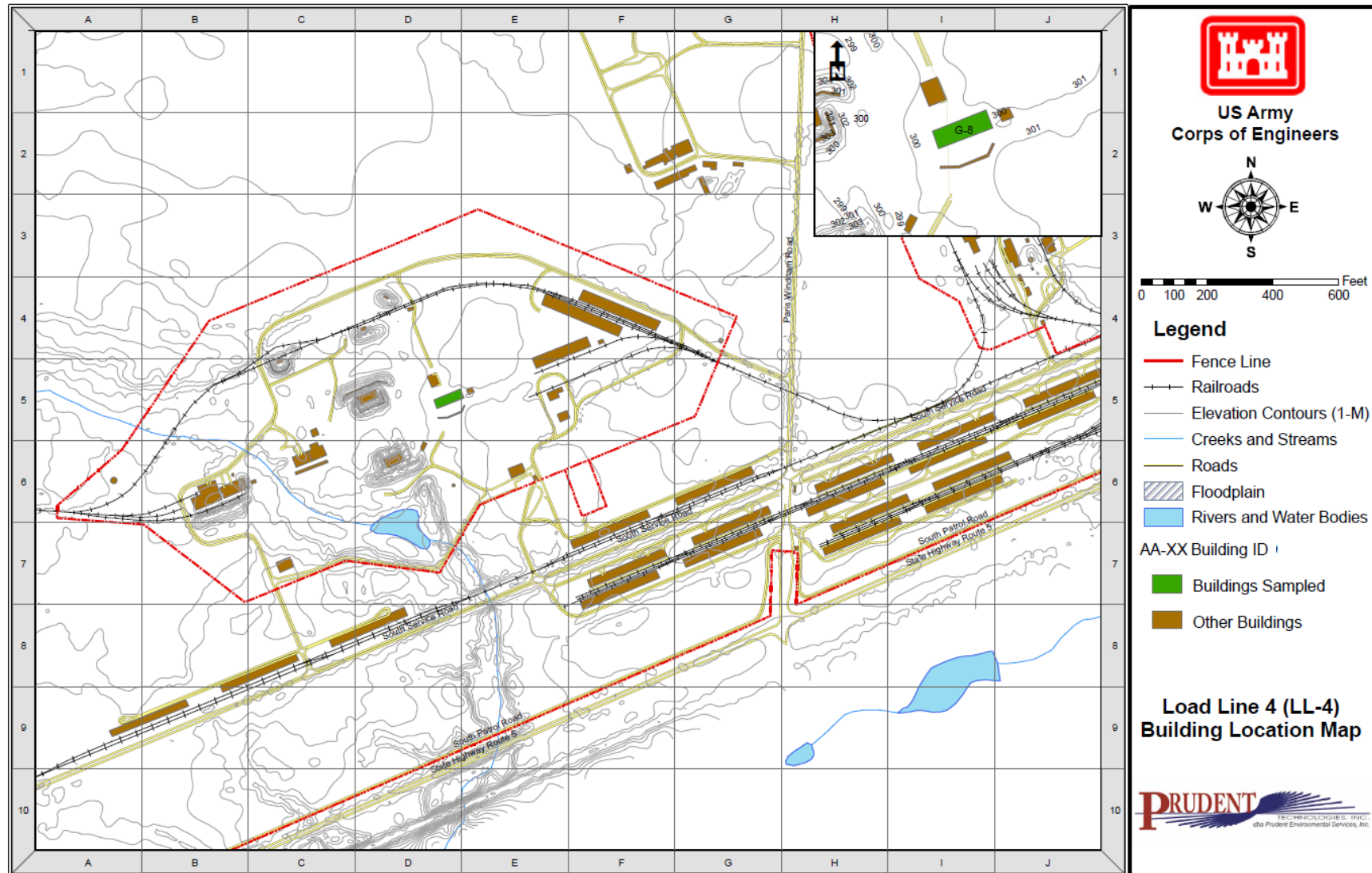


Figure 1-5: Building Location Map for LL4



2.0 USACE INVESTIGATION

2.1 SURFACE SOIL SAMPLING

The surface soil ISM sampling was conducted over the period December 1–3, 2009 by members of the Louisville District Corps of Engineers and the OHEPA. All sampling was conducted as prescribed in a technical memorandum dated November 20, 2009 for this project. Unless otherwise specified, field activities were conducted in accordance with the FWSAP and Facility-Wide Safety and Health Plan (FWSHP). There were two variations from the facility-wide documents. Soil samples were collected in plastic bags instead of glass jars, and equipment was decontaminated with Citranox, which is a combined phosphate free detergent and acid rinse. Methanol was still used as part of the decontamination process. CT Laboratories was the primary lab and RTI Laboratories was the Quality Assurance Lab. MEC avoidance was not required because no sampling was conducted within a Munitions Response Site (MRS).

2.1.1 LL-1, LL-2, LL-3, LL-4, and Buildings F-15 and F-16

The sampling of surface soils at these AOCs was done using ISM techniques with a minimum of 30 aliquots taken within each sampling area at a depth of 0 to 1.0 feet bgs, except where refusal was encountered prior to reaching a depth of 1.0 feet bgs. The aliquots were collected in a systematic random manor. Sampling areas were within 20-foot buffers around the building footprints or the planned removal areas. The 20-foot width was selected after consulting with the demolition contractor, PIKA International, Inc. (PIKA), who indicated that its operations typically were completed within 20 feet of the building footprints.

The following discussion presents the rationale for the sampling performed. Areas where levels of contamination were found to exceed the National Guard Trainee CUGs were remediated by removal under a USACE contract to URS. Samples were taken outside the building footprints at 100 percent of the remediated areas. URS had already performed sampling within the building footprints at these areas. In previous URS work plans, buildings were given a high, medium, or low rating for potential for explosives contamination based on historical records and previous sampling events. Samples in the USACE Investigation were taken around 100 percent of the high potential building footprints. Samples were taken around a minimum of 40 percent of the medium potential building footprints, and around a minimum of 25 percent of the low potential building footprints. Out of the 60 low potential building footprints, samples were taken around at least 15 of the building footprints. Out of the 57 medium potential buildings, samples were taken around at least 23 of the building footprints. These percentages of buildings were selected at random while ensuring buildings of different historical uses were sampled. Figures 2-1 through 2-6 show all the buildings and their potential ratings. These figures also show the sample areas. Some buildings were large enough that multiple ISM samples were taken around a building or group of buildings.

Explosives were the primary contaminants of concern in the sampled areas. The samples were analyzed for trinitrotoluene (TNT), which is the only contaminant that warranted removal actions during URS's under-slab investigations. Demolition work plans produced by PIKA indicated that the floors of buildings to be demolished were to be swept to remove potential contaminated debris, including a mixture of loose paint chips and miscellaneous sweeping debris. The PIKA work plans also stated that hazardous items of environmental concern would be removed before demolition of the buildings. PIKA's project

Figure 2-1: Corps Sampling Areas at Load Line 1

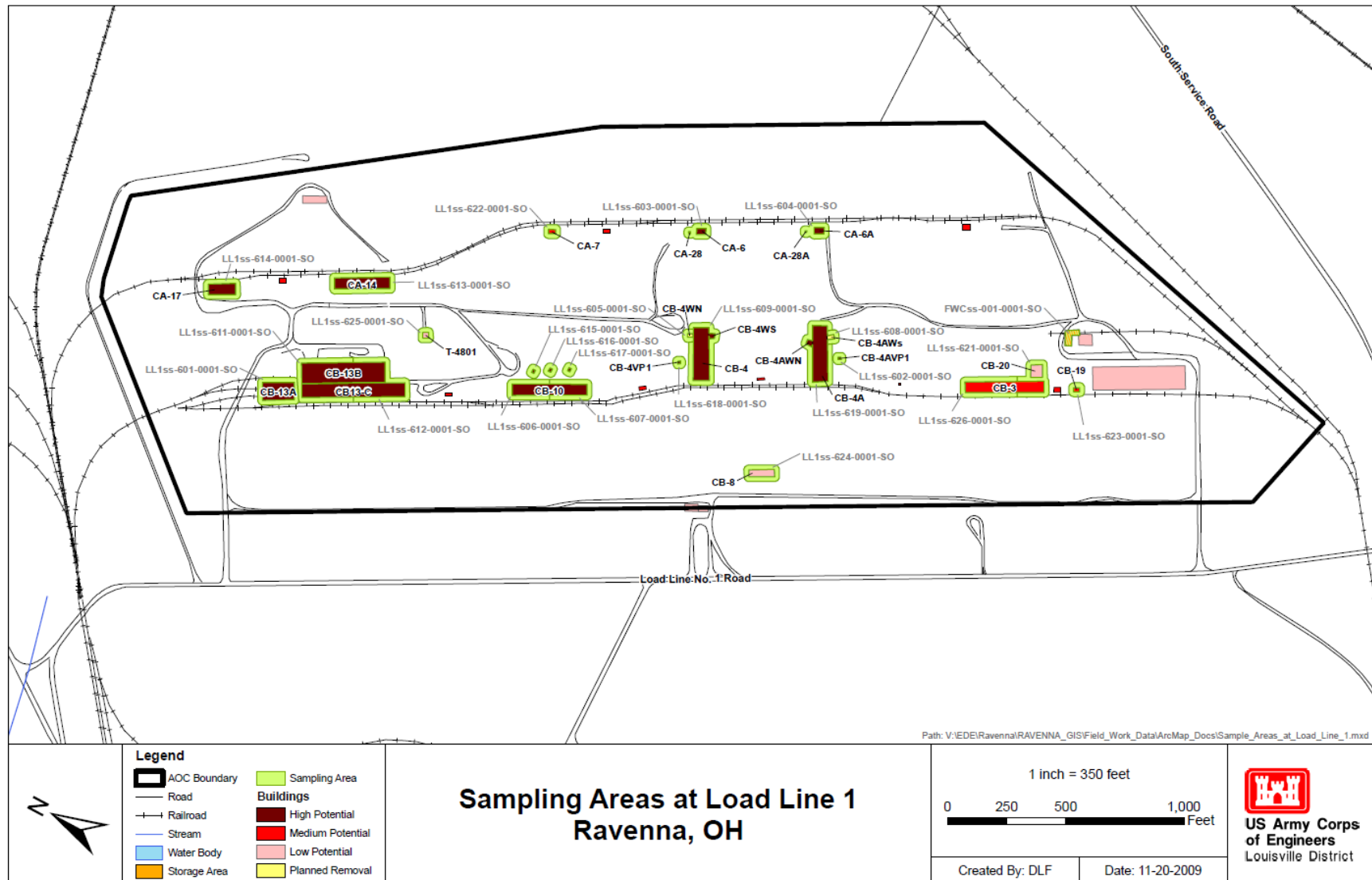


Figure 2-2: Corps Sampling Areas at Load Line 2

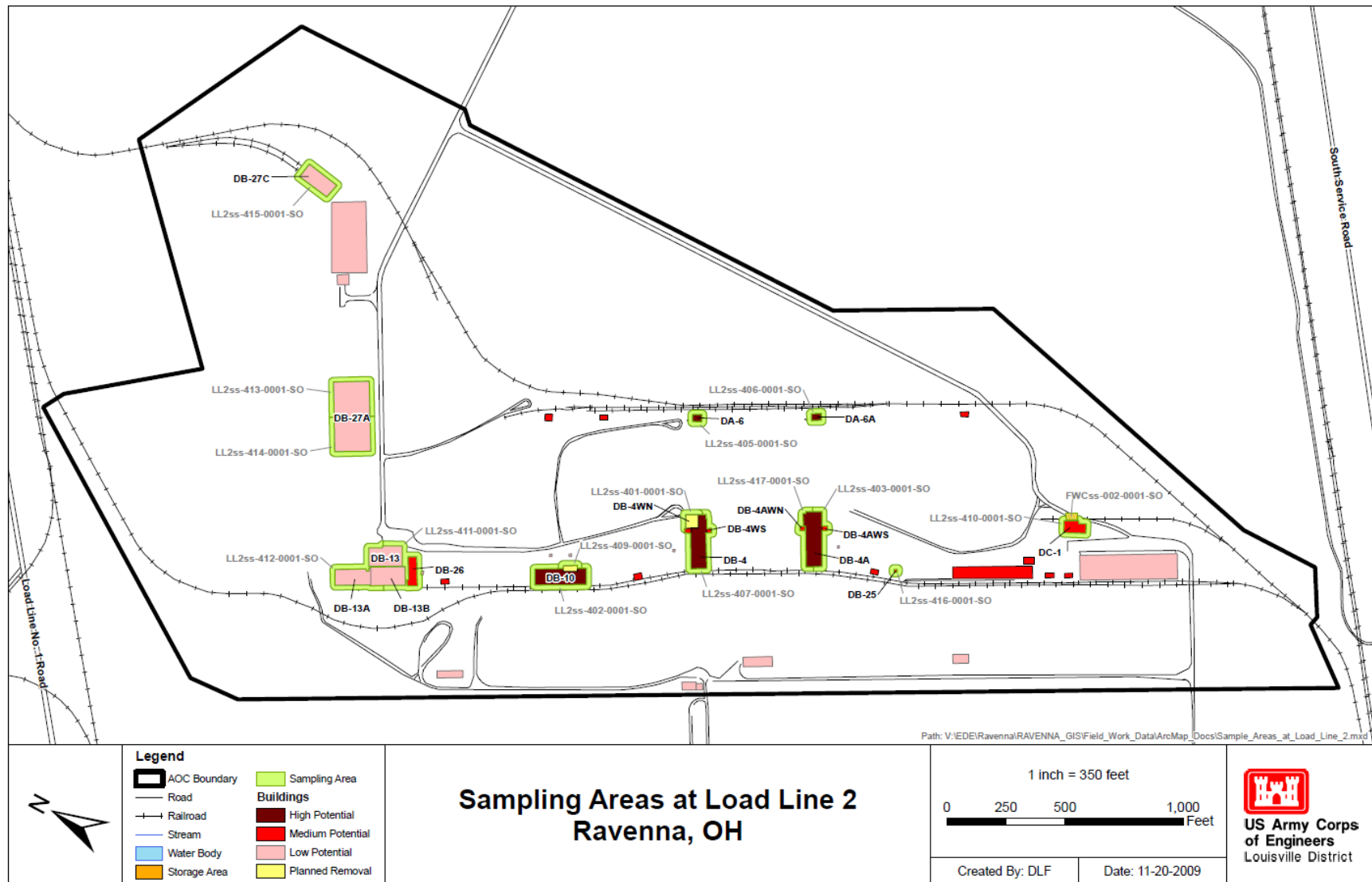


Figure 2-3: Corps Sampling Areas at Load Line 3

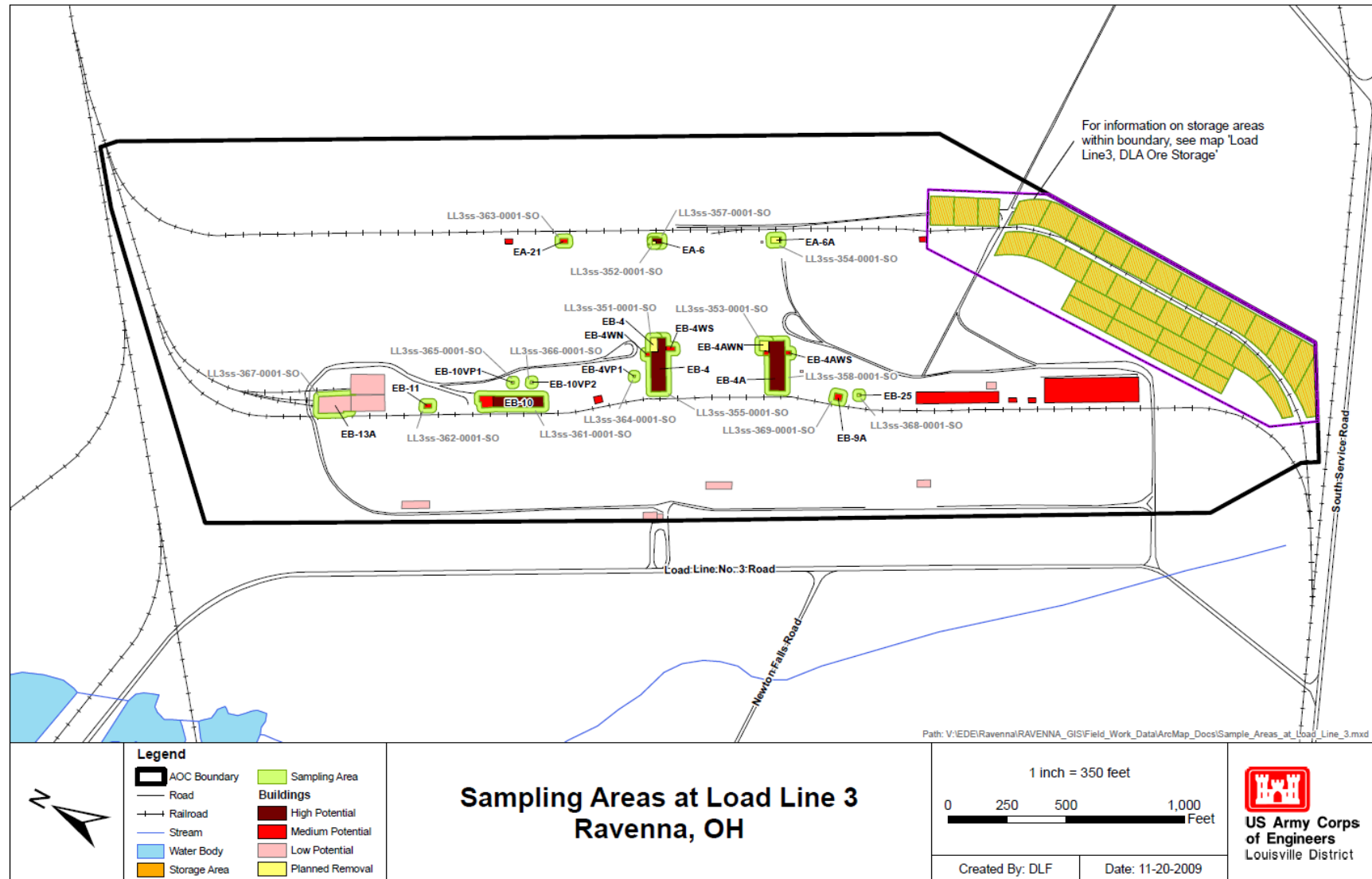


Figure 2-4: Corps Sampling Areas at Load Line 4

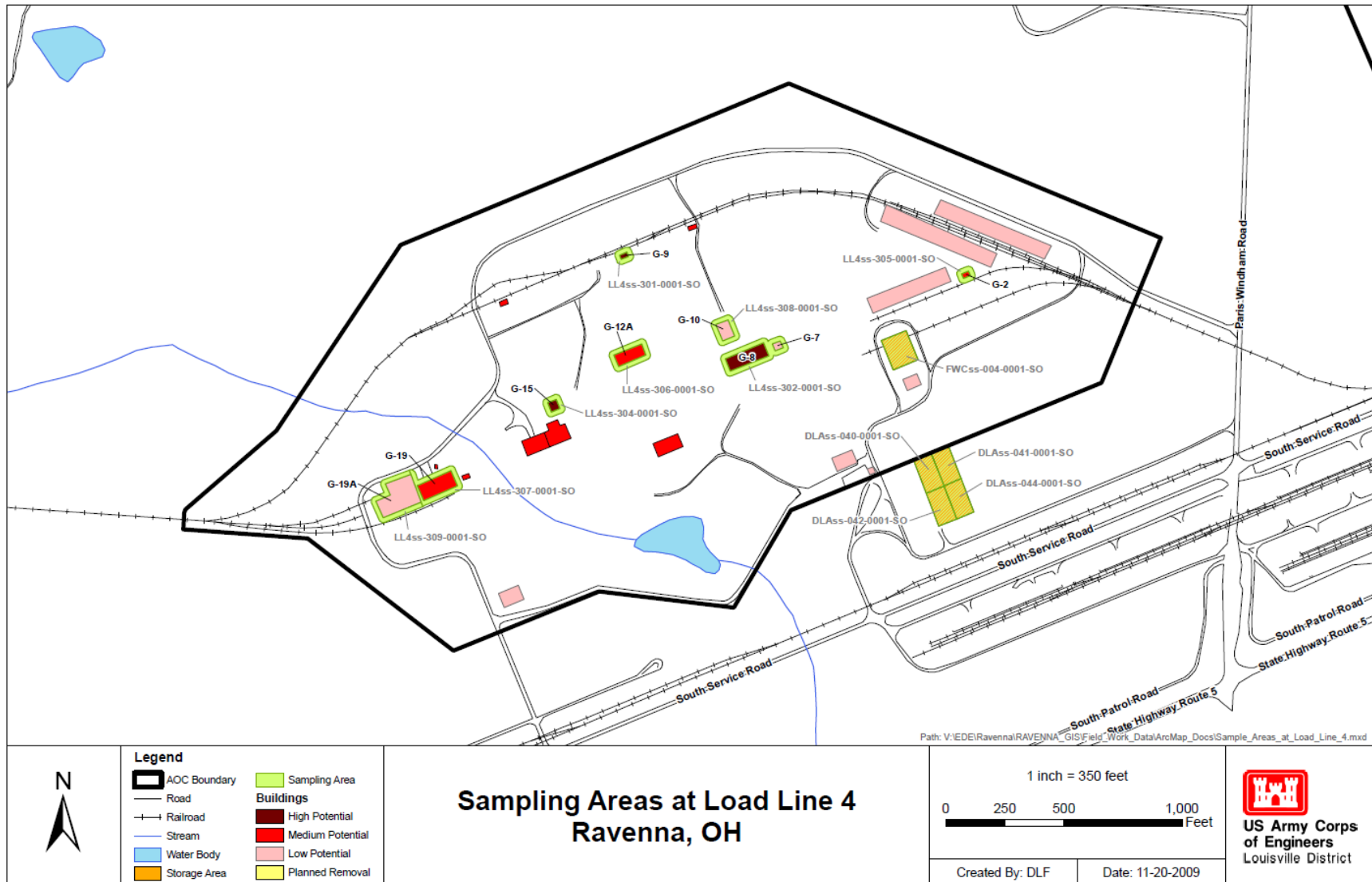


Figure 2-5: Corps Sampling Areas at Load Line 12

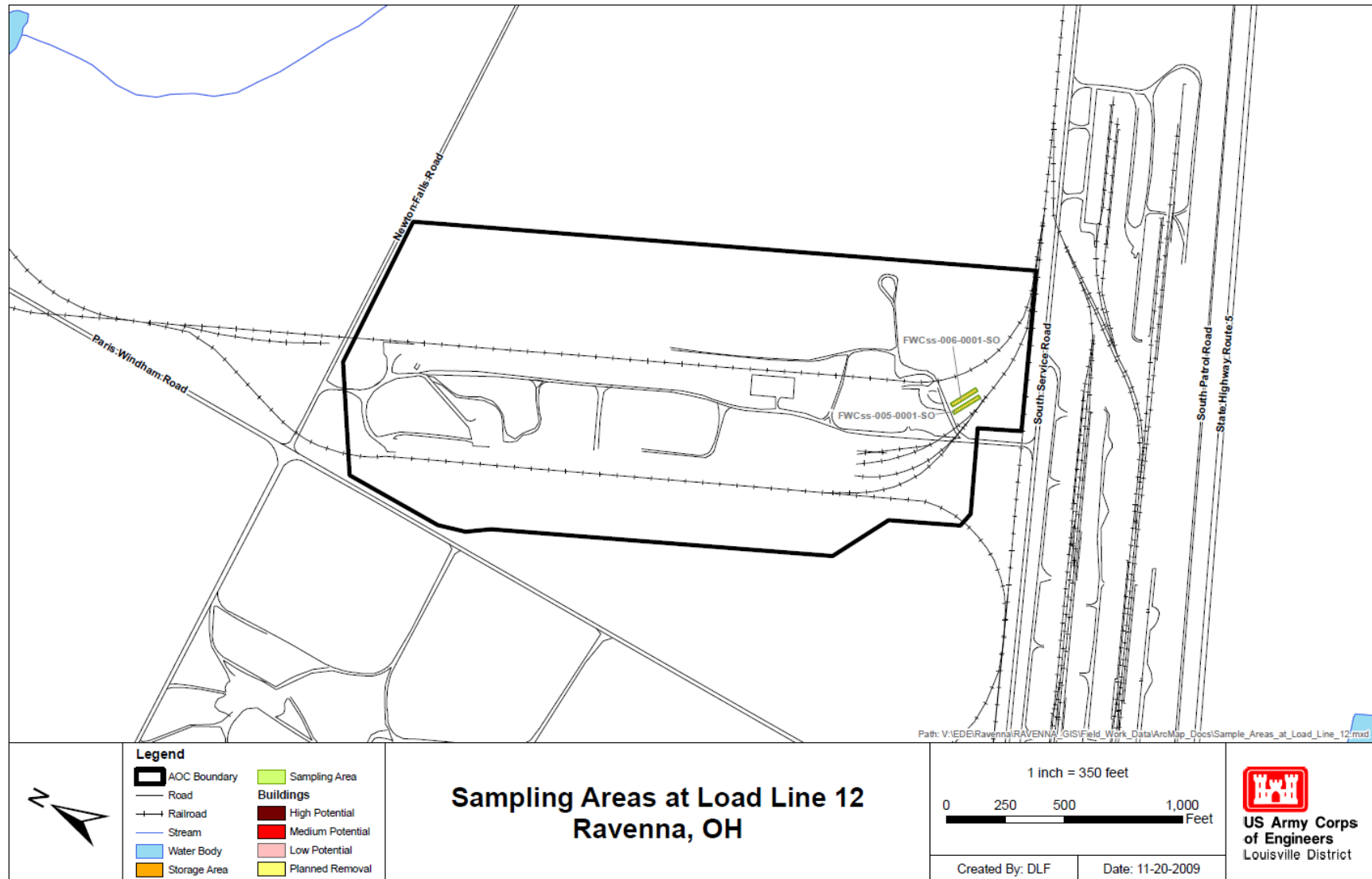
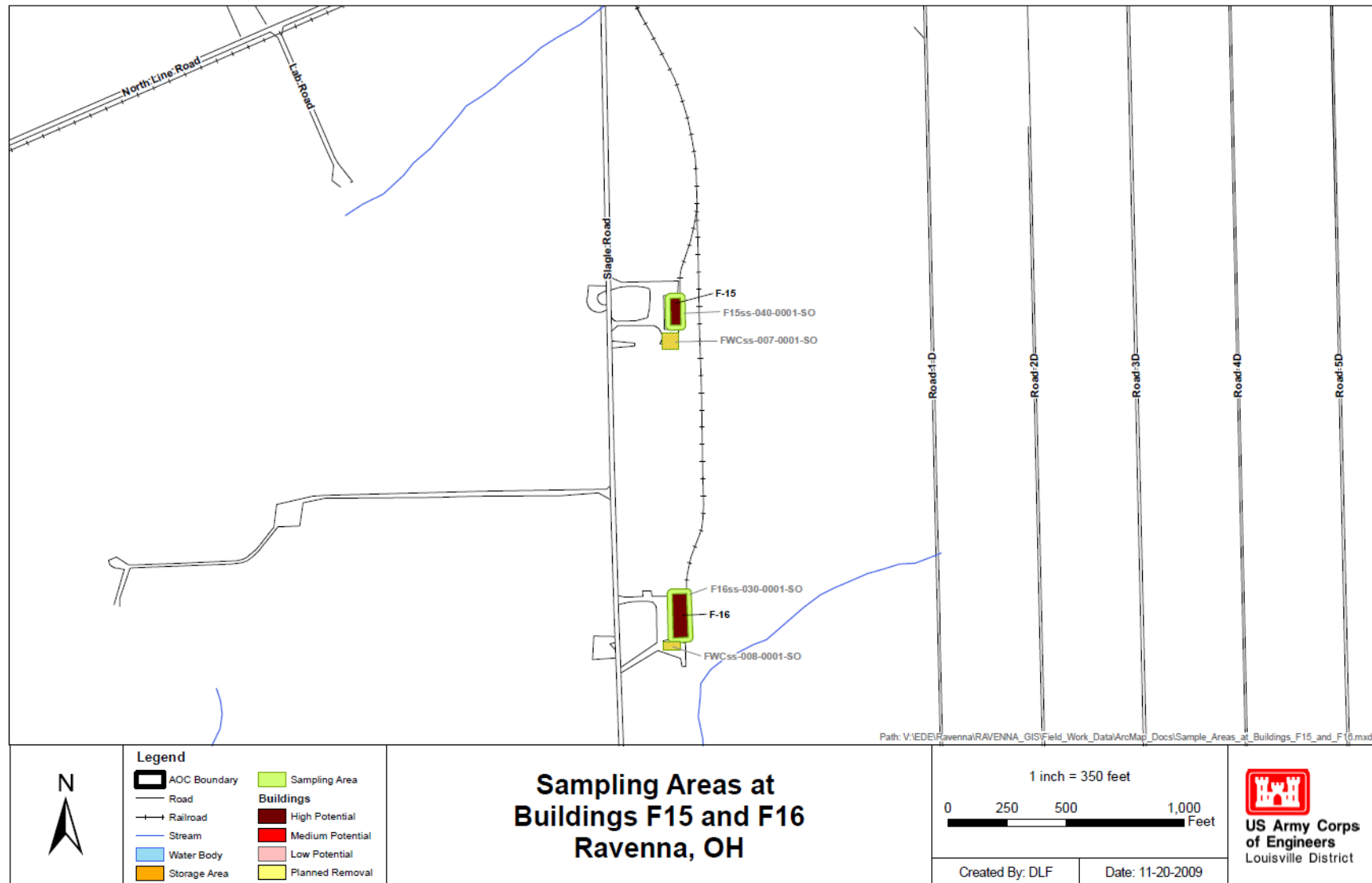


Figure 2-6: Corps Sampling Areas at Buildings F15 & F16



manager also confirmed that demolition was conducted in accordance with the approved work plans. Previously, a remedial action was completed for areas outside of the building footprints before the buildings and/or slabs were demolished. There were several remediation areas containing high concentrations of metals. Due to these findings, USACE analyzed 100 percent of the samples for explosives. One hundred percent of the samples taken around the melt pour buildings were analyzed for target analyte list (TAL) metals, and ten percent of the samples were analyzed for the full suite, as required by the FWSAP. The full suite of analyses at RVAAP includes TAL metals, mercury, explosives, propellants, semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), and VOCs. Samples for VOCs analyses were taken from the approximate middle of the associated ISM sampling areas.

2.1.2 CC-RVAAP-73 (Facility-Wide Coal Storage) and CC-RVAAP-79 (DLA Ore Storage Sites)

The sampling of surface soils at these AOCs was done using ISM samples with a minimum of 30 aliquots taken within each sampling area at a depth of 0 to 1.0 feet below ground surface, unless refusal was encountered prior to reaching a depth of 1.0 feet. Where refusal was encountered prior to reaching a depth of 1.0 feet bgs, the sample was collected to the depth below ground surface at which refusal was encountered. The aliquots were collected in a systematic random manor. Samples were only taken at the AOCs that are co-located within Load Lines 1, 2, 3, 4, 12 and Buildings F-15 and F-16. The results of this sampling will be used for preliminary RI data. Additional sampling of these areas may be required after the results of this sampling effort have been assessed.

Within Load Line 1, the coal storage area associated with the powerhouse CC-1 was sampled. Within Load Line 2, the coal storage area associated with powerhouse DC-1 was sampled. Within Load Line 4, the coal storage area associated with powerhouse G-4 was sampled. Within Load Line 12, two coal storage areas were sampled. Within the Buildings F-15 and F-16 AOCs, coal storage areas associated with the two buildings were sampled. Samples collected from the coal storage areas were analyzed for TAL metals and SVOCs. Additionally, 10 percent of the samples from each AOC were tested for the full analytical suite, in accordance with the FWSAP.

3.0 ACTIVITIES PRIOR TO SAMPLE COLLECTION BY PRUDENT

3.1 PRE-MOBILIZATION

3.1.1 Subcontracts

Subcontracts were established with the following companies for services as described below. The subcontractors utilized were those listed in the proposal.

Drilling (Geoprobe) Services	Frontz Drilling
Analytical Services (Primary and Quality Control)	TestAmerica, Inc.
Surveying Services	Vista Sciences Corporation
Potable Water	Vietz Water Hauling
Portable Toilet and Wash Station	Miller and Company Sanitation Services
Waste Disposal	Emerald Environmental, Inc.

3.1.2 Unique Equipment Procurement

Unique equipment planned and/or utilized for the subsurface ISM sampling included:

Aluminum half pipes 2-in OD x 1.5-in ID x 6-foot long tubes cut in half length-wise and aluminum wedge samplers (½-in x ½-in aluminum channel cut to (9-10)-inch sections with one end pointed) were purchased and then prepared by the Kentucky Machine & Tool Co. in Louisville, Kentucky. Metal storage cabinets envisioned to bring Geoprobe samples from the field back to the sampling building (Building 1036) were purchased from the Office Equipment Co. in Louisville, Kentucky.

3.1.3 Regular Equipment Procurement

Much of the sampling equipment was purchased via the internet, including materials from Forestry Suppliers, Inc., ULINE, En Novative Technologies, Inc. (Terra Cores), and Home Depot (Refrigerator) and shipped directly to Building 1036 during the week prior to the beginning of field sampling. Blank sampling labels were purchased from Desktop Labels and prepared prior to arrival at the site. The unexploded ordnance (UXO) surface instruments, Schonstadt GA-72Cd magnetometer was purchased, and the downhole Subsurface Instruments Gradiometer Model BHG, was rented.

3.2 MOBILIZATION

Mobilization took place August 11-15, 2010 and included assembling and organizing all the preordered equipment/materials, purchasing equipment not already ordered, organizing the allocated workspace in Building 1036, assembling unique equipment, establishing the decontamination line, renting waste drums and a photo ionization detector, and coordinating with facility personnel and other contractors working on site.

3.3 SITE PREPARATION

To facilitate productive sampling from the beginning of fieldwork, Prudent met with the subcontracted surveyor and requested that corners of the subject buildings be laid out at least one or two days ahead of the field sampling crew. The surveyor used light green pin flags to locate the corners of buildings.

Yellow pin flags were used by Prudent personnel to locate the primary Geoprobe sampling locations, orange flags were used for the quality control (QC) or 2nd triplicate Geoprobe locations, and red flags were used for the quality assurance (QA) or 3rd triplicate Geoprobe locations, Photograph 3-1. Although high grass was present at Building G-8 (Load Line 4), no site clearance actions were required to locate the primary and triplicate Geoprobe locations. High grass that caused poor visibility was minimal at the other building locations. MEC avoidance was performed during both the selection of individual boring locations and during the drilling of individual borings.



Photograph 3-1: Layout of Primary QC and QA Boring Locations.

Primary locations have a yellow pin flag, QC locations have an orange pin flag, and QA locations have a red pin flag.

4.0 SAMPLE COLLECTION AND PREPARATION

4.1 LAYOUT OF BORING LOCATIONS WITH SUBSEQUENT ACCURATE SURVEY

Geoprobe sample locations (primary and triplicate) were laid out prior to drilling as described Section 3.3. The subcontracted surveyor determined locations (via Ohio state plane coordinates) and elevations (via NAD 83) within two days of drilling at the proposed buildings/load lines, except at Load Line 1 where it was approximately 12 days after completion of drilling at that load line. Locations and elevations were recorded within 0.1 feet. At many buildings, two or three attempts were made at a given boring location to extend the boring to the desired depth of 7.0 feet bgs. Once the drilling was completed, the field crew placed the pin flag in the boring location where the actual sample was collected. The locations and surface elevations of all Geoprobe borings are shown by building number in Figures 4-1 through 4-4.

4.2 SAMPLING TABLES

A discussion of the sampling identification protocols is provided below. The example below is for a sampling area that contains three vertical borings. Discussion of horizontal and vertical subsurface ISM sampling is presented in Paragraphs 4.4.3 and 4.4.4.

ID Protocol for Subsurface ISM Samples at LLs 1, 2, 3, and 4

Horizontal ISM Samples (at example ISM location 123)

LL1SB-123V-0101-SO	ISM Sample from 1' – 3' VOCs- Methanol
LL1SB-123V-0102-SO	ISM Sample from 3' – 5' VOCs- Methanol
LL1SB-123V-0103-SO	ISM Sample from 5' – 7' VOCs- Methanol
LL1SB-123B-0101-SO	1' – 3' VOCs- Methanol Field Blank
LL1SB-123B-0102-SO	3' – 5' VOCs- Methanol Field Blank
LL1SB-123B-0103-SO	5' – 7' VOCs- Methanol Field Blank
LL1SB-123M-0101-SO	ISM Sample from 1' – 3' Non-VOCs
LL1SB-123M-0102-SO	ISM Sample from 3' – 5' Non-VOCs
LL1SB-123M-0103-SO	ISM Sample from 5' – 7' Non-VOCs

Vertical ISM Samples (at example ISM location 123)

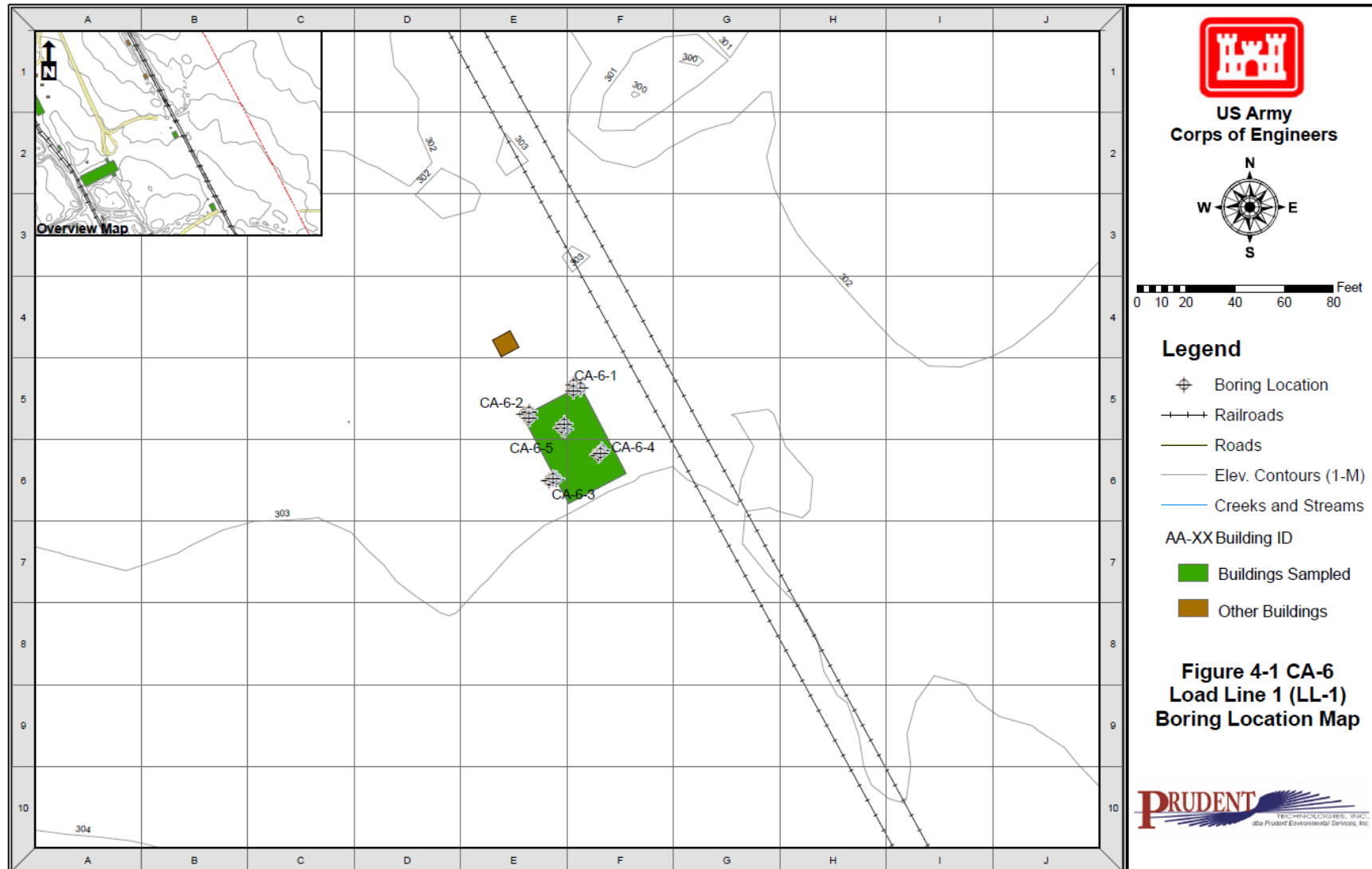
LL1SB-123V-0001-SO	ISM Sample at 1 st sub-location within ISM location 123 VOCs-Methanol
LL1SB-123V-0002-SO	ISM Sample at 2 nd sub-location within ISM location 123 VOCs-Methanol
LL1SB-123V-0003-SO	ISM Sample at 3 rd sub-location within ISM location 123 VOCs-Methanol
LL1SB-123V-000L-SO	ISM Sample at last sub-location within ISM location 123 VOCs-Methanol
LL1SB-123M-0001-SO	ISM Sample at 1 st sub-location within ISM location 123 Non-VOCs
LL1SB-123M-0002-SO	ISM Sample at 2 nd sub-location within ISM location 123 Non-VOCs

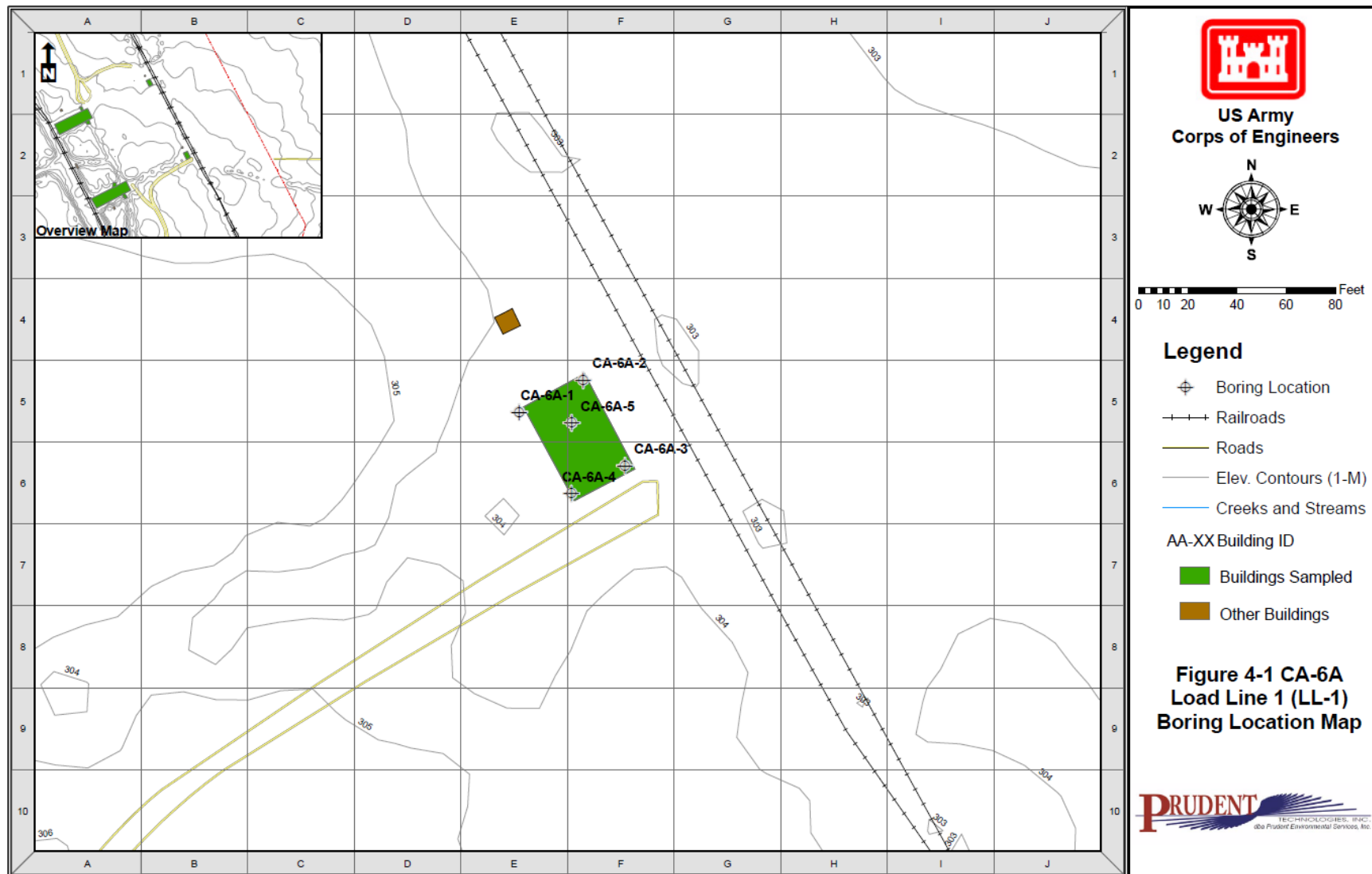
LL1SB-123M-0003-SO ISM Sample at 3rd sub-location within ISM location 123 Non-VOCs

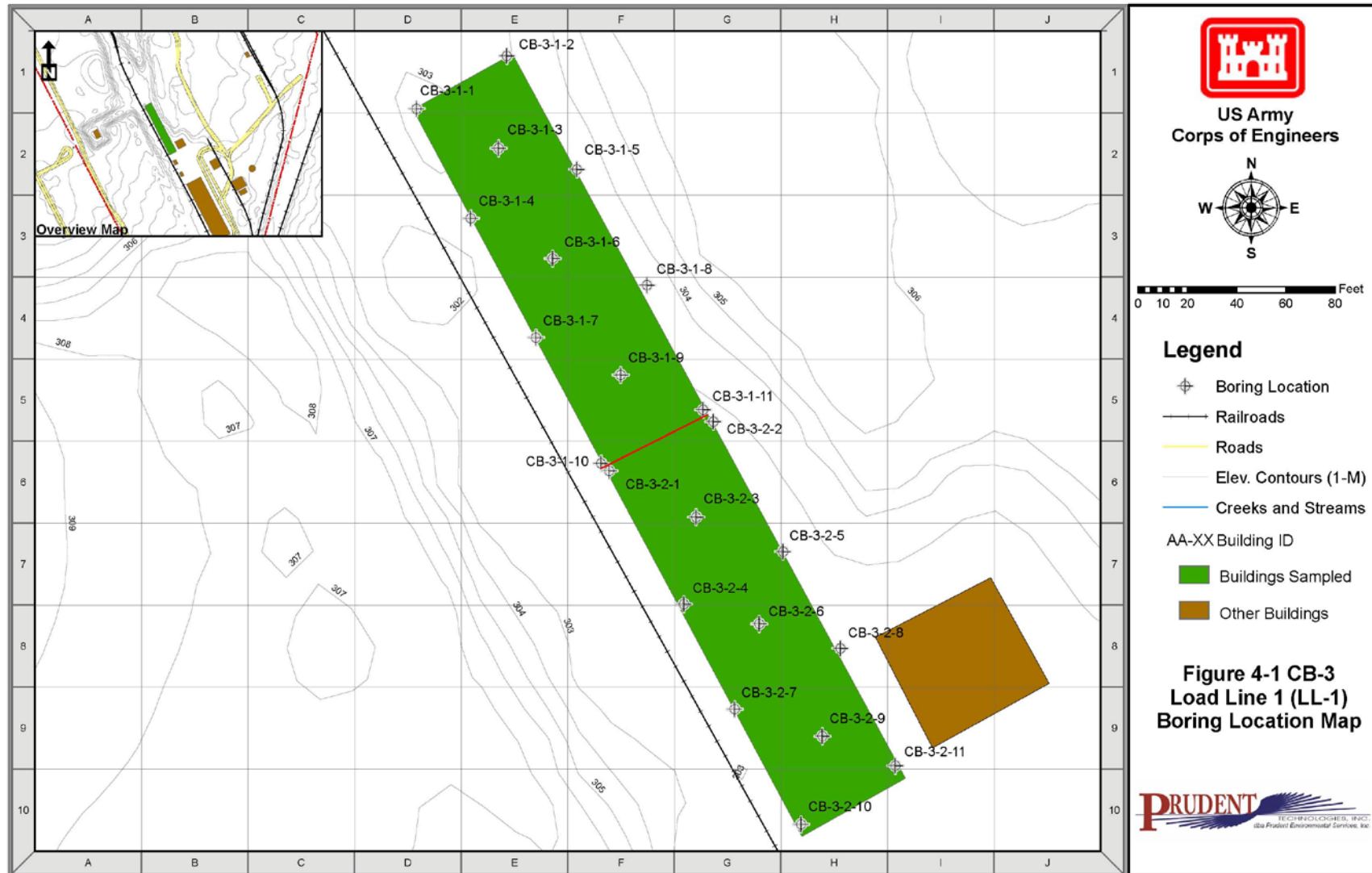
LL1SB-123M-000L-SO ISM Sample at last sub-location within ISM location 123 Non-VOCs

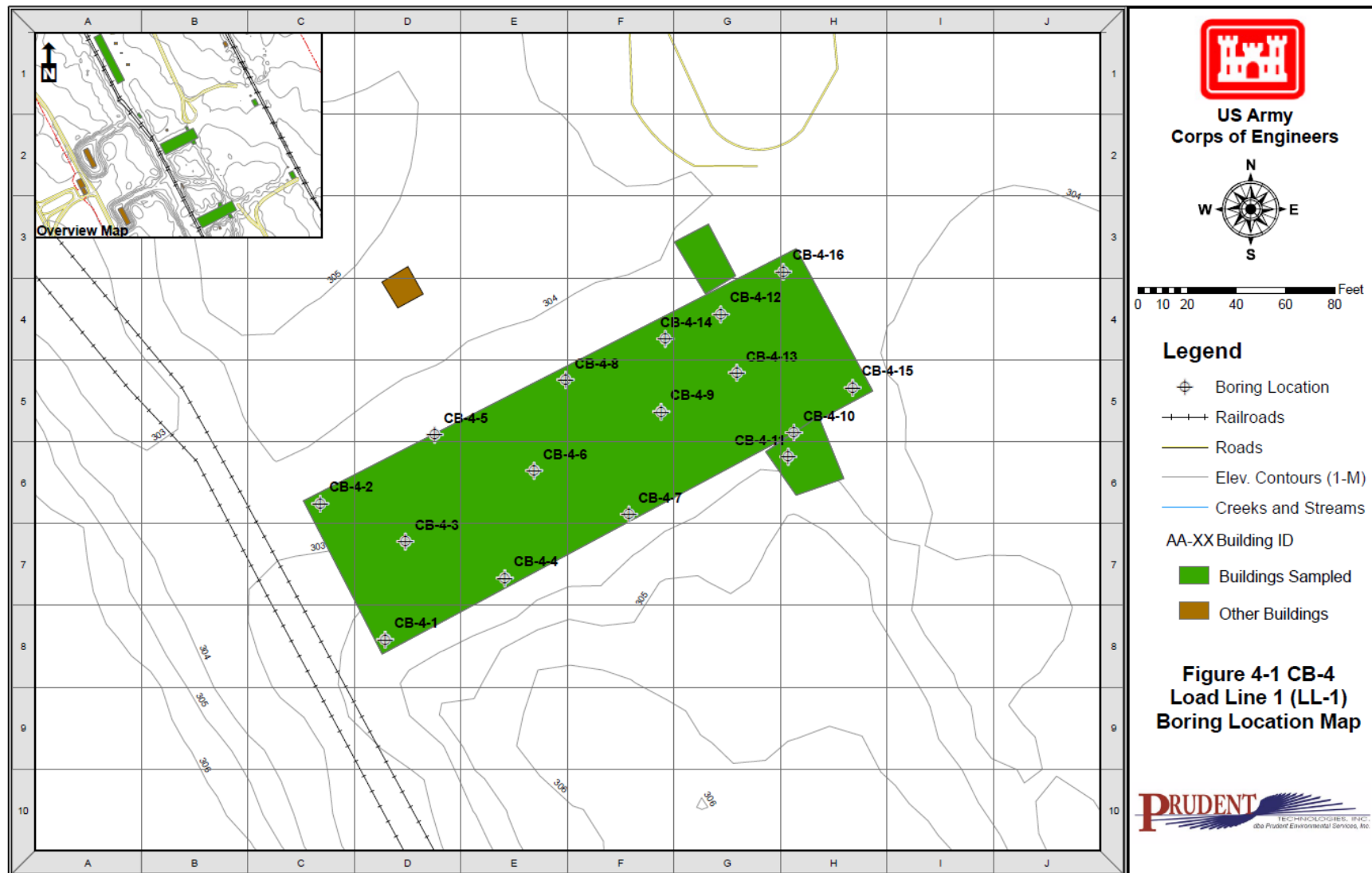
Sampling ID tables for the planned and completed subsurface push probe borings are provided as Tables 4-1 through 4-4. The tables show the sample collection dates, the depths bgs from which the sample was collected, and the planned boring locations where the samples could not be collected below a depth of one-foot bgs.

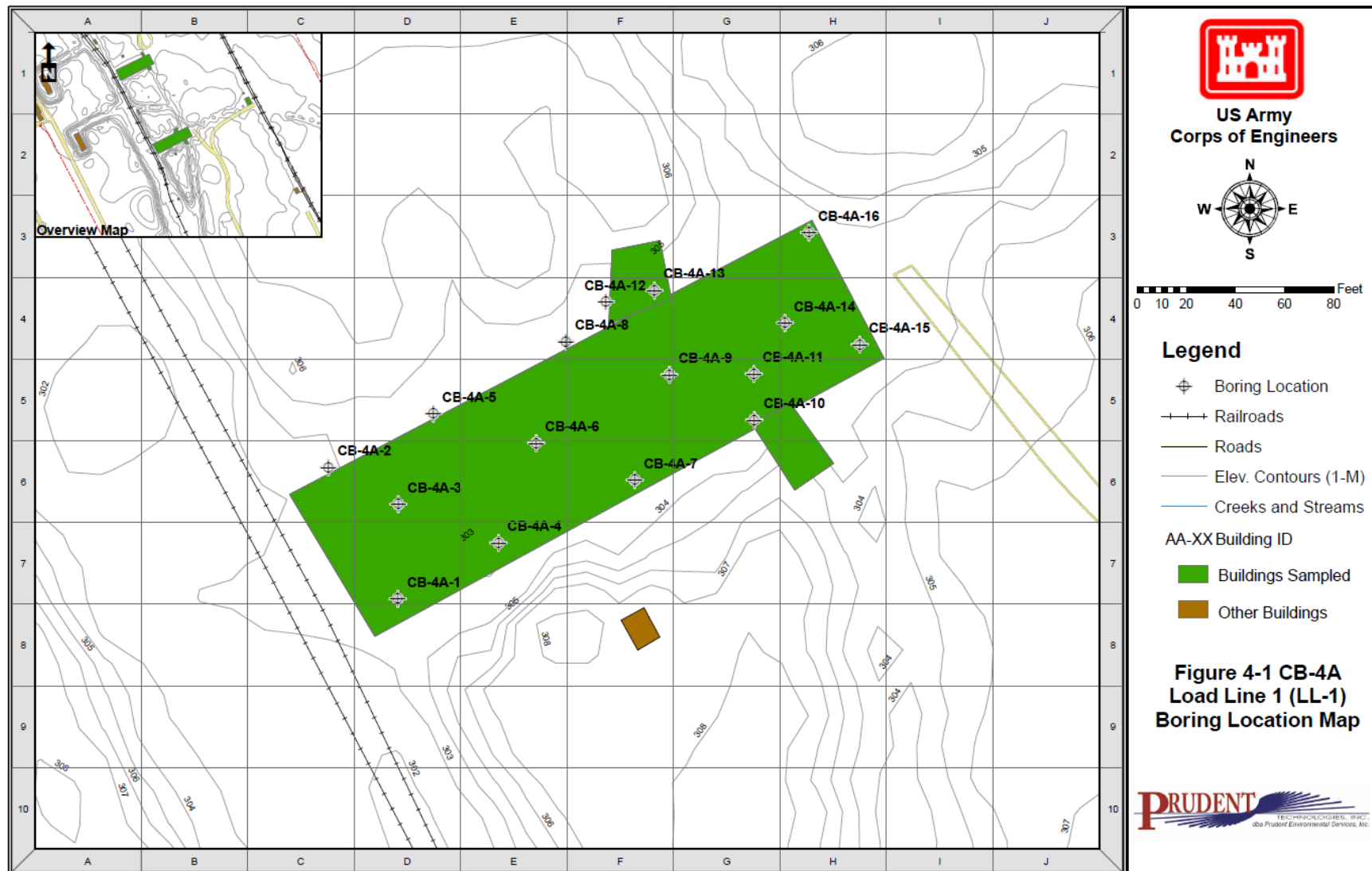
Figure 4-1: Boring Location Map for Load Line 1 Buildings











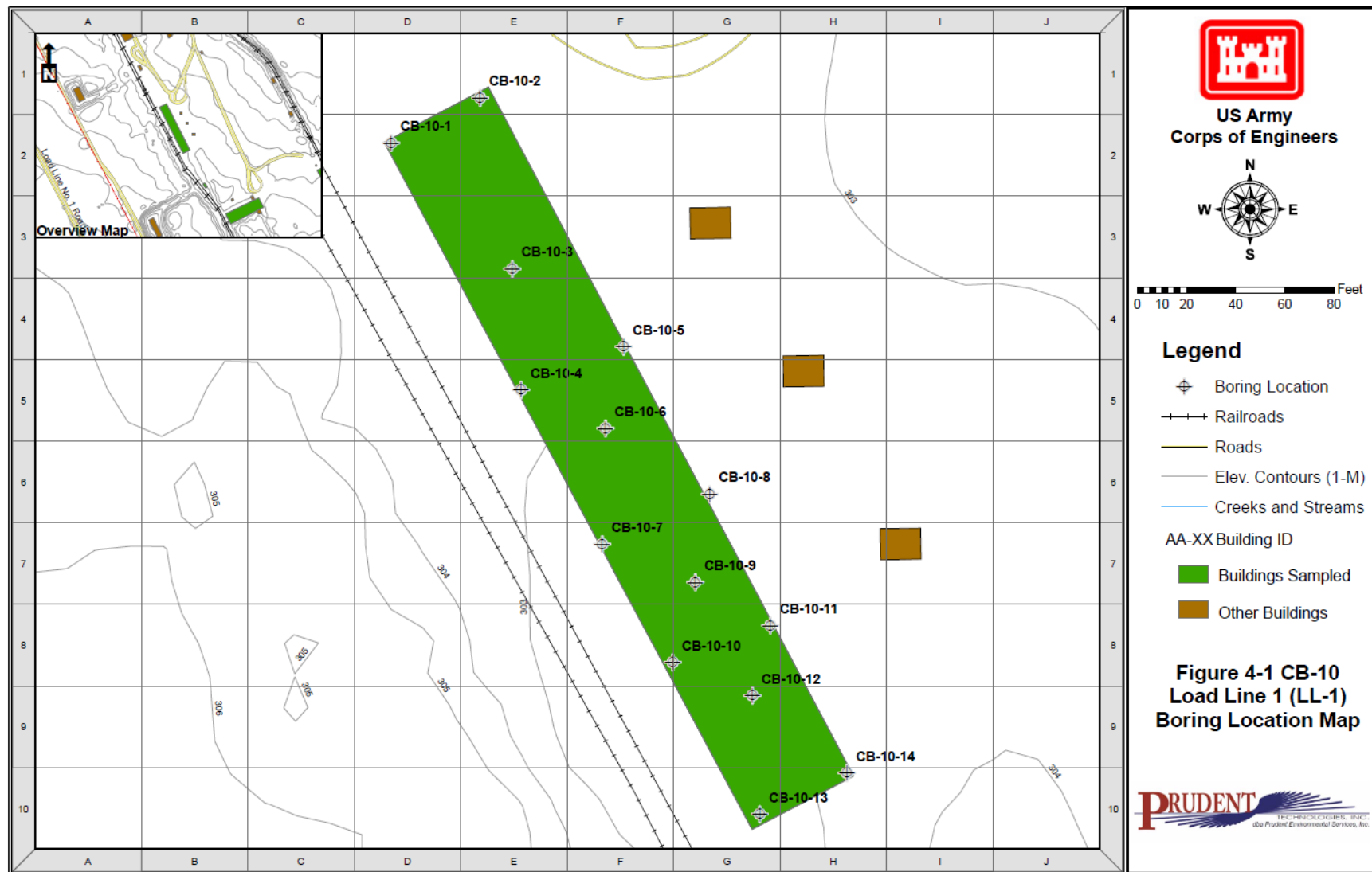
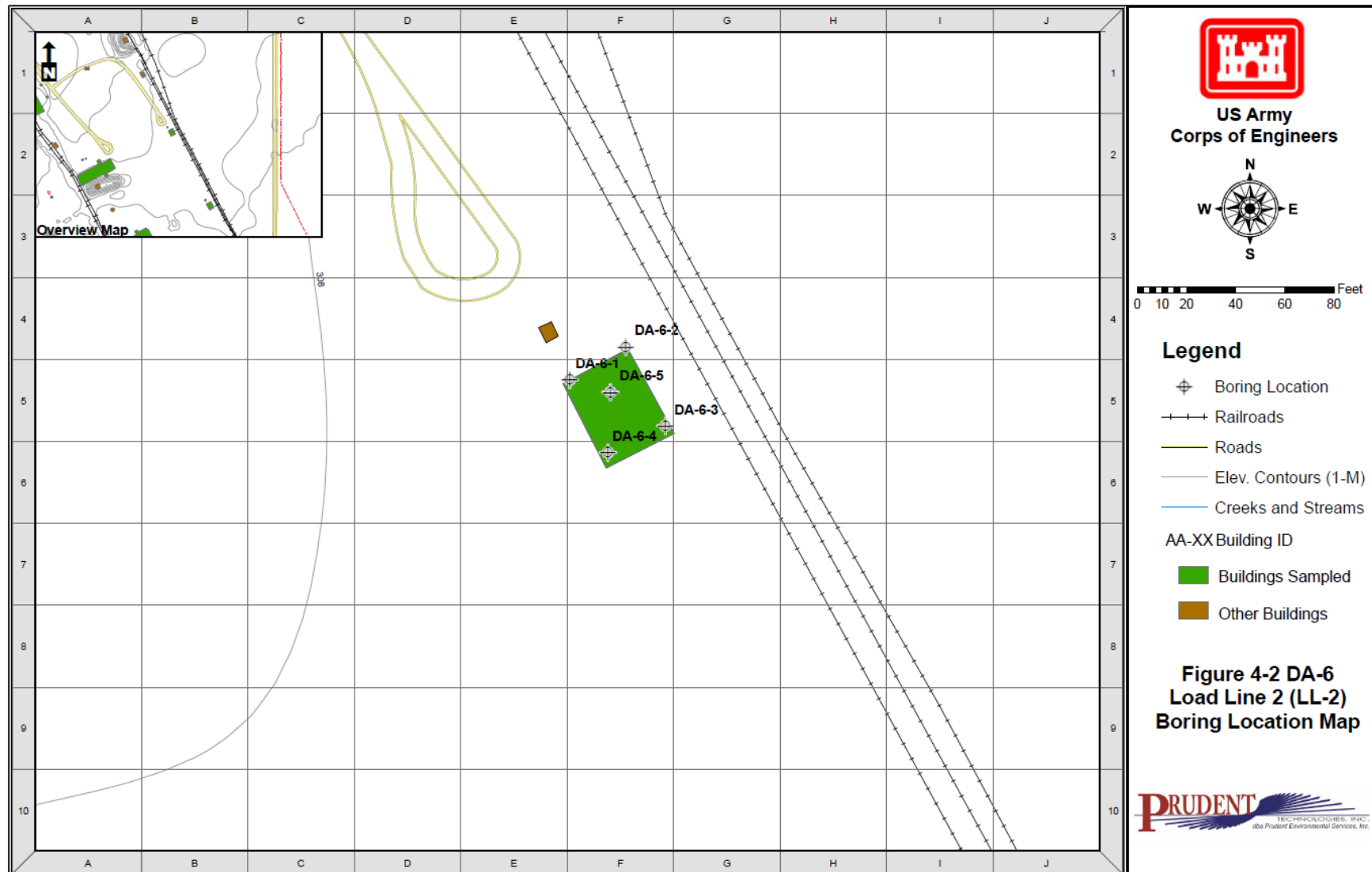
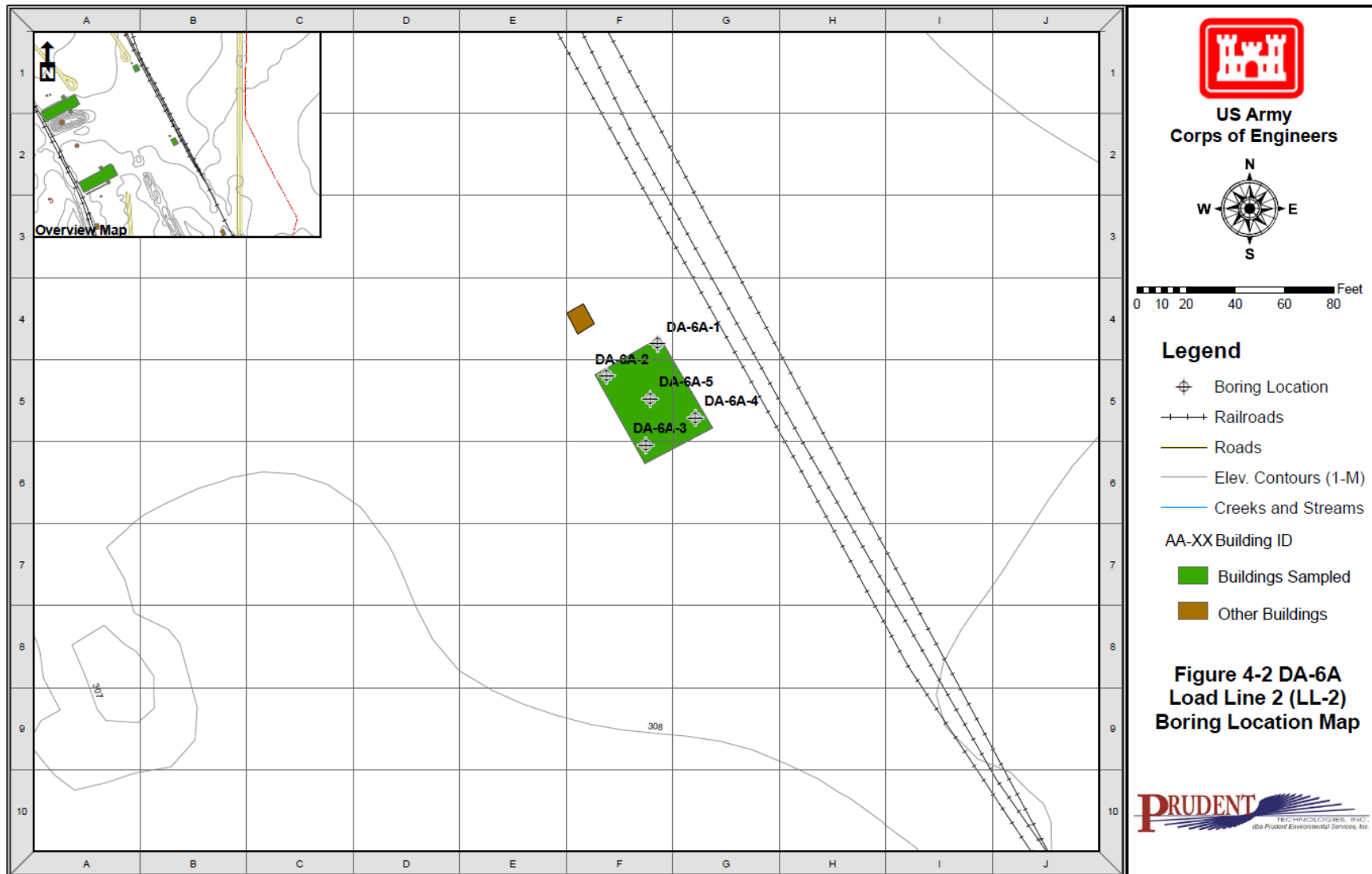
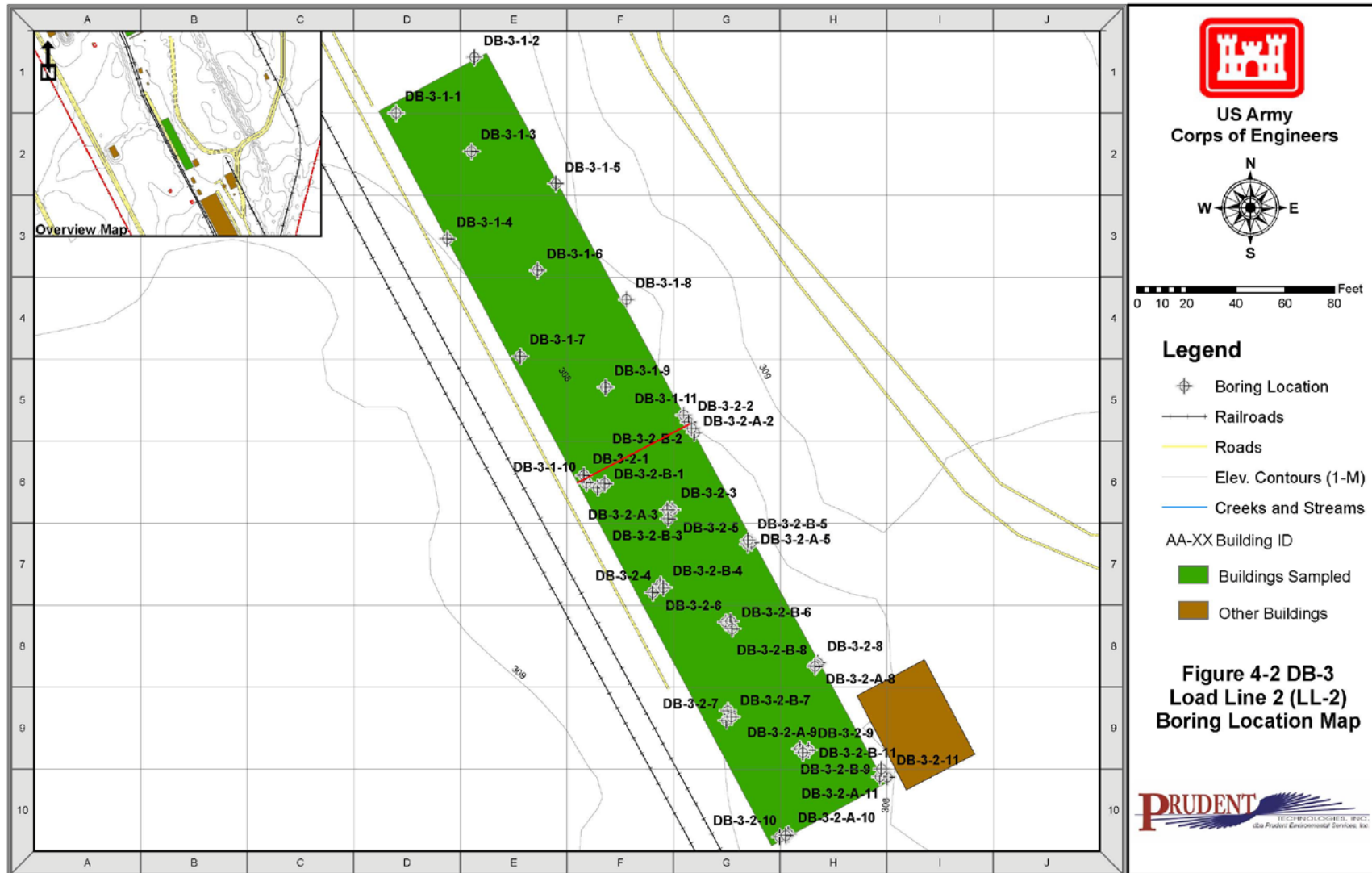
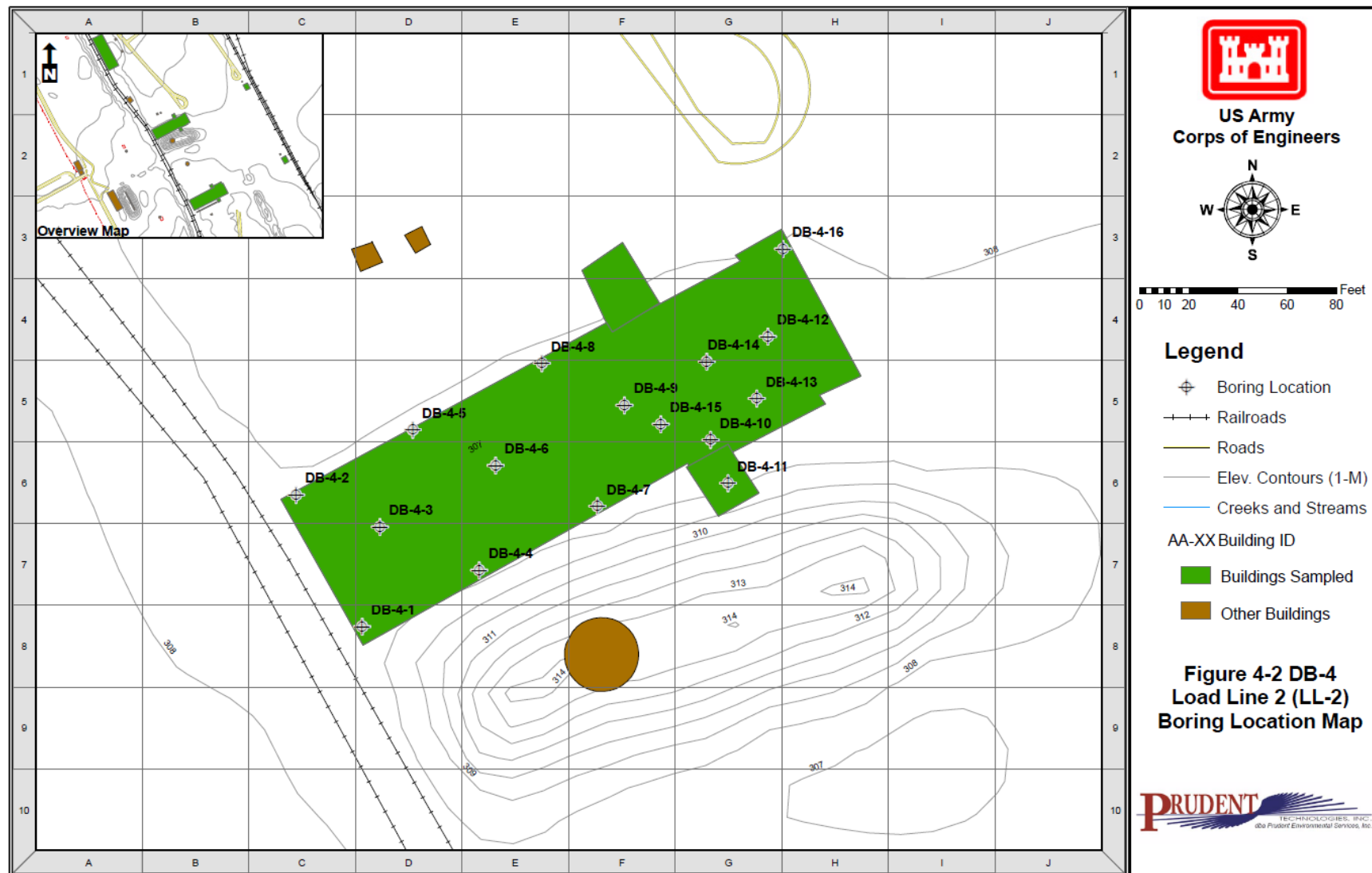


Figure 4-2: Boring Location Map for LL2 Buildings











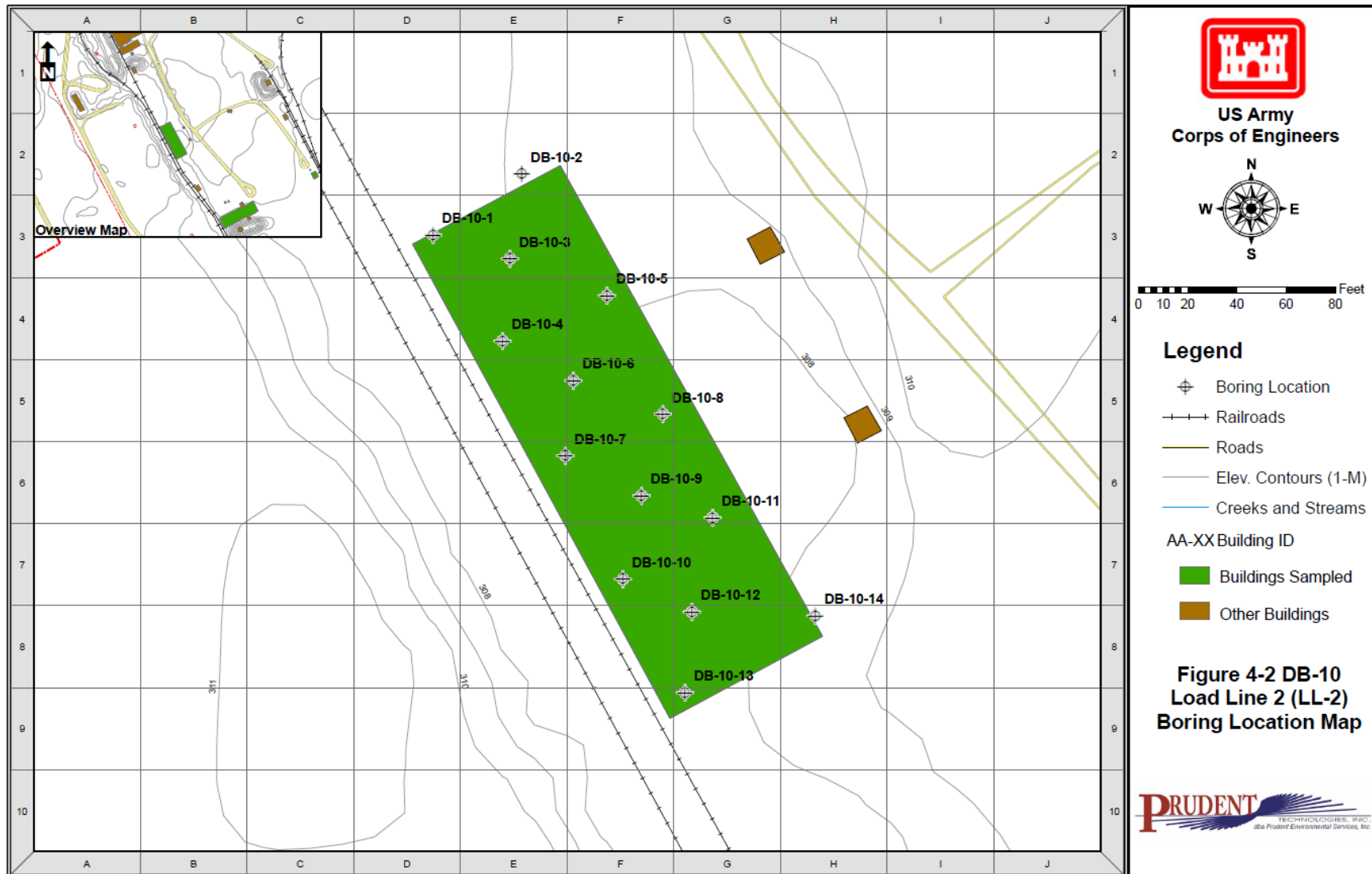
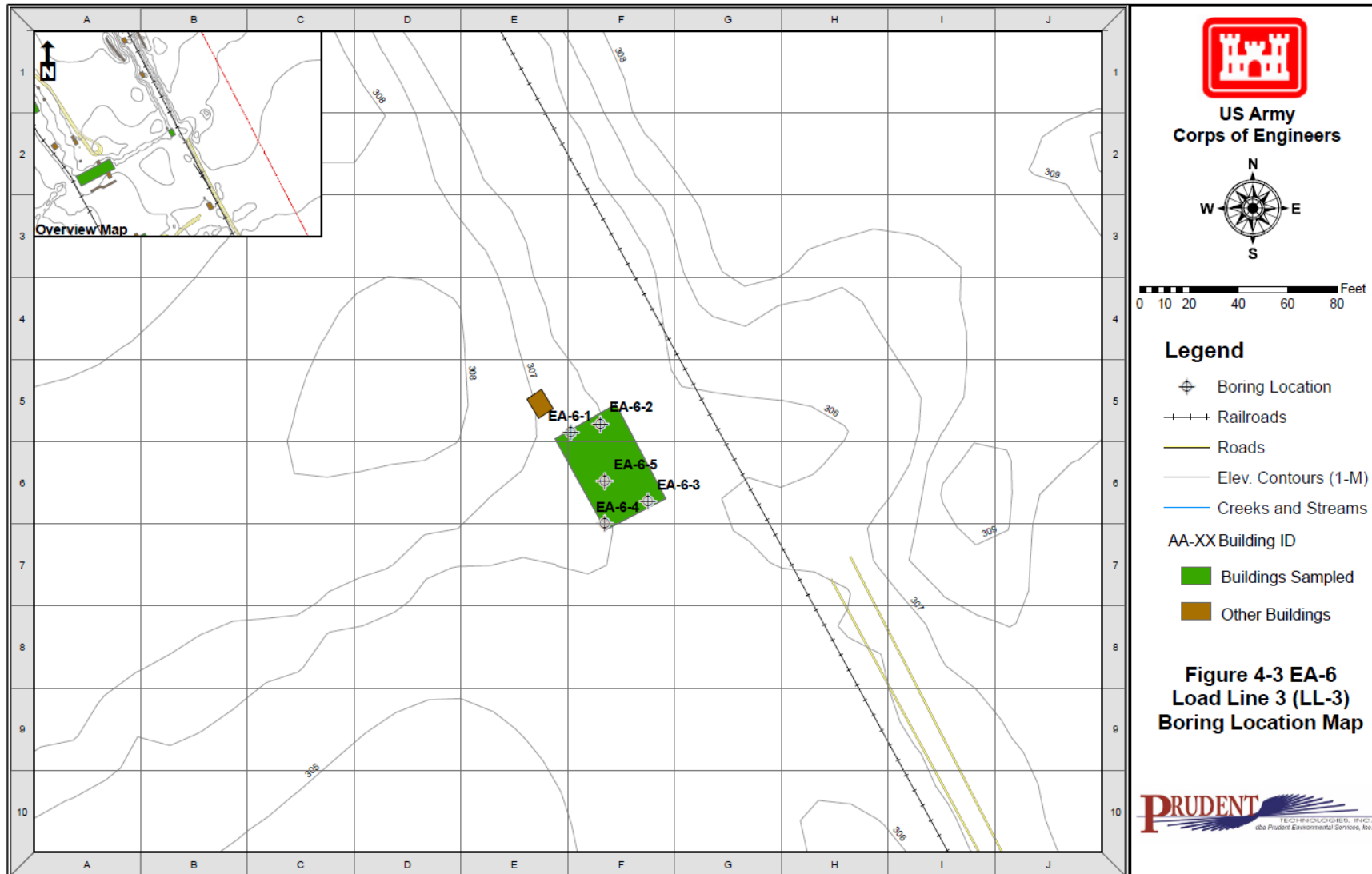
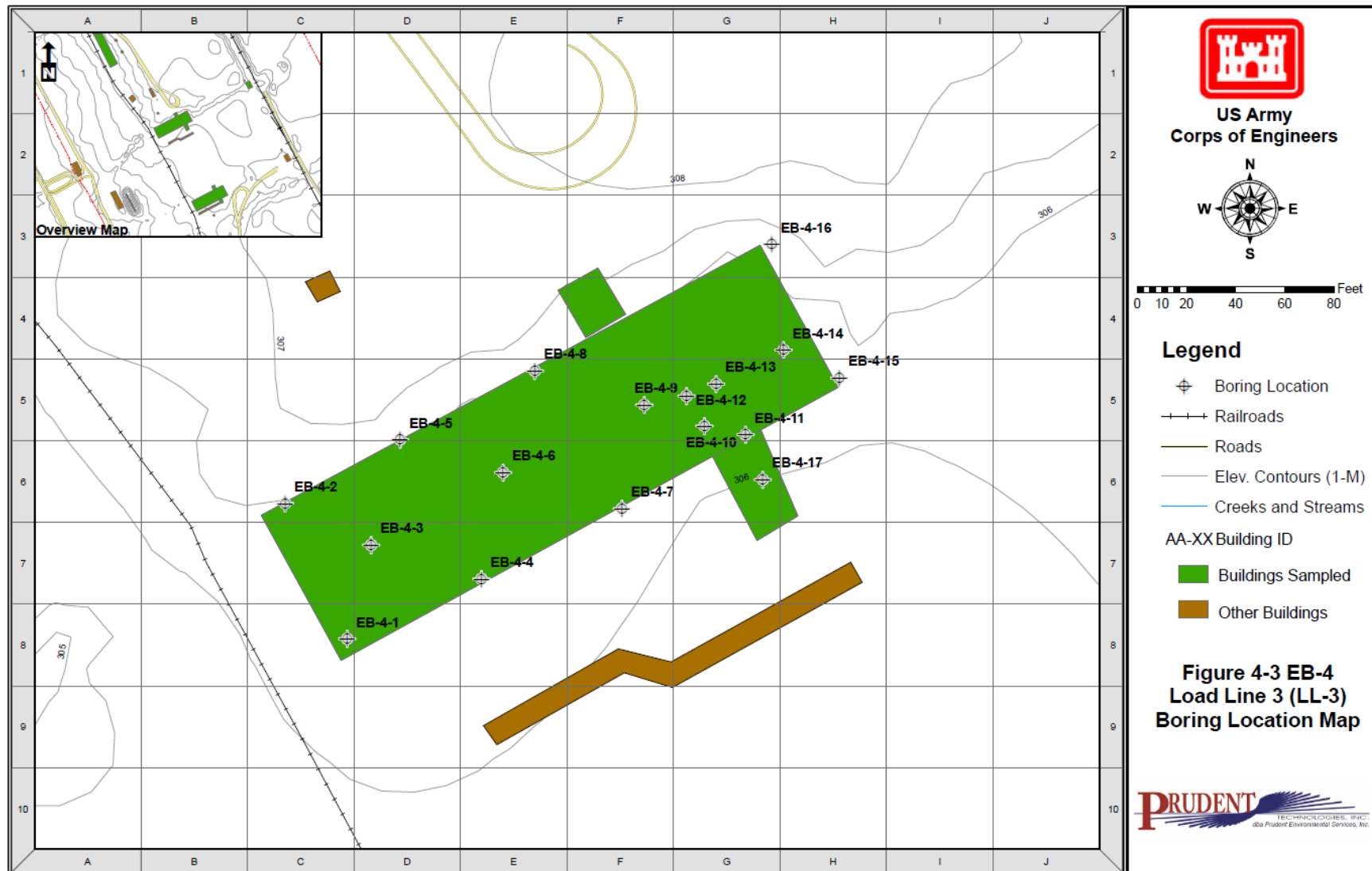
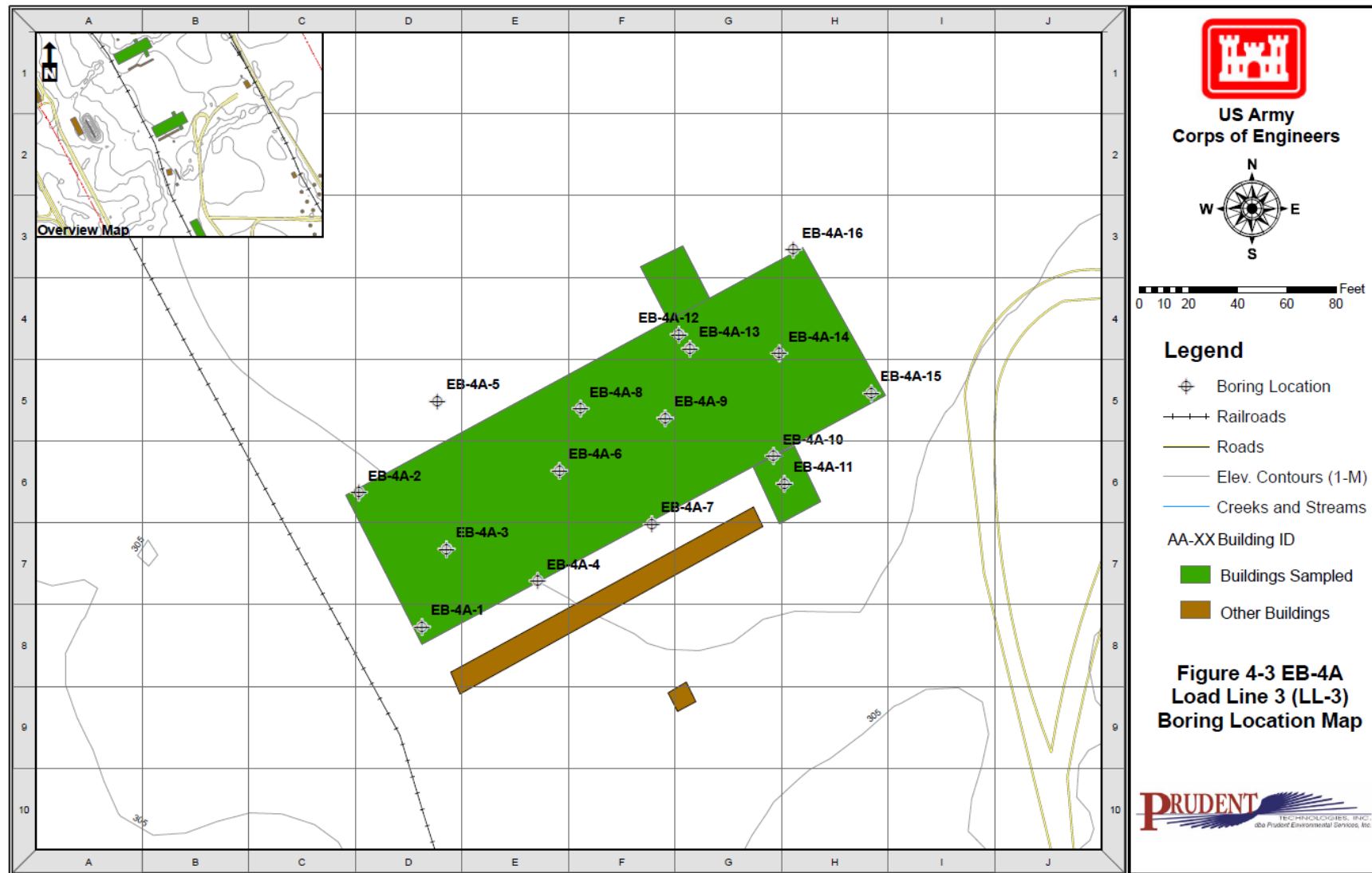


Figure 4-3: Boring Location Map for LL3 Buildings









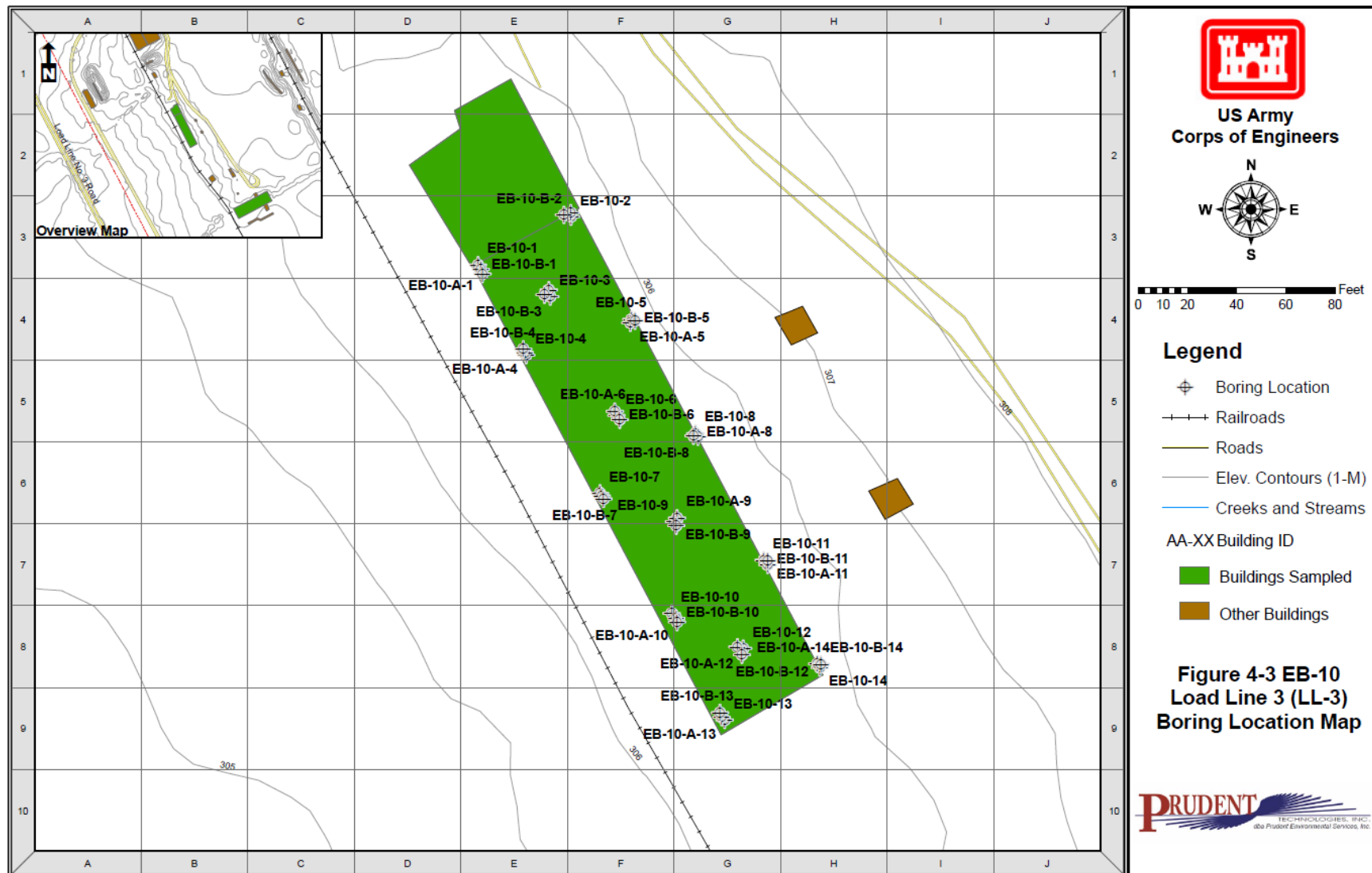


Figure 4-4: Boring Location Map for LL4 Building

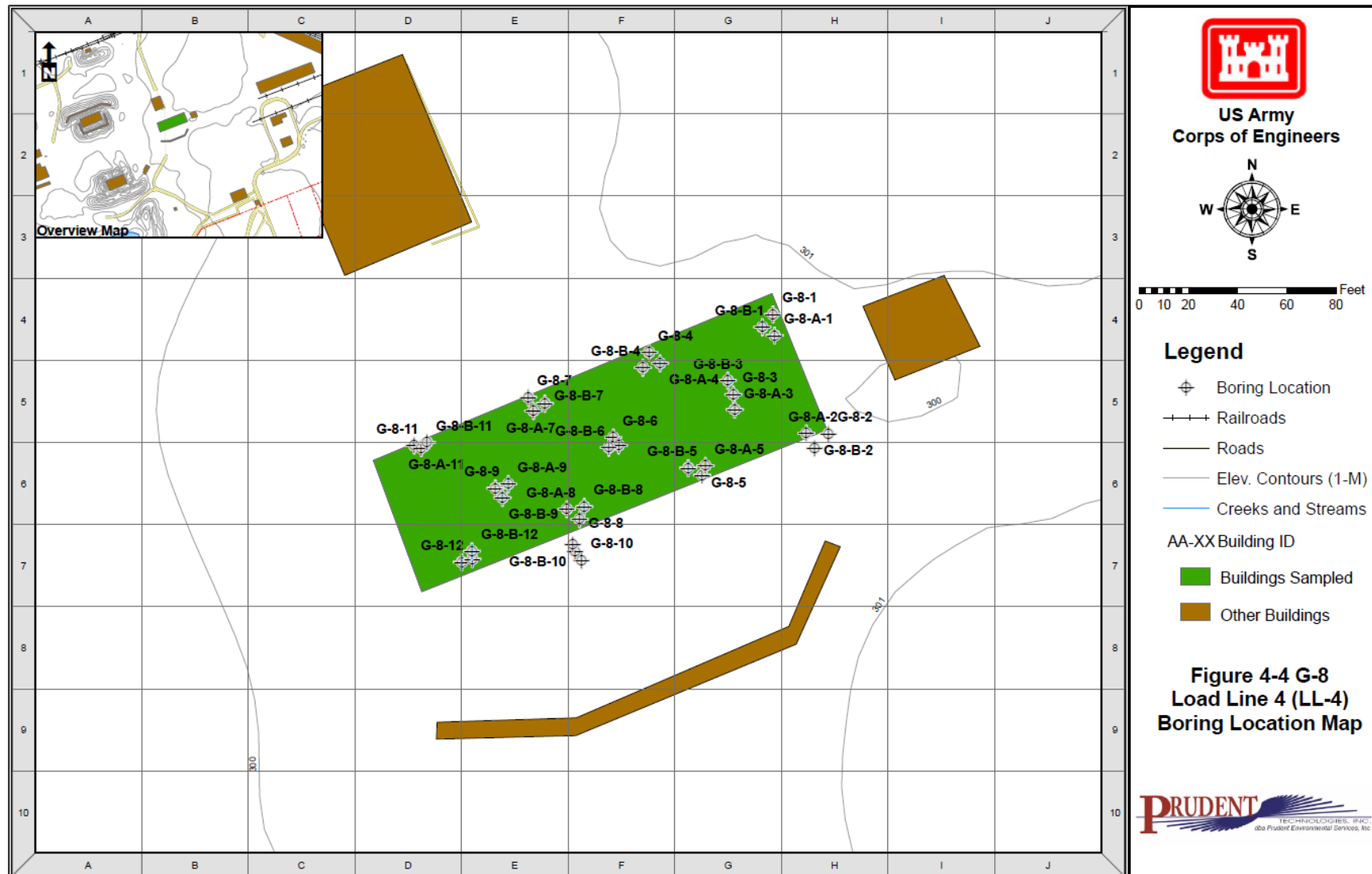


Table 4-1: Subsurface ISM Sampling Table for Load Line 1

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-1	CB-3	Shell Receiving Bldg-1	350	50	LL1SB-636V-0101-SO		11	1 – 3							1								9/1/10		
					LL1SB-636M-0101-SO			1 - 3		1		1											9/1/10	1 – 3	
					LL1SB-636V-0102-SO			3 – 5							1								9/1/10		
					LL1SB-636M-0102-SO			3 - 5		1		1											9/1/10	3 – 5	
					LL1SB-636V-0103-SO		*(Added)	5 – 7							1								9/1/10		
					LL1SB-636M-0103-SO		*(Added)	5 – 7		1		1											9/1/10	5 – 7	
						LLSB-636V-0001-SO			1 - 5							1									
						LLSB-636M-0001-SO			1 - 5		1		1										9/1/10	1.5	
						LLSB-636V-0002-SO			1 - 5							1									
						LLSB-636M-0002-SO			1 - 5		1		1										9/1/10	2.0	
						LLSB-636V-0003-SO			1 - 5							1									
						LLSB-636M-0003-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-636V-0004-SO			1 - 5							1									
						LLSB-636M-0004-SO			1 - 5		1		1										9/1/10	2.5	
						LLSB-636V-0005-SO			1 - 5							1									
						LLSB-636M-0005-SO			1 - 5		1		1										9/1/10	2.5	
						LLSB-636V-0006-SO			1 - 5							1									
						LLSB-636M-0006-SO			1 - 5		1		1										9/1/10	3.0	
						LLSB-636V-0007-SO			1 - 5							1									
						LLSB-636M-0007-SO			1 - 5		1		1										9/1/10	5.0	
						LLSB-636V-0008-SO			1 - 5							1									
						LLSB-636M-0008-SO			1 - 5		1		1										9/1/10	7.0	
						LLSB-636V-0009-SO			1 - 5							1									
						LLSB-636M-0009-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-636V-0010-SO			1 - 5							1									
						LLSB-636M-0010-SO			1 - 5		1		1										9/1/10	3.5	
						LLSB-636V-0011-SO			1 – 5							1									
						LLSB-636M-0011-SO			1 - 5		1		1										9/1/10	5.5	
	CB-3	Shell Receiving Bldg-2	350	50	LL1SB-634V-0101-SO		11	1 – 3							1								9/1/10		
					LL1SB-634M-0101-SO			1 - 3		1		1											9/1/10	1 – 3	
					LL1SB-634V-0102-SO			3 – 5							1								9/1/10		
					LL1SB-634M-0102-SO			3 - 5		1		1											9/1/10	3 – 5	
					LL1SB-634V-0103-SO		*(Added)	5 – 7							1								9/1/10		
					LL1SB-634M-0103-SO		*(Added)	5 – 7		1		1											9/1/10	5 – 7	
						LLSB-634V-0001-SO			1 - 5							1									
						LLSB-634M-0001-SO			1 - 5		1		1										9/1/10	3.0	
						LLSB-634V-0002-SO			1 - 5							1									
						LLSB-634M-0002-SO			1 - 5		1		1										9/1/10	7.0	
						LLSB-634V-0003-SO			1 - 5							1									
						LLSB-634M-0003-SO			1 - 5		1		1										9/1/10	2.5	
						LLSB-634V-0004-SO			1 - 5							1									
						LLSB-634M-0004-SO			1 - 5		1		1										9/1/10	4.0	
						LLSB-634V-0005-SO			1 - 5							1									
						LLSB-634M-0005-SO			1 - 5		1		1										9/1/10	6.0	
						LLSB-634V-0006-SO			1 - 5							1									
						LLSB-634M-0006-SO			1 - 5		1		1										9/1/10	1.7	
						LLSB-634V-0007-SO			1 - 5							1									

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-1	CB-3	Shell Receiving Bldg.	350	50		LLSB-634M-0007-SO			1 - 5		1		1											9/1/10	4.5
	(Cont.)	(Continued)				LLSB-634V-0008-SO			1 - 5						1										
						LLSB-634M-0008-SO			1 - 5		1		1											9/1/10	3.0
						LLSB-634V-0009-SO			1 - 5						1										
						LLSB-634M-0009-SO			1 - 5		1		1											No Sample	1.0
						LLSB-634V-0010-SO			1 - 5						1										
						LLSB-634M-0010-SO			1 - 5		1		1											9/1/10	4.5
						LLSB-634V-0011-SO			1 - 5						1										
						LLSB-634M-0011-SO			1 - 5		1		1											9/1/10	5.0
	CA-6	Explosives	40	40	LL1SB-635V-0101-SO		5	1 - 3							1									8/31/10	
		Preparation			LL1SB-635B-0101-SO			1 - 3							1									8/31/10	
					LL1SB-635M-0101-SO			1 - 3		1		1		1			1		1		1			8/31/10	1 - 3
					LL1SB-635V-0102-SO			3 - 5							1									8/31/10	
					LL1SB-635B-0102-SO			3 - 5							1									8/31/10	
					LL1SB-635M-0102-SO			3 - 5		1		1		1			1		1		1			8/31/10	3 - 5
					LL1SB-635v-0103-SO		*(Added)	5 - 7							1									8/31/10	
					LL1SB-635M-0103-SO		*(Added)	5 - 7		1		1		1			1		1		1			8/31/10	5 - 7
						LLSB-635V-0001-SO			1 - 5							1									
						LLSB-635M-0001-SO			1 - 5		1		1		1			1		1		1		8/31/10	6.5
						LLSB-635V-0002-SO			1 - 5							1									
						LLSB-635M-0002-SO			1 - 5		1		1		1			1		1		1		8/31/10	6.5
						LLSB-635V-0003-SO			1 - 5							1									
						LLSB-635M-0003-SO			1 - 5		1		1		1			1		1		1		8/31/10	7.0
						LLSB-635V-0004-SO			1 - 5							1									
						LLSB-635M-0004-SO			1 - 5		1		1		1			1		1		1		8/31/10	5.0
						LLSB-635V-0005-SO			1 - 5							1									
						LLSB-635M-0005-SO			1 - 5		1		1		1			1		1		1		8/31/10	6.5
	CA-6	Explosives	40	40	LL1SB-637V-0101-SO		5	1 - 3							1									8/31/10	
		Preparation			LL1SB-637M-0101-SO			1 - 3		1		1		1			1		1		1			8/31/10	1 - 3
					LL1SB-637V-0102-SO			3 - 5							1									8/31/10	
					LL1SB-637M-0102-SO			3 - 5		1		1		1			1		1		1			8/31/10	3 - 5
					LL1SB-637V-0103-SO		*(Added)	5 - 7								1								8/31/10	
					LL1SB-637M-0103-SO		*(Added)	5 - 7		1		1		1			1		1		1			8/31/10	5 - 7
						LLSB-637-0001-SO			1 - 5							1									
						LLSB-637M-0001-SO			1 - 5		1		1		1			1		1		1		8/31/10	5.0
						LLSB-637V-0002-SO			1 - 5							1									
						LLSB-637M-0002-SO			1 - 5		1		1		1			1		1		1		8/31/10	6.5
						LLSB-637V-0003-SO			1 - 5							1									
						LLSB-637M-0003-SO			1 - 5		1		1		1			1		1		1		8/31/10	6.5
						LLSB-637V-0004-SO			1 - 5							1									
						LLSB-637M-0004-SO			1 - 5		1		1		1			1		1		1		8/31/10	5.0
						LLSB-637V-0005-SO			1 - 5							1									
						LLSB-637M-0005-SO			1 - 5		1		1		1			1		1		1		8/31/10	5.0
	CA-6	Explosives	40	40	LL1SB-631V-0101-SO		5	1 - 3							1									8/31/10	
		Preparation			LL1SB-631M-0101-SO			1 - 3		1		1		1			1		1			1		8/31/10	1 - 3
					LL1SB-631V-0102-SO			3 - 5							1									8/31/10	
					LL1SB-631M-0102-SO			3 - 5		1		1		1			1		1			1		8/31/10	3 - 5
					LL1SB-631V-0103-SO		*(Added)	5 - 7								1								8/31/10	
					LL1SB-631M-0103-SO		*(Added)	5 - 7		1		1		1			1		1			1		8/31/10	5 - 7
						LLSB-631V-0001-SO			1 - 5							1									
						LLSB-631M-0001-SO			1 - 5		1		1		1			1		1		1		8/31/10	5.0

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert				
LL-1						LLSB-631V-0002-SO			1 - 5						1										
						LLSB-631M-0002-SO			1 - 5		1		1		1		1		1		1		8/31/10	5.5	
						LLSB-631V-0003-SO			1 - 5						1										
						LLSB-631M-0003-SO			1 - 5		1		1		1		1		1		1		8/31/10	7.0	
						LLSB-631V-0004-SO			1 - 5						1										
						LLSB-631M-0004-SO			1 - 5		1		1		1		1		1		1		8/31/10	5.5	
						LLSB-631V-0005-SO			1 - 5						1										
						LLSB-631M-0005-SO			1 - 5		1		1		1		1		1		1		8/31/10	7.0	
	CA-6A	Explosives	40	40	LL1SB-633M-0101-SO		5	1 – 3		1		1											8/25/10	1 – 3	
		Preparation			LL1SB-633M-0102-SO			3 - 5		1		1											8/25/10	3 – 5	
					LL1SB-633M-0103-SO		*(Added)	5 - 7															8/25/10	5 – 7	
						LLSB-633M-0001-SO			1 - 5		1		1										8/25/10	7.0	
						LLSB-633M-0002-SO			1 - 5		1		1										8/25/10	6.0	
						LLSB-633M-0003-SO			1 - 5		1		1										8/25/10	2.5	
						LLSB-633M-0004-SO			1 - 5		1		1										8/25/10	2.0	
						LLSB-633M-0005-SO			1 - 5		1		1										8/25/10	7.0	
	CB-4	Melt Pour	210	50	LL1SB-632M-0101-SO		16	1 – 3		1		1											9/1/10	1 – 3	
					LL1SB-632M-0102-SO			3-- 5		1		1											9/1/10	3 – 5	
					LL1SB-632M-0103-SO		*(Added)			1		1											9/1/10	5 – 7	
						LLSB-632M-0001-SO			1 - 5		1		1										9/1/10	5.0	
						LLSB-632M-0002-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-632M-0003-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-632M-0004-SO			1 - 5		1		1										9/1/10	2.0	
						LLSB-632M-0005-SO			1 - 5		1		1										9/1/10	5.5	
						LLSB-632M-0006-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-632M-0007-SO			1 - 5		1		1										9/1/10	5.5	
						LLSB-632M-0008-SO			1 - 5		1		1										9/1/10	3.0	
						LLSB-632M-0009-SO			1 - 5		1		1										9/1/10	1.5	
						LLSB-632M-0010-SO			1 - 5		1		1										9/1/10	4.5	
						LLSB-632M-0011-SO			1 - 5		1		1										9/1/10	2.0	
						LLSB-632M-0012-SO			1 - 5		1		1										9/1/10	1.5	
						LLSB-632M-0013-SO			1 - 5		1		1										No Sample	0.7	
						LLSB-632M-0014-SO			1 - 5		1		1										9/1/10	3.5	
						LLSB-632M-0015-SO			1 - 5		1		1										9/1/10	2.0	
						LLSB-632M-0016-SO			1 - 5		1		1										9/1/10	1.5	
	CB-4A	Melt Pour	210	50	LL1SB-638M-0101-SO		16	1 – 3		1		1											9/1/10	1 – 3	
					LL1SB-638M-0102-SO			3 - 5		1		1											9/1/10	3 – 5	
					LL1SB-638M-0103-SO		*(Added)	5 - 7		1		1											9/1/10	5 – 7	
						LLSB-638M-0001-SO			1 - 5		1		1										9/1/10	3.5	
						LLSB-638M-0002-SO			1 - 5		1		1										9/1/10	4.0	
						LLSB-638M-0003-SO			1 - 5		1		1										No Sample	0.5	
						LLSB-638M-0004-SO			1 - 5		1		1										9/1/10	5.5	
						LLSB-638M-0005-SO			1 - 5		1		1										9/1/10	4.0	
						LLSB-638M-0006-SO			1 - 5		1		1										9/1/10	1.5	
						LLSB-638M-0007-SO			1 - 5		1		1										9/1/10	5.5	
						LLSB-638M-0008-SO			1 - 5		1		1										9/1/10	3.5	
						LLSB-638M-0009-SO			1 - 5		1		1										No Sample	1.0	
						LLSB-638M-0010-SO			1 - 5		1		1										9/1/10	5.0	
						LLSB-638M-0011-SO			1 - 5		1		1										9/1/10	2.0	
						LLSB-638M-0012-SO			1 - 5		1		1										9/1/10	3.5	

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-1	CB-4A	Melt Pour	210	50		LLSB-638M-0013-SO			1 - 5		1		1											9/1/10	1.5
	(Cont.)	(Continued)				LLSB-638M-0014-SO			1 - 5		1		1											9/1/10	5.0
						LLSB-638M-0015-SO			1 - 5		1		1											9/1/10	2.0
						LLSB-638M-0016-SO			1 - 5		1		1											9/1/10	2.5
	CB-10	Drill and	300	50	LL1SB-630M-0101-SO		14	1 – 3		1		1												8/31/10	1 – 3
		Assembly			LL1SB-630M-0102-SO			3 - 5		1		1												8/31/10	3 – 5
						LLSB-630M-0001-SO			1 - 5		1		1											8/31/10	1.5
						LLSB-630M-0002-SO			1 - 5		1		1											8/31/10	2.5
						LLSB-630M-0003-SO			1 - 5		1		1											8/31/10	2.5
						LLSB-630M-0004-SO			1 - 5		1		1											8/31/10	1.5
						LLSB-630M-0005-SO			1 - 5		1		1											8/31/10	2.0
						LLSB-630M-0006-SO			1 - 5		1		1											8/31/10	2.0
						LLSB-630M-0007-SO			1 - 5		1		1											No Sample	<1.0
						LLSB-630M-0008-SO			1 - 5		1		1											8/31/10	2.5
						LLSB-630M-0009-SO			1 - 5		1		1											8/31/10	1.5
						LLSB-630M-0010-SO			1 - 5		1		1											No Sample	<1.0
						LLSB-630M-0011-SO			1 - 5		1		1											8/31/10	3.0
						LLSB-630M-0012-SO			1 - 5		1		1											No Sample	<1.0
						LLSB-630M-0013-SO			1 - 5		1		1											8/31/10	6.5
						LLSB-630M-0014-SO			1 - 5		1		1											8/31/10	4.5
	Primary ISM Sample							totals:		14	78	14	78	2	5	6	27	2	5	2	5	2	5		
	Methanol Field Blank															2									
	QC Triplicate to Primary Lab							totals:		2		2		2		2		2		2		2			
	QA Triplicate to QA Lab							totals:		2		2		2	5	2		2		2		2	5		
TOTAL										18	78	18	78	6	5	12	27	6	5	6	5	6	5		

Only one set of vertical samples was analyzed in a sample area, either those associated with the primary sample or those associated with the triplicate horizontal samples that had the most CUG exceedances.

*Added denotes additional horizontal subsurface ISM samples that were collected because the borings extended deeper bgs than anticipated.

Table 4-2: Subsurface ISM Sampling Table for Load Line 2

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
								Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor		
LL-2	DB-3	Shell Receiving Bldg-1	350	50	LL2SB-507V-0101-SO		11	1 – 3								1								8/24/10	
					LL2SB-507M-0101-SO			1 - 3		1		1												8/24/10	1 – 3
					LL2SB-507V-0102-SO			3 – 5								1								8/24/10	
					LL2SB-507M-0102-SO			3 - 5		1		1												8/24/10	3 – 5
					LL2SB-507V-0103-SO			5 - 7								1								8/24/10	
					LL2SB-507M-0103-SO			5 - 7		1		1												8/24/10	5 – 7
						LL2SB-507V-0001-SO			1 - 7								1								
						LL2SB-507M-0001-SO			1 - 7		1		1											8/24/10	5.0
						LL2SB-507V-0002-SO			1 - 7								1								
						LL2SB-507M-0002-SO			1 - 7		1		1											8/24/10	5.0
						LL2SB-507V-0003-SO			1 - 7								1								
						LL2SB-507M-0003-SO			1 - 7		1		1											8/24/10	7.0
						LL2SB-507V-0004-SO			1 - 7								1								
						LL2SB-507M-0004-SO			1 - 7		1		1											8/24/10	5.0
						LL2SB-507V-0005-SO			1 – 7								1								
						LL2SB-507M-0005-SO			1 – 7		1		1											8/24/10	4.0
						LL2SB-507V-0006-SO			1 – 7								1								
						LL2SB-507M-0006-SO			1 – 7		1		1											8/24/10	7.0
						LL2SB-507V-0007-SO			1 – 7								1								
						LL2SB-507M-0007-SO			1 – 7		1		1											8/24/10	3.0
						LL2SB-507V-0008-SO			1 – 7								1								
						LL2SB-507M-0008-SO			1 – 7		1		1											8/24/10	5.0
						LL2SB-507V-0009-SO			1 – 7								1								
						LL2SB-507M-0009-SO			1 – 7		1		1											8/24/10	7.0
						LL2SB-507V-0010-SO			1 – 7								1								
						LL2SB-507M-0010-SO			1 – 7		1		1											8/24/10	7.0
						LL2SB-507V-0011-SO			1 – 7								1								
						LL2SB-507M-0011-SO			1 – 7		1		1											8/24/10	7.0
	DB-3	Shell Receiving Bldg-2	350	50	LL2SB-505V-0101-SO		11	1 – 3								1								8/27/10	
					LL2SB-505B-0101-SO			1 - 3								1								8/27/10	
					LL2SB-505M-0101-SO			1 - 3		1		1		1				1		1		1		8/27/10	1 – 3
					LL2SB-505V-0102-SO			3 – 5								1								8/27/10	
					LL2SB-505B-0102-SO			3 - 5								1								8/27/10	
					LL2SB-505M-0102-SO			3 - 5		1		1		1				1		1		1		8/27/10	3 – 5
					LL2SB-505V-0103-SO			5 - 7								1								8/27/10	
					LL2SB-505V-0103-SO			5 - 7								1								8/27/10	
					LL2SB-505M-0103-SO			5 - 7		1		1		1				1		1		1		8/27/10	5 – 7
						LL2SB-505V-0001-SO			1 - 7								1								
						LL2SB-505M-0001-SO			1 - 7		1		1		1				1		1		1	8/27/10	7.0
						LL2SB-505V-0002-SO			1 - 7								1								
						LL2SB-505M-0002-SO			1 - 7		1		1		1				1		1		1	8/27/10	7.0
						LL2SB-505V-0003-SO			1 - 7								1								
						LL2SB-505M-0003-SO			1 - 7		1		1		1				1		1		1	8/27/10	7.0
						LL2SB-505V-0004-SO			1 - 7								1								
						LL2SB-505M-0004-SO			1 - 7		1		1		1				1		1		1	8/27/10	3.0
						LL2SB-505V-0005-SO			1 – 7								1								

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-2	DB-3	Shell Receiving Bldg-2	350	50		LL2SB-505M-0005-SO		1 – 7		1		1		1			1		1		1		8/27/10	4.5	
	(Cont.)	(Continued)				LL2SB-505V-0006-SO		1 – 7								1									
						LL2SB-505M-0006-SO		1 – 7		1		1		1			1		1		1		8/27/10	7.0	
						LL2SB-505V-0007-SO		1 – 7								1									
						LL2SB-505M-0007-SO		1 – 7		1		1		1			1		1		1		8/27/10	7.0	
						LL2SB-505V-0008-SO		1 – 7								1									
						LL2SB-505M-0008-SO		1 – 7		1		1		1			1		1		1		8/27/10	7.0	
						LL2SB-505V-0009-SO		1 – 7								1									
						LL2SB-505M-0009-SO		1 – 7		1		1		1			1		1		1		8/27/10	7.0	
						LL2SB-505V-0010-SO		1 – 7								1									
						LL2SB-505M-0010-SO		1 – 7		1		1		1			1		1		1		8/27/10	6.0	
						LL2SB-505V-0011-SO		1 – 7								1									
						LL2SB-505M-0011-SO		1 – 7		1		1		1			1		1		1		8/27/10	7.0	
	DB-3	Shell Receiving Bldg-2	350	50	LL2SB-501V-0101-SO		11	1 – 3								1							8/27/10		
					LL2SB-501M-0101-SO			1 - 3		1		1		1			1		1		1		8/27/10	1 – 3	
					LL2SB-501V-0102-SO			3 – 5								1							8/27/10		
					LL2SB-501M-0102-SO			3 - 5		1		1		1			1		1		1		8/27/10	3 – 5	
					LL2SB-501V-0103-SO			5 - 7								1							8/27/10		
					LL2SB-501M-0103-SO			5 - 7		1		1		1			1		1		1		8/27/10	5 – 7	
					LL2SB-501V-0001-SO			1 - 7								1									
					LL2SB-501M-0001-SO			1 - 7			1		1		1			1		1			8/27/10	7.0	
					LL2SB-501V-0002-SO			1 - 7								1									
					LL2SB-501M-0002-SO			1 - 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0003-SO			1 - 7								1									
					LL2SB-501M-0003-SO			1 - 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0004-SO			1 - 7								1									
					LL2SB-501M-0004-SO			1 - 7			1		1		1			1		1		1		8/227/10	3.0
					LL2SB-501V-0005-SO			1 – 7								1									
					LL2SB-501M-0005-SO			1 – 7			1		1		1			1		1		1		8/27/10	3.0
					LL2SB-501V-0006-SO			1 – 7								1									
					LL2SB-501M-0006-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0007-SO			1 – 7								1									
					LL2SB-501M-0007-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0008-SO			1 – 7								1									
					LL2SB-501M-0008-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0009-SO			1 – 7								1									
					LL2SB-501M-0009-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0010-SO			1 – 7								1									
					LL2SB-501M-0010-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
					LL2SB-501V-0011-SO			1 – 7								1									
					LL2SB-501M-0011-SO			1 – 7			1		1		1			1		1		1		8/27/10	7.0
	DB-3	Shell Receiving Bldg-2	350	50	LL2SB-504V-0101-SO		11	1 – 3								1							8//27/10		
					LL2SB-504M-0101-SO			1 - 3		1		1		1			1		1		1		8/27/10	1 – 3	
					LL2SB-504V-0102-SO			3 – 5								1							8/27/10		
					LL2SB-504M-0102-SO			3 - 5		1		1		1			1		1		1		8/27/10	3 – 5	

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-2	DB-3	Shell Receiving Bldg-2	350	50	LL2SB-504V-0103-SO			5 - 7							1								8/27/10		
	(Cont.)	(Continued			LL2SB-504M-0103-SO			5 - 7		1		1		1			1		1		1		8/27/10	5 – 7	
						LL2SB-504V-0001-SO			1 - 7						1										
						LL2SB-504M-0001-SO			1 - 7		1		1		1		1		1				8/27/10	7.0	
						LL2SB-504V-0002-SO			1 - 7						1										
						LL2SB-504M-0002-SO			1 - 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0003-SO			1 - 7						1										
						LL2SB-504M-0003-SO			1 - 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0004-SO			1 - 7						1										
						LL2SB-504M-0004-SO			1 - 7		1		1		1		1		1		1		8/27/10	4.0	
						LL2SB-504V-0005-SO			1 – 7						1										
						LL2SB-504M-0005-SO			1 – 7		1		1		1		1		1		1		8/27/10	5.0	
						LL2SB-504V-0006-SO			1 – 7						1										
						LL2SB-504M-0006-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0007-SO			1 – 7						1										
						LL2SB-504M-0007-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0008-SO			1 – 7						1										
						LL2SB-504M-0008-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0009-SO			1 – 7						1										
						LL2SB-504M-0009-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0010-SO			1 – 7						1										
						LL2SB-504M-0010-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
						LL2SB-504V-0011-SO			1 – 7						1										
						LL2SB-504M-0011-SO			1 – 7		1		1		1		1		1		1		8/27/10	7.0	
	DA-6	Explosives Preparation	40	40	LL2SB-508M-0101-SO		5	1 – 3		1		1											8/25/10	1 – 3	
					LL2SB-508M-0102-SO			3 - 5		1		1											8/25/10	3 – 5	
					LL2SB-508M-0103-SO			5 - 7		1													8/25/10	5 – 7	
						LL2SB-508M-0001-SO			1 – 7		1		1										8/25/10	7.0	
						LL2SB-508M-0002-SO			1 – 7		1		1										8/25/10	7.0	
						LL2SB-508M-0003-SO			1 – 7		1		1										8/25/10	7.0	
						LL2SB-508M-0004-SO			1 – 7		1		1										8/25/10	7.0	
						LL2SB-508M-0005-SO			1 – 7		1		1		1								8/25/10	7.0	
	DA-6A	Explosives Preparation	40	40	LL2SB-506M-0101-SO		5	1 – 3		1		1											8/24/10	1 – 3	
					LL2SB-506M-0102-SO			3 - 5		1		1											8/24/10	3 – 5	
					LL2SB-506M-0103-SO			5 - 7		1													8/24/10	5 – 7	
						LL2SB-506M-0001-SO			1 – 7		1		1										8/24/10	7.0	
						LL2SB-506M-0002-SO			1 – 7		1		1										8/24/10	7.0	
						LL2SB-506M-0003-SO			1 – 7		1		1										8/24/10	7.0	
						LL2SB-506M-0004-SO			1 – 7		1		1										8/24/10	7.0	
						LL2SB-506M-0005-SO			1 – 7		1		1										8/24/10	7.0	
	DB-4	Melt Pour	210	50	LL2SB-502M-0101-SO		16	1 – 3		1		1											8/25/10	1 – 3	
					LL2SB-502M-0102-SO			3 - 5		1		1											8/25/10	3 – 5	
					LL2SB-502M-0103-SO			5 - 7		1		1											8/25/10	5 – 7	
						LL2SB-502M-0001-SO			1 – 7		1		1										8/25/10	7.0	
						LL2SB-502M-0002-SO			1 – 7		1		1										8/25/10	7.0	

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-2	DB-4	Melt Pour	210	50		LL2SB-502M-0003-SO		1 – 7		1		1											8/25/10	7.0	
	(Cont.)	(Continued)				LL2SB-502M-0004-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0005-SO		1 – 7		1		1											8/25/10	5.0	
						LL2SB-502M-0006-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0007-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0008-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0009-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0010-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0011-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0012-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0013-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0014-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0015-SO		1 – 7		1		1											8/25/10	7.0	
						LL2SB-502M-0016-SO		1 – 7		1		1											8/25/10	7.0	
	DB-4A	Melt Pour	210	50	LL2SB-509M-0101-SO		16	1 – 3		1		1											8/23/10	1 – 3	
					LL2SB-509M-0102-SO			3 – 5		1		1											8/23/10	3 – 5	
					LL2SB-509M-0103-SO			5 – 7		1		1											8/23/10	5 – 7	
						LL2SB-509M-0001-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0002-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0003-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0004-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0005-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0006-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0007-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0008-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0009-SO			1 – 7		1		1										8/28/10	7.0	
						LL2SB-509M-0010-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0011-SO			1 – 7		1		1										8/23/10	5.0	
						LL2SB-509M-0012-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0013-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0014-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0015-SO			1 – 7		1		1										8/23/10	7.0	
						LL2SB-509M-0016-SO			1 – 7		1		1										8/23/10	7.0	
	DB-10	Drill and	300	50	LL1SB-503M-0101-SO		14	1 – 3		1		1											8/27/10	1 – 3	
		Assembly			LL1SB-503M-0102-SO			3 – 5		1		1											8/27/10	3 – 5	
					LL1SB-503M-0103-SO			5 – 7		1		1											Not Taken	5 – 7	
						LL2SB5030M-0001-SO			1 – 5		1		1										8/27/10	2.0	
						LL2SB-503M-0002-SO			1 – 7		1		1										8/27/10	1.5	
						LL2SB-503M-0003-SO			1 – 7		1		1										8/26/10	3.0	
						LL2SB-503M-0004-SO			1 – 7		1												8/26/10	3.0	
						LL2SB-503M-0005-SO			1 – 7		1		1										8/27/10	3.0	
						LL2SB-503M-0006-SO			1 – 7		1		1										8/26/10	1.5	
						LL2SB-503M-0007-SO			1 – 7		1		1										8/26/10	3.5	
						LL2SB-503M-0008-SO			1 – 7		1		1										8/27/10	2.5	
						LL2SB-503M-0009-SO			1 – 7		1		1										8/26/10	2.0	

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6						VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
						LL2SB-503M-0010-SO		1 - 7		1		1											8/26/10	4.0	
						LL2SB-503M-0011-SO		1 - 7		1		1											8/27/10	3.0	
						LL2SB-503M-0012-SO		1 - 7		1		1											8/26/10	3.5	
						LL2SB-503M-0013-SO		1 - 7		1		1											8/26/10	3.5	
						LL2SB-503M-0014-SO		1 - 7		1		1											8/27/10	2.0	
	Primary ISM Sample								totals:	21	78	21	78	3	11	6	22	3	11	3	11	3	11		
	Methanol Field Blank														3										
	QC Triplicate to Primary Lab								totals:	3		3		3		3		3		3		3			
	QA Triplicate to QA Lab								totals:	3		3		3		3		3		3		3			
TOTAL									27	78	27	78	9	11	15	22	9	11	9	11	9	11			

Only one set of vertical samples was analyzed in a sample area, either those associated with the primary sample or those associated with the triplicate horizontal samples that had the most CUG exceedances

Table 4-3: Subsurface ISM Sampling Table for Load Line 3

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)	
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides				
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert			Hor
LL3	EB-3	Shell Receiving Bldg-1	350	50	LL3SB-406V-0101-SO		11	1 – 3							1										8/20/10	
					LL3SB-406M-0101-SO			1 - 3		1		1													8/20/10	1 – 3
					LL3SB-406V-0102-SO			3 – 5							1										8/20/10	
					LL3SB-406M-0102-SO			3 - 5		1		1													8/20/10	3 – 5
					LL3SB-406V-0103-SO			5 - 7							1										8/20/10	
					LL3SB-406M-0103-SO			5 - 7		1		1													8/20/10	5 – 7
						LL3SB-406V-0001-SO			1 - 7							1										
						LL3SB-406M-0001-SO			1 - 7		1		1												8/20/10	7.0
						LL3SB-406V-0002-SO			1 - 7							1										
						LL3SB-406M-0002-SO			1 - 7		1		1												8/20/10	7.0
						LL3SB-406V-0003-SO			1 - 7							1										
						LL3SB-406M-0003-SO			1 - 7		1		1												8/20/10	7.0
						LL3SB-406V-0004-SO			1 - 7							1										
						LL3SB-406M-0004-SO			1 - 7		1		1												8/20/10	7.0
						LL3SB-406V-0005-SO			1 – 7							1										
						LL3SB-406M-0005-SO			1 – 7		1		1												8/20/10	7.0
						LL3SB-406V-0006-SO			1 – 7							1										
						LL3SB-406M-0006-SO			1 – 7		1		1												8/20/10	7.0
						LL3SB-406V-0007-SO			1 – 7							1										
						LL3SB-406M-0007-SO			1 – 7		1		1												8/20/10	7.0
						LL3SB-406V-0008-SO			1 – 7							1										
						LL3SB-406M-0008-SO			1 – 7		1		1												8/20/10	7.0
						LL3SB-406V-0009-SO			1 – 7							1										
						LL3SB-406M-0009-SO			1 – 7		1		1												9/20/10	7.0
						LL3SB-406V-0010-SO			1 – 7							1										
						LL3SB-406M-0010-SO			1 – 7		1		1												8/20/10	7.0
						LL3SB-406V-0011-SO			1 – 7							1										
						LL3SB-406M-0011-SO			1 – 7		1		1												8/20/10	7.0
	EB-3	Shell Receiving Bldg-2	350	50	LL3SB-401V-0101-SO		11	1 – 3							1										8/18/10	
					LL3SB-401M-0101-SO			1 - 3		1		1													8/18/10	1 – 3
					LL3SB-401V-0102-SO			3 – 5								1									8/18/10	
					LL3SB-401M-0102-SO			3 - 5		1		1													8/18/10	3 – 5
					LL3SB-401V-0103-SO			5 - 7								1									8/18/10	
					LL3SB-401M-0103-SO			5 - 7		1		1													8/18/10	5 – 7
						LL3SB-401V-0001-SO			1 - 7							1										
						LL3SB-401M-0001-SO			1 - 7		1		1												8/18/10	7.0
						LL3SB401M-0002-SO			1 - 7							1										
						LL3SB-401M-0002-SO			1 - 7		1		1												8/18/10	7.0
						LL3SB-401V-0003-SO			1 - 7							1										
						LL3SB-401M-0003-SO			1 - 7		1		1												8/18/10	7.0
						LL3SB-401V-0004-SO			1 - 7							1										
						LL3SB-401M-0004-SO			1 - 7		1		1												8/18/10	7.0
						LL3SB-401V-0005-SO			1 – 7							1										

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-3	EB-3	Shell Receiving Bldg-2	350	50		LL3SB-401M-0005-SO		1 – 7		1		1												8/18/10	7.0
	(Cont.)	(Continued)				LL3SB-401V-0006-SO		1 – 7								1									
						LL3SB-401M-0006-SO		1 - 7		1		1												8/18/10	7.0
						LL3SB-401V-0007-SO		1 – 7								1									
						LL3SB-401M-0007-SO		1 – 7		1		1												8/18/10	7.0
						LL3SB-401V-0008-SO		1 – 7								1									
						LL3SB-401M-0008-SO		1 – 7		1		1												8/18/10	7.0
						LL3SB-401V-0009-SO		1 – 7								1									
						LL3SB-401M-0009-SO		1 – 7		1		1												8/18/10	7.0
						LL3SB-401V-0010-SO		1 – 7								1									
						LL3SB-401M-0010-SO		1 – 7		1		1												8/18/10	7.0
						LL3SB-401V-0011-SO		1 – 7								1									
						LL3SB-401M-0011-SO		1 – 7		1		1												8/18/10	7.0
	EA-6	Explosives Preparation	40	40	LL3SB-403M-0101-SO		5	1 – 3		1		1												Area Remediated	
					LL3SB-403M-0102-SO			3 -- 5		1		1												Area Remediated	
					LL3SB-403M-0103-SO			5 - 7		1		1												Area Remediated	
						LL3SB-403M-0001-SO			1 – 7		1		1											Area Remediated	
						LL3SB-403M-0002-SO			1 – 7		1		1											Area Remediated	
						LL3SB-403M-0003-SO			1 – 7		1		1											Area Remediated	
						LL3SB-403M-0004-SO			1 – 7		1		1											Area Remediated	
						LL3SB-403M-0005-SO			1 – 7		1		1											Area Remediated	
	EA-6A	Explosives Preparation	40	40	LL3SB-405M-0101-SO		5	1 – 3		1		1												8/23/10	1 – 3
					LL3SB-405M-0102-SO			3 -- 5		1		1												8/23/10	3 – 5
					LL3SB-405M-0103-SO			5 - 7		1		1												8/23/10	5 – 7
						LL3SB-405M-0001-SO			1 – 7		1		1											8/23/10	5.0
						LL3SB-405M-0002-SO			1 – 7		1		1											8/23/10	7.0
						LL3SB-405M-0003-SO			1 – 7		1		1											8/23/10	5.0
						LL3SB-405M-0004-SO			1 – 7		1		1											8/23/10	5.0
						LL3SB-405M-0005-SO			1 – 7		1		1											8/23/10	6.0
	EB-4	Melt Pour	210	50	LL3SB-407M-0101-SO		16	1 – 3		1		1												8/19/10	1 – 3
					LL3SB-407M-0102-SO			3 -- 5		1		1												8/19/10	3 – 5
					LL3SB-407M-0103-SO			5 - 7		1		1												8/19/10	5 – 7
						LL3SB-407M-0001-SO			1 – 7		1		1											8/19/10	4.5
						LL3SB-407M-0002-SO			1 – 7		1		1											8/18/10	4.5
						LL3SB-407M-0003-SO			1 – 7		1		1											8/19/10	3.0
						LL3SB-407M-0004-SO			1 – 7		1		1											8/19/10	7.0
						LL3SB-407M-0005-SO			1 – 7		1		1											8/18/10	4.5
						LL3SB-407M-0006-SO			1 – 7		1		1											8/19/10	4.0
						LL3SB-407M-0007-SO			1 – 7		1		1											8/19/10	7.0
						LL3SB-407M-0008-SO			1 – 7		1		1											8/18/10	3.5
						LL3SB-407M-0009-SO			1 - 7		1		1											8/19/10	3.0
						LL3SB-407M-0010-SO			1 - 7		1		1											8/18/10	4.0
						LL3SB-407M-0011-SO			1 - 7		1		1											8/18/10	7.0
						LL3SB-407M-0012-SO			1 - 7		1		1											8/19/10	2.5
						LL3SB-407M-0013-SO			1 - 7		1		1											8/18/10	3.0

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-3	EB-4	Melt Pour	210	50		LL3SB-407M-0014-SO		1 - 7		1		1											8/18/10	4.5	
	(Cont.)	(Continued)				LL3SB-407M-0015-SO		1 - 7		1		1											8/18/10	7.0	
						LL3SB-407M-0016-SO		1 - 7		1		1											8/18/10	4.5	
						LL3SB-407M-0017-SO		1 - 7		1		1											8/19/10	7.0	
	EB-4A	Melt Pour	210	50	LL3SB-402M-0101-SO		16	1 - 3		1		1											8/20/10	1 - 3	
					LL3SB-402M-0102-SO			3 - 5		1		1											8/20/10	3 - 5	
					LL3SB-402M-0103-SO			5 - 7		1		1											8/20/10	5 - 7	
						LL3SB-402M-0001-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-402M-0002-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0003-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0004-SO			1 - 7		1												8/19/10	7.0	
						LL3SB-407M-0005-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0006-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0007-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0008-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0009-SO			1 - 7		1		1										8/19/10	7.0	
						LL3SB-407M-0010-SO			1 - 7		1		1										8/20/10	7.0	
						LL3SB-407M-0011-SO			1 - 7		1		1										8/20/10	7.0	
						LL3SB-407M-0012-SO			1 - 7		1		1										8/20/10	7.0	
						LL3SB-407M-0013-SO			1 - 7		1		1										8/20/10	7.0	
						LL3SB-407M-0014-SO			1 - 7		1		1										8/20/10	7.0	
						LL3SB-407M-0015-SO			1 - 7		1		1										8/20/10	6.0	
						LL3SB-407M-0016-SO			1 - 7		1		1										8/20/10	7.0	
	EB-10	Drill & Assembly	300	48	LL3SB-409V-0101-SO		14	1 - 3							1								8/30/10		
					LL3SB-409B-0101-SO			1 - 3							1								8/30/10		
					LL3SB-409M-0101-SO			1 - 3		1		1		1			1		1		1		8/30/10	1 - 3	
					LL3SB-409V-0102-SO			3 - 5							1								8/30/10		
					LL3SB-409B-0102-SO			3 - 5							1								8/30/10		
					LL3SB-409M-0102-SO			3 - 5		1		1		1			1		1		1		8/30/10	3 - 5	
					LL3SB-409V-0103-SO			5 - 7							1								8/30/10		
					LL3SB-409B-0103-SO			5 - 7							1								8/30/10		
					LL3SB-409M-0103-SO			5 - 7		1		1		1			1		1		1		8/30/10	5 - 7	
						LL3SB-409V-0001-SO			1 - 7						1										
						LL3SB-409M-0001-SO			1 - 7		1		1		1			1		1		1	8/30/10	6.5	
						LL3SB-409V-0002-SO			1 - 7						1										
						LL3SB-409M-0002-SO			1 - 7		1		1		1			1		1		1	8/30/10	2.5	
						LL3SB-409V-0003-SO			1 - 7						1										
						LL3SB-409M-0003-SO			1 - 7		1		1		1			1		1		1	8/30/10	4.0	
						LL3SB-409V-0004-SO			1 - 7						1										
						LL3SB-409M-0004-SO			1 - 7		1		1		1			1		1		1	8/30/10	7.0	
						LL3SB-409V-0005-SO			1 - 7						1										
						LL3SB-409M-0005-SO			1 - 7		1		1		1			1		1		1	8/30/10	5.5	
						LL3SB-409V-0006-SO			1 - 7						1										
						LL3SB-409M-0006-SO			1 - 7		1		1		1			1		1		1	8/30/10	4.0	
						LL3SB-409V-0007-SO			1 - 7						1										
						LL3SB-409M-0007-SO			1 - 7		1		1		1			1		1		1	8/30/10	7.0	
						LL3SB-409V-0008-SO			1 - 7						1										
						LL3SB-409M-0008-SO			1 - 7		1		1		1			1		1		1	8/30/10	4.0	
						LL3SB-409V-0009-SO			1 - 7						1										

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (Ft.)		Number of Samples												Date Completed	Actual Depth (Ft.)		
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs				Pesticides	
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert			Hor	Vert
LL-3	EB-10	Drill & Assembly	300	48		LL3SB-409M-0009-SO		1 – 7		1		1		1				1		1		1	8/30/10	3.5	
	(Cont.)	(Continued)				LL3SB-409V-0010-SO		1 – 7								1									
						LL3SB-409M-0010-SO		1 – 7		1		1		1				1		1		1	8/30/10	7.0	
						LL3SB-409V-0011-SO		1 – 7								1									
						LL3SB-409M-0011-SO		1 – 7		1		1		1				1		1		1	8/30/10	4.5	
						LL3SB-409V-0012-SO		1 – 7								1									
						LL3SB-409M-0012-SO		1 – 7		1		1		1				1		1		1	8/30/10	4.0	
						LL3SB-409V-0013-SO		1 – 7								1									
						LL3SB-409M-0013-SO		1 – 7		1		1		1				1		1		1	8/30/10	7.0	
						LL3SB-409V-0014-SO		1 – 7								1									
						LL3SB-409M-0014-SO		1 – 7		1		1		1				1		1		1	8/30/10	4.0	
	EB-10	Drill & Assembly	300	48	LL3SB-404V-0101-SO		14	1 – 3								1							8/30/10		
					LL3SB-404M-0101-SO			1 - 3		1		1		1				1		1		1	8/30/10	1 – 3	
					LL3SB-404V-0102-SO			3 – 5	3 – 5							1							8/30/10		
					LL3SB-404M-0102-SO			3 - 5	3 - 5	1		1		1				1		1		1	8/30/10	3 – 5	
					LL3SB-404V-0103-SO			5 - 7	5 - 7							1							8/30/10		
					LL3SB-404M-0103-SO			5 - 7	5 - 7	1		1		1				1		1		1	8/30/10	5 – 7	
						LL3SB-404V-0001-SO			1 - 7								1								
						LL3SB-404M-0001-SO			1 - 7		1		1		1				1		1		1	8/30/10	7.0
						LL3SB-404V-0002-SO			1 - 7								1								
						LL3SB-404M-0002-SO			1 - 7		1		1		1				1		1		1	8/30/10	2.0
						LL3SB-404V-0003-SO			1 - 7								1								
						LL3SB-404M-0003-SO			1 - 7		1		1		1				1		1		1	8/30/10	5.0
						LL3SB-404V-0004-SO			1 - 7								1								
						LL3SB-404M-0004-SO			1 - 7		1		1		1				1		1		1	8/30/10	6.5
						LL3SB-404V-0005-SO			1 – 7								1								
						LL3SB-404M-0005-SO			1 – 7		1		1		1				1		1		1	8/30/10	2.0
						LL3SB-404V-0006-SO			1 – 7								1								
						LL3SB-404M-0006-SO			1 – 7		1		1		1				1		1		1	8/30/10	3.0
						LL3SB-404V-0007-SO			1 – 7								1								
						LL3SB-404M-0007-SO			1 – 7		1		1		1				1		1		1	8/30/10	7.0
						LL3SB-404V-0008-SO			1 – 7								1								
						LL3SB-404M-0008-SO			1 – 7		1		1		1				1		1		1	8/30/10	4.0
						LL3SB-404V-0009-SO			1 – 7								1								
						LL3SB-404M-0009-SO			1 – 7		1		1		1				1		1		1	8/30/10	3.0
						LL3SB-404V-0010-SO			1 – 7								1								
						LL3SB-404M-0010-SO			1 – 7		1		1		1				1		1		1	8/30/10	7.0
						LL3SB-404V-0011-SO			1 – 7								1								
						LL3SB-404M-0011-SO			1 – 7		1		1		1				1		1		1	8/30/10	4.0
						LL3SB-404V-0012-SO			1 – 7								1								
						LL3SB-404M-0012-SO			1 – 7		1		1		1				1		1		1	8/30/10	3.0
						LL3SB-404V-0013-SO			1 – 7								1								
						LL3SB-404M-0013-SO			1 – 7		1		1		1				1		1		1	8/30/10	7.0
						LL3SB-404V-0014-SO			1 – 7								1								
						LL3SB-404M-0014-SO			1 – 7		1		1		1				1		1		1	8/30/10	3.0

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (Ft)		Number of Samples														Date Completed	Actual Depth (Ft)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-3	EB-10	Drill & Assembly	300	48	LL3SB-408V-0101-SO		14	1 – 3							1								8/30/10		
					LL3SB-408M-0101-SO			1 - 3		1		1		1			1		1		1		8/30/10	1 – 3	
					LL3SB-408V-0102-SO			3 – 5	3 – 5						1								8/30/10		
					LL3SB-408M-0102-SO			3 - 5	3 - 5	1		1		1			1		1		1		8/30/10	3 – 5	
					LL3SB-408V-0103-SO			5 - 7	5 - 7						1								8/30/10		
					LL3SB-408M-0103-SO			5 - 7	5 - 7	1		1		1			1		1		1		8/30/10	5 – 7	
						LL3SB-408V-0001-SO			1 - 7							1									
						LL3SB-408M-0001-SO			1 - 7		1		1		1			1		1			8/30/10	7.0	
						LL3SB-408V-0002-SO			1 - 7							1									
						LL3SB-408M-0002-SO			1 - 7		1		1		1			1		1			8/30/10	2.5	
						LL3SB-408V-0003-SO			1 - 7							1									
						LL3SB-408M-0003-SO			1 - 7		1		1		1			1		1			8/30/10	4.0	
						LL3SB-408V-0004-SO			1 - 7							1									
						LL3SB-408M-0004-SO			1 - 7		1		1		1			1		1			8/30/10	7.0	
						LL3SB-408V-0005-SO			1 – 7							1									
						LL3SB-408M-0005-SO			1 – 7		1		1		1			1		1			8/30/10	3.0	
						LL3SB-408V-0006-SO			1 – 7							1									
						LL3SB-408M-0006-SO			1 - 7		1		1		1			1		1			8/30/10	4.0	
LL-3	EB-10	Drill & Assembly	300	48		LL3SB-408V-0007-SO			1 – 7							1									
	(Cont.)	(Continued)				LL3SB-408M-0007-SO			1 – 7		1		1		1			1		1		1	8/30/10	7.0	
						LL3SB-408V-0008-SO			1 – 7							1									
						LL3SB-408M-0008-SO			1 – 7		1		1		1			1		1		1	8/30/10	2.5	
						LL3SB-408V-0009-SO			1 – 7							1									
						LL3SB-408M-0009-SO			1 – 7		1		1		1			1		1		1	8/30/10	3.5	
						LL3SB-408V-0010-SO			1 – 7							1									
						LL3SB-408M-0010-SO			1 – 7		1		1		1			1		1		1	8/30/10	7.0	
						LL3SB-408V-0011-SO			1 – 7							1									
						LL3SB-408M-0011-SO			1 – 7		1		1		1			1		1		1	8/30/10	3.0	
						LL3SB-408V-0012-SO			1 – 7							1									
						LL3SB-408M-0012-SO			1 – 7		1		1		1			1		1		1	8/30/10	3.0	
						LL3SB-408V-0013-SO			1 – 7							1									
						LL3SB-408M-0013-SO			1 – 7		1		1		1			1		1		1	8/30/10	7.0	
						LL3SB-408V-0014-SO			1 – 7							1									
						LL3SB-408M-0014-SO			1 – 7		1		1		1			1		1		1	8/30/10	3.0	
	Primary ISM Sample								totals:		21	78	21	78	3	14	9	36	3	14	3	14			
	Methanol Field Blank																3								
	QC Triplicate to Primary Lab								totals:		3		3		3		3		3		3				
	QA Triplicate to QA Lab								totals:		3		3		3		3		3		3				
TOTAL										27	78	27	78	9	14	18	36	9	14	9	14	9	14		

Only one set of vertical samples was analyzed in a sample area, either those associated with the primary sample or those associated with the triplicate horizontal samples that had the most CUG exceedances.

Table 4-4: Subsurface ISM Sampling Table for Load Line 4

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
LL-4	G-8	Melt Pour	171	71	LL4SB-402V-0101-SO		12	1 – 3								1								8/16/10	
					LL4SB-402B-0101-SO			1 – 3								1								8/16/10	
					LL4SB-402M-0101-SO			1 – 3		1		1		1				1		1		1		8/16/10	1 – 3
					LL4SB-402V-0102-SO			3 – 5	3 – 5							1								8/16/10	
					LL4SB-402B-0102-SO			3 – 5								1								8/16/10	
					LL4SB-402M-0102-SO			3 – 5	3 – 5	1		1		1				1		1		1		8/16/10	3 – 5
					LL4SB-402V-0103-SO			5 – 7	5 – 7							1								8/16/10	
					LL4SB-402B-0103-SO			5 – 7								1								8/16/10	
					LL4SB-402M-0103-SO			5 – 7	5 – 7	1		1		1				1		1		1		8/16/10	5 – 7
						LL4SB-402V-0001-SO			1 – 7							1								8/16/10	
						LL4SB-402M-0001-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0002-SO			1 – 7							1									
						LL4SB-402M-0002-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0003-SO			1 – 7							1									
						LL4SB-402M-0003-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0004-SO			1 – 7							1									
						LL4SB-402M-0004-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0005-SO			1 – 7							1									
						LL4SB-402M-0005-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0006-SO			1 – 7							1									
						LL4SB-402M-0006-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0007-SO			1 – 7							1									
						LL4SB-402M-0007-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0008-SO			1 – 7							1									
						LL4SB-402M-0008-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0009-SO			1 – 7							1									
						LL4SB-402M-0009-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0010-SO			1 – 7							1									
						LL4SB-402M-0010-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0011-SO			1 – 7							1									
						LL4SB-402M-0011-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
						LL4SB-402V-0012-SO			1 – 7							1									
						LL4SB-402M-0012-SO			1 – 7		1		1		1			1		1		1		8/16/10	7.0
	G-8	Melt Pour	171	71	LL4SB-401V-0101-SO		12	1 – 3								1								8/17/10	
					LL4SB-401M-0101-SO			1 – 3		1		1		1				1		1		1		8/17/10	1 – 5
					LL4SB-401V-0102-SO			3 – 5	3 – 5							1								8/17/10	
					LL4SB-401M-0102-SO			3 – 5	3 – 5	1		1		1				1		1		1		8/17/10	3 – 5
					LL4SB-401V-0103-SO			5 – 7	5 – 7							1								8/17/10	
					LL4SB-401M-0103-SO			5 – 7	5 – 7	1		1		1				1		1		1		8/17/10	5 – 7
						LL4SB-401V-0001-SO			1 – 7							1									
						LL4SB-401M-0001-SO			1 – 7		1		1		1			1		1		1		8/17/10	7.0
						LL4SB-401V-0002-SO			1 – 7							1									
						LL4SB-401M-0002-SO			1 – 7		1		1		1			1		1		1		8/17/10	7.0
						LL4SB-401V-0003-SO			1 – 7							1									

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
						LL4SB-401M-0003-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0004-SO		1 - 7								1		1							
						LL4SB-401M-0004-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0005-SO		1 - 7								1									
LL-4	G-8	Melt Pour	171	71		LL4SB-401M-0005-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
	(Cont.)	(Continued)				LL4SB-401V-0006SO		1 - 7								1									
						LL4SB-401M-0006SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0007-SO		1 - 7								1									
						LL4SB-401M-0007-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0008-SO		1 - 7								1									
						LL4SB-401M-0008-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0009SO		1 - 7								1									
						LL4SB-401M-0009-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0010-SO		1 - 7								1									
						LL4SB-401M-0010-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0011-SO		1 - 7								1									
						LL4SB-401M-0011-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
						LL4SB-401V-0012-SO		1 - 7								1									
						LL4SB-401M-0012-SO		1 - 7		1		1		1				1		1			8/17/10	7.0	
	G-8	Melt Pour	171	71	LL4SB-403V-0101-SO		12	1 - 3								1							8/26/10		
					LL4SB-403M-0101-SO			1 - 3		1		1		1				1		1		1		8/26/10	1 - 3
					LL4SB-403V-0102-SO			3 - 5	3 - 5							1							8/26/10		
					LL4SB-403M-0102-SO			3 - 5	3 - 5	1		1		1				1		1		1		8/26/10	3 - 5
					LL4SB-403V-0103-SO			5 - 7	5 - 7							1							8/26/10		
					LL4SB-403M-0103-SO			5 - 7	5 - 7	1		1		1				1		1		1		8/26/10	5 - 7
						LL4SB-403V-0001-SO		1 - 7								1									
						LL4SB-403M-0001-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0002-SO		1 - 7								1									
						LL4SB-403M-0002-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0003-SO		1 - 7								1									
						LL4SB-403M-0003-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0004-SO		1 - 7								1									
						LL4SB-403M-0004-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0005-SO		1 - 7								1									
						LL4SB-403M-0005-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0006-SO		1 - 7								1									
						LL4SB-403M-0006-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0007-SO		1 - 7								1									
						LL4SB-403M-0007-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0008-SO		1 - 7								1									
						LL4SB-403M-0008-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0009-SO		1 - 7								1									
						LL4SB-403M-0009-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0
						LL4SB-403V-0010-SO		1 - 7								1									
						LL4SB-403M-0010-SO		1 - 7		1		1		1				1		1		1		8/26/10	7.0

Description			Bldg. Size (Ft)		Sample ID		Number Geoprobe Borings	Planned Depth (ft.)		Number of Samples														Date Completed	Actual Depth (Ft.)
										Metals + Hg + Cr+6		Explosives		Propellants		VOCs		SVOCs		PCBs		Pesticides			
Facility/Area	Bldg.	Building Utilization	LG	W	Hor	Vert		Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert	Hor	Vert		
						LL4SB-403V-0011-SO		1 - 7							1										
						LL4SB-403M-0011-SO		1 - 7		1		1		1			1		1		1		8/26/10	7.0	
						LL4SB-403V-0012-SO		1 - 7							1										
						LL4SB-403M-0012-SO		1 - 7		1		1		1			1		1		1		8/26/10	7.0	
	Primary ISM Sample							totals:		3	12	3	12	3	12	3	12	3	12	3	12				
	Methanol Field Blank															3									
	QC Triplicate to Primary Lab							totals:		3		3		3		3		3		3					
	QA Triplicate to QA Lab							totals:		3		3		3		3		3		3					
									TOTAL		9	12	9	12	9	12	12	12	9	12	9	12			

Only one set of vertical samples was analyzed in a sample area, either those associated with the primary sample or those associated with the triplicate horizontal samples that had the most CUG exceedances.

4.3 GEOPROBE COLLECTION PROCESS

The goal at each planned Geoprobe boring location was to advance the boring to a depth of seven feet. This would allow subsurface horizontal ISM samples to be collected over depth ranges of 1 to 3, 3 to 5, and 5 to 7 feet bgs. It would also allow a set of subsurface vertical ISM samples, one from each Geoprobe boring within a sample area, to be collected. A Geoprobe Model 6620 T (track-mounted) drilling rig (Photograph 4-5) was used to perform all drilling associated with this project. Surface maneuvering of the drilling rig was controlled remotely by the driller and the unit was easily positioned over the planned boring locations. Additionally, the Geoprobe rig had sufficient power to displace debris as it was advanced and could drill typically several feet into weathered rock. At each planned boring location immediately prior to drilling, the selected area was swept with a Schonstedt GA-72Cd, by a UXO Technician III to check for buried ordnance (Photograph 4-6). If the area was clear, the drilling began and advanced to a depth of five feet. As the Geoprobe unit was withdrawn, the UXO Technician monitored the hole with a Photo Ionization Detector (MiniRAE2000) for the presence of organic vapors. The driller then removed the five-foot Geoprobe sample from the drilling tube. Next, the UXO Technician lowered a Subsurface Instruments Gradiometer Model BHG (Photograph 4-7) into the hole to check for the presence of buried ordnance below five feet. If the probe indicated that no magnetic anomalies were present below five feet, the boring was advanced from five to seven feet. The drilling tube was then removed and the five to seven-foot Geoprobe sample was removed. The Geoprobe sample tubes were then brought to a table (Photograph 4-8) for subsequent opening by the field sample processing team. The table where the Geoprobe samples were opened (Photographs 4-14 and 4-15) was near the sample processing area where other members of the field team processed the Geoprobe samples and thus the samples for VOC analyses were collected within several minutes from when the Geoprobe tubes were removed from the ground. In the meantime, the driller back-filled the completed boring hole with bentonite pellets and placed the pin flag associated with that boring back into the bentonite-filled hole. If the boring could not be advanced to a depth of five feet at the planned location, the drilling rig was moved over several feet and an additional drilling attempt to the desired depth of seven feet was made. If the attempt at the second location failed, the drill was moved over several feet and a third and final attempt was made to advance the boring to a depth of seven feet. All Geoprobe tubes collected were saved until all attempts were made and the set of tubes that penetrated the deepest was used for the sample at that boring location. At the completion of all attempts at a given boring location, each hole was filled with bentonite pellets and the pin flag associated with that boring was placed in the boring hole where the sample taken (Photograph 4-9). The core barrel shoe was decontaminated in the field by the driller after all attempts at a boring location were completed prior to beginning drilling at another drilling location (Photograph 4-10).



Photograph 4-5: Geoprobe Model 6620 T (Track-Mounted) Drilling Rig.



Photograph 4-6: Surface anomaly avoidance with Schonstedt GA-72cd



Photograph 4-7: Subsurface anomaly avoidance with Gradiometer Model BHG



Photograph 4-8: Bringing Geoprobe tubes to the sampling area



Photograph 4-9: Bentonite pellets filled all borings.



Photograph 4-10: Decontamination of the core barrel shoe.

4.3.1 Preparation of Environmental Samples from the Geoprobe Samples

The goals of the processing of the Geoprobe samples was to prepare one set of representative, repeatable horizontal ISM and vertical ISM samples for VOC analyses (Methanol preserved) and another set of representative and repeatable samples for non-VOC analyses. Additionally, the materials contained within the Geoprobe tubes were logged geotechnically. Initially the Geoprobe tubes were going to be brought from the field back to Building 1036 where processing of the Geoprobe samples would be performed under controlled conditions. However, a Prudent team member recently had success processing such samples in the field and indicated that an attempt should be made to similarly process the Geoprobe samples for this project in the field. Many of the planned techniques described in the Field Sampling Plan were utilized, except that they were performed under controlled conditions in the field. Specifically, a 10-foot-by-10-foot polyester canopy, that was easy to setup, breakdown, and move, provided a work area that was shaded and dry (Photographs 4-11 through 4-13). Two tables were setup within the canopy area, one for preparing the horizontal and vertical ISM samples, and the other for preparing the associated documentation. Within or directly adjacent to the tent were sample coolers, rinse and wash buckets, large bags for investigative-derived waste (IDW), plastic bag-lined buckets for soil cutting IDW, and assorted sampling and safety equipment. After the canopy and tables were moved from one sample area to another, the surface of the sample preparation table was covered with a new piece of 6-millimeter thick plastic sheeting. This sheeting was also placed on the ground at one end of the table where soil materials removed during cleaning of the table surface between one sample and the next could be efficiently collected and added to the bucket of soil cuttings.

4.3.2 Opening of the Geoprobe Tubes and Placement of the Geoprobe Samples on the Sampling Table

All Geoprobe tubes were cut length-wise with a Geoprobe tube cutter. Cutting of the Geoprobe tubes was done on a table provided by the driller (Photograph 4-14). The tabletop itself was swept clean periodically, but because soil inside the Geoprobe tubes was not in contact with the table, no debris or material from other samples could be introduced into the Geoprobe tube that was being cut (Photograph 4-15). Once a Geoprobe liner tube was cut (two places on the top side of the liner approximately 75° apart), the Geoprobe sample was moved from the cutting table to the sample processing table and placed in an aluminum half-pipe, described in Section 3.1.2 (Photograph 4-16). The sides of the Geoprobe liner extended above the sides of the aluminum half-pipe, and thus, no material from previous sampling could enter into the Geoprobe liner being processed (Photograph 4-16 and 4-17). The aluminum half-pipes had an inside diameter of 1.5-inches, thereby matching the outside diameter of the Geoprobe plastic liners. There was a cylindrical aluminum block at the lower end of each half-pipe that enhanced stability of the Geoprobe liner samples. The stability and secureness of the Geoprobe liner samples within the aluminum half-pipes greatly facilitated safe and efficient use of the 5 gram Terra Core® and aluminum wedge samplers during subsequent field sample collection. There were two separate half pipes on the sample-processing table, one for the Geoprobe tube pushed from 0 to 5 feet bgs and another parallel one for the Geoprobe tube pushed from 5 to 7 feet bgs.

Between the processing of the two Geoprobe samples from one boring to the next, the sample processing table and half-pipes were cleaned with Clorox® Disinfecting Wipes. Theoretically, no material from the sampling table or half-pipes could get into the next Geoprobe samples because the sides of the Geoprobe samples extended above the sides of the half-pipe. The tool used to cut the Geoprobe liners was not decontaminated per se. However, several sets of cutting blades were used daily and the cutting tool is designed so that the blade penetrates only 1 mm beyond the thickness of the liner.

Terra Core® is a patented tool of En Novative Technologies, Inc.



Photograph 4-11: Portable canopy used to shelter the field sampling area



Photograph 4-12: Portable canopy readily movable



Photograph 4-13: Portable canopy easy to disassemble and transport



Photograph 4-14: Geoprobe liner cutting



Photograph 4-15: Table for cutting Geoprobe liner tubes



Photograph 4-16: Aluminum half pipes securing Geoprobe tube liner



Photograph 4-17: Side of Geoprobe liner tube above sides of aluminum half pipe

4.3.3 Logging of Materials within the Geoprobe Samples

As materials were being collected for the environmental samples, a geologist simultaneously prepared a field log describing the extents of materials collected (recovery), types of materials, estimated classifications under the Unified Soil Classification System, fill or original materials, and any unusual materials or occurrences. Also noted were the depths of penetration of the Geoprobe drilling unit for each attempt at drilling to seven feet if refusal was encountered prior to seven feet. Although original materials were recovered at a few locations (Photograph 4-18) the vast majority of materials encountered were fill (Photograph 4-19). It was difficult to distinguish between fill materials placed during the original construction in the early 1940's and recent fill placed after the buildings had been demolished (Photograph 4-20). In addition, at many of the borings, fill over weathered rock was encountered (Photograph 4-21). Finally, weathered rock was encountered at or very near the surface at some locations (Photographs 4-22 and 23) especially at Load Line 1. Activity field logs are provided in Appendix B, field boring logs are provided in Appendix D, and typed boring logs are provided in Appendix E.

4.3.4 Preparation of Subsurface ISM Samples for VOC Analyses

The general process to collect subsurface ISM samples for VOC analysis was to collect nominal 5-gram plugs of soil via Terra Core® samplers (Photograph 24) immediately after opening the Geoprobe tubes, then placing the plugs of soil into bottles containing methanol (Photograph 24 and 25) to prevent release of VOCs prior to their analyses. The jars of methanol and soil were then maintained on ice until they were received at the laboratory. During the Kick-Off Meeting for the subject project, Dr. Mark Bruce of TestAmerica, Inc. provided detailed guidance on the most efficient means of collecting methanol-

preserved ISM samples. The following guidelines were used in collecting the horizontal soil samples and preserving them in methanol:

For a 2-foot interval horizontal subsurface ISM sample, it was desirable for representativeness to have a minimum of 50 soil plugs collected over the set of borings within that sample area and with the same number of plugs taken from each individual boring within the sample area.

- To minimize the detection limit, it was desirable to have the ratio of the soil volume to the methanol volume as close as possible to one, i.e., 1 ml of soil per 1 ml methanol.
- In all cases, there should be sufficient methanol in a bottle to ensure that no soil is above the level of the methanol, i.e. all soil is covered with methanol.
- For horizontal samples with up to 250 mg of soil, 500 ml bottles were used.
- For horizontal samples with greater than 250 mg of soil, one-liter bottles were used.

For collecting vertical subsurface ISM samples for VOC analyses, the same general principles listed above were utilized, however there were lesser amounts of soil collected. To provide consistency, the same number of soil plugs from each two-foot interval down the length of the soil boring (1 to 3, 3 to 5, and 5 to 7 feet) was placed in a bottle containing typically 90 ml of methanol (Photograph 4-26). The actual combinations utilized were those that were proposed.

For vertical samples, the collection of sufficient amounts of “soil” for a bottle with a given volume of methanol was greatly facilitated by the use of a scale at the sampling table. As the designated number of soil plugs from each two-foot interval down the length of the Geoprobe samples were being placed in the bottle of methanol, the weight of the soil going into the bottle was monitored and compared with the tare weight of the methanol in that bottle that had been recorded prior to placing any soil plugs in the bottle. If the weight of the methanol which had been determined and noted at the laboratory on the bottle, more soil from each two-foot interval was added until the mass of soil was equal to or greater than the mass of methanol.

Also for vertical samples, at those boring locations where refusal was encountered prior to a depth of seven-feet, the collection processed was modified to provide as near the same amount of soil as methanol over the depths of material covered, i.e. more material from each two-foot layer was added.

Where soil materials were encountered, as at Load Line 4, the Terra Core© samplers worked well and the methods listed above worked well. At most of the other sample areas at Load Lines 1, 2, and 3, however, a variety of non-soil materials were encountered, including debris, slag, gravel, and rock fragments. In those areas, judgment was utilized by field personnel in attempting to provide equal amounts of mass of each of the borings for a horizontal sample and down the length of a boring for a vertical sample. In addition, the field team attempted to collect at least as much soil mass as the amount of methanol in a given bottle.



Photograph 4-18: Original clays



Photograph 4-19: Wet gravel fill recovered at some locations



Photograph 4-20: Clay fill over weathered rock



Photograph 4-21: Recent fill over older fill over weathered rock



**Photograph 4-22: Weathered rock just below surface (typical at Load Line 1).
Right shows top of Geoprobe tube**



Photograph 4-23: Shallow rock at Load Line 1



**Photograph 4-24 A: Collecting nominal 5-gram soil plugs from the Geoprobe samples.
For horizontal subsurface VOC ISM samples, the large, opened jars are used.**



**Photograph 4-25 B: Putting nominal 5-gram soil plugs in bottles
with Methanol (horizontal subsurface ISM samples)**



Photograph 4-26: Collecting nominal 5-gram soil plugs for a vertical subsurface VOC ISM sample. For vertical subsurface VOC ISM samples, the small, open jars are used.

4.3.5 Preparation of Subsurface ISM Samples for Non-VOC Analyses

The general process to collect horizontal subsurface ISM samples for non-VOC analysis was to utilize an aluminum wedge sampler to collect portions of material over an entire two-foot interval, either 1 to 3, 3 to 5, or 5 to 7 feet, and place that material into a five-gallon bucket. The bucket was lined with a plastic garbage disposal bag (Photograph 4-27) containing materials from the other borings within that sample area (building) from only the designated depth interval. Thus for each sample area, there were three five-gallon buckets, one designated for each of the three depth intervals, into which materials from the designated depths over all the borings within that sample area were collected. Generally, two runs down a 2-foot interval were taken and placed in the appropriate bucket. The wedge sampler itself was a 9 to 10-inch long piece of ½-inch x ½-inch aluminum channel with a very sharp point at one end of the piece (Photograph 4-28). The wedge sampler proved to be very effective in collecting small soil size materials within the encountered matrix of debris, slag, large gravel, and rock fragments (Photograph 4-29) and in cutting hard clay (Photograph 4-30).

The general process to collect vertical subsurface ISM samples for non-VOC analysis was similar to that used for horizontal subsurface ISM samples except that lesser amounts of materials were collected down the entire length of a boring. A plastic coffee can, lined with a one-gallon Ziploc® bag was used to collect vertical samples (Photograph 4-31). Approximately the same amount of material from each 2-foot interval was added to the coffee can and then weighed on a scale at the sample-processing table. The laboratory had requested a minimum of 350 grams of soil size (< 0.1 inch) material. The field sampling team attempted to provide sufficient material to meet the laboratory's requirement, but not an excess amount that would cause prolonged time for subsequent air-drying at the laboratory. Thus, the field team

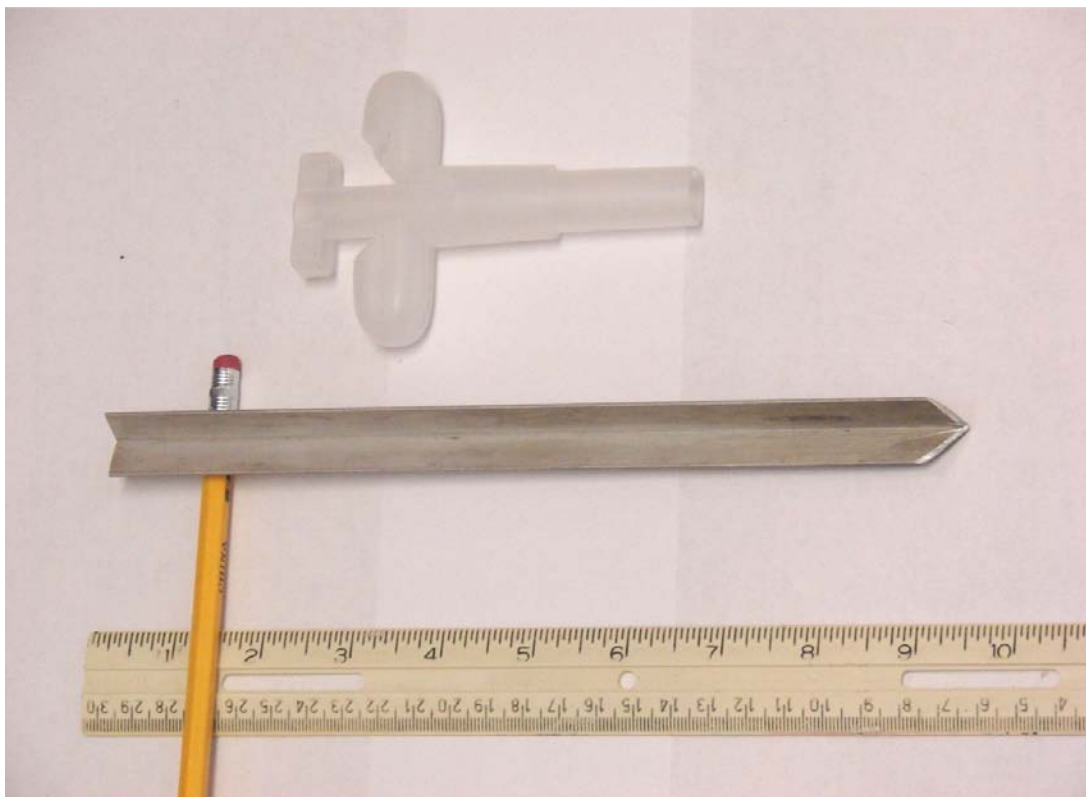
attempted to provide approximately 600 grams of soil size material for an entire vertical sample. Once an initial amount of material was collected over each two-foot depth interval down the length of the boring, the coffee can was weighed to determine if at least 600 grams of soil had been collected. If that amount had not been collected, then approximately equal amounts from each of the two-foot intervals were added and the coffee can was weighed again. This process was followed until at least 600 grams of soil size material was collected within the coffee can. At the completion of the sample collection, the one-gallon Ziploc® bag was removed from the coffee can, labeled, rubber banded, and placed in another similar Ziploc® bag with a second identical sample label and again rubber banded. Finally, it was placed in a cooler of ice for subsequent shipment to the laboratory. The second sample label on the outer Ziploc® bag had two-inch clear tape placed over it to prevent smearing due to the potential presence of water in the cooler.

4.3.6 Sample Documentation

Because of the rapid pace of sampling, much coordination was required between the field samplers and the person preparing the documentation of those samples. Use of the printed sample labels with as much information as could be printed prior to the actual sample collection facilitated the rapid pace of sampling. To assist both the person preparing the documentation in the field and the laboratory, all horizontal sample IDs were highlighted with yellow while the vertical samples had no highlighting, Photograph 4-32. As an independent check on the boring logs, a set of activity field logs, provided in Appendix B, was also maintained. Attempts were made to prepare the chain-of-custody forms as sampling progressed, but often these forms had to be prepared at the end of sampling.



Photograph 4-27: Lined 5-gallon buckets used to collect horizontal subsurface ISM samples. The 3 buckets with white garbage disposal bags are used for the three depth intervals- 1 to 3 feet, 3 to 5 feet, and 5 to 7 feet.



**Photograph 4-28: Terra Core and aluminum wedge sampler.
Terra Core is at the top with wedge sampler below.**



Photograph 4-29: Use of aluminum wedge sampler with weathered rock



Photograph 4-30: Use of aluminum wedge sampler with hard clays



Photograph 4-31: Use of a lined coffee can to collect vertical subsurface ISM samples.



Photograph 4-32: Use of pre-populated sample labels

5.0 SAFETY

The field investigation was conducted according to the Site Safety and Health Plan (SHHP) Addendum prepared for this activity. A daily tailgate meeting was conducted each morning prior to any field activities to note both past and present safety concerns. This information was also shared with the subcontractor driller. Logs of these meetings are provided as Appendix A. During the field activities, a radio provided by the RVAAP and multiple cell phones were with personnel in the field. On two days, however, a facility radio was not available, but cell phone coverage was checked and found to be sufficient. Surface and subsurface anomaly avoidance was conducted at all borings prior to beginning or advancing a boring. Monitoring for VOCs was performed utilizing a photoionization detector (PID) at the boring locations each time a Geoprobe sample was removed from a boring. No elevated readings were noted during the course of the investigation.

6.0 DECONTAMINATION

The driller decontaminated the core barrel shoe in the field after the completion of each boring prior to beginning the next boring (Photograph 6-1).



Photograph 6-1: Buckets for field decontamination of the core barrel shoe.

The tools used to collect soil samples from the Geoprobe tubes were the Terra Core samplers for VOCs and the aluminum wedge samplers for the non-VOC samples. The Terra Core samplers were a one-time use, disposable item and thus did not require decontamination. The aluminum wedge samplers were decontaminated per the FWSAP protocols (Photograph 6-2). To evaluate the efficiency of the decontamination process, one set of rinsate samples was collected each week that sampling occurred. No measurable contamination was detected in any of the rinsate samples indicating that the decontamination process was effective. After the aluminum wedge samplers had been decontaminated, they were wrapped in aluminum foil and placed in a covered plastic bin for transport to the field sites.



Photograph 6-2: Decontaminating aluminum wedge samplers

7.0 WASTE MANAGEMENT

7.1 FIELD COLLECTION OF WASTE MATERIALS

The waste materials generated in the field comprised soil cuttings (from the Geoprobe tubes), personal protective equipment (PPE), spent empty Geoprobe liners, used Terra Core samplers, and general non-environmental trash. The soil cuttings were primarily collected in plastic garbage liners placed inside 5-gallon buckets (Photograph 7-1). Additional soil materials were collected on the clear 6-millimeter plastic sheeting placed on the ground at the end of the cutting table and below the two 5-gallon buckets used for collecting soil cuttings. A large garbage bag was used to contain the used nitrile gloves, the used Terra Core samplers, and cut-up pieces of Geoprobe liners. A long-handled steel lopper was used to cut the Geoprobe liners into 12 to 18 inch pieces (Photograph 7-2). Finally, a large garbage bag was used to collect general non-environmental waste. The 5-gallon buckets used in the field for hand wash and rinse were brought to Building 1036 and their contents emptied into the 55-gallon drum for decontamination water. The buckets for soil cuttings and the large garbage bags for PPE were brought back to Building 1036 and placed in appropriately labeled 55-gallon open-headed drums.



Photograph 7-1: Excess soil cuttings placed in 2-gallon buckets with black, plastic liners



Photograph 7-2: Cutting used Geoprobe liner tubes for easier handling and disposal

7.2 DECONTAMINATION WATER

The water from the decontamination was emptied periodically into the 55-gallon drum at Building 1036. As mentioned above, the field wash and rinse waters were also placed in this drum.

7.3 NON-ENVIRONMENTAL TRASH

Garbage bags containing non-environmental trash were periodically emptied at the large trash dumpster at Building 1038.

7.4 FACILITY COORDINATION

An RVAAP weekly non-hazardous and hazardous waste inventory sheet was completed per the protocol followed by the facility to track such waste materials. The 55-gallons drums used to temporarily store waste materials were labeled per the protocol detailed in the FWSAP and were inspected weekly.

7.5 DISPOSITION OF DRUMS

Upon receipt of all analytical results of the materials sent to the laboratory, a short summary of the measured contamination and recommended means of disposing of the drums will be prepared and submitted to the RVAAP Facility Manager and the OHEPA. The drums were collected by and disposed of by Emerald Environmental Inc. according to state and federal laws and regulations.

8.0 INVESTIAGTION RESULTS

8.1 USACE SAMPLING RESULTS

Analytical results of the USACE surface soil ISM samples taken in December 2009 are provided in the following sections and tables. All results are compared with the minimum of the appropriate sets of CUGs for the National Guard Trainee and Resident Adult Farmer or the Regional Screening Level (RSL), where no CUGs are in place. A listing of the National Guard Trainee, Resident Adult Farmer, and RSLs are provided as Table 8-1.

8.1.1 Load Line 1 Sampling Results

Table 8-2 summarizes the sampling results at Load Line 1 buildings. Only SVOCs (benzo (a) pyrene and dibenzo (a,h) anthracene) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line1.
- SVOCs were detected in building CB-4/CB-4WS and CB-4A/CB-4AWN. For building CB-4/CB-4WS all three samples (primary, field duplicate, and blind duplicate) were above the CUGs for benzo (a) pyrene and dibenzo (a,h) anthracene. Benzo (a) pyrene ranged from 0.24 mg/kg for the primary, which carried a J flag qualifier, 0.52 mg/kg for the field duplicate, and 0.36 mg/kg for the blind duplicate sample. For building CB-4A/CB-4AWN, only the field duplicate sample was above the CUG for benzo (a) pyrene at 0.38 mg/kg.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

8.1.2 Load Line 2 Sampling Results

Table 8-3 summarizes the sampling results at Load Line 2 buildings. Only SVOCs (benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, and n-nitroso-di-n-propylanine) and PCBs (Aroclor 1524) were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line1.
- SVOCs were detected in building DB-4A/DB-4AWS and DB-4/DB-4WS. For building DB-4A/DB-4AWS only the primary and blind duplicate samples were above the CUG for benzo (a) pyrene at 0.24 and 0.25 mg/kg; however, these results carry a J flagged qualifier. For building DB-4/DB-4WS only the primary sample was above the CUG for benzo (a) anthracene, benzo (a) pyrene, and benzo (b) fluoranthene, at 3.9 mg/kg, 3.8 mg/kg, and 5.1 mg/kg.
- Pesticides and PCBs were detected at building DB-4/DB-4WS. Only the primary sample was above the CUG at 13 mg/kg for Aroclor 1254.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

Table 8-1: LL 1-4 & 12: Vertical Subsurface ISM Samples

Table 8-1A: Subsurface ISM Sampling Criteria to Analyze Vertical Subsurface ISM Samples

COC	Units	Criterion to Analyze Vertical Samples	National Guard Trainee Subsurface CUG		Background	Resident Farmer Adult Subsurface CUG		RSL for COCs w/No CUG 10 ⁻⁵ or HI =1
			Non-Cancer HI = 1	Cancer Risk = 10 ⁻⁵		Non-Cancer HI = 1	Cancer Risk = 10 ⁻⁵	
Inorganics								
Aluminum	mg/kg	34,960	34,960	*	19,500	529,229	*	
Antimony	mg/kg	136	1,753	*	0.96	136	*	
Arsenic	mg/kg	19.8	1,140	27.8	19.8	82.1	4.25	
Barium	mg/kg	3,506	3,506	*	124.0	89,656	*	
Beryllium	mg/kg	160			0.88			160
Cadmium	mg/kg	109	3,292	109	0	223	12,491	
Chromium (as Cr-3)	mg/kg	196,942	1,000,000	*	27.2	196,942	*	
Chromium, hexavalent	mg/kg	16.4	56.1	16.4	*	904	1,874	
Cobalt	mg/kg	70.3	140	70.3	23.2	8,198	8,030	
Copper	mg/kg	27,138	253,680	*	32.2	27,138	*	
Iron	mg/kg	190,104	1,000,000	*	35,200.0	190,104	*	
Lead	mg/kg	4,000			19.1			4,000
Manganese 1' - 3' & 3' - 5'	mg/kg	1,450	351	*	1,450	14,817	*	
5' - 7'	mg/kg	3,030	351		3,030	14,817		
Mercury	mg/kg	165	1,722	*	0.044	165	*	
Nickel	mg/kg	13,463	126,391	*	60.7	13,463	*	
Nitrate	mg/kg	1,000,000	1,000,000	*	*	1,000,000	*	
Selenium	mg/kg	390			1.5			390
Silver	mg/kg	3,240	31,049	*	0	3,240	*	
Thallium	mg/kg	47.6	477	*	0.91	47.6	*	
Vanadium	mg/kg	1,558	23,045	*	37.6	1,558	*	
Zinc	mg/kg	196,589	1,000,000	*	93.3	196,589	*	
Explosives - Propellants								
1,3,5 Trinitrobenzene	mg/kg	15,280	165,422	*	*	15,280	*	
1,3 Dinitrobenzene	mg/kg	59.4	596.0	*	*	59.4	*	
2,4,6 Trinitrotoluene	mg/kg	211	2,488	4,643	*	211	328	
2,4 Dinitrotoluene	mg/kg	7.53	6,519	134	*	439	7.53	
2,6 Dinitrotoluene	mg/kg	7.69	3,309	136	*	224	7.69	
2-Amino-4,6 Dinitrotoluene	mg/kg	128	1,237	*	*	128	*	
4-Amino-2,6-dinitrotoluene	mg/kg	128	1,237	*	*	128	*	
Nitrobenzene	mg/kg	48					48	
2 Nitrotoluene	mg/kg	60.3	59,611	726	*	5,945	60.3	
3 Nitrotoluene	mg/kg	6.1						6.1
4 Nitrotoluene	mg/kg	816	59,611	9,818	*	5,945	816	
HMX	mg/kg	19,090	234,645	*	*	19,090	*	
RDX	mg/kg	1,452	17,113	1,452	*	1,632	*	
Tetryl	mg/kg	240						240
Nitroguanadine	mg/kg	6,100						6,100
Nitroglycerin	mg/kg	816	*	9,818	*	*	816	

RSL = Regional Screening Levels

* = Does not exist

Table 8-1A Continued

COC	Units	Criterion to Analyze Vertical Samples	National Guard Trainee Subsurface CUG		Background	Resident Farmer Adult Subsurface CUG		RSL for COCs w/No CUG 10 ⁻⁵ or HI =1
			Non-Cancer HI = 1	Cancer Risk = 10 ⁻⁵		Non-Cancer HI = 1	Cancer Risk = 10 ⁻⁵	
Semi-Volatiles								
2 Methylnaphtalene	mg/kg	2,378	23,845	*	*	2,378	*	*
4 Chloro-3-methylphenol	mg/kg	*	*	*	*	*	*	*
4 Nitrophenol	mg/kg	4,756	47,689	*	*	4,756	*	*
Benzo(a) anthracene	mg/kg	2.21	*	47.7	*	*	2.21	*
Benzo(a) pyrene	mg/kg	0.221	*	4.77	*	*	0.221	*
Benzo(b) fluoranthene	mg/kg	2.21	*	4.77	*	*	2.21	*
Benzo(k) fluoranthene	mg/kg	22.1	*	477	*	*	22.1	*
Bix(2-chloroethoxy)methane	mg/kg	1,783	17,883	*	*	1,783	*	*
Carbazole	mg/kg	694	*	8,346	*	*	694	*
Chrysene	mg/kg	221	*	4,774	*	*	221	*
Dibenz(a,h) anthracene	mg/kg	0.221	*	4.77	*	*	0.221	*
Dibenzofuran	mg/kg	1,189	11,922	*	*	1,189	*	*
Fluoranthene	mg/kg	2,765	50,868	*	*	2,765	*	*
Fluorene	mg/kg	7,366	114,583	*	*	7,366	*	*
Indeno(1,2,3-cd) pyrene	mg/kg	2.21	*	47.7	*	*	2.21	*
N-Nitroso-di-n-propylamine	mg/kg	1.27	*	19	*	*	1.27	*
Naphthalene	mg/kg	3,678	15,407	*	*	3,678	*	*
Pentachlorophenol	mg/kg	21.2	56,558	440	*	3,269	21.2	*
Pyrene	mg/kg	2,074	38,151	*	*	2,074	*	*
Pesticides & PCBs								
4,4-DDE	mg/kg	40.8	*	491	*	*	40.8	*
Aldrin	mg/kg	0.8	179	7.88	*	17.8	0.816	*
Dieldrin	mg/kg	0.9	298	8.39	*	29.7	0.867	*
Endrin	mg/kg	17.7	330	*	*	17.7	*	*
Endrin aldehyde	mg/kg	0.0	*	*	*	*	*	*
Heptachlor	mg/kg	3.1	2,981	29.8	*	297	3.08	*
Heptachlor epoxide	mg/kg	1.5	77.5	14.8	*	7.73	1.52	*
PCB-1016	mg/kg	2.0	192	34.6	*	12.2	2.03	*
PCB-1248	mg/kg	2.0	*	34.6	*	*	2.03	*
PCB-1254	mg/kg	2.0	54.9	34.6	*	3.48	2.03	*
PCB-1260	mg/kg	2.0	*	34.6	*	*	2.03	*
alpha-Chlordane	mg/kg	0.0	*	*	*	*	*	*
beta-BHC	mg/kg	7.7	*	74.2	*	*	7.7	*
gamma-Chlordane	mg/kg	0.0	*	*	*	*	*	*

RSL = Regional Screening Levels

* = Does not exist

Table 8-1A Continued

COC	Units	Criterion to Analyze Vertical Samples	Region 9 2008 for COCs w/No CUG 10-5 or HI =1	RSL for COCs w/No CUG 10-5 or HI =1
Volatiles				
1,1,1 Trichloroethane	mg/kg	8700		8700
1,1,2,2 Tetrachloroethane	mg/kg	5.6		5.6
1,1,2 Trichloroethane	mg/kg	11		11
1,1 Dichloroethane	mg/kg	33		33
1,1 Dichloroethene	mg/kg	120	120	
1,2 Dibromoethane	mg/kg	0.34		0.34
1,2 Dichloroethane	mg/kg	4.3		4.3
1,2 Dichloroethene (total)	mg/kg	700		700
1,2 Dichloropropane	mg/kg	8.8		8.8
2 Butanone	mg/kg	22000	22000	
2 Hexanone	mg/kg	210		210
4 Methyl-2-pentanone	mg/kg	5300	5300	
Acetone	mg/kg	61000		61000
Benzene	mg/kg	11		11
Bromochloromethane	mg/kg	8.2	8.2	
Bromodichloromethane	mg/kg	2.7		2.7
Bromoform	mg/kg	610		610
Bromomethane	mg/kg	7.3		7.3
Carbon disulfide	mg/kg	820		820
Carbon tetrachloride	mg/kg	6.1		6.1
Chlorobenzene	mg/kg	290		290
Chloroethane	mg/kg	30	30	
Chloroform	mg/kg	2.9		2.9
Chloromethane	mg/kg	120		120
Cis-1,3-dichloropropene	mg/kg	17		17
Dibromochloromethane	mg/kg	6.8		6.8
Ethyl benzene	mg/kg	54		54
Methylene chloride	mg/kg	110		110
Styrene	mg/kg	6300		6300
Tetrachloroethene	mg/kg	4.8	4.8	
Toluene	mg/kg	5000		5000
Trans-1,3-dichloropropene	mg/kg	17		17
Trichloroethene	mg/kg	0.53	0.53	
Vinyl chloride	mg/kg	0.6		0.6
Xylenes (total)	mg/kg	630		630

NOTE: National Guard Trainee or Resident Farmer CUGs do not exist for VOCs

RSL = Regional Screening Level

Table 8-1B: Subsurface Vertical ISM Samples That Were Analyzed

Load Line	Building Number	Building Type	Analyses
1	CB-4A	Melt Pour	Explosives
2	CA-6	Explosives Preparation	SVOCs
	DA-6	Explosives Preparation	Explosives
3	EA-6	Explosives Preparation	Metals
4			SVOCs
	EB-10	Drill & Assembly	Metals
			SVOCs
	G-8	Melt Pour	SVOCs

8.1.3 Load Line 3 Sampling Results

Table 8-4 summarizes the sampling results at Load Line 3 buildings. Only Aroclor 1254 was detected above the CUG. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- SVOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- Pesticides and PCBs were detected at building EB-4/EB-4WS/EB-4WN. Only the field duplicate sample was above the CUG at 3.4 mg/kg for Aroclor 1254. Both the primary and blind duplicate samples were below the CUG.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.

8.1.4 Load Line 4 Sampling Results

Table 8-5 summarizes the sampling results at Load Line 4 buildings. None of the chemicals were detected above the CUGs. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- SVOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.

8.1.5 Coal Storage Areas

Table 8-6 summarizes the sampling results at selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16. Only SVOC (benzo (a) pyrene, and benzo (b) fluoranthene) were detected above the CUG. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.
- Explosives were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.
- SVOCs were detected in Building CC-1 for Load Line 1 and DC-1 for Load Line 2. For Load Line 1 Building CC-1 primary sample was above the CUG for benzo (a) pyrene at 0.84 mg/kg; however, these results carry a J flag qualifier.
- For Load Line 2 Building DC-1 all three samples (primary, field duplicate, and blind duplicate) were above the CUG for benzo (a) pyrene 1.4 mg/kg, 1.6 mg/kg, and 1.1 mg/kg respectively; however, these results carry a J flag qualifier. The DC-1 result for benzo (b) fluoranthene was reported at 2.5 mg/kg, which is also above the CUG.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.
- VOCs were not detected above the CUGs in any of the samples collected from selected coal storage areas at Load Line 1, 2, 3, 4, and 12, F-15 and F-16.

Table 8-2-A Load Line 1 Metals - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E			Building	Sample ID	CB-4WN		CB-4AWS		CB-4/CB-4WS								CB-4A/CB-4AWN							
					LL1SS-605-0001-SO		LL1SS-608-0001-SO		LL1SS-609-0001-SO		LL1SS-609-0002-SO		LL1SS-609-0003-SO		RSD (%) of Three Replicate Samples	LL1SS-619-0001-SO		CB-4A/CB-4AWN				RSD (%) of Three Replicate Samples		
					752527(A)		752525(A)		752526(A)		0912084-002(B)		752763(A)			752522(A)		0912084-001(B)		752524(A)				
					Type Sample		Primary		Primary		Primary		Field Dup			Blind Dup		Primary		Field Dup			Blind Dup	
					Sample Date		12/1/2009		12/1/2009		12/1/2009		12/1/2009			12/2/2009		12/1/2009		12/1/2009			12/1/2009	
					Sample Depth		0 - 0.5'		0 - 1'		0 - 0.5'		0 - 0.5'			0 - 0.5'		0 - 0.5'		0 - 0.5'			0 - 0.5'	
		Value	Min LU or RSL																					
Analytes	Units	Value		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q				
Metals	Aluminum	mg/kg	34,960	NG	5000		3940		6240	M	8700		6410		19	7540		8100		7210		6		
	Antimony	mg/kg	136	RFA	10	U	0.86	J	0.33	JY	0.076		0.25	J		10	U	0.081		10	U			
	Arsenic	mg/kg	19.8	BKG1	5.9		4.7		4.4		9.5		4.3		49	4.2		8.2		3.4		49		
	Barium	mg/kg	3,506	NG	40.5		29.3		53.3	Y	62		50.5		11	63.6		48		58.3		14		
	Beryllium	mg/kg	160	RSL	0.11	J	0.09	J	0.2	J	0.48		0.21	J		0.3	J	0.49		0.29	J			
	Cadmium	mg/kg	109	NG	0.63	J	0.52	J	0.63	JM	0.71		0.56	J		0.5	J	0.43		0.51	J			
	Calcium	mg/kg	NA	NA	11700		18900		11700		8700		11400			19600		12000		18900				
	Chromium (as Cr-3)	mg/kg	196,942	NG	16.7		59.4		20.9	Y	12		27		38	15.3		11		18.1		24		
	Chromium, hexavalent	mg/kg	16.4	NG	6.4	U	6.4	U	6.4	UM	0.2	U	6.4	U		6.4	U	0.2	U	6.4	U			
	Cobalt	mg/kg	70.3	NG	3.8		3.7		4.8		6.3		4.8		16	4.7		6		4.7		15		
	Copper	mg/kg	27,138	RFA	12.3		12.7		16.9	Y	23		14.7		24	11.5		14		14.6		12		
	Iron	mg/kg	NA	NA	12600		16300		16000		13000		16100			18700		15000		19300				
	Lead	mg/kg	4,000	RSL	34.4		89.3		59.6		74		54.7		16	48.7		76		40.5		34		
	Magnesium	mg/kg	NA	NA	2470		3610		2430		2600		2380			3180		2800		3320				
	Manganese	mg/kg	1,450	BKG1	455		391		490		590		487		11	727		710		721		1		
	Mercury	mg/kg	165	RFA	0.045		0.017		0.067		0.23		0.083		71	0.022		0.023	J	0.018				
	Nickel	mg/kg	13,463	RFA	10.4		9.7		16.1	M	13		14.7		11	16.2		14		13.1		11		
	Potassium	mg/kg	NA	NA	661		612		729		760		759		2	830		870		834				
	Selenium	mg/kg	390	RSL	1.3	U	1.3	U	0.41	J	0.24		1.3	U		0.49	J	0.26		0.45	J			
	Silver	mg/kg	3,240	RFA	2	U	2	U	2	U	0.034		2	U		2	U	0.024		2	U			
	Sodium	mg/kg	NA	NA	59		48.1		41		26		40.9			80.5		62		75.4				
	Thallium	mg/kg	47.6	RFA	2	U	2	UB	2	U	0.08		2	U		2	UB	0.069		2	U			
	Vanadium	mg/kg	1,558	RFA	3.9		4.3		6.4		11		6.3		34	4.2		9.3		4		51		
	Zinc	mg/kg	196,589	RFA	71.6		125		68.2	M	90		58.3		22	59		92		55.8		29		
	RSD % Average=											25	RSD % Average=							22				

Table 8-2-B Load Line 1 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		CB-13A		CB-4AVP1		CA-6/CA-28		CA-6A/CA-28A		CB-4WN		CB-10		CB-10		CB-4/CB-4WS						CB-13/13-C				CA-14					
Lab Identifier				752796(A)		752523(A)		752513(A)		752512(A)		752527(A)		752793(A)		752792(A)		752526(A)		912084-002(B)		752763(A)		752797(A)				752798(A)		752515(A)					
Type Sample				Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Field Dup		Blind Dup		Primary				Primary		Primary					
Sample Date				12/2/2009		12/1/2009		12/1/2009		12/1/2009		12/1/2009		12/2/2009		12/2/2009		12/1/2009		12/1/2009		12/2/2009		12/2/2009				12/2/2009		12/1/2009					
Sample Depth				0 - 0.5'		0 - 1'		0 - 0.7'		0 - 0.7'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'				0 - 0.5'		0 - 0.5'					
Analytes				Units		Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value				Q		Value		Q	
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.04	U	0.25	U		0.25	U	0.25	U	0.25	U				
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.04	U	0.24	U		0.24	U	0.24	U	0.24	U				
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.24	U	0.12	JP	1		0.14	J	2.6		0.24	U	0.24	U	0.35		5.9		1.2		120	0.24	U	0.24	U	0.24	U				
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U				
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U				
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.071	J	0.15	J	0.24	U	0.15	J	0.24	U	0.24	U	0.24	U	0.04	U	0.075	JP		0.24	U	0.24	U	0.24	U				
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.08	U	0.29	U		0.29	U	0.29	U	0.29	U				
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.08	U	0.27	U		0.27	U	0.27	U	0.27	U				
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.26	U	0.17	J	0.26	U	0.12	J	0.26	U	0.26	U	0.26	U	0.22		0.26	U		0.26	U	0.26	U	0.26	U				
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.08	U	0.33	U		0.33	U	0.33	U	0.33	U				
	HMX	mg/kg	19,090	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.08	U	0.26	U		0.26	U	0.26	U	0.26	U				
	Nitrobenzene	mg/kg	48	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.04	U	0.24	U		0.24	U	0.24	U	0.24	U				
	Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	4		1.4	U		1.4	U	1.4	U	1.4	U				
PETN	mg/kg	NA	NA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	0.2		1.4	U		1.4	U	1.4	U	1.4	U					
RDX	mg/kg	1,452	NG	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.08		0.29	U		0.29	U	0.29	U	0.29	U					
Tetryl	mg/kg	240	RSL	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.08		0.29	U		0.29	U	0.29	U	0.29	U					
Nitrocellulose	mg/kg	NA	NA	NA		NA		NA		NA		NA		NA		NA		16		16		16	U		NA		NA		NA						
Nitroguanidine	mg/kg	6,100	RSL	NA		NA		NA		NA		NA		NA		NA		1.5	B	0.13		1.4			NA		NA		NA						
RSD % Average = 120																																			

Table 8-2-B Load Line 1 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		CA-17		CB-10VP1		CB-10VP2		CB-10VP3		CB-4VP1		CB-4A/CB-4AWN						CB-3/CB-20		CA-7		CB-19		CB-8		T-4801		CB-3					
				Sample ID		LL1SS-614-0001-SO		LL1SS-615-0001-SO		LL1SS-616-0001-SO		LL1SS-617-0001-SO		LL1SS-618-0001-SO		LL1SS-619-0001-SO		LL1SS-619-0002-SO		LL1SS-619-0003-SO		RSD (%) of Three Replicate Samples		LL1SS-621-0001-SO		LL1SS-622-0001-SO		LL1SS-623-0001-SO		LL1SS-624-0001-SO		LL1SS-625-0001-SO		LL1SS-626-0001-SO			
						Lab Identifier		752794(A)		752789(A)		752790(A)		752791(A)		752765(A)		752522(A)		0912084-001(B)				752524(A)		752509(A)		752514(A)		752508(A)		752799(A)		752795(A)		752510(A)	
						Type Sample		Primary		Primary		Primary		Primary		Primary		Primary		Field Dup				Blind Dup		Primary		Primary		Primary		Primary		Primary		Primary	
						Sample Date		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/1/2009		12/1/2009				12/1/2009		12/1/09		12/1/09		12/1/09		12/2/09		12/2/09		12/1/09	
						Sample Depth		0 - 0.3'		0 - 0.5'		0 - 0.5'		0 - 0.7'		0 - 0.5'		0 - 0.5'		0 - 0.5'				0 - 0.5'		0 - 0.5'		0 - 0.7'		0 - 0.7'		0 - 0.5'		0 - 0.3'		0 - 0.7'	
Analytes		Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q						
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.2	U	0.25	U		0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.24	U				
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.2	U	0.24	U		0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U				
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	6.7		19.0		7.3		63	0.24	U	0.46		0.24	U	0.24	U	0.24	U	0.24	U				
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.2	U	0.27	U		0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.26	U				
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.2	U	0.27	U		0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.26	U				
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.2	U	0.091	J		0.24	U	0.1	J	0.24	U	0.24	U	0.24	U	0.24	U				
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.4	U	0.29	U		0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.28	U				
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.4	U	0.27	U		0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.26	U				
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.12	J	0.2	U	0.26	U		0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.25	U				
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.4	U	0.33	U		0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.32	U				
	HMX	mg/kg	19,090	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.35		0.4	U	0.26			0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.25	U				
	Nitrobenzene	mg/kg	48	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.2	U	0.24	U		0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U				
	Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	20.0	U	1.4	U		1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U				
	PETN	mg/kg	NA	NA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.0	U	1.4	U		1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U				
RDX	mg/kg	1,452	NG	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	2.4		0.4	U	0.79			0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.28	U					
Tetryl	mg/kg	240	RSL	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.4	U	0.29	U		0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.28	U					
Nitrocellulose	mg/kg	NA	NA	NA		NA		NA		NA		NA		16	U	19.0		16	U		NA		NA		NA		NA		NA		NA						
Nitroguanidine	mg/kg	6,100	RSL	NA		NA		NA		NA		NA		0.84	B,P	0.1	U	0.35	B,P		NA		NA		NA		NA		NA		NA						
RSD % Average =																63																					

Table 8-2-C Load Line 1 Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E			Building		CB-4/CB-4WS										CB-4A/CB-4AWN					
					Sample ID		LL1SS-609-0001-SO		LL1SS-609-0002-SO		LL1SS-609-0003-SO		RSD (%) of Three Replicate Samples		LL1SS-619-0001-SO		LL1SS-619-0002-SO		LL1SS-619-0003-SO	
Lab Identifier		752526(A)		0912084-002(B)		752763(A)		752522(A)		0912084-001(B)		752524(A)								
Type Sample		Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup								
Sample Date		12/1/2009		12/1/2009		12/2/2009		12/1/2009		12/1/2009		12/1/2009								
Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'								
Analytes	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q				
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.33	U	NA		0.33	U		0.33	U	NA		0.33	U				
1,3-Dichlorobenzene	mg/kg	530	R9	0.33	U	NA		0.33	U		0.33	U	NA		0.33	U				
1,4-Dichlorobenzene	mg/kg	24	RSL	0.33	U	NA		0.33	U		0.33	U	NA		0.33	U				
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2,4-Dichlorophenol	mg/kg	180	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2,4-Dinitrophenol	mg/kg	120	RSL	0.67	UM,Y	0.83	U	0.67	U		0.66	U	0.83	U	0.66	U				
2,4-Dinitrotoluene	mg/kg	16	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2,6-Dinitrotoluene	mg/kg	61	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2-Chloronaphthalene	mg/kg	6,300	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2-Chlorophenol	mg/kg	390	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2-Methyl-4,6-dinitrophenol	mg/kg	NA	NA	0.67	UM,Y	0.32	U	0.67	U		0.66	U	0.32	U	0.66	U				
2-Methylnaphthalene	mg/kg	2,378	RFA	0.035	J	0.16	U	0.032	J		0.058	J	0.16	U	0.041	J				
2-Methylphenol	mg/kg	3,100	R9	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
2-Nitroaniline	mg/kg	6,100	RSL	0.67	U	0.32	U	0.67	U		0.66	U	0.32	U	0.66	U				
2-Nitrophenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.67	U	1	U	0.67	U		0.66	U	1	U	0.66	U				
3-Nitroaniline	mg/kg	NA	NA	0.67	U	0.32	U	0.67	U		0.66	U	0.32	U	0.66	U				
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.33	U	0.2	U	0.33	U		0.33	U	0.2	U	0.33	U				
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
4-Chloroaniline	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
4-Methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
4-Nitroaniline	mg/kg	240	RSL	0.33	U	0.32	U	0.33	U		0.33	U	0.32	U	0.33	U				
4-Nitrophenol	mg/kg	4,756	RFA	0.67	U	0.83	U	0.67	U		0.66	U	0.83	U	0.66	U				
Acenaphthene	mg/kg	3,400	RSL	0.015	J	0.035	J	0.018	J		0.33	U	0.16	U	0.33	U				
Acenaphthylene	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
Anthracene	mg/kg	22,000	RSL	0.076	J	0.12	J	0.1	J		0.04	J	0.064	J	0.045	J				
Benzo(a)anthracene	mg/kg	2.21	RFA	0.26	J	0.52		0.44			0.086	J	0.32		0.13	J				
Benzo(a)pyrene	mg/kg	0.221	RFA	0.24	J	0.52		0.36			0.087	J	0.38		0.12	J				
Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.38		0.85	m	0.61		52	0.15	J	0.52	m	0.19	J				
Benzo(g,h,i)perylene	mg/kg	62	R9	0.11	J	0.25		0.17	J		0.058	J	0.24		0.08	J				
Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.13	J	0.27	m	0.19	J		0.052	J	0.23	m	0.088	J				
Benzoic acid	mg/kg	240,000	RSL	0.33	U	1	U	0.33	U		0.33	U	1	U	0.33	U				
Benzyl alcohol	mg/kg	6,100	RSL	0.33	U	0.032	J	0.33	U		0.33	U	0.66	U	0.33	U				
Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.33	U	0.1	U	0.33	U		0.33	U	0.1	U	0.33	U				
Bis(2-chloroethyl) ether	mg/kg	2	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.1	U	0.33	U				
Bis(2-chloroisopropyl) ether	mg/kg	29	RSL	0.33	U	NA		0.33	U		0.33	U	0.16	U	0.33	U				
Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.2	JB	0.043	J	0.088	JB		0.095	JB	0.045	J	0.45	B				
Butylbenzyl phthalate	mg/kg	2,600	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
Carbazole	mg/kg	694	RFA	0.072	J	0.12	J	0.093	J		0.034	J	0.054	J	0.044	J				
Chrysene	mg/kg	221	RFA	0.26	J	0.52		0.43			0.083	J	0.35		0.14	J				
Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	0.33	U	0.074	J	0.33	U		0.33	U	0.063	J	0.057	J				
Dibenzofuran	mg/kg	1,189	RFA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
Diethyl phthalate	mg/kg	49,000	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				
Dimethyl phthalate	mg/kg	610,000	R9	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U				

Table 8-2-C Load Line 1 Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building	CB-4/CB-4WS							CB-4A/CB-4AWN					
				Sample ID	LL1SS-609-0001-SO		LL1SS-609-0002-SO		LL1SS-609-0003-SO		RSD (%) of Three Replicate Samples	LL1SS-619-0001-SO		LL1SS-619-0002-SO		LL1SS-619-0003-SO	
					752526(A)		0912084-002(B)		752763(A)			752522(A)		0912084-001(B)		752524(A)	
					Primary		Field Dup		Blind Dup			Primary		Field Dup		Blind Dup	
					12/1/2009		12/1/2009		12/2/2009			12/1/2009		12/1/2009		12/1/2009	
					0 - 0.5'		0 - 0.5'		0 - 0.5'			0 - 0.5'		0 - 0.5'		0 - 0.5'	
Analytes	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.11	JB	0.28		0.11	JB		0.12	JB	0.16	U	0.11	JB	
Di-n-octyl phthalate	mg/kg	2,400	R9	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Fluoranthene	mg/kg	2,765	RFA	0.55		1.1		0.92		60	0.16	J	0.66		0.24	J	
Fluorene	mg/kg	7,366	RFA	0.05	J	0.034	J	0.053	J		0.041	J	0.16	U	0.041	J	
Hexachlorobenzene	mg/kg	3	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Hexachlorobutadiene	mg/kg	62	RSL	0.33	U	0.05	U	0.33	U		0.33	U	0.05	U	0.33	U	
Hexachlorocyclopentadiene	mg/kg	370	R9	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Hexachloroethane	mg/kg	350	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.13	J	0.26		0.2	J		0.065	J	0.26		0.09	J	
Isophorone	mg/kg	5,100	RSL	1.0	M,Y	0.16	U	0.36			11		0.16	U	0.33		
Naphthalene	mg/kg	3,678	RFA	0.026	J	0.16	U	0.022	J		0.33	U	0.16	U	0.026	J	
Nitrobenzene	mg/kg	48	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
N-Nitroso-di-n-propylamine	mg/kg	1	RFA	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
N-Nitrosodiphenylamine	mg/kg	990	R9	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Pentachlorophenol	mg/kg	21	RFA	0.67	UM	0.16	U	0.67	U		0.66	U	0.16	U	0.26	J	
Phenanthrene	mg/kg	2,300	R9	0.29	J	0.59		0.42			0.1	J	0.27		0.13	J	
Phenol	mg/kg	18,000	RSL	0.33	U	0.16	U	0.33	U		0.33	U	0.16	U	0.33	U	
Pyrene	mg/kg	2,074	RFA	0.44		0.83		0.74		49	0.12	J	0.51		0.2	J	
RSD % Average =										54							

See Notes at end of Table 8-6-E

Table 8-2-D Load Line 1 Pesticides and PCBs - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		CB-4/CB-4WS						CB-4A/CB-4AWN							
				Sample ID	LL1SS-609-0001-SO		LL1SS-609-0002-SO		LL1SS-609-0003-SO		RSD (%) of Three Replicate Samples	LL1SS-619-0001-SO		LL1SS-619-0002-SO		LL1SS-619-0003-SO		RSD (%) of Three Replicate Samples	
Lab Identifier		752526(A)		0912084-002(B)		752763(A)		752522(A)		0912084-001(B)		752524(A)							
Type Sample		Primary		Blind Dup		Field Dup		Primary		Field Dup		Blind Dup							
Sample Date		12/1/09		12/1/09		12/2/09		12/1/09		12/1/09		12/1/09							
Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'							
Analytes	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q			
Pesticides & PCBs	4,4'-DDD	mg/kg	20	RSL	0.18	M,H	0.017	U	0.012	UH		0.19	H	0.0085	U	0.12	UH		
	4,4'-DDE	mg/kg	40.8	RFA	0.074	M,H	0.0083	U	0.075	PH		0.11	UH	0.0042	U	0.11	UH		
	4,4'-DDT	mg/kg	17.0	RSL	0.3	Z,M,H	0.0083	U	0.32	H		0.42	H	0.0042	U	0.12	JPH		
	Aldrin	mg/kg	0.8	RFA	0.017	U,H	0.0083	U	0.017	UH		0.17	UH	0.0042	U	0.17	UH		
	alpha-BHC	mg/kg	0.9	R9	0.019	U,H	0.0083	U	0.019	UH		0.19	UH	0.0042	U	0.19	UH		
	alpha-Chlordane	mg/kg	0.0	NA	0.011	U,H	0.0083	U	0.011	UH		0.11	UH	0.0042	U	0.11	UH		
	beta-BHC	mg/kg	7.7	NA	0.009	JPH	0.0083	U	0.02	UH		0.2	UH	0.0042	U	0.2	UH		
	Chlordane (Technical)	mg/kg	NA	NA	0.3	U,H	0.17	U	0.3	UH		3.0	UH	0.084	U	3.0	UH		
	delta-BHC	mg/kg	NA	NA	0.011	U,H	0.0083	U	0.011	UH		0.11	UH	0.0042	U	0.11	UH		
	Dieldrin	mg/kg	0.9	RFA	0.063	P,M,H	0.0083	U	0.012	UH		0.09	JPH	0.0042	U	0.12	UH		
	Endosulfan I	mg/kg	370.0	R9	0.022	U,H	0.0083	U	0.022	U		0.22	UH	0.0042	U	0.22	UH		
	Endosulfan II	mg/kg	370.0	R9	0.012	U,H	0.0083	U	0.011	JPH		0.12	UH	0.0042	U	0.12	UH		
	Endosulfan sulfate	mg/kg	370.0	R9	0.031	U,H	0.0083	U	0.031	UH		0.31	UH	0.0042	U	0.31	UH		
	Endrin	mg/kg	17.7	RFA	0.014	U,H	0.0083	U	0.014	UH		0.14	UH	0.0042	U	0.14	UH		
	Endrin aldehyde	mg/kg	0.0	NA	0.071	P,H	0.0083	U	0.086	PH		0.36	UH	0.0042	U	0.36	UH		
	Endrin ketone	mg/kg	18.0	R9	0.028	UZH	0.0083	U	0.0091	JPH		0.11	JPH	0.0042	U	0.28	UH		
	gamma-BHC	mg/kg	NA	NA	0.016	U,H	0.0083	U	0.016	UH		0.16	UH	0.0042	U	0.16	UH		
	gamma-Chlordane	mg/kg	16.0	R9	0.054	P,MH	0.0083	U	0.048	PH		0.04	JPH	0.0042	U	0.11	UH		
	Heptachlor	mg/kg	3.1	RFA	0.17	P,MH	0.0083	U	0.012	UH		0.12	UH	0.0042	U	0.12	UH		
	Heptachlor epoxide	mg/kg	1.5	RFA	0.017	U,H	0.0083	U	0.017	UH		0.17	UH	0.0042	U	0.17	UH		
	Methoxychlor	mg/kg	310.0	RSL	0.086	P,Z,MH	0.0083	U	0.096	H		0.11	JH	0.0042	U	0.23	UH		
	Toxaphene	mg/kg	4.4	R9	0.3	U,H	0.17	U	0.3	UH		3.0	UH	0.084	U	3.0	UH		
	Aroclor 1016	mg/kg	2.0	RFA	0.031	U	0.33	U	0.031	U		0.031	U	0.16	U	0.031	U		
	Aroclor 1221	mg/kg	1.4	RSL	0.041	U	0.33	U	0.041	U		0.041	U	0.16	U	0.041	U		
	Aroclor 1232	mg/kg	1.4	RSL	0.047	U	0.33	U	0.047	U		0.047	U	0.16	U	0.047	U		
	Aroclor 1242	mg/kg	2.2	RSL	0.034	U	0.33	U	0.034	U		0.034	U	0.16	U	0.034	U		
	Aroclor 1248	mg/kg	2.0	RFA	0.03	U	0.33	U	0.03	U		0.03	U	0.16	U	0.03	U		
	Aroclor 1254	mg/kg	2.0	RFA	4.9		3		4		93	2.2		1.5		1.5		23	
	Aroclor 1260	mg/kg	2.0	RFA	0.03	UM	0.41		0.03	U		0.03	U	0.22		0.03	U		

Table 8-2-E Load Line 1 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

				Building		CB-4/CB-4WS				CB-4A/CB-4AWN	
				Sample ID		LL1SS-610-0001-SO	LL1SS-610-0002-SO	LL1SS-610-0003-SO		LL1SS-620-0001-SO	
				Lab Identifier		752753(A)	752754(A)	0912084-006(B)		752755(A)	
				Type Sample		Primary	Blind Dup	Field Dup		Primary	
				Sample Date		12/2/09	12/2/09	12/2/09		12/2/09	
				Sample Depth		0 - 0.4'	0 - 0.4'	0 - 0.4'		0 - 0.5'	
		Analytes	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q
Volatile Organic Compounds		1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,1,1-Trichloroethane	mg/kg	8700	RSL	0.006	U	0.0052	U	0.000061	U
		1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.006	U	0.0052	U	0.000061	U
		1,1,2-Trichloroethane	mg/kg	11	RSL	0.006	U	0.0052	U	0.000061	U
		1,1-Dichloroethane	mg/kg	33	RSL	0.006	U	0.0052	U	0.000061	U
		1,1-Dichloroethene	mg/kg	120	R9	0.006	U	0.0052	U	0.000061	U
		1,1-Dichloropropene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2,3-Trichlorobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2,3-Trichloropropane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2,4-Trichlorobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2,4-Trimethylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,2-Dibromoethane	mg/kg	0.34	RSL	0.006	U	0.0052	U	0.000061	U
		1,2-Dichlorobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	0.000061	U
		1,2-Dichloroethane	mg/kg	4.3	RSL	0.006	U	0.0052	U	0.000061	U
		1,2-Dichloropropane	mg/kg	8.8	RSL	0.006	U	0.0052	U	0.000061	U
		1,3,5-Trimethylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,3-Dichlorobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	0.000061	U
		1,3-Dichloropropane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		1,4-Dichlorobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	0.000061	U
		2,2-Dichloropropane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		2-Butanone	mg/kg	22000	R9	0.025	U	0.022	U	0.000075	J 0.058
		2-Chlorotoluene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		2-Hexanone	mg/kg	210	RSL	0.01	JB	0.0059	JB	0.00031	U 0.0063 JB
		4-Chlorotoluene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		4-Methyl-2-pentanone	mg/kg	5300	R9	0.0068	JB	0.0043	JB	0.00031	U 0.0039 JB
		Acetone	mg/kg	61000	RSL	0.024	U	0.021	U	0.00061	U 0.27
		Benzene	mg/kg	11	RSL	0.006	U	0.0052	U	0.000037	U 0.0049
		Bromobenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		Bromochloromethane	mg/kg	8.2	R9	0.006	U	0.0052	U	0.000061	U 0.0049
		Bromodichloromethane	mg/kg	2.7	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Bromoform	mg/kg	610	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Bromomethane	mg/kg	7.3	RSL	0.006	U	0.0052	U	0.00024	U 0.0049
		Carbon disulfide	mg/kg	820	RSL	0.006	U	0.0052	U	0.00031	U 0.0019 J
		Carbon tetrachloride	mg/kg	6.1	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Chlorobenzene	mg/kg	290	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Chloroethane	mg/kg	30	R9	0.012	U	0.01	U	0.00031	U 0.0098
		Chloroform	mg/kg	2.9	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Chloromethane	mg/kg	120	RSL	0.006	U	0.0052	U	0.00012	U 0.0049
		cis-1,2-Dichloroethene	mg/kg	NA	NA	0.006	U	0.0052	U	0.000061	U 0.0049
		cis-1,3-Dichloropropene	mg/kg	17	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Dibromochloromethane	mg/kg	6.8	RSL	0.012	U	0.01	U	0.000061	U 0.0098
		Dibromomethane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		Dichlorodifluoromethane	mg/kg	NA	NA	0.012	U	0.01	U	NA	0.0098
		Diisopropyl ether	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		Ethylbenzene	mg/kg	54	RSL	0.006	U	0.0052	U	0.000061	U 0.0049
		Freon 113	mg/kg	NA	NA	0.01	U	0.009	U	NA	0.0086
		Hexachlorobutadiene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		Iodomethane	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049
		Isopropylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA	0.0049

Table 8-2-E Load Line 1 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		CB-4/CB-4WS						CB-4A/CB-4AWN	
				Sample ID		LL1SS-610-0001-SO		LL1SS-610-0002-SO		LL1SS-610-0003-SO		LL1SS-620-0001-SO	
Type Sample		Primary		Blind Dup		Field Dup		Primary					
Sample Date		12/2/09		12/2/09		12/2/09		12/2/09					
Sample Depth		0 - 0.4'		0 - 0.4'		0 - 0.4'		0 - 0.5'					
Analytes	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q		
m,p-Xylenes	mg/kg	NA	NA	0.012	U	0.01	U	NA		0.0098	U		
Methyl tert-butyl ether	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
Methylene chloride	mg/kg	110	RSL	0.012	U	0.01	U	0.00012	U	0.0098	U		
Naphthalene	mg/kg	NA	NA	0.0026	JB	0.0019	JB	NA		0.0018	JB		
n-Butylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
n-Propylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
o-Xylene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
p-Isopropyltoluene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0063			
sec-Butylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
Styrene	mg/kg	6300	RSL	0.006	U	0.0052	U	0.000061	U	0.0049	U		
tert-Butylbenzene	mg/kg	NA	NA	0.006	U	0.0052	U	NA		0.0049	U		
Tetrachloroethene	mg/kg	4.8	R9	0.006	U	0.0052	U	0.000061	U	0.0049	U		
Toluene	mg/kg	5000	RSL	0.002	J	0.0017	J	0.000061	U	0.0049	U		
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.006	U	0.0052	U	0.000061	U	0.0049	U		
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.006	U	0.0052	U	0.000061	U	0.0049	U		
Trichloroethene	mg/kg	0.53	R9	0.006	U	0.0052	U	0.000061	U	0.0049	U		
Trichlorofluoromethane	mg/kg	NA	NA	0.0013	J	0.0052	U	NA		0.0049	U		
Vinyl acetate	mg/kg	NA	NA	0.019	U	0.017	U	NA		0.016	U		
Vinyl chloride	mg/kg	0.6	RSL	0.006	U	0.0052	U	0.000049	U	0.0049	U		
Xylenes, Total	mg/kg	630	RSL	NA		NA		0.00018	U	NA			

Table 8-3-A Load Line 2 Metals - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building	DB-4/DB-4WN		DB-4A/DB-4AWS						DB-4/DB-4WS						DB-4A/DB-4AWN					
				Sample ID	LL2SS-401-0001-SO		LL2SS-403-0001-SO		LL2SS-403-0002-SO		LL2SS-403-0003-SO		RSD (%) of Three Replicate Samples	LL2SS-407-0001-SO		LL2SS-407-0002-SO		LL2SS-407-0003-SO		RSD (%) of Three Replicate Samples	LL2SS-417-0001-SO			
					Lab Identifier		752768(A)		753404(A)		0912084-004(B)			753405(A)		752766(A)		0912084-003(B)			752767(A)		753406(A)	
					Type Sample		Primary		Primary		Field Dup			Blind Dup		Primary		Field Dup			Blind Dup		Primary	
					Sample Date		12/2/2009		12/2/2009		12/2/2009			12/2/2009		12/2/2009		12/2/2009			12/2/2009		12/2/2009	
					Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'			0 - 0.5'		0 - 0.5'		0 - 0.5'			0 - 0.5'		0 - 0.5'	
Metals	Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q			Value	Q		Value	Q		
	Aluminum	mg/kg	34,960	NG	7190		9140		12000		9450		15	11200		15000		8210		30	11400			
	Antimony	mg/kg	136	RFA	10	U	1.2	J	0.066		1.2	J		0.47	J	0.049		0.8	J		1.2	J		
	Arsenic	mg/kg	19.8	BKG1	5.5		13.5		15		13.1		7	6.6		14		5.2		55	16.3			
	Barium	mg/kg	3,506	NG	43.4		51.2		49		47.1		4	95.4		59		53.8		33	56.7			
	Beryllium	mg/kg	160	RSL	0.25	J	0.47	J	0.58		0.47	J		0.57	J	0.59		0.32	J		0.54	J		
	Cadmium	mg/kg	109	NG	0.15	J	1	U	0.34		1	U		0.82	J	0.22		0.49	J		1	U		
	Calcium	mg/kg	NA	NA			10700		11000		11400					5700					16300			
	Chromium (as Cr-3)	mg/kg	196,942	NG	18.2		24.9		14		14.2		35	49.4		15		58.3		56	22.3			
	Chromium, hexavalent	mg/kg	16.4	NG	6.4	U	6.4	U	0.19	U	6.4	U		6.4	U	0.2	U	6.4	U		6.4	U		
	Cobalt	mg/kg	70.3	NG	6.3		6.5		9.5		6.4		24	5.9		10		6.5		30	8.3			
	Copper	mg/kg	27,138	RFA	14		24.4		32		20		24	13		20		14.1		24	16.9			
	Iron	mg/kg	NA	NA			24300		25000		21700					23000					27000			
	Lead	mg/kg	4,000	RSL	28.5		33.6		30		36.1		9	110		24		32.6		85	38.6			
	Magnesium	mg/kg	NA	NA			3710		5000		3890					3400					5040			
	Manganese	mg/kg	1,450	BKG1	936		382		450		406		8	936		570		492		36	446			
	Mercury	mg/kg	165	RFA	0.021		0.012		0.016	J	0.011			0.028		0.022	J	0.022			0.03			
	Nickel	mg/kg	13,463	RFA	16.2		19.8		27		19.8		19	14.3		22		17		22	25.2			
	Potassium	mg/kg	NA	NA			1230		1400		1090					1100					1330			
	Selenium	mg/kg	390	RSL	1.3	U	0.54	J	0.21		0.47	J		0.69	J	0.36		1.3	U		1.3	U		
	Silver	mg/kg	3,240	RFA	2	U	2	U	0.033		2	U		0.38	J	0.033		2	U		2	U		
	Sodium	mg/kg	NA	NA			60.2		87		56.9					35					56.7			
	Thallium	mg/kg	47.6	RFA	2	U	2	U	0.093		2	U		2	UB	0.11		2	U		2	U		
	Vanadium	mg/kg	1,558	RFA	14		12.8		13		13		1	14.4		16		15		5	15.4			
	Zinc	mg/kg	196,589	RFA	62.1		61.7		100		64.9		28	66.6		86		62.6		17	59.2			
	RSD % Average=													15.9			RSD % Average=						36	

Table 8-3-B Load Line 2 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		DB-4/DB-4WN		DB-10		DB-4A/DB-4AWS						DA-6		DA-6A		DB-4/DB-4WS									
				Sample ID		LL2SS-401-0001-SO		LL2SS-402-0001-SO		LL2SS-403-0001-SO		LL2SS-403-0002-SO		LL2SS-403-0003-SO		RSD (%) of Three Replicate Samples		LL2SS-405-0001-SO		LL2SS-406-0001-SO		LL2SS-407-0001-SO		LL2SS-407-0002-SO		LL2SS-407-0003-SO		RSD (%) of Three Replicate Samples	
Lab Identifier		752768(A)		752787A(A)		753404(A)		0912084-004(B)		753405(A)		752517(A)		752516(A)		752766(A)		0912084-003(B)		752767(A)									
Type Sample		Primary		Primary		Primary		Field Dup		Blind Dup		Primary		Primary		Primary		Field Dup		Blind Dup									
Sample Date		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/1/2009		12/1/2009		12/2/2009		12/2/2009		12/2/2009									
Sample Depth		0 - 0.5'		0 - 1'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 1'		0 - 1'		0 - 0.5'		0 - 0.5'		0 - 0.5'									
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q							
1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.25	U	0.24	U	0.04	U	0.25	U		0.25	U	0.15	J	0.25	U	0.04	U	0.25	U					
1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	1.3		0.04	U	0.24	U		0.24	U	0.24	U	0.24	U	0.04	U	0.24	U					
2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.19	J	0.59		0.27	U	3.3		2.8		77	4.2		38		0.29	P	0.64		1.2		65				
2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.27	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U	0.04	U	0.27	U					
2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.27	U	0.24	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U	0.04	U	0.27	U					
2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.24	U	0.29	U	0.04	U	0.24	U		0.14	J	0.31		0.24	U	0.04	U	0.16	J					
2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.29	U	0.27	U	0.08	U	0.29	U		0.29	U	0.29	U	0.29	U	0.08	U	0.29	U					
3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.27	U	0.26	U	0.08	U	0.27	U		0.27	U	0.27	U	0.27	U	0.08	U	0.27	U					
4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.1	J	0.26	U	0.33	U	0.1		0.26	U		0.26	U	0.26	U	0.26	U	0.1		0.19	J					
4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.33	U	0.26	U	0.08	U	0.33	U		0.33	U	0.33	U	0.33	U	0.08	U	0.33	U					
HMX	mg/kg	19,090	RFA	0.26	U	0.26	U	0.24	U	0.11		0.22	J		0.26	U	0.26	U	0.26	U	0.08	U	0.26	U					
Nitrobenzene	mg/kg	48	RFA	0.24	U	0.24	U	1.4	U	0.04	U	0.24	U		0.24	U	0.24	U	0.24	U	0.04	U	0.24	U					
Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	1.4	U	16		1.4	U		1.4	U	1.4	U	1.4	U	4		1.4	U					
PETN	mg/kg	NA	NA	1.4	U	1.4	U	0.2	J	4	U	1.4	U		1.4	U	1.4	U	1.4	U	0.2	U	1.4	U					
RDX	mg/kg	1,452	NG	0.29	U	0.29	U	0.29	U	0.12	U	0.45			0.29	U	0.29	U	0.29	U	0.08	U	0.29	U					
Tetryl	mg/kg	240	RSL	0.29	U	0.29	U	16	U	0.2	U	0.29	U		0.29	U	0.29	U	0.29	U	0.08	U	0.29	U					
Nitrocellulose	mg/kg	None	NA	NA		NA		0.26	P	0.5		16	U		NA		NA		16	U	14		16	U					
Nitroguanidine	mg/kg	6,100	RSL	NA		NA		0.33	U	0.08	U	0.28	P		NA		NA		2.1		0.13	U	0.15	P					
										RSD % Average = 77															RSD % Average = 65				

Table 8-3-B Load Line 2 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		DB-10		DC-1		DB-13/DB-13B/DB-26		DB-13/DB-13A/DB-13B		DB-27A				DB-27C		DB-25		DB-4A/DB-4AWN	
				Sample ID		LL2SS-409-0001-SO		LL2SS-410-0001-SO		LL2SS-411-0001-SO		LL2SS-412-0001-SO		LL2SS-413-0001-SO		LL2SS-414-0001-SO		LL2SS-415-0001-SO		LL2SS-416-0001-SO		LL2SS-417-0001-SO	
Lab Identifier		752788(A)		752519(A)		752784(A)		752785(A)		752521(A)		752520(A)		752518(A)		752786(A)		753406(A)					
Type Sample		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary					
Sample Date		12/2/2009		12/1/2009		12/1/2009		12/1/2009		12/1/2009		12/1/2009		12/1/2009		12/1/2009		12/2/2009					
Sample Depth		0 - 1'		0 - 0.5'		0 - 1'		0 - 1'		0 - 0.4'		0 - 0.4'		0 - 0.5'		0 - 1'		0 - 0.5'					
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q				
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U			
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U			
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	7.1		0.24	U	0.24	U	0.24	U	0.24	U	0.47		1.2		32				
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U			
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U			
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.12	J	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.18	JP			
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U			
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U			
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U			
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U			
	HMX	mg/kg	19,090	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U			
	Nitrobenzene	mg/kg	48	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U			
	Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U			
	PETN	mg/kg	NA	NA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U			
	RDX	mg/kg	1,452	NG	0.21	J	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U			
Tetryl	mg/kg	240	RSL	0.29	U	0.29		0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U				
Nitrocellulose	mg/kg	None	NA	NA		NA		NA		NA		NA		NA		NA		NA					
Nitroguanidine	mg/kg	6,100	RSL	NA		NA		NA		NA		NA		NA		NA		NA					

See Notes at end of Table 8-6-E																
			Building	DB-4A/DB-4AWS						DB-4/DB-4WS						
			Sample ID	LL2SS-403-0001-SO		LL2SS-403-0002-SO		LL2SS-403-0003-SO		LL2SS-407-0001-SO		LL2SS-407-0002-SO		LL2SS-407-0003-SO		
			Lab Identifier	753404(A)		0912084-004(B)		753405(A)		752766(A)		0912084-003(B)		752767(A)		
			Type Sample	Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup		
			Sample Date	12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009		
			Sample Depth	0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		
			Value	Min LU or RSL												
Analyte	Units				Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q
1,2,4-Trichlorobenzene	mg/kg	220	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.0017	U
1,2-Dichlorobenzene	mg/kg	1,900	RSL		0.33	U	N/A		0.33	U	1.7	UM	N/A		0.33	U
1,3-Dichlorobenzene	mg/kg	530	R9		0.33	U	N/A		0.33	U	1.7	UM	N/A		0.33	U
1,4-Dichlorobenzene	mg/kg	24	RSL		0.33	U	N/A		0.33	U	1.7	U	N/A		0.33	U
2,4,5-Trichlorophenol	mg/kg	6,100	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U
2,4,6-Trichlorophenol	mg/kg	440	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U
2,4-Dichlorophenol	mg/kg	180	RSL		0.33	U	0.16	U	0.33	U	1.7	UM,Y	0.16	U	0.33	U
2,4-Dimethylphenol	mg/kg	1,200	RSL		0.66	U	0.16	U	0.66	U	1.7	U	0.16	U	0.33	U
2,4-Dinitrophenol	mg/kg	120	RSL		0.33	U	0.83	U	0.33	U	3.3	UM	0.83	U	0.33	U
2,4-Dinitrotoluene	mg/kg	16	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.67	U
2,6-Dinitrotoluene	mg/kg	61	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U
2-Chloronaphthalene	mg/kg	6,300	RSL		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U
2-Chlorophenol	mg/kg	390	RSL		0.66	U	0.16	U	0.66	U	1.7	UM	0.16	U	0.33	U
2-Methyl-4,6-dinitrophenol	mg/kg	NA	NA		0.03	J	0.32	U	0.031	J	3.3	UM	0.32	U	0.33	U
2-Methylnaphthalene	mg/kg	2,378	RFA		0.33	U	0.16	U	0.33	U	0.33	JM	0.16	U	0.67	U
2-Methylphenol	mg/kg	3,100	R9		0.66	U	0.16	U	0.66	U	1.7	U	0.16	U	0.33	U
2-Nitroaniline	mg/kg	6,100	RSL		0.33	U	0.32	U	0.33	U	3.3	UM	0.32	U	0.33	U
2-Nitrophenol	mg/kg	NA	NA		0.66	U	0.16	U	0.66	U	1.7	UM	0.16	U	0.67	U
3,3'-Dichlorobenzidine	mg/kg	11	RSL		0.66	U	1	U	0.66	U	3.3	U	1	U	0.33	U
3-Nitroaniline	mg/kg	NA	NA		0.33	U	0.32	U	0.33	U	3.3	U	0.32	U	0.67	U
4-Bromophenyl phenyl ether	mg/kg	NA	NA		0.33	U	0.2	U	0.33	U	1.7	U	0.2	U	0.67	U
4-Chloro-3-methylphenol	mg/kg	NA	NA		0.33	U	0.16	U	0.33	U	1.7	U	0.16	U	0.33	U
4-Chloroaniline	mg/kg	NA	NA		0.33	U	0.16	U	0.33	U	1.7	U	0.16	U	0.33	U
4-Chlorophenyl phenyl ether	mg/kg	NA	NA		0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U
4-Methylphenol	mg/kg	NA	NA		0.33	U	0.16	U	0.33	U	1.7	U	0.16	U	0.33	U
4-Nitroaniline	mg/kg															

Table 8-3-C Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		DB-4A/DB-4AWS						DB-4/DB-4WS					
				Sample ID		LL2SS-403-0001-SO		LL2SS-403-0002-SO		LL2SS-403-0003-SO		LL2SS-407-0001-SO		LL2SS-407-0002-SO		LL2SS-407-0003-SO	
Lab Identifier		753404(A)		0912084-004(B)		753405(A)		752766(A)		0912084-003(B)		752767(A)					
Type Sample		Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup					
Sample Date		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009					
Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'		0 - 0.5'					
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.33	U	0.16	U	0.33	U	1.7	UB,M	0.16	U	0.33	U		
Di-n-octyl phthalate	mg/kg	2,400	R9	0.46		0.16	U	0.36		1.7	U	0.16	U	0.19	JB		
Fluoranthene	mg/kg	2,765	RFA	0.049	J	0.64		0.043	J	7.5	M	0.049	J	0.33	U		
Fluorene	mg/kg	7,366	RFA	0.33	U	0.16	U	0.33	U	0.58	JM	0.16	U	0.073	J		
Hexachlorobenzene	mg/kg	3	RSL	0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.038	J		
Hexachlorobutadiene	mg/kg	62	RSL	0.33	U	0.05	U	0.33	U	1.7	UM	0.05	U	0.33	U		
Hexachlorocyclopentadiene	mg/kg	370	R9	0.33	U	0.16	U	0.33	U	1.7	UM,Y	0.16	U	0.33	U		
Hexachloroethane	mg/kg	350	RSL	0.099	J	0.16	U	0.096	J	1.7	U	0.16	U	0.33	U		
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.41		0.1	J	0.091	J	2	M	0.16	U	0.33	U		
Isophorone	mg/kg	5,100	RSL	0.022	J	0.16	U	0.021	J	1.7	UM	0.16	U	0.043	J		
Naphthalene	mg/kg	3,678	RFA	0.33	U	0.16	U	0.33	U	0.41	JM	0.16	U	0.13	J		
Nitrobenzene	mg/kg	48	RSL	0.33	U	0.16	U	0.33	U	1.7	U	0.16	U	0.018	J		
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U		
N-Nitrosodiphenylamine	mg/kg	990	R9	0.33	U	0.16	U	0.33	U	1.7	UM	0.16	U	0.33	U		
Pentachlorophenol	mg/kg	21	RFA	0.31	J	0.16	U	0.14	J	3.3	UM	0.16	U	0.33	U		
Phenanthrene	mg/kg	2,300	R9	0.33	U	0.17		0.33	U	4.4	M	0.028	J	0.67	U		
Phenol	mg/kg	18,000	RSL	0.34		0.16	U	0.29	J	1.7	U	0.16	U	0.045	J		
Pyrene	mg/kg	2,074	RFA	0.33	U	0.39		0.33	U	6.4	M	0.035	J	0.33	U		

All results were below the RL. No RSDs were calculated.

Table 8-3-D Pesticides and PCBs - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E			Building		DB-4A/DB-4AWS										DB-4/DB-4WS							
					Sample ID		LL2SS-403-0001-SO		LL2SS-403-0002-SO		LL2SS-403-0003-SO		RSD (%) of Three Replicate Samples		LL2SS-407-0001-SO		LL2SS-407-0002-SO		LL2SS-407-0003-SO		RSD (%) of Three Replicate Samples	
Lab Identifier		753404(A)		0912084-004(B)		753405(A)				752766(A)		0912084-003(B)		752767(A)								
Type Sample		Primary		Field Dup		Blind Dup				Primary		Field Dup		Blind Dup								
Sample Date		12/2/2009		12/2/2009		12/2/2009				12/2/2009		12/2/2009		12/2/2009								
Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'				0 - 0.5'		0 - 0.5'		0 - 0.5'								
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q						
4,4'-DDD	mg/kg	20	RSL	0.0012	UH	0.0017	U	0.0012	UH		0.019	MH	0.0017	U	0.33	U						
4,4'-DDE	mg/kg	40.8	RFA	0.0058	PH	0.00083	U	0.0036	PH		0.0022	UH	0.00083	U	0.0071	H						
4,4'-DDT	mg/kg	17	RSL	0.023	H	0.00083	U	0.018	H		0.035	MH	0.00083	U	0.016	H						
Aldrin	mg/kg	0.82	RFA	0.0017	UH	0.00083	U	0.0017	UH		0.0034	UH	0.00083	U	0.0017	UH						
alpha-BHC	mg/kg	0.9	R9	0.0019	UH	0.00083	U	0.0019	UH		0.0038	UH	0.00083	U	0.0023	PH						
alpha-Chlordane	mg/kg	NA	NA	0.0025	H	0.00083	U	0.0011	UH		0.0022	UH	0.00083	U	0.0011	UH						
beta-BHC	mg/kg	7.7	NA	0.002	UH	0.00083	U	0.002	UH		0.0041	UH	0.00083	U	0.002	UH						
Chlordane (Technical)	mg/kg	NA	NA	0.03	UH	0.017	U	0.03	UH		0.061	UH	0.017	U	0.03	UH						
delta-BHC	mg/kg	NA	NA	0.0011	UH	0.00083	U	0.0011	UH		0.0022	UH	0.00083	U	0.0011	UH						
Dieldrin	mg/kg	0.9	RFA	0.0057	PH	0.00083	U	0.0042	PH		0.0083	P,MH	0.00083	U	0.0035	PH						
Endosulfan I	mg/kg	370	R9	0.0022	UH	0.00083	U	0.0022	UH		0.0045	UH	0.00083	U	0.0022	UH						
Endosulfan II	mg/kg	370	R9	0.0005	JPH	0.00083	U	0.0005	PH		0.0008	JPH	0.00083	U	0.0004	JPH						
Endosulfan sulfate	mg/kg	370	R9	0.0031	UH	0.00083	U	0.0031	UH		0.0063	UMH	0.00083	U	0.0031							
Endrin	mg/kg	17.7	RFA	0.0014	UH	0.00083	U	0.0014	UH		0.0028	UH	0.00083	U	0.0014							
Endrin aldehyde	mg/kg	NA	NA	0.0083	H	0.00083	U	0.0072	PH		0.013	MH	0.00083	U	0.0081							
Endrin ketone	mg/kg	18	R9	0.0028	UH	0.00083	U	0.0072	PH		0.0057	UH	0.00083	U	0.0024							
gamma-BHC	mg/kg	NA	NA	0.0016	UH	0.00083	U	0.0016	UH		0.028	MH	0.00083	U	0.016							
gamma-Chlordane	mg/kg	16	R9	0.003	JPH	0.00083	U	0.011	UVH		0.045	UVH	0.00083	U	0.011							
Heptachlor	mg/kg	3.1	RFA	0.012	UVH	0.00083	U	0.012	UVH		0.061	P,MH	0.00083	U	0.012							
Heptachlor epoxide	mg/kg	1.5	RFA	0.0017	UH	0.00083	U	0.0015	JPH		0.0034	UH	0.00083	U	0.0017							
Methoxychlor	mg/kg	310	RSL	0.0073	PH	0.00083	U	0.0072	H		0.0047	UH	0.00083	U	0.0058							
Toxaphene	mg/kg	4.4	R9	0.03	UH	0.017	U	0.03	UH		0.061	UH	0.017	U	0.03							
Aroclor 1016	mg/kg	2.0	RFA	0.031	U	0.033	U	0.031	U		0.31	UM	0.033	U	0.031	U						
Aroclor 1221	mg/kg	1.4	RSL	0.041	U	0.033	U	0.041	U		0.41	U	0.033	U	0.042	U						
Aroclor 1232	mg/kg	1.4	RSL	0.047	U	0.033	U	0.047	U		0.47	U	0.033	U	0.048	U						
Aroclor 1242	mg/kg	2.2	RSL	0.034	U	0.033	U	0.034	U		0.34	U	0.033	U	0.035	U						
Aroclor 1248	mg/kg	2.0	RFA	0.03	U	0.033	U	0.03	U		0.3	U	0.033	U	0.03	U						
Aroclor 1254	mg/kg	2.0	RFA	0.38		0.091		0.82		85	13		0.07		0.29		166					
Aroclor 1260	mg/kg	2.0	RFA	0.03	U	0.023	J	0.03	U		0.3	UM	0.015	J	0.03	U						

Except for Aroclor 1254, all results were below the RL and no RSDs were calculated.

Table 8-3-E Load Line 2 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E			Building		DB-4A/DB-4AWS		DB-4/DB-4WS		
			Sample ID		LL2SS-404-0001-SO	LL2SS-408-0001-SO			
				Lab Identifier			752757(A)	752756(A)	
				Type Sample			Primary	Primary	
				Sample Date			12/2/2009	12/2/2009	
Sample Depth		0 - 0.5'	0 - 0.4'						
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q		
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	0.0047	U	0.005	U		
1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0047	U	0.005	U		
1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.0047	U	0.005	U		
1,1,2-Trichloroethane	mg/kg	11	RSL	0.0047	U	0.005	U		
1,1-Dichloroethane	mg/kg	33	RSL	0.0047	U	0.005	U		
1,1-Dichloroethene	mg/kg	120	R9	0.0047	U	0.005	U		
1,1-Dichloropropene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2,3-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2,3-Trichloropropane	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2,4-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2,4-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2-Dibromoethane	mg/kg	0.34	RSL	0.0047	U	0.005	U		
1,2-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,2-Dichloroethane	mg/kg	4.3	RSL	0.0047	U	0.005	U		
1,2-Dichloropropane	mg/kg	8.8	RSL	0.0047	U	0.005	U		
1,3,5-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,3-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
1,3-Dichloropropane	mg/kg	NA	NA	0.0047	U	0.005	U		
1,4-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
2,2-Dichloropropane	mg/kg	NA	NA	0.0047	U	0.005	U		
2-Butanone	mg/kg	22000	R9	0.02	U	0.021	U		
2-Chlorotoluene	mg/kg	NA	NA	0.0047	U	0.005	U		
2-Hexanone	mg/kg	210	RSL	0.019	U	0.02	U		
4-Chlorotoluene	mg/kg	NA	NA	0.0047	U	0.005	U		
4-Methyl-2-pentanone	mg/kg	5300	R9	0.019	U	0.02	U		
Acetone	mg/kg	61000	RSL	0.019	U	0.02	U		
Benzene	mg/kg	11	RSL	0.0047	U	0.005	U		
Bromobenzene	mg/kg	NA	NA	0.0047	U	0.005	U		
Bromochloromethane	mg/kg	8.2	R9	0.0047	U	0.005	U		
Bromodichloromethane	mg/kg	2.7	RSL	0.0047	U	0.005	U		
Bromoform	mg/kg	610	RSL	0.0047	U	0.005	U		
Bromomethane	mg/kg	7.3	RSL	0.0047	U	0.005	U		
Carbon disulfide	mg/kg	820	RSL	0.0047	U	0.005	U		
Carbon tetrachloride	mg/kg	6.1	RSL	0.0047	U	0.005	U		
Chlorobenzene	mg/kg	290	RSL	0.0047	U	0.005	U		
Chloroethane	mg/kg	30	R9	0.0094	U	0.01	U		
Chloroform	mg/kg	2.9	RSL	0.0047	U	0.005	U		
Chloromethane	mg/kg	120	RSL	0.0047	U	0.005	U		
cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0047	U	0.005	U		
cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0047	U	0.005	U		
Dibromochloromethane	mg/kg	6.8	RSL	0.0094	U	0.01	U		
Dibromomethane	mg/kg	NA	NA	0.0047	U	0.005	U		
Dichlorodifluoromethane	mg/kg	NA	NA	0.0094	U	0.01	U		
Diisopropyl ether	mg/kg	NA	NA	0.0047	U	0.005	U		
Ethylbenzene	mg/kg	54	RSL	0.0047	U	0.005	U		
Freon 113	mg/kg	NA	NA	0.0082	U	0.0088	U		
Hexachlorobutadiene	mg/kg	NA	NA	0.0047	U	0.005	U		
Iodomethane	mg/kg	NA	NA	0.0047	U	0.005	U		

Table 8-3-E Load Line 2 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

				Building	DB-4A/DB-4AWS		DB-4/DB-4WS	
				Sample ID	LL2SS-404-0001-SO		LL2SS-408-0001-SO	
				Lab Identifier	752757(A)		752756(A)	
				Type Sample	Primary		Primary	
				Sample Date	12/2/2009		12/2/2009	
				Sample Depth	0 - 0.5'		0 - 0.4'	
		Units	Value	Min LU or RSL				
Analyte					Value	Q	Value	Q
Isopropylbenzene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
m,p-Xylenes	mg/kg	NA	NA	NA	0.0094	U	0.01	U
Methyl tert-butyl ether	mg/kg	NA	NA	NA	0.0047	U	0.005	U
Methylene chloride	mg/kg	110	RSL	NA	0.0094	U	0.01	U
Naphthalene	mg/kg	NA	NA	NA	0.00094	JB	0.0013	JB
n-Butylbenzene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
n-Propylbenzene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
o-Xylene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
p-Isopropyltoluene	mg/kg	NA	NA	NA	0.0014	J	0.0029	J
sec-Butylbenzene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
Styrene	mg/kg	6300	RSL	NA	0.0047	U	0.005	U
tert-Butylbenzene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
Tetrachloroethene	mg/kg	4.8	R9	NA	0.0047	U	0.005	U
Toluene	mg/kg	5000	RSL	NA	0.0047	U	0.005	U
trans-1,2-Dichloroethene	mg/kg	NA	NA	NA	0.0047	U	0.005	U
trans-1,3-Dichloropropene	mg/kg	17	RSL	NA	0.0047	U	0.005	U
Trichloroethene	mg/kg	0.53	R9	NA	0.0047	U	0.005	U
Trichlorofluoromethane	mg/kg	NA	NA	NA	0.0047	U	0.005	U
Vinyl acetate	mg/kg	NA	NA	NA	0.015	U	0.016	U
Vinyl chloride	mg/kg	0.6	RSL	NA	0.0047	U	0.005	U
Xylenes, Total		630	RSL	NA	N/A		N/A	

Table 8-4-A Load Line 3 Metals - Surface Soil MI Samples

See Notes at end of Table 8-6-E			Building		EB-4		EB-4A/EB-4AWN		EB-4/EB-4WS/EB4WN						EB-4A/EB-4AWS									
			Sample ID		LL3SS-351-0001-SO		LL3SS-353-0001-SO		LL3SS-355-0001-SO		LL3SS-355-0002-SO		LL3SS-355-0003-SO		RSD (%) of Three Replicate Samples		LL3SS-358-0001-SO		LL3SS-358-0002-SO		LL3SS-358-0003-SO		RSD (%) of Three Replicate Samples	
					753401(A)		753409(A)		753396(A)		0912084-007(B)		753400(A)				753407(A)		0912084-005(B)		753408(A)			
					Primary		Blind Dup		Primary		Field Dup		Blind Dup				Primary		Field Dup		Blind Dup			
					12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009				12/3/2009		12/3/2009		12/3/2009			
					0 - 1'		0 - 0.5'		0 - 1'		0 - 1'		0 - 1'				0 - 0.5'		0 - 0.5'		0 - 0.5'			
Value		Min LU or RSL																						
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q				
Metals	Aluminum	mg/kg	34,960	NG	10600		11400		7830		11000		8030		20	9360		10000		10400		5		
	Antimony	mg/kg	136	RFA	1.4	J	1.4	J	1.2	J	0.09		0.99	J		0.88	J	0.044		1	J			
	Arsenic	mg/kg	19.8	BKG1	4.2		14.2		6.4		14		4.2		63	5.2		14		5.1		63		
	Barium	mg/kg	3,506	NG	78.6		66.9		45.8		54		47.4		9	57.8		63		62.6		5		
	Beryllium	mg/kg	160	RSL	0.77	J	0.66	J	0.25	J	0.52		0.41	J		0.51	J	0.7		0.53	J			
	Cadmium	mg/kg	109	NG	1	U	1	U	0.45	J	0.21		1	U		0.19	J	0.39		0.041	JB			
	Calcium	mg/kg	NA	NA	19000		8960		6870		6300		7130		4	10300		7400		12400		4		
	Chromium (as Cr-3)	mg/kg	196,942	NG	32.7		24.9		74.3		14		33.9		75	29.2		14		71.4		78		
	Chromium, hexavalent	mg/kg	16.4	NG	6.4	U	6.4	U	6.4	U	0.21	U	6.4	U		6.4	U	0.2	U	6.4	U			
	Cobalt	mg/kg	70.3	NG	7.1		8.1		5.6		9.6		5.6		33	5.6		9		5.4		30		
	Copper	mg/kg	27,138	RFA	13.1		17		17.1		24		16.1		23	14.5		28		46.7		54		
	Iron	mg/kg	NA	NA	29100		25500		19900		24000		23100			22900		23000		23300		4		
	Lead	mg/kg	4,000	RSL	37.7		34.6		22.4		24		9.1		44	30.7		33		35.3		7		
	Magnesium	mg/kg	NA	NA	5000		3280		2670		3900		2760		4	2690		3500		2880		4		
	Manganese	mg/kg	1,450	BKG1	643		629		471		560		437		13	506		540		510		4		
	Mercury	mg/kg	165	RFA	0.013		0.028		0.017		0.017	J	0.014			0.017		0.019	J	0.019				
	Nickel	mg/kg	13,463	RFA	19.9		25.3		18.5		29		19.5		26	16.4		25		17.1		24		
	Potassium	mg/kg	NA	NA	1570		1120		1260		1200		1070		4	986		1000		1280		4		
	Selenium	mg/kg	390	RSL	0.62	JB	0.6	J	1.3	U	0.22		0.45	JB		0.5	J	0.27		0.47	J			
	Silver	mg/kg	3,240	RFA	2	U	2	U	2	U	0.028		2	U		2	U	0.03		2	U			
	Sodium	mg/kg	NA	NA	100		46		66		59		51.5		4	63.4		67		90.1		4		
	Thallium	mg/kg	47.6	RFA	2	U	2	U	2	U	0.1		2	U		2	U	0.083		2	U			
Vanadium	mg/kg	1,558	RFA	14.2		16.4		13		13		12.7		1	13.2		14		14.2		4			
Zinc	mg/kg	196,589	RFA	51.5		54.3		55.4		90		47.7		35	63.4		130		69.1		42			
											RSD% Average = 24								RSD% Average = 21					

Table 8-4-B Load Line 3 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6. E				Building		EB-4		EB-4A/EB-4AWN		EA-6A		EB-4/EB-4WS/EB4WN						EA-6		EB-4A/EB-4AWS						EB-10/EB10A		EB-11		EA-21					
				Sample ID		LL3SS-351-0001-SO		LL3SS-353-0001-SO		LL3SS-354-0001-SO		LL3SS-355-0001-SO		LL3SS-355-0002-SO		LL3SS-355-0003-SO		RSD (%) of Three Replicate Samples		LL3SS-357-0001-SO		LL3SS-358-0001-SO		LL3SS-358-0003-SO		RSD (%) of Two Replicate Samples		LL3SS-361-0001-SO		LL3SS-362-0001-SO		LL3SS-363-0001-SO			
						Lab Identifier		753401(A)		753409(A)		752505(A)		753396(A)		0912084-007(B)				753400(A)		752506(A)		753407(A)				753408(A)		752779(A)		752780		752507	
						Type Sample		Primary		Primary		Primary		Primary		Field Dup				Blind Dup		Primary		Primary				Blind Dup		Primary		Primary		Primary	
						Sample Date		12/3/2009		12/2/2009		12/1/2009		12/3/2009		12/3/2009				12/3/2009		12/1/2009		12/2/2009				12/2/2009		12/2/2009		12/2/2009		12/1/2009	
						Sample Depth		0 - 1'		0 - 0.5'		0 - 1'		0 - 1'		0 - 1'				0' 1'		0 - 1'		0 - 0.5'				0 - 0.5'		0 - 1'		0 - 1'		0 - 1'	
Analyte		Units	Value	Min LU or RSL		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q						
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA		0.25	U	0.25	U	0.25	U	0.25	U	0.04	U	0.25	U	0.25	U	0.25	U	0.25	U		0.25	U	0.25	U	0.25	U					
	1,3-Dinitrobenzene	mg/kg	59.4	RFA		0.24	U	0.24	U	0.24	U	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U	0.24	U		0.24	U	0.24	U	0.24	U					
	2,4,6-Trinitrotoluene	mg/kg	211	RFA		1.1		1.2		15		0.76		0.51		1.9		70	1.9	P	0.28		1.4		133	5.1		0.24	U	0.085	JP				
	2,4-Dinitrotoluene	mg/kg	7.53	RFA		0.27	U	0.27	U	0.27	U	0.27	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U		0.27	U	0.27	U	0.27	U				
	2,6-Dinitrotoluene	mg/kg	7.69	RFA		0.27	U	0.27	U	0.27	U	0.27	U	0.04	U	0.27	U		0.27	U	0.27	U	0.27	U		0.27	U	0.27	U	0.27	U				
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA		0.24	U	0.51		0.22	J	0.24	U	0.04	U	0.24	U		0.19	JP	0.24	U	0.12	J		0.24	U	0.24	U	0.24	U				
	2-Nitrotoluene	mg/kg	60.3	RFA		0.29	U	0.29	U	0.29	U	0.29	U	0.08	U	0.29	U		0.29	U	0.29	U	0.29	U		0.29	U	0.29	U	0.29	U				
	3-Nitrotoluene	mg/kg	6.1	RSL		0.27	U	0.27	U	0.27	U	0.27	U	0.08	U	0.27	U		0.27	U	0.27	U	0.27	U		0.27	U	0.27	U	0.27	U				
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA		0.26	U	0.64		0.29		0.26	U	0.076		0.26	U		0.31	P	0.096	J	0.12	J		0.26	U	0.26	U	0.26	U				
	4-Nitrotoluene	mg/kg	816	RFA		0.33	U	0.33	U	0.33	U	0.33	U	0.08	U	0.33	U		0.33	U	0.33	U	0.33	U		0.33	U	0.33	U	0.33	U				
	HMX	mg/kg	19,090	RFA		0.26	U	0.26	U	0.26	U	0.26	U	0.08	U	0.26	U		0.26	U	0.26	U	0.26	U		0.26	U	0.26	U	0.26	U				
	Nitrobenzene	mg/kg	48	RFA		0.24	U	0.24	U	0.24	U	0.24	U	0.04	U	0.24	U		0.24	U	0.24	U	0.24	U		0.24	U	0.24	U	0.24	U				
	Nitroglycerin	mg/kg	816	RFA		1.4	U	1.4	U	1.4	U	1.4	U	4	U	1.4	U		1.4	U	1.4	U	1.4	U		1.4	U	1.4	U	1.4	U				
	PETN	mg/kg	NA	NA		1.4	U	1.4	U	1.4	U	1.4	U	0.2	U	1.4	U		1.4	U	1.4	U	1.4	U		1.4	U	1.4	U	1.4	U				
RDX	mg/kg	1,452	NG		0.29	U	0.29	U	0.29	U	0.29	U	0.08	U	0.29	U		0.29	U	0.29	U	0.29	U		0.29	U	0.29	U	0.29	U					
Tetryl	mg/kg	240	RSL		0.29	U	0.29	U	0.29	U	0.29	U	0.08	U	0.29	U		0.29	U	0.29	U	0.29	U		0.29	U	0.29	U	0.29	U					
Nitrocellulose	mg/kg	None	NA	NA		NA		NA		16	U	18		16	U		NA		16	U	16	U		NA		NA		NA							
Nitroguanadine	mg/kg	6,100	RSL	NA		NA		NA		0.069	JP	0.13	U	0.14	P		NA		0.72		0.5	P	36	NA		NA		NA							
												% RSD Average = 70						% RPD Average= 85																	

Table 8-4-B Load Line 3 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6 E				Building	EB-4VP1		EB-10VP1		EB-10VP2		EB-13A		EB-25		EB-9A	
				Sample ID	LL3SS-364-0001-SO		LL3SS-365-0001-SO		LL3SS-366-0001-SO		LL3SS-367-0001-SO		LL3SS-368-0001-SO		LL3SS-369-0001-SO	
				Lab Identifier	752782		752778		752783		752781		752503		752504	
				Type Sample	Primary		Primary		Primary		Primary		Primary		Primary	
				Sample Date	12/1/2009		12/2/2009		12/1/2009		12/2/2009		12/1/2009		12/1/2009	
				Sample Depth	0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'	
Analyte		Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.24	U	0.24	U	0.24	U	0.24	U	4.9		1.1	
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.14	J	0.26	U
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
	HMX	mg/kg	19,090	RFA	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U
	Nitrobenzene	mg/kg	48	RFA	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
	Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
	PETN	mg/kg	NA	NA	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
	RDX	mg/kg	1,452	NG	0.29	U	0.29	U	0.29	U	0.29	U	0.3		0.29	U
	Tetryl	mg/kg	240	RSL	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
	Nitrocellulose	mg/kg	None	NA	NA		NA		NA		NA		NA		NA	
	Nitroguanadine	mg/kg	6,100	RSL	NA		NA		NA		NA		NA		NA	

Table 8-4-C Load Line Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

				Building	EB-4/EB-4WS/EB4WN						EB-4A/EB-4AWS					
				Sample ID	LL3SS-355-0001-SO		LL3SS-355-0002-SO		LL3SS-355-0003-SO		LL3SS-358-0001-SO		LL3SS-358-0002-SO		LL3SS-358-0003-SO	
				Lab Identifier	753396(A)		0912084-007(B)		753400(A)		753407(A)		0912084-005(B)		753408(A)	
				Type Sample	Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup	
				Sample Date	12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009	
				Sample Depth	0 - 1'		0 - 1'		0 ' 1'		0 - 0.5'		0 - 0.5'		0 - 0.5'	
				Value	Min LU or RSL											
Semivolatiles	Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q
	1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.33	UM	NA		0.33	U	0.33	U	NA		0.33	U
	1,3-Dichlorobenzene	mg/kg	530	R9	0.33	U	NA		0.33	U	0.33	U	NA		0.33	U
	1,4-Dichlorobenzene	mg/kg	24	RSL	0.33	U	NA		0.33	U	0.33	U	NA		0.33	U
	2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2,4,6-Trichlorophenol	mg/kg	440	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2,4-Dichlorophenol	mg/kg	180	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2,4-Dimethylphenol	mg/kg	1,200	RSL	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2,4-Dinitrophenol	mg/kg	120	RSL	0.67	UM	0.83	U	0.66	U	0.66	U	0.83	U	0.67	U
	2,4-Dinitrotoluene	mg/kg	16	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2,6-Dinitrotoluene	mg/kg	61	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2-Chloronaphthalene	mg/kg	6,300	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2-Chlorophenol	mg/kg	390	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2-Methyl-4,6-dinitrophenol	mg/kg	NA	NA	0.67	UM	0.32	U	0.66	U	0.66	U	0.32	U	0.67	U
	2-Methylnaphthalene	mg/kg	2,378	RFA	0.33	U	0.16	U	0.027	J	0.033	J	0.16	U	0.029	J
	2-Methylphenol	mg/kg	3,100	R9	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	2-Nitroaniline	mg/kg	6,100	RSL	0.67	U	0.32	U	0.66	U	0.66	U	0.32	U	0.67	U
	2-Nitrophenol	mg/kg	NA	NA	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.67	U	1	U	0.66	U	0.66	U	1	U	0.67	U
	3-Nitroaniline	mg/kg	NA	NA	0.67	U	0.32	U	0.66	U	0.66	U	0.32	U	0.67	U
	4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.33	UM	0.2	U	0.33	U	0.33	U	0.2	U	0.33	U
	4-Chloro-3-methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	4-Chloroaniline	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	4-Methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	4-Nitroaniline	mg/kg	240	RSL	0.33	U	0.32	U	0.33	U	0.33	U	0.32	U	0.33	U
	4-Nitrophenol	mg/kg	4,756	RFA	0.67	U	0.83	U	0.66	U	0.66	U	0.83	U	0.67	U
	Acenaphthene	mg/kg	3,400	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Acenaphthylene	mg/kg	NA	NA	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Anthracene		NA	NA	0.036	JM,Y	0.16	U	0.025	J	0.025	J	0.16	U	0.027	J
	Benzo(a)anthracene	mg/kg	2.21	RFA	0.21	JM,Y	0.051	J	0.037	J	0.036	J	0.039	J	0.04	J
	Benzo(a)pyrene	mg/kg	0.221	RFA	0.11	JM,Y	0.055	J	0.048	J	0.04	J	0.034	J	0.047	J
	Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.21	JM,Y	0.074	JM	0.065	J	0.067	J	0.056	JM	0.077	J
	Benzo(g,h,i)perylene	mg/kg	62	R9	0.073	JY	0.16	U	0.044	J	0.043	J	0.16	U	0.046	J
	Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.078	JM,Y	0.037	JM	0.039	J	0.033	J	0.16	U	0.033	J
	Benzoic acid	mg/kg	240,000	RSL	0.33	U	1	U	0.33	U	0.33	U	1	U	0.33	U
	Benzyl alcohol	mg/kg	6,100	RSL	0.33	U	0.11	J	0.33	U	0.33	U	0.067	J	0.33	U
	Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.33	U	0.1	U	0.33	U	0.33	U	0.1	U	0.33	U
	Bis(2-chloroethyl) ether	mg/kg	2.1	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Bis(2-chloroisopropyl) ether		NA	NA	0.33	U	NA		0.33	U	0.066	JB	NA		0.33	U
	Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.064	JM,Y,E	0.16	U	0.093	JB	0.33	U	0.16	U	0.059	JB
	Butylbenzyl phthalate	mg/kg	2,600	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Carbazole	mg/kg	694	RFA	0.029	JM,Y	0.16	U	0.33	U	0.026	J	0.16	U	0.33	U
	Chrysene	mg/kg	221	RFA	0.22	JM,Y	0.04	J	0.031	J	0.33	U	0.056	J	0.039	J
	Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Dibenzofuran	mg/kg	1,189	RFA	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Diethyl phthalate	mg/kg	49,000	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
	Dimethyl phthalate	mg/kg	610,000	R9	0.33	UM	0.16	U	0.33	U	0.1	JB	0.16	U	0.33	U

Table 8-4-C Load Line Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

		Building		EB-4/EB-4WS/EB4WN						EB-4A/EB-4AWS					
		Sample ID		LL3SS-355-0001-SO		LL3SS-355-0002-SO		LL3SS-355-0003-SO		LL3SS-358-0001-SO		LL3SS-358-0002-SO		LL3SS-358-0003-SO	
		Lab Identifier		753396(A)		0912084-007(B)		753400(A)		753407(A)		0912084-005(B)		753408(A)	
		Type Sample		Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup	
		Sample Date		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009	
		Sample Depth		0 - 1'		0 - 1'		0 ' 1'		0 - 0.5'		0 - 0.5'		0 - 0.5'	
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.11	JM,Y,B	0.16	U	0.1	JB	0.33	U	0.16	U	0.09	JB
Di-n-octyl phthalate	mg/kg	2,400	R9	0.33	U	0.16	U	0.33	U	0.07	J	0.16	U	0.33	U
Fluoranthene	mg/kg	2,765	RFA	0.38	M,Y	0.065	J	0.064	J	0.33	U	0.082	J	0.081	J
Fluorene	mg/kg	7,366	RFA	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.038	J
Hexachlorobenzene	mg/kg	3	RSL	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
Hexachlorobutadiene	mg/kg	62	RSL	0.33	U	0.05	U	0.33	U	0.33	U	0.05	U	0.33	U
Hexachlorocyclopentadiene	mg/kg	370	R9	0.33	UM	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
Hexachloroethane	mg/kg	350	RSL	0.33	U	0.16	U	0.33	U	0.046	J	0.16	U	0.33	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.075	JY	0.16	U	0.048	J	0.13	J	0.16	U	0.048	J
Isophorone	mg/kg	5,100	RSL	0.26	JM,Y	0.16	U	0.57		0.023	J	0.16	U	0.1	J
Naphthalene	mg/kg	3,678	RFA	0.017	JY	0.16	U	0.018	J	0.33	U	0.16	U	0.019	J
Nitrobenzene	mg/kg	48	RSL	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.33	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
N-Nitrosodiphenylamine	mg/kg	990	R9	0.33	UM	0.16	U	0.33	U	0.66	U	0.16	U	0.33	U
Pentachlorophenol	mg/kg	21.2	RFA	0.67	UM	0.16	U	0.66	U	0.044	J	0.16	U	0.67	U
Phenanthrene	mg/kg	2,300	R9	0.05	JM,Y	0.16	U	0.04	J	0.33	U	0.031	J	0.05	J
Phenol	mg/kg	18,000	RSL	0.33	U	0.16	U	0.33	U	0.042	J	0.16	U	0.33	U
Pyrene	mg/kg	2,074	RFA	0.31	JM,Y	0.057	J	0.043	J	NA		0.062	J	0.055	J

All results were below the RL. No RSDs were calculated.

Table 8-4-D Load Line 3 Pesticides and PCBs - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building	EB-4/EB-4WS/EB4WN							EB-4A/EB-4AWS						
				Sample ID	LL3SS-355-0001-SO	LL3SS-355-0002-SO		LL3SS-355-0003-SO		RSD (%) of Three Replicate Samples	LL3SS-358-0001-SO	LL3SS-358-0002-SO		LL3SS-358-0003-SO		RSD (%) of Three Replicate Samples		
				Lab Identifier	753396(A)		0912084-007(B)		753400(A)		753407(A)		912084-005(B)		753408(A)			
Type Sample	Primary		Field Dup		Blind Dup		Primary		Field Dup		Blind Dup							
Sample Date	12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009							
Sample Depth	0 - 1'		0 - 1'		0' 1'		0 - 0.5'		0 - 0.5'		0 - 0.5'							
	Min LU or																	
Analyte	Units	Value	RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		
Pesticides & PCBs	4,4'-DDD	mg/kg	20.0	RSL	0.0012	UH	0.017	U	0.012	UVH		0.0012	UH	0.0034	U	0.0012	UH	
	4,4'-DDE	mg/kg	40.8	RFA	0.018	P,Y,MH	0.0083	U	0.042	H		0.0095	UHP	0.0017	U	0.0011	UH	
	4,4'-DDT	mg/kg	17.0	RSL	0.058	M,YH	0.0083	U	0.13	H		0.038	H	0.0017	U	0.0032	PH	
	Aldrin	mg/kg	0.8	RFA	0.0038	Y,MH	0.0083	U	0.0017	UH		0.0017	UH	0.0017	U	0.0017	UH	
	alpha-BHC	mg/kg	0.9	R9	0.0019	UMH	0.0083	U	0.0019	UH		0.0088	PH	0.0017	U	0.00071	JPH	
	alpha-Chlordane	mg/kg	0.0	NA	0.0011	UMH	0.0083	U	0.0011	UH		0.0011	UH	0.0017	U	0.00051	JPH	
	beta-BHC	mg/kg	7.7	NA	0.002	UH	0.0083	U	0.002	UH		0.002	UH	0.0017	U	0.002	UH	
	Chlordane (Technical)	mg/kg	NA	NA	0.03	UH	0.17	U	0.03	UH		0.03	UH	0.033	U	0.03	UH	
	delta-BHC	mg/kg	NA	NA	0.0011	UMH	0.0083	U	0.0089	PH		0.026	PH	0.0017	U	0.0051	PH	
	Dieldrin	mg/kg	0.9	RFA	0.0012	UH	0.0083	U	0.012	UVH		0.0012	UH	0.0017	U	0.00071	JPH	
	Endosulfan I	mg/kg	370.0	R9	0.0022	UH	0.0083	U	0.0022	UH		0.0022	UH	0.0017	U	0.0022	UH	
	Endosulfan II	mg/kg	370.0	R9	0.0025	P,M,YH	0.0083	U	0.003	JPH		0.002	PH	0.0017	U	0.0012	UH	
	Endosulfan sulfate	mg/kg	370.0	R9	0.0031	UMH	0.0083	U	0.0031	UH		0.0031	UH	0.0017	U	0.0031	UH	
	Endrin	mg/kg	17.7	RFA	0.0036	P,M,YH	0.0083	U	0.0014	UH		0.0033	PH	0.0017	U	0.0014	UH	
	Endrin aldehyde	mg/kg	0.0	NA	0.018	P,M,YH	0.0083	U	0.039	PH		0.013	H	0.0017	U	0.0027	JH	
	Endrin ketone	mg/kg	18.0	R9	0.0037	P,M,YH	0.0083	U	0.0028	UH		0.0037	PH	0.0017	U	0.0028	UH	
	gamma-BHC	mg/kg	NA	NA	0.0016	UMH	0.0083	U	0.0016	UH		0.0016	UH	0.0017	U	0.0016	UH	
	gamma-Chlordane	mg/kg	16.0	R9	0.012	P,M,YH	0.0083	U	0.025	PH		0.022	UVH	0.0017	U	0.0014	PH	
	Heptachlor	mg/kg	3.1	RFA	0.27	P,M,YH	0.0083	U	0.012	UVH		0.024	UVH	0.0017	U	0.004	PH	
	Heptachlor epoxide	mg/kg	1.5	RFA	0.0017	UMH	0.0083	U	0.0017	UH		0.0017	UH	0.0017	U	0.0017	UH	
	Methoxychlor	mg/kg	310.0	RSL	0.017	M,YH	0.0083	U	0.039	H		0.012	PH	0.0017	U	0.0023	H	
	Toxaphene	mg/kg	4.4	R9	0.03	UH	0.17	U	0.03	UH		0.03	UH	0.033	U	0.03	UH	
	Aroclor 1016	mg/kg	2.0	RFA	0.031	U	0.33	U	0.062	U		0.031	U	0.066	U	0.031	U	
	Aroclor 1221	mg/kg	1.4	RSL	0.041	U	0.33	U	0.082	U		0.041	U	0.066	U	0.041	U	
	Aroclor 1232	mg/kg	1.4	RSL	0.047	U	0.33	U	0.094	U		0.047	U	0.066	U	0.047	U	
	Aroclor 1242	mg/kg	2.2	RSL	0.034	U	0.33	U	0.068	U		0.034	U	0.066	U	0.034	U	
	Aroclor 1248	mg/kg	2.0	RFA	0.03	U	0.33	U	0.06	U		0.03	U	0.066	U	0.03	U	
	Aroclor 1254	mg/kg	2.0	RFA	0.86		3.4		1.6		67	0.27		0.32		0.57		42
	Aroclor 1260	mg/kg	2.0	RFA	0.03	UM	0.5		0.06	U		0.03	U	0.057	J	0.03	U	

Except for Aroclor 1254, all results were below the RL and no RSDs were calculated.

Table 8-4-E Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building	EB-4A/EB-4AWS		EB-4A/EB-4AWS	
				Sample ID	LL3SS-356-0001-SO	LL3SS-359-0001-SO		
			Lab Identifier		752758(A)		752759(A)	
			Type Sample		Primary		Primary	
			Sample Date		12/2/2009		12/2/2009	
			Sample Depth		0 - 0.5'		0 - 0.5'	
			Value	Min LU or RSL				
Analyte	Units				Value	Q	Value	Q
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0047	U	0.0047	U
	1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.0047	U	0.0047	U
	1,1,2-Trichloroethane	mg/kg	11	RSL	0.0047	U	0.0047	U
	1,1-Dichloroethane	mg/kg	33	RSL	0.0047	U	0.0047	U
	1,1-Dichloroethene	mg/kg	120	R9	0.0047	U	0.0047	U
	1,1-Dichloropropene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2,3-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2,3-Trichloropropane	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2,4-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2,4-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2-Dibromoethane	mg/kg	0.34	RSL	0.0047	U	0.0047	U
	1,2-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,2-Dichloroethane	mg/kg	4.3	RSL	0.0047	U	0.0047	U
	1,2-Dichloropropane	mg/kg	8.8	RSL	0.0047	U	0.0047	U
	1,3,5-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,3-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,3-Dichloropropane	mg/kg	NA	NA	0.0047	U	0.0047	U
	1,4-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	2,2-Dichloropropane	mg/kg	NA	NA	0.0047	U	0.0047	U
	2-Butanone	mg/kg	22000	R9	0.02	U	0.02	U
	2-Chlorotoluene	mg/kg	NA	NA	0.0047	U	0.0047	U
	2-Hexanone	mg/kg	210	RSL	0.019	U	0.019	U
	4-Chlorotoluene	mg/kg	NA	NA	0.0047	U	0.0047	U
	4-Methyl-2-pentanone	mg/kg	5300	R9	0.019	U	0.019	U
	Acetone	mg/kg	61000	RSL	0.019	U	0.019	U
	Benzene	mg/kg	11	RSL	0.0047	U	0.0047	U
	Bromobenzene	mg/kg	NA	NA	0.0047	U	0.0047	U
	Bromochloromethane	mg/kg	8.2	R9	0.0047	U	0.0047	U
	Bromodichloromethane	mg/kg	2.7	RSL	0.0047	U	0.0047	U
	Bromoform	mg/kg	610	RSL	0.0047	U	0.0047	U
	Bromomethane	mg/kg	7.3	RSL	0.0047	U	0.0047	U
	Carbon disulfide	mg/kg	820	RSL	0.0047	U	0.0047	U
	Carbon tetrachloride	mg/kg	6.1	RSL	0.0047	U	0.0047	U
	Chlorobenzene	mg/kg	290	RSL	0.0047	U	0.0047	U
	Chloroethane	mg/kg	30	R9	0.0094	U	0.0093	U
	Chloroform	mg/kg	2.9	RSL	0.0047	U	0.0047	U
	Chloromethane	mg/kg	120	RSL	0.0047	U	0.0047	U
	cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0047	U	0.0047	U
cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0047	U	0.0047	U	
Dibromochloromethane	mg/kg	6.8	RSL	0.0094	U	0.0093	U	
Dibromomethane	mg/kg	NA	NA	0.0047	U	0.0047	U	
Dichlorodifluoromethane	mg/kg	NA	NA	0.0094	U	0.0093	U	
Diisopropyl ether	mg/kg	NA	NA	0.0047	U	0.0047	U	
Ethylbenzene	mg/kg	54	RSL	0.0047	U	0.0047	U	
Freon 113	mg/kg	NA	NA	0.0082	U	0.0081	U	
Hexachlorobutadiene	mg/kg	NA	NA	0.0047	U	0.0047	U	
Iodomethane	mg/kg	NA	NA	0.0047	U	0.0047	U	

Table 8-4-E Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building	EB-4A/EB-4AWS		EB-4A/EB-4AWS			
				Sample ID	LL3SS-356-0001-SO		LL3SS-359-0001-SO			
					Lab Identifier		752758(A)		752759(A)	
					Type Sample		Primary		Primary	
					Sample Date		12/2/2009		12/2/2009	
					Sample Depth		0 - 0.5'		0 - 0.5'	
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q			
Isopropylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U			
m,p-Xylenes	mg/kg	NA	NA	0.0094	U	0.0093	U			
Methyl tert-butyl ether	mg/kg	NA	NA	0.0047	U	0.0047	U			
Methylene chloride	mg/kg	110	RSL	0.0094	U	0.0093	U			
Naphthalene	mg/kg	NA	NA	0.0094	U	0.0093	U			
n-Butylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U			
n-Propylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U			
o-Xylene	mg/kg	NA	NA	0.0047	U	0.0047	U			
p-Isopropyltoluene	mg/kg	NA	NA	0.0011	J	0.0047	U			
sec-Butylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U			
Styrene	mg/kg	6300	RSL	0.0047	U	0.0047	U			
tert-Butylbenzene	mg/kg	NA	NA	0.0047	U	0.0047	U			
Tetrachloroethene	mg/kg	4.8	R9	0.0047	U	0.0047	U			
Toluene	mg/kg	5000	RSL	0.0047	U	0.0047	U			
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.0047	U	0.0047	U			
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.0047	U	0.0047	U			
Trichloroethene	mg/kg	0.53	R9	0.0047	U	0.0047	U			
Trichlorofluoromethane	mg/kg	NA	NA	0.0047	U	0.0047	U			
Vinyl acetate	mg/kg	NA	NA	0.015	U	0.015	U			
Vinyl chloride	mg/kg	0.6	RSL	0.0047	U	0.0047	U			
Xylenes, Total	mg/kg	630	RSL	N/A		N/A				

Table 8-5-A Load Line 4 Metals - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		G-8/G-7							
				Sample ID		LL4SS-302-0001-SO		LL4SS-302-0002-SO		LL4SS-302-0003-SO		RSD (%) of Three Replicate Samples	
Type Sample		Primary		Field Duplicate		Blind Dup							
Sample Date		12/3/09		12/3/09		12/3/09							
Sample Depth		0 - 1'		0 - 1'		0 - 1'							
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q				
Metals	Aluminum	mg/kg	34,960	NG	11500		14000		10600		15		
	Antimony	mg/kg	136	RFA	1.5	J	0.081		1.3	J			
	Arsenic	mg/kg	19.8	BKG1	3.1		13		2.7		93		
	Barium	mg/kg	3,506	NG	64.4	Y	60		78		14		
	Beryllium	mg/kg	160	RSL	0.53	JY	0.63		0.64	J			
	Cadmium	mg/kg	109	NG	1	U	0.27		1	U			
	Calcium	mg/kg	NA	NA	14300		10000		10400		21		
	Chromium (as Cr-3)	mg/kg	196,942	NG	56.6		15		34.2		59		
	Chromium, hexavalent	mg/kg	16.4	NG	6.4	UM	0.19	U	6.4	U			
	Cobalt	mg/kg	70.3	NG	8.3	J	11		6.9				
	Copper	mg/kg	27,138	RFA	19.6		20		14.5		17		
	Iron	mg/kg	NA	NA	25700	Y	25000		31500		13		
	Lead	mg/kg	4,000	RSL	58.9		39		33		31		
	Magnesium	mg/kg	NA	NA	4680		4500		3750		11		
	Manganese	mg/kg	1,450	BKG1	468	Y	470		572		12		
	Mercury	mg/kg	165.0	RFA	0.017		0.023		0.018		17		
	Nickel	mg/kg	13,463.0	RFA	23.9		27		21.5		11		
	Potassium	mg/kg	NA	NA	1500		1100		1290		15		
	Selenium	mg/kg	390	RSL	0.54	JB	0.18		0.6	J			
	Silver	mg/kg	3,240	RFA	2	U	0.034		2	U			
	Sodium	mg/kg	NA	NA	62.4		36		52.9		27		
	Thallium	mg/kg	47.6	RFA	20	UV	0.11		2	U			
	Vanadium	mg/kg	1,558	RFA	17.2		15		15.5		7		
Zinc	mg/kg	196,589	RFA	67.7		96		51.6		31			
RSD % Average =										25			

Table 8-5-B Load Line 4 Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building	G-9		G-8/G-7						G-15		G-2		G-12A		G-19		G-10		G-19A			
				Sample ID	LL4SS-301-0001-SO		LL4SS-302-0001-SO		LL4SS-302-0002-SO		LL4SS-302-0003-SO		LL4SS-304-0001-SO		LL4SS-305-0001-SO		LL4SS-306-0001-SO		LL4SS-307-0001-SO		LL4SS-308-0001-SO		LL4SS-309-0001-SO			
					Lab Identifier		753414(A)		753402(A)		0912084-008(B)		753403(A)		753411(A)		753416(A)		753413(A)		753412(A)		753415(A)		753410(A)	
					Type Sample		Primary		Primary		Field Duplicate		Blind Dup		Primary		Primary		Primary		Primary		Primary		Primary	
					Sample Date		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09		12/3/09	
				Sample Depth		0 - 0.7'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 0.5'		0 - 0.7'		0 - 0.8'		0 - 0.7'		0 - 1'		
					Min LU or RSL																					
Analyte		Units	Value		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15280	RFA	0.25	U	0.24	U	0.04	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U		
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.24	U	0.27	U	0.04	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U		
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.27	U	0.04	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U		
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.27	U	0.24	U	0.04	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U		
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.29	U	0.08	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U		
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.27	U	0.08	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U		
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.26	U	0.04	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U		
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.33	U	0.04	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U		
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.26	U	0.08	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U		
	HMX	mg/kg	19090	RFA	0.26	U	0.24	U	0.08	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U		
	Nitrobenzene	mg/kg	48	RFA	0.24	U	1.4	U	0.04	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U		
	Nitroglycerin	mg/kg	816	RFA	1.4	U	1.4	U	4		1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U		
	PETN	mg/kg	NA	NA	1.4	U	0.29	U	0.2	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U		
	RDX	mg/kg	1452	NG	0.29	U	0.29	U	0.08	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U		
Tetryl	mg/kg	240	RSL	0.29	U	16	U	0.08	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U			
Nitrocellulose	mg/kg	NA	NA	16	U	16	U	14	U	2.5		NA		NA		NA		NA		NA		NA				
Nitroguanadine	mg/kg	6100	RSL	0.5	P	2.3		0.13	U	16	U	NA		NA		NA		NA		NA		NA				
All results were below the RL. No %RSD were calculated																										

Table 8-5-C Load Line 4 Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E					Building		G-8/G-7					
					Sample ID	LL4SS-302-0001-SO		LL4SS-302-0002-SO		LL4SS-302-0003-SO		
			Lab Identifier		753402(A)		0912084-008(B)		753403(A)			
			Type Sample		Primary		Field Dup		Blind Dup			
			Sample Date		12/3/09		12/3/09		12/3/09			
			Sample Depth		0 - 1'		0 - 1'		0 - 1'			
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q			
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.33	U	0.16	U	0.33	U			
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.33	U	NA		0.33	U			
1,3-Dichlorobenzene	mg/kg	530	R9	0.33	U	NA		0.33	U			
1,4-Dichlorobenzene	mg/kg	24	RSL	0.33	U	0.16	U	0.33	U			
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.33	UM	0.16	U	0.33	U			
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.33	UM	0.16	U	0.33	U			
2,4-Dichlorophenol	mg/kg	180	RSL	0.33	U	0.16	U	0.33	U			
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.33	U	0.83	U	0.33	U			
2,4-Dinitrophenol	mg/kg	120	RSL	0.67	UM	0.16	U	0.67	U			
2,4-Dinitrotoluene	mg/kg	16	RSL	0.33	U	0.16	U	0.33	U			
2,6-Dinitrotoluene	mg/kg	61	RSL	0.33	U	0.16	U	0.33	U			
2-Chloronaphthalene	mg/kg	6,300	RSL	0.33	U	0.16	U	0.33	U			
2-Chlorophenol	mg/kg	390	RSL	0.33	U	0.16	U	0.33	U			
2-Methyl-4,6-dinitrophenol	mg/kg	NA	NA	0.67	UM	0.32	U	0.67	U			
2-Methylnaphthalene	mg/kg	2,378	RFA	0.029	J	0.16	U	0.032	J			
2-Methylphenol	mg/kg	3,100	R9	0.33	U	0.16	U	0.33	U			
2-Nitroaniline	mg/kg	6,100	RSL	0.67	U	0.32	U	0.67	U			
2-Nitrophenol	mg/kg	NA	NA	0.33	UM	0.16	U	0.33	U			
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.67	U	1	U	0.67	U			
3-Nitroaniline	mg/kg	NA	NA	0.67	U	0.32	U	0.67	U			
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.33	U	0.2	U	0.33	U			
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U			
4-Chloroaniline	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U			
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U			
4-Methylphenol	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U			
4-Nitroaniline	mg/kg	240	RSL	0.33	U	0.32	U	0.33	U			
4-Nitrophenol	mg/kg	4,756	RFA	0.67	U	0.83	U	0.67	U			
Acenaphthene	mg/kg	3,400	RSL	0.33	U	0.16	U	0.33	U			
Acenaphthylene	mg/kg	NA	NA	0.33	U	0.16	U	0.33	U			
Anthracene	mg/kg	22,000	RSL	0.03	J	0.16	U	0.026	J			
Benzo(a)anthracene	mg/kg	2	RFA	0.088	J	0.036	J	0.047	J			
Benzo(a)pyrene	mg/kg	0.221	RFA	0.08	J	0.038	J	0.061	J			
Benzo(b)fluoranthene	mg/kg	2	RFA	0.17	J	0.079	Jm	0.11	J			
Benzo(g,h,i)perylene	mg/kg	62	R9	0.08	J	0.16	U	0.06	J			
Benzo(k)fluoranthene	mg/kg	22	RFA	0.056	J	0.037	Jm	0.048	J			
Benzoic acid	mg/kg	240,000	RSL	0.33	U	1.0	U	0.33	U			
Benzyl alcohol	mg/kg	6,100	RSL	0.33	U	0.042	J	0.33	U			
Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.33	U	0.1	U	0.33	U			
Bis(2-chloroethyl) ether	mg/kg	2	RSL	0.33	U	0.16	U	0.33	U			
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.1	JB	0.16	U	0.1	JB			
Di-n-octyl phthalate	mg/kg	2,400	R9	0.33	U	0.16	U	0.33	U			
Fluoranthene	mg/kg	2,765	RFA	0.14	J	0.083	J	0.098	J			
Fluorene	mg/kg	7,366	RFA	0.33	U	0.16	U	0.039	J			
Hexachlorobenzene	mg/kg	3	RSL	0.33	U	0.16	U	0.33	U			

Table 8-5-C Load Line 4 Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

		Building		G-8/G-7					
		Sample ID		LL4SS-302-0001-SO		LL4SS-302-0002-SO		LL4SS-302-0003-SO	
		Lab Identifier		753402(A)		0912084-008(B)		753403(A)	
		Type Sample		Primary		Field Dup		Blind Dup	
		Sample Date		12/3/09		12/3/09		12/3/09	
		Sample Depth		0 - 1'		0 - 1'		0 - 1'	
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q
Hexachlorobutadiene	mg/kg	62	RSL	0.33	U	0.05	U	0.33	U
Hexachlorocyclopentadiene	mg/kg	370	R9	0.33	UM	0.16	U	0.33	U
Hexachloroethane	mg/kg	350	RSL	0.33	U	0.16	U	0.33	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.077	J	0.16	U	0.061	J
Isophorone	mg/kg	5,100	RSL	0.33	U	0.16	U	0.028	J
Naphthalene	mg/kg	3,678	RFA	0.02	J	0.16	U	0.024	J
Nitrobenzene	mg/kg	48	RSL	0.33	U	0.16	U	0.33	U
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.33	U	0.16	U	0.33	U
N-Nitrosodiphenylamine	mg/kg	990	R9	0.33	U	0.16	U	0.33	U
Pentachlorophenol	mg/kg	21.2	RFA	0.67	UM	0.16	U	0.67	U
Phenanthrene	mg/kg	2300	R9	0.045	J	0.03	J	0.062	J
Phenol	mg/kg	18000	RSL	0.33	U	0.16	U	0.33	U
Pyrene	mg/kg	2074	RFA	0.13	J	0.069	J	0.088	J

All results were below the RL. No %RSD was calculated.

Table 8-5-D Load Line 4 Pesticides and PCBs - Surface Soil MI Samples

See Notes at end of Table 8-6-E			Building	G-8/G-7								
			Sample ID	LL4SS-302-0001-SO		LL4SS-302-0002-SO		LL4SS-302-0003-SO		RSD (%) of Three Replicate Samples		
				Lab Identifier		753402(A)		0912084-008(B)			753403(A)	
				Type Sample		Primary		Field Duplicate			Blind Dup	
				Sample Date		12/3/09		12/3/09			12/3/09	
				Sample Depth		0 - 1'		0 - 1'			0 - 1'	
			Min LU or									
Analyte	Units	Value	RSL	Value	Q	Value	Q	Value	Q			
Pesticides & PCBs	4,4'-DDD	mg/kg	20	RSL	0.0012	UH	0.0034	U	0.0012	UH		
	4,4'-DDE	mg/kg	40.8	RFA	0.0048	P,M,YH	0.0017	U	0.0084	PH		
	4,4'-DDT	mg/kg	17	RSL	0.011	M,YH	0.0017	U	0.02	H		
	Aldrin	mg/kg	0.816	RFA	0.0017	UMH	0.0017	U	0.0017	UH		
	alpha-BHC	mg/kg	0.9	R9	0.0019	UMH	0.0017	U	0.0011	JH		
	alpha-Chlordane	mg/kg	NA	NA	0.0011	UMH	0.0017	U	0.0011	UH		
	beta-BHC	mg/kg	7.7	RFA	0.002	UH	0.0017	U	0.002	UH		
	Chlordane (Technical)	mg/kg	NA	NA	0.03	UH	0.033	U	0.03	UH		
	delta-BHC	mg/kg	NA	NA	0.0011	UMH	0.0017	U	0.0011	UH		
	Dieldrin	mg/kg	0.867	RFA	0.0022	P,M,YH	0.0017	U	0.0012	UH		
	Endosulfan I	mg/kg	370	R9	0.0022	UH	0.0017	U	0.0022	UH		
	Endosulfan II	mg/kg	370	R9	0.0012	UH	0.0017	U	0.0004	JPH		
	Endosulfan sulfate	mg/kg	370	R9	0.0031	UMH	0.0017	U	0.0031	UH		
	Endrin	mg/kg	17.7	RFA	0.0011	JP,M,YH	0.0017	U	0.0017	PH		
	Endrin aldehyde	mg/kg	0	NA	0.0032	JP,YH	0.0017	U	0.0042	PH		
	Endrin ketone	mg/kg	18	R9	0.0055	P,M,YH	0.0017	U	0.0066	PH		
	gamma-BHC	mg/kg	NA	NA	0.0016	UMH	0.0017	U	0.0011	J		
	gamma-Chlordane	mg/kg	16	R9	0.007	P,M,YH	0.0017	U	0.0052	PH		
	Heptachlor	mg/kg	3.08	RFA	0.025	P,M,YH	0.0017	U	0.0087	PH		
	Heptachlor epoxide	mg/kg	1.52	RFA	0.0017	UMH	0.0017	U	0.0013	JPH		
	Methoxychlor	mg/kg	310	RSL	0.0023	UMH	0.0017	U	0.0045	H		
	Toxaphene	mg/kg	4.4	R9	0.03	UH	0.033	U	0.03	UH		
	Aroclor 1016	mg/kg	2.03	RFA	0.031	UM	0.066	U	0.031	U		
	Aroclor 1221	mg/kg	1.4	RSL	0.041	U	0.066	U	0.041	U		
	Aroclor 1232	mg/kg	1.4	RSL	0.047	U	0.066	U	0.047	U		
	Aroclor 1242	mg/kg	2.2	RSL	0.034	U	0.066	U	0.034	U		
	Aroclor 1248	mg/kg	2.03	RFA	0.03	U	0.066	U	0.03	U		
Aroclor 1254	mg/kg	2.03	RFA	0.19		0.54		0.16		71		
Aroclor 1260	mg/kg	2.03	RFA	0.03	U	0.11		0.03	U			
Except for Arochlor 1254, all results were below the RL. No RSDs were calculated.									%RSD Average =	71		

Table 8-5-E Load Line 4 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		G-8/G-7 (LL-4)	
				Sample ID		LL4SS-303-0001-SO	
Type Sample		Primary					
Sample Date		12/2/2009					
Sample Depth		0 - 0.5'					
		Value	Min LU or RSL				
Analyte	Units			Value	Q		
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	0.0047	U	
	1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0047	U	
	1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.0047	U	
	1,1,2-Trichloroethane	mg/kg	11	RSL	0.0047	U	
	1,1-Dichloroethane	mg/kg	33	RSL	0.0047	U	
	1,1-Dichloroethene	mg/kg	120	R9	0.0047	U	
	1,1-Dichloropropene	mg/kg	8.8	RSL	0.0047	U	
	1,2,3-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	
	1,2,3-Trichloropropane	mg/kg	NA	NA	0.0047	U	
	1,2,4-Trichlorobenzene	mg/kg	NA	NA	0.0047	U	
	1,2,4-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	
	1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	0.0047	U	
	1,2-Dibromoethane	mg/kg	0.34	RSL	0.0047	U	
	1,2-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	
	1,2-Dichloroethane	mg/kg	4.3	RSL	0.0047	U	
	1,2-Dichloropropane	mg/kg	8.8	RSL	0.0047	U	
	1,3,5-Trimethylbenzene	mg/kg	NA	NA	0.0047	U	
	1,3-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	
	1,3-Dichloropropane	mg/kg	NA	NA	0.0047	U	
	1,4-Dichlorobenzene	mg/kg	NA	NA	0.0047	U	
	2,2-Dichloropropane	mg/kg	NA	NA	0.0047	U	
	2-Butanone	mg/kg	22000	R9	0.02	U	
	2-Chlorotoluene	mg/kg	NA	NA	0.0047	U	
	2-Hexanone	mg/kg	210	RSL	0.019	U	
	4-Chlorotoluene	mg/kg	NA	NA	0.0047	U	
	4-Methyl-2-pentanone	mg/kg	5300	R9	0.019	U	
	Acetone	mg/kg	61000	RSL	0.019	U	
	Benzene	mg/kg	11	RSL	0.0047	U	
	Bromobenzene	mg/kg	NA	NA	0.0047	U	
	Bromochloromethane	mg/kg	8.2	R9	0.0047	U	
	Bromodichloromethane	mg/kg	2.7	RSL	0.0047	U	
	Bromoform	mg/kg	610	RSL	0.0047	U	
	Bromomethane	mg/kg	7.3	RSL	0.0047	U	
	Carbon disulfide	mg/kg	820	RSL	0.0047	U	
	Carbon tetrachloride	mg/kg	6.1	RSL	0.0047	U	
	Chlorobenzene	mg/kg	290	RSL	0.0047	U	
	Chloroethane	mg/kg	30	R9	0.0094	U	
	Chloroform	mg/kg	2.9	RSL	0.0047	U	
	Chloromethane	mg/kg	120	RSL	0.0047	U	
	cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0047	U	
	cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0047	U	
	Dibromochloromethane	mg/kg	6.8	RSL	0.0094	U	
	Dibromomethane	mg/kg	NA	NA	0.0047	U	
	Dichlorodifluoromethane	mg/kg	NA	NA	0.0094	U	
	Diisopropyl ether	mg/kg	NA	NA	0.0047	U	
	Ethylbenzene	mg/kg	54	RSL	0.0047	U	
	Freon 113	mg/kg	NA	NA	0.0082	U	
	Hexachlorobutadiene	mg/kg	NA	NA	0.0047	U	
	Iodomethane	mg/kg	NA	NA	0.0047	U	

Table 8-5-E Load Line 4 Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		G-8/G-7 (LL-4)	
				Sample ID		LL4SS-303-0001-SO	
				Type Sample		Primary	
Sample Date		12/2/2009					
Sample Depth		0 - 0.5'					
Analyte	Units	Value	Min LU or RSL	Value	Q		
Isopropylbenzene	mg/kg	NA	NA	0.0047	U		
m,p-Xylenes	mg/kg	NA	NA	0.0094	U		
Methyl tert-butyl ether	mg/kg	NA	NA	0.0047	U		
Methylene chloride	mg/kg	110	RSL	0.0094	U		
Naphthalene	mg/kg	NA	NA	0.0094	U		
n-Butylbenzene	mg/kg	NA	NA	0.0047	U		
n-Propylbenzene	mg/kg	NA	NA	0.0047	U		
o-Xylene	mg/kg	NA	NA	0.0047	U		
p-Isopropyltoluene	mg/kg	NA	NA	0.0047	U		
sec-Butylbenzene	mg/kg	NA	NA	0.0047	U		
Styrene	mg/kg	6300	RSL	0.0047	U		
tert-Butylbenzene	mg/kg	NA	NA	0.0047	U		
Tetrachloroethene	mg/kg	4.8	R9	0.0047	U		
Toluene	mg/kg	5000	RSL	0.0047	U		
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.0047	U		
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.0047	U		
Trichloroethene	mg/kg	0.53	R9	0.0047	U		
Trichlorofluoromethane	mg/kg	NA	NA	0.0047	U		
Vinyl acetate	mg/kg	NA	NA	0.015	U		
Vinyl chloride	mg/kg	0.6	RSL	0.0047	U		
Xylenes, Total		630	RSL	N/A			

Table 8-6-A Coal Storage Area Metals - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		CC-1 (LL1)		DC-1 (LL-2)						G-4 (LL-4)		LL-12		LL-12		F-15		F-16	
				Sample ID	FWCSS-001-0001-SO	FWCSS-002-0001-SO	FWCSS-002-0002-SO	FWCSS-002-0003-SO	RSD (%) of Three Replicate Samples	FWCSS-004-0001-SO	FWCSS-005-0001-SO	FWCSS-006-0001-SO	FWCSS-007-0001-SO	FWCSS-008-0001-SO									
Lab Identifier	752511(A)	753430(A)	0912084-010(B)	753431(A)	753434(A)	753428(A)	753427(A)	753426(A)	753423(A)														
Type Sample	Primary	Primary	Field Dup	Blind Dup	Primary	Primary	Primary	Primary	Primary														
Sample Date	12/1/2009	12/3/2009	12/3/2009	12/3/2009	12/3/2009	12/2/2009	12/2/2009	12/2/2009	12/2/2009														
Sample Depth	0 - 0.3'	0 - 1'	0 - 1'	0 - 1'	0 - 1'	0 - 1'	0 - 1'	0 - 1'	0 - 1'														
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		
Metals	Aluminum	mg/kg	34,960	NG	13000		16700		15000		15300	6	12600		18300		14300		15900		11500		
	Antimony	mg/kg	136	RFA	0.9	J	1.1	J	0.05		1.2	J	1.5	J	1.7	J	1.2	J	1.4	J	1.5	J	
	Arsenic	mg/kg	19.8	BKG1	5.4		5.5		14		13.6	43	2.4		4.6		3.9		2.7		14		
	Barium	mg/kg	3,506	NG	116		152		130		136	8	87.5		73.6		81.1		88.1		74.9		
	Beryllium	mg/kg	160	RSL	0.57	J	1.1	J	1.3		1	J	0.63	J	0.67	J	0.79	J	0.78	J	0.7	J	
	Cadmium	mg/kg	109	NG	0.66	J	1	U	0.27		1	U	1	U	1	U	1	U	1	U	1	U	
	Calcium	mg/kg	NA	NA	21800		32200		23000		22900	21	27900		2990		1340		5260		8070		
	Chromium (as Cr-3)	mg/kg	196,942	NG	59.9		70.9		20		42.1	58	50.6		40.2		28		58.4		52		
	Chromium, hexavalent	mg/kg	16.4	NG	6.4	U	6.4	U	0.19	U	6.4	U	6.4	U	6.4	U	6.4	U	6.4	U	6.4	U	
	Cobalt	mg/kg	70.3	NG	5.7		5.9		10		6.9	28	5.5		6.3		8		7		7		
	Copper	mg/kg	27,138	RFA	15.1		21.8		47		28.5	40	13.1		10.6		11.6		12.4		14.4		
	Iron	mg/kg	NA	NA	24300		24100		24000		27200	7	27900		29900		31500		27900		29300		
	Lead	mg/kg	4,000	RSL	64.7		199		56		56.5	79	45.3		28.1		24.5		27.7		31		
	Magnesium	mg/kg	NA	NA	6220		6990		7300		5980	10	5580		3040		2750		3250		3680		
	Manganese	mg/kg	1,450	BKG1	1100		1880		1300		1310	22	722		352		474		516		588		
	Mercury	mg/kg	165	RFA	0.099		0.64		0.14		1.5	91	0.09		0.04		0.031		0.042		0.019		
	Nickel	mg/kg	13,463	RFA	16.6		23.4		33		24.9	19	18.5		17.8		19.8		22.9		21.8		
	Potassium	mg/kg	NA	NA	1610		1580		1400		1380	8	1470		1570		1480		1560		1440		
	Selenium	mg/kg	390	RSL	0.8	J	1.3		0.44		1	J	0.75	J	1.1	J	0.77	J	0.86	J	0.8	J	
	Silver	mg/kg	3,240	RFA	2	U	2	U	0.046		2	U	0.19	J	2	U	2	U	2	U	2	U	
Sodium	mg/kg	NA	NA	192		212		220		159	17	96.6		52.9		45.9		80.8		68.1			
Thallium	mg/kg	47.6	RFA	2	U	2	U	0.096		2	U	2	U	2	U	2	U	2	U	2	U		
Vanadium	mg/kg	1,558	RFA	0.057		37.2		38		36.6	2	18.2		25.6		20.8		24.3		16.9			
Zinc	mg/kg	196,589	RFA	15.2		45.8		100		54	44	62.1		45		44.9		47.6		48.7			
RSD % Average=											30												

Table 8-6-B Coal Storage Area Explosives - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building	DC-1						F-16		F-15			
				Sample ID	FWCSS-002-0001-SO		FWCSS-002-0002-SO		FWCSS-002-0003-SO		F16SS-030-0001-SO		F15SS-040-0001-SO			
					Lab Identifier		753430(A)		0912084-010(B)		753431(A)		753424(A)		753425(A)	
					Type Sample		Primary		Field Duplicate		Blind Dup		Primary		Primary	
					Sample Date		12/3/2009		12/3/2009		12/3/2009		12/2/2009		12/2/2009	
				Sample Depth		0 - 1'		0 - 1'		0 - 1'		0 - 1'				
Analyte		Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.25	U	0.04	U	0.081	JP	0.25	U	0.25	U		
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U		
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U		
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.27	U	0.04	U	0.27	U	0.27	U	0.27	U		
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.18	JP	0.04	U	0.15	J	0.27	U	0.27	U		
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U		
	2-Nitrotoluene	mg/kg	60.3	RFA	0.29	U	0.08	U	0.29	U	0.29	U	0.29	U		
	3-Nitrotoluene	mg/kg	6.1	RSL	0.27	U	0.08	U	0.27	U	0.27	U	0.27	U		
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.26	U	0.04	U	0.26	U	0.26	U	0.26	U		
	4-Nitrotoluene	mg/kg	816	RFA	0.33	U	0.08	U	0.33	U	0.33	U	0.33	U		
	HMX	mg/kg	19,090	RFA	0.26	U	0.08	U	0.26	U	0.26	U	0.26	U		
	Nitrobenzene	mg/kg	48	RFA	0.24	U	0.04	U	0.24	U	0.24	U	0.24	U		
	Nitroglycerin	mg/kg	816	RFA	1.4	U	4	U	1.4	U	1.4	U	1.4	U		
	PETN	mg/kg	NA	NA	1.4	U	0.2	U	1.4	U	1.4	U	1.4	U		
	RDX	mg/kg	1,452	NG	0.29	U	0.08	U	0.29	U	0.29	U	0.29	U		
	Tetryl	mg/kg	240	RSL	0.29	U	0.08	U	0.29	U	0.29	U	0.29	U		
	Nitrocellulose	mg/kg	None	NA	16	U	14	U	16	U	NA		NA			
Nitroguanidine	mg/kg	6,100	RSL	3.8		0.12	U	2.6		NA		NA				

All results were below the RL. No RSDs were calculated.

Table 8-6-C Coal Storage Area Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		CC-1		DC-1				G-4		LL-12		LL-12		F-15		F-16		
				Sample ID	FWCSS-001-0001-SO		FWCSS-002-0001-SO		FWCSS-002-0002-SO		FWCSS-002-0003-SO		FWCSS-004-0001-SO		FWCSS-005-0001-SO		FWCSS-006-0001-SO		FWCSS-007-0001-SO		FWCSS-008-0001-SO	
Lab Identifier		752511(A)		753430(A)		912084-010(B)		753431(A)		753434(A)		753428(A)		753427(A)		753426(A)		753423(A)				
Type Sample		Primary		Primary		Field Dup		Blind Dup		Primary		Primary		Primary		Primary		Primary				
Sample Date		12/1/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009				
Sample Depth		0 - 0.3'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'				
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	
1,2,4-Trichlorobenzene	mg/kg	220	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.13	JV	1.7	UV	NA		1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
1,3-Dichlorobenzene	mg/kg	530	R9	1.7	UV	1.7	UV	NA		1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
1,4-Dichlorobenzene	mg/kg	24	RSL	0.069	JV	1.7	UV	NA		1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2,4,6-Trichlorophenol	mg/kg	440	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.044		0.33	U	
2,4-Dichlorophenol	mg/kg	180	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2,4-Dimethylphenol	mg/kg	1,200	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2,4-Dinitrophenol	mg/kg	120	RSL	3.3	UV	3.3	UV	0.83	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
2,4-Dinitrotoluene	mg/kg	16	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2,6-Dinitrotoluene	mg/kg	61	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2-Chloronaphthalene	mg/kg	6,300	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2-Chlorophenol	mg/kg	390	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2-Methyl-4,6-dinitrophenol	mg/kg	NA	NA	3.3	UV	3.3	UV	0.32	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
2-Methylnaphthalene	mg/kg	2,378	RFA	0.43	JV	0.21	JV	0.046	J	0.18	JV	0.06	J	0.065	J	0.046	J	0.098	J	0.088	J	
2-Methylphenol	mg/kg	3,100	R9	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
2-Nitroaniline	mg/kg	6,100	RSL	3.3	UV	3.3	UV	0.32	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
2-Nitrophenol	mg/kg	NA	NA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
3,3'-Dichlorobenzidine	mg/kg	11	RSL	3.3	UV	3.3	UV	1	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
3-Nitroaniline	mg/kg	NA	NA	3.3	UV	3.3	UV	0.32	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
4-Bromophenyl phenyl ether	mg/kg	NA	NA	1.7	UV	1.7	UV	0.2	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Chloro-3-methylphenol	mg/kg	NA	NA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Chloroaniline	mg/kg	NA	NA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Methylphenol	mg/kg	NA	NA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Nitroaniline	mg/kg	240	RSL	1.7	UV	1.7	UV	0.32	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
4-Nitrophenol	mg/kg	4,756	RFA	3.3	UV	3.3	UV	0.83	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U	
Acenaphthene	mg/kg	3,400	RSL	1.7	UV	0.075	JV	0.13	J	1.7	UV	0.027	J	0.34	U	0.33	U	0.33	U	0.33	U	
Acenaphthylene	mg/kg	NA	NA	1.7	UV	0.21	JV	0.099	J	0.17	JV	0.33	U	0.026	J	0.33	U	0.33	U	0.33	U	
Anthracene	mg/kg	22,000	RSL	0.29	JV	0.36	JV	0.32		0.31	JV	0.082	J	0.037	J	0.023	J	0.023	J	0.024	J	
Benzo(a)anthracene	mg/kg	2.21	RFA	0.9	JV	1.5	JV	1.5		1.1	JV	0.17	J	0.13	J	0.026	J	0.016	J	0.022	J	
Benzo(a)pyrene	mg/kg	0.221	RFA	0.84	JV	1.4	JV	1.6	J	1.1	JV	0.13	J	0.12	J	0.039	J	0.028	J	0.033	J	
Benzo(b)fluoranthene	mg/kg	2.21	RFA	1.5	JV	2.5	V	2.1	m	1.5	JV	0.2	J	0.27	J	0.061	J	0.33	U	0.05	J	
Benzo(g,h,i)perylene	mg/kg	62	R9	0.77	JV	0.84	JV	1.4		0.66	JV	0.085	J	0.083	J	0.036	J	0.33	U	0.035	J	
Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.43	JV	0.61	JV	1.1	m	0.85	JV	0.075	J	0.077	J	0.032	J	0.33	U	0.028	J	
Benzoic acid	mg/kg	240,000	RSL	1.7	UV	1.7	UV	1	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Benzyl alcohol	mg/kg	6,100	RSL	1.7	UV	1.7	UV	0.12	J	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	1.7	UV	1.7	UV	0.1	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Bis(2-chloroethyl) ether	mg/kg	2.1	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.23	JBV	0.29	JBV	0.081	J	0.23	JBV	0.078	JB	0.13	JB	0.083	JB	0.076	JB	0.07	JB	
Butylbenzyl phthalate	mg/kg	2,600	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Carbazole	mg/kg	694	RFA	0.23	JV	0.27	JV	0.19		0.24	JV	0.062	J	0.034	J	0.33	U	0.33	U	0.33	U	
Chrysene	mg/kg	221	RFA	0.92	JV	1.5	JV	1.6		1.1	JV	0.14	J	0.17	J	0.025	J	0.014	J	0.018	J	
Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	1.7	UV	1.7	UV	0.33		1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Dibenzofuran	mg/kg	1,189	RFA	1.7	UV	1.7	UV	0.099	J	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Diethyl phthalate	mg/kg	49,000	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Dimethyl phthalate	mg/kg	610,000	R9	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	
Di-n-butyl phthalate	mg/kg	6,100	RSL	1.7	UBV	1.7	UV	0.16	U	1.7	UBV	0.085	JB	0.098	JB	0.098	JB	0.11	JB	0.11	JB	
Di-n-octyl phthalate	mg/kg	2,400	R9	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U	

Table 8-6-C Coal Storage Area Semivolatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E				Building		CC-1		DC-1				G-4		LL-12		LL-12		F-15		F-16					
				Sample ID		FWCSS-001-0001-SO		FWCSS-002-0001-SO		FWCSS-002-0002-SO		FWCSS-002-0003-SO		FWCSS-004-0001-SO		FWCSS-005-0001-SO		FWCSS-006-0001-SO		FWCSS-007-0001-SO		FWCSS-008-0001-SO			
						Lab Identifier		752511(A)		753430(A)		912084-010(B)		753431(A)		753434(A)		753428(A)		753427(A)		753426(A)		753423(A)	
						Type Sample		Primary		Primary		Field Dup		Blind Dup		Primary		Primary		Primary		Primary		Primary	
						Sample Date		12/1/2009		12/3/2009		12/3/2009		12/3/2009		12/3/2009		12/2/2009		12/2/2009		12/2/2009		12/2/2009	
						Sample Depth		0 - 0.3'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'		0 - 1'	
Analyte		Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q					
Fluoranthene	mg/kg	2,765	RFA	1.7	V	2.9	V	2.9		2.2	V	0.37	0	0.2	J	0.058	J	0.046	J	0.052	J				
Fluorene	mg/kg	7,366	RFA	0.24	JV	0.3	JV	0.2		0.3	JV	0.065	J	0.039	J	0.33	U	0.33	U	0.33	U				
Hexachlorobenzene	mg/kg	3.0	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Hexachlorobutadiene	mg/kg	62	RSL	1.7	UV	1.7	UV	0.05	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Hexachlorocyclopentadiene	mg/kg	370	R9	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Hexachloroethane	mg/kg	350	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.5	JV	0.84	JV	1.2		0.66	JV	0.083	J	0.089	J	0.042	J	0.33	U	0.039	J				
Isophorone	mg/kg	5,100	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.11	J	0.34	U	0.33	U	0.33	U	0.33	U				
Naphthalene	mg/kg	3,678	RFA	0.29	JV	0.18	JV	0.057	J	0.16	JV	0.042	J	0.047	J	0.034	J	0.064	J	0.054	J				
Nitrobenzene	mg/kg	48	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
N-Nitrosodiphenylamine	mg/kg	990	R9	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Pentachlorophenol	mg/kg	21.2	RFA	3.3	UV	3.3	UV	0.16	U	3.3	UV	0.66	U	0.67	U	0.67	U	0.67	U	0.67	U				
Phenanthrene	mg/kg	2,300	R9	0.98	JV	1.6	JV	1.5		1.3	JV	0.32	J	0.074	J	0.042	J	0.049	J	0.05	J				
Phenol	mg/kg	18,000	RSL	1.7	UV	1.7	UV	0.16	U	1.7	UV	0.33	U	0.34	U	0.33	U	0.33	U	0.33	U				
Pyrene	mg/kg	2,074	RFA	1.7	V	2.3	V	2.5		1.8	V	0.3	J	0.16	J	0.03	J	0.022	J	0.026	J				

Except for pyrene (%RSD = 16), all results were below the RL and no RSDs were calculated.

Table 8-6-D Coal Storage Area Pesticides and PCBs - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building		DC-1					
				Sample ID	FWCSS-002-0001-SO		FWCSS-002-0002-SO		FWCSS-002-0003-SO		
											Lab Identifier
Type Sample		Primary		Field Dup		Blind Dup					
Sample Date		12/3/2009		12/3/2009		12/3/2009					
Sample Depth		0 - 1'		0 - 1'		0 - 1'					
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		
4,4'-DDD	mg/kg	20.0	RSL	0.007	PH	0.0017	U	0.015	H		
4,4'-DDE	mg/kg	40.8	RFA	0.0036	PH	0.00083	U	0.0067	PH		
4,4'-DDT	mg/kg	17.0	RSL	0.015	ZH	0.00083	U	0.026	H		
Aldrin	mg/kg	0.8	RFA	0.0034	UH	0.00083	U	0.0017	UH		
alpha-BHC	mg/kg	0.9	R9	0.0038	UH	0.00083	U	0.0053	PH		
alpha-Chlordane	mg/kg	0.0	NA	0.0022	UH	0.00083	U	0.0011	UH		
beta-BHC	mg/kg	7.7	NA	0.052	PH	0.00083	U	0.002	UH		
Chlordane (Technical)	mg/kg	NA	NA	0.06	UH	0.017	U	0.03	UH		
delta-BHC	mg/kg	NA	NA	0.0022	UH	0.00083	U	0.0069	H		
Dieldrin	mg/kg	0.9	RFA	0.0048	PH	0.00083	U	0.0061	PH		
Endosulfan I	mg/kg	370	R9	0.0044	UH	0.00083	U	0.0022	UH		
Endosulfan II	mg/kg	370	R9	0.0012	JPH	0.00083	U	0.0008	JPH		
Endosulfan sulfate	mg/kg	370	R9	0.0062	UH	0.00083	U	0.0031	UH		
Endrin	mg/kg	17.7	RFA	0.0028	UH	0.00083	U	0.0014	UH		
Endrin aldehyde	mg/kg	0.0	NA	0.008	PH	0.00083	U	0.01	H		
Endrin ketone	mg/kg	18.0	R9	0.0046	JZH	0.00083	U	0.0016	JPH		
gamma-BHC	mg/kg	NA	NA	0.0032	UH	0.00083	U	0.0016	UH		
gamma-Chlordane	mg/kg	16.0	R9	0.0042	PH	0.00083	U	0.003	JPH		
Heptachlor	mg/kg	3.1	RFA	0.0024	UH	0.00083	U	0.012	UVH		
Heptachlor epoxide	mg/kg	1.5	RFA	0.0034	UH	0.00083	U	0.0017	UH		
Methoxychlor	mg/kg	310	RSL	0.011	ZH	0.00083	U	0.0079	PH		
Toxaphene	mg/kg	4.4	R9	0.00006	UH	0.017	U	0.03	UH		
Aroclor 1016	mg/kg	2.0	RFA	0.031	U	0.033	U	0.031	U		
Aroclor 1221	mg/kg	1.4	RSL	0.041	U	0.033	U	0.041	U		
Aroclor 1232	mg/kg	1.4	RSL	0.047	U	0.033	U	0.047	U		
Aroclor 1242	mg/kg	2.2	RSL	0.034	U	0.033	U	0.034	U		
Aroclor 1248	mg/kg	2.0	RFA	0.03	U	0.033	U	0.03	U		
Aroclor 1254	mg/kg	2.0	RFA	0.065		0.092		0.017	JP		
Aroclor 1260	mg/kg	2.0	RFA	0.03	U	0.029	J	0.03	U		

Table 8-6-E Coal Storage Area Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building	DC-1					
				Sample ID	FWCSS-003-0001-SO		FWCSS-003-0002-SO		FWCSS-003-0003-SO	
					753432(A)	753433(A)	0912084-009(B)			
		Type Sample		Primary		Blind Dup		Field Dup		
		Sample Date		40150		40150		40150		
		Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'		
			Min LU or							
	Analyte	Units	Value	RSL	Value	Q	Value	Q	Value	Q
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0042	U	0.0044	U	0.052	U
	1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.0042	U	0.0044	U	0.052	U
	1,1,2-Trichloroethane	mg/kg	11	RSL	0.0042	U	0.0044	U	0.052	U
	1,1-Dichloroethane	mg/kg	33	RSL	0.0042	U	0.0044	U	0.052	U
	1,1-Dichloroethene	mg/kg	120	R9	0.0042	U	0.0044	U	0.052	U
	1,1-Dichloropropene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2,3-Trichlorobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2,3-Trichloropropane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2,4-Trichlorobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2,4-Trimethylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,2-Dibromoethane	mg/kg	0.34	RSL	0.0042	U	0.0044	U	N/A	
	1,2-Dichlorobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	0.052	U
	1,2-Dichloroethane	mg/kg	4.3	RSL	0.0042	U	0.0044	U	0.052	U
	1,2-Dichloropropane	mg/kg	8.8	RSL	0.0042	U	0.0044	U	0.052	U
	1,3,5-Trimethylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,3-Dichlorobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	0.052	U
	1,3-Dichloropropane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	1,4-Dichlorobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	0.052	U
	2,2-Dichloropropane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	2-Butanone	mg/kg	22000	R9	0.018	U	0.018	U	0.053	
	2-Chlorotoluene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	2-Hexanone	mg/kg	210	RSL	0.017	U	0.018	U	0.26	U
	4-Chlorotoluene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	4-Methyl-2-pentanone	mg/kg	5300	R9	0.017	U	0.018	U	0.26	U
	Acetone	mg/kg	61000	RSL	0.017	U	0.018	U	0.52	U
	Benzene	mg/kg	11	RSL	0.0042	U	0.0044	U	0.031	U
	Bromobenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	Bromochloromethane	mg/kg	8.2	R9	0.0042	U	0.0044	U	0.052	U
	Bromodichloromethane	mg/kg	2.7	RSL	0.0042	U	0.0044	U	0.052	U
	Bromoform	mg/kg	610	RSL	0.0042	U	0.0044	U	0.052	U
	Bromomethane	mg/kg	7.3	RSL	0.0042	U	0.0044	U	0.21	U
	Carbon disulfide	mg/kg	820	RSL	0.0042	U	0.0044	U	0.26	U
	Carbon tetrachloride	mg/kg	6.1	RSL	0.0042	U	0.0044	U	0.052	U
	Chlorobenzene	mg/kg	290	RSL	0.0042	U	0.0044	U	0.052	U
	Chloroethane	mg/kg	30	R9	0.0083	U	0.0088	U	0.26	U
	Chloroform	mg/kg	2.9	RSL	0.0042	U	0.0044	U	0.052	U
	Chloromethane	mg/kg	120	RSL	0.0042	U	0.0044	U	0.1	U
	cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0042	U	0.0044	U	0.052	U
	cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0042	U	0.0044	U	0.052	U
	Dibromochloromethane	mg/kg	6.8	RSL	0.0083	U	0.0088	U	0.052	U
	Dibromomethane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	Dichlorodifluoromethane	mg/kg	NA	NA	0.0083	U	0.0088	U	N/A	
	Diisopropyl ether	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	Ethylbenzene	mg/kg	54	RSL	0.0042	U	0.0044	U	0.052	U
	Freon 113	mg/kg	NA	NA	0.0073	U	0.0077	U	N/A	
	Hexachlorobutadiene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	
	Iodomethane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A	

Table 8-6-E Coal Storage Area Volatile Organic Compounds - Surface Soil MI Samples

See Notes at end of Table 8-6-E

See Notes at end of Table 8-6-E				Building	DC-1					
				Sample ID	FWCSS-003-0001-SO		FWCSS-003-0002-SO		FWCSS-003-0003-SO	
Type Sample		Primary		Blind Dup		Field Dup				
Sample Date		40150		40150		40150				
Sample Depth		0 - 0.5'		0 - 0.5'		0 - 0.5'				
Analyte	Units	Value	Min LU or							
			RSL	Value	Q	Value	Q	Value	Q	
Isopropylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
m,p-Xylenes	mg/kg	NA	NA	0.0083	U	0.0088	U	N/A		
Methyl tert-butyl ether	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
Methylene chloride	mg/kg	110	RSL	0.0083	U	0.0088	U	0.1	U	
Naphthalene	mg/kg	NA	NA	0.0083	U	0.0088	U	N/A		
n-Butylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
n-Propylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
o-Xylene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
p-Isopropyltoluene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
sec-Butylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
Styrene	mg/kg	6300	RSL	0.0042	U	0.0044	U	0.052	U	
tert-Butylbenzene	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
Tetrachloroethene	mg/kg	4.8	R9	0.0042	U	0.0044	U	0.052	U	
Toluene	mg/kg	5000	RSL	0.0042	U	0.0044	U	0.052	U	
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.0042	U	0.0044	U	0.052	U	
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.0042	U	0.0044	U	0.052	U	
Trichloroethene	mg/kg	0.53	R9	0.0042	U	0.0044	U	0.052	U	
Trichlorofluoromethane	mg/kg	NA	NA	0.0042	U	0.0044	U	N/A		
Vinyl acetate	mg/kg	NA	NA	0.013	U	0.014	U	N/A		
Vinyl chloride	mg/kg	0.6	RSL	0.0042	U	0.0044	U	0.042	U	
Xylenes, Total	mg/kg	630	RSL	N/A		N/A		0.16	U	

All results were below the RL. No RSDs were calculated.

Table Legend

LU	Land Use
RSL	US EPA Regional Screening Level
NG	National Guard Trainee Land Use
RFA	Resident Farmer Adult Land Use
BKG1	Surface Soil Background – Used for screening against surface soil MI samples and 1' – 3' and 3' – 5' subsurface MI samples
BKG2	Subsurface Soil Background – Used for screening against 5' – 7' subsurface MI samples
RSL	Regional Screening Level
R9	US EPA Region 9 Screening Criteria
NA	Not Analyzed
Primary	Primary Horizontal Subsurface MI Sample
Primary V	Primary Vertical Subsurface MI Sample
QC-H	Quality Control Horizontal Subsurface MI Sample
QC-V	Quality Control Vertical Subsurface MI Sample
QA-H	Quality Assurance Horizontal Subsurface MI Sample
WA-V	Quality Assurance Vertical Subsurface MI Sample
RSD	Relative Standard Deviation
RSD%	Relative Standard Deviation Percent
RPD	Relative Percent Difference

Data Qualifiers

A	Analyte averaged calibration criteria within acceptable limits
B	Analyte detected in associated Method Blank
D or Dil	Diluted Out
E	No coliform detected in the Total Coliform Analysis
H	Holding time exceeded
J	Estimated value
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptable limits
P or G	Concentration of analyte differs more than 40% between primary and confirmation analysis
U	Analyte concentration was not above the detection level
V	Raised quantitation or reporting limit due to dilution from matrix interference
Y	Replicate duplicate precision outside acceptance limits

8.2 PRUDENT'S SAMPLING RESULTS

Analytical results from Prudent's subsurface soil ISM samples collected in August 2010 are provided in the following sections and tables. All results are compared with the minimum of the appropriate sets of CUGs for the National Guard Trainee and Resident Adult Farmer or the RSL, where no CUGs are established. The RSL risk levels were adjusted to match those used to determine the CUGs. A listing of CUGs for the National Guard Trainee, Resident Adult Farmer, and RSLs are provided as Table 8-1.

All horizontal subsurface ISM samples were analyzed as prescribed on Tables 4-1 through 4-2. Vertical subsurface ISM samples were only analyzed if there was an exceedance of one of the CUGs from one of the associated horizontal subsurface ISM samples. Additionally, the set of vertical samples associated with an exceedance of one of the horizontal samples was only analyzed for the type of CUG exceeded, as explosives, SVOCs, etc.

Triplicate sample results are presented in the Table 8-7-A through Table 8-10-E as well. Where triplicate sample results are presented, the relative standard deviation (RSD) for individual analyses are calculated for detections and an average RSD is shown at the bottom of the table for that set of analyses.

8.2.1 Load Line 1 Sampling Results

Table 8-7 summarizes the sampling results at Load Line 1 buildings. Figures 8-1 and 8-2 depict areas of concern at Load Line 1. Only explosive 2,4,6-trinitrotoluene and SVOCs (benzo (a) anthracene, benzo (a) pyrene, and benzo (b) fluoranthene) were detected above the CUG. Below is a brief summary of results:

- Metals were not detected above CUGs in any of the samples collected from the buildings at Load Line 1.
- Explosives and propellants were detected in building CB-4A above the CUGs. The primary horizontal sample interval 3-5 foot bgs had 2,4,6-trinitrotoluene detected at 2,700 mg/kg. Vertical samples at soil boring 7 and 10 for building CB-4A detected 2,4,6-trinitrotoluene at 4,400 mg/kg and 17,000 mg/kg respectively.
- SVOCs were detected in building CA-6 in the primary and field duplicate horizontal samples above the CUG for benzo (a) anthracene at 2.3 mg/kg and benzo (a) pyrene at 1.0 mg/kg, 1.2 mg/kg, and 2.2 mg/kg. Vertical samples for building CA-6 ranged for benzo (a) anthracene at 3.2 mg/kg and 5.5 mg/kg, benzo (a) pyrene at 2.0 mg/kg and 3.5 mg/kg, benzo (b) fluoranthene at 2.7 mg/kg and 5.5 mg/kg.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

8.2.2 Load Line 2 Sampling Results

Table 8-8 summarizes the sampling results at Load Line 2 buildings. Only explosive 2,4,6-trinitrotoluene were detected above the CUG. Figure 8-3 depicts areas of concern at Load Line 2. Below is a brief summary of results:

- Metals were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.

- Explosives and propellants were detected in building DA-6 above the CUG. The primary horizontal sample interval 1-3 foot bgs had 2,4,6-trinitrotoluene detected at 230 mg/kg. None of the vertical samples at DA-6 detected 2,4,6-trinitrotoluene above the CUG.
- SVOCs were not detected above CUGs in any of the samples collected from the buildings at Load Line 2.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 2.

8.2.3 Load Line 3 Sampling Results

Table 8-9 summarizes the sampling results at Load Line 3 buildings. Only arsenic and SVOC benzo (a) pyrene were detected above the CUGs. Figures 8-4 and 8-5 depict areas of concern at Load Line 3. Below is a brief summary of results:

- Only one heavy metal, arsenic, was detected above the CUG at building EA-6 horizontal sample interval 5-7 foot bgs was detected at 22 mg/kg. No vertical samples for building EA-6 were above the CUG for arsenic. Building EB-10 horizontal sample interval 5-7 foot bgs ranged from 23.4 mg/kg to 35.7 mg/kg and vertical samples at soil boring 10 ranged from 23.2mg/kg to 30.3 mg/kg and soil boring 13 were at 20.2 mg/kg for arsenic.
- Explosives and propellants were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- SVOCs were detected in the EB-10 horizontal samples above the CUG for benzo (a) pyrene in the blind and field duplicates which ranged from 0.27 mg/kg to 0.39 mg/kg. Vertical samples for building EB-10 ranged for 0.23 mg/kg to 1.6 mg/kg for benzo (a) pyrene.
- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 3.
- VOCs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 1.

8.2.4 Load Line 4 Sampling Results

Table 8-10 summarizes the sampling results at Load Line 3 buildings. Only SVOCs (benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (k) fluoranthene, dibenzo (a,h) anthracene, and indeno (1,2,3-cd) pyrene) were detected above the CUG. Figure 8-6 depicts areas of concern at Load Line 4. Below is a brief summary of results:

- Metals were not detected above the CUG in any of the samples collected from the buildings at Load Line 4.
- Explosives and propellants were not detected above the CUG in any of the samples collected from the buildings at Load Line 4.
- SVOCs were detected in the G-8 horizontal samples (1-3, 3-5, and 5-7 foot bgs intervals) above the CUG for benzo (a) anthracene at 4.1 mg/kg, benzo (a) pyrene which ranged from 0.35 mg/kg to 3.7 mg/kg, benzo (b) fluoranthene which ranged from 2.4 mg/kg to 4.5 mg/kg, and dibenzo (a,h) anthracene at 0.48 mg/kg. Four vertical samples, soil boring 7, 8, 10, and 11, showed elevated SVOC concentrations above the CUG. The highest SVOC concentrations above the

CUG were at soil boring 7 with benzo (a) anthracene at 54.0 mg/kg, benzo (a) pyrene at 51.0 mg/kg, benzo (b) fluoranthene at 61.0 mg/kg, benzo (k) fluoranthene at 27.0 mg/kg, and indeno (1,2,3,-cd) pyrene at 29.0 mg/kg

- Pesticides and PCBs were not detected above the CUGs in any of the samples collected from the buildings at Load Line 4.
- VOCs were not detected above the CUG in any of the samples collected from the buildings at Load Line 4.

Table 8-7-A Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Metals

See Notes at end of Table 8 10-E				Building	CB-10						CB-4						CA-6A						CB-3-2						CA-6						CA-6							
				Sample ID	LL1SB-630M-0101-SO	LL1SB-630M-0102-SO	LL1SB-630M-0103-SO	LL1SB-632M-0101-SO	LL1SB-632M-0102-SO	LL1SB-632M-0103-SO	LL1SB-633M-0101-SO	LL1SB-633M-0102-SO	LL1SB-633M-0103-SO	LL1SB-634M-0101-SO	LL1SB-634M-0102-SO	LL1SB-634M-0103-SO	LL1SB-635M-0101-SO	LL1SB-637M-0101-SO	LL1SB-631M-0101-SO	RSD % of Three Samples	LL1SB-635M-0102-SO	LL1SB-637M-0102-SO	LL1SB-631M-0102-SO	RSD % of Three Samples																		
Type Sample	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Blind Dup.	Field Dup.		Primary	Blind Dup.	Field Dup.																				
Sample Date	8/31/2010	8/31/2010	8/31/2010	9/1/2010	9/1/2010	9/1/2010	8/25/2010	8/25/2010	8/25/2010	9/1/2010	9/1/2010	9/1/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010		8/31/2010	8/31/2010	8/31/2010																				
Sample Depth	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	1 - 3	1 - 3		3 - 5	3 - 5	3 - 5																				
Units	Value	Min LU or RSL	Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q					
			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q						
Analyte																																										
Aluminum	mg/kg	34,960	NG	6730	B	2580	B	2090	B	4360		3000		2850		6880		7250		2820		4750		4140		3410		7450	B	6450	B	8410	B	13	7020	B	6620	B	8900	B	16	
Antimony	mg/kg	136	RFA	0.095	J	0.085	J	0.15	U	0.098	J	0.084	J	0.19	J	0.12	J	0.085	J	0.15	U	0.12	J	0.12	J	0.098	J	0.094	J	0.099	J	0.62			0.096	J	0.088	J	0.44			
Arsenic	mg/kg	19.8	BKG	10.4		7.9		3.3		6.8		4.6		5.6		11.9		9.7		4.4		10.2		9.5		5.6		11.3		10.4		6.5		27	11.6		10.5		5.7		34	
Barium	mg/kg	3,506	NG	44.2		17.6		34.4		41.5		39.9		47.8		41.7		44.9		17.8		29.9		23.5		30.4		50.1		39.2		77.7		36	45.4		41.2		55.2		15	
Beryllium	mg/kg	160	RSL	0.36		0.19		0.2		0.34	B	0.3	B	0.21	B	0.41		0.47		0.26		0.31	B	0.25	B	0.3	B	0.4		0.33		0.6		22	0.36		0.33		0.49		22	
Cadmium	mg/kg	109	NG	0.1	J	0.11	J	0.095	J	0.35		0.36		0.59		0.18	J	0.16	J	0.16	J	0.13	J	0.11	J	0.088	J	0.1	J	0.098	J	0.39			0.13	J	0.13	J	0.43			
Calcium	mg/kg	NA	NA	3680		2460		3820		11100		7840		15500		6040		6740		4300		5180		2360		9920		3430		3070		22200	B	114	4940		4360		3400	B	18	
Chromium (as Cr-3)	mg/kg	196,942	NG	23.8		9.5		9.6		21.5		16.3		18.2		21.5		23.2		13		16		17.2		12.2		21.1		22.2		101		95	20.7		28.2		73.9		70	
Cobalt	mg/kg	70.3	NG	6.9		3.7		3.7		4.5		2.8		3.8		7.1		7.1		4.1		6		5.5		3		7.2		6.5		6.3		7	7.4		7.1		7.4		2	
Copper	mg/kg	27,138	RFA	15		8		7.9		12		7.4		15.1		15.5		14.5		5.9		16.5		14.8		7.7		18.5		17.8		18.3		2	17.7		17.6		19.4		6	
Iron	mg/kg	190,104	RSL	18900		10200		10500		12700		10600		14200		18700		16300		9030		17900		14000		9330		20300		18400		19500		5	20200		19600		25500		15	
Lead	mg/kg	4,000	RSL	12.5		10.1		36		31.7		28.2		27.7		16.1		10.9		7.6		12.4		10.4		7.4		12		12.5		31.6		60	14.8		13		59		90	
Magnesium	mg/kg	NA	NA	2110		882		851		1660		1450		1210		2620		2500		815		2210		1660		1520		2320		2110		3260	B	24	2360		2340		2280	B	2	
Manganese (1' - 5')	mg/kg	1,450	BKG1	377		348				432	B	460	B			390		410				417	B	288	B		B	394		349		777		46	425		381		437		7	
Manganese (5' - 7')	mg/kg	3,030	BKG2					386						272	B					282						339																
Nickel	mg/kg	13,463	RFA	20.4		10.5		7.9		16.6		11.6		15.3		21.7		21		10.9		18.2		17.9		9.9		21.2		20.6		15		18	21.1		24.3		17.3		17	
Potassium	mg/kg	NA	NA	892	B	565	B	455	B	596		435		424		948		1020		597		773		717		515		1060	B	979	B	999		4	1030	B	1060	B	1560		25	
Selenium	mg/kg	390	RSL	1.5		1.2		0.56		0.47	J	0.41	J	0.32	J	0.67		0.74		0.39	J	0.78		0.5		0.4	J	1.8		1.5		0.41	B	59	1.5		1.5		0.43	U		
Silver	mg/kg	3,240	RFA	0.051	U	0.05	U	0.05	U	0.05	U	0.05	U	0.024	J	0.021	J	0.051	U	0.05	U	0.017	J	0.05	U	0.051	U	0.017	J	0.017	J	0.057	U			0.02	J	0.018	J	0.057	U	
Sodium	mg/kg	NA	NA	45.5	J	22	J	25.5	J	60.6	J	66.1	J	35.4	J	61.1	J	64.8	J	34.6	J	43.2	J	32.7	J	49	J	49.7	J	45.3	J	211			51.5	J	43.1	J	211			
Thallium	mg/kg	47.6	RFA	0.14	J	0.064	J	0.058	J	0.082	J	0.15	U	0.072	J	0.13	J	0.12	J	0.062	J	0.14	J	0.099	J	0.065	J	0.15	J	0.14	J	1.1			0.16	J	0.15	J	1.1			
Vanadium	mg/kg	1,558	RFA	13.7		5.8		4.2		7.8		4.8		5.7		12.1		12.6		5.3		9.6		8.2		5.1		14.9		13.2		12.7		9	14.3		13.2		16.1		10	
Zinc	mg/kg	196,589	RFA	45.4		42.6		36.5		70.6		51.2		65.5		80.9		70		99		50.6		50.8		45.6		56.5		54.9		54		2	61.1		54.7		66.5		10	
Chromium, hexavalent	mg/kg	16.4	NG	0.81	U	0.8	U	0.8	U	0.81	U	0.27	J	0.81	U	0.31	J	0.81	U	0.81	U	0.81	U	0.27	J	0.52	J	0.41	J	0.61	J	6.5	U			0.81	U	0.29	J	6.5	U	
Mercury	mg/kg	165	RFA	0.032	J	0.033	U	0.033	U	0.044	J	0.048	J	0.11		0.018	J	0.019	J	0.033	U	0.021	J	0.033	U	0.034	U	0.023	J	0.023	J	0.042				0.033	U	0.021	J	0.02		
																										RSD % Average =				32						RSD % Average =				22		

Table 8-7-A Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Metals

See Notes at end of Table 8
10-E

See Notes at end of Table 8 10-E				Building		CA-6										CB-3-1						CB-4A					
				Sample ID		LL1SB-635M-0103-SO		LL1SB-637M-0103-SO		LL1SB-631M-0103-SO		RSD % of Three Samples		LL1SB-636M-0101-SO		LL1SB-636M-0102-SO		LL1SB-636M-0103-SO		LL1SB-638M-0101-SO		LL1SB-638M-0102-SO		LL1SB-638M-0103-SO			
Type Sample		Primary		Blind Dup.		Field Dup.				Primary		Primary		Primary		Primary		Primary		Primary		Primary					
Sample Date		8/31/2010		8/31/2010		8/31/2010				9/1/2010		9/1/2010		9/1/2010		9/1/2010		9/1/2010		9/1/2010		9/1/2010					
Sample Depth		5 - 7		5 - 7		5 - 7				1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7							
Units		Value	Min LU or RSL																								
Analyte				Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q					
Metals	Aluminum	mg/kg	34,960	NG	5060	B	6880	B	7290	B	19	4190		4550		5180		3440	E	3780		2310					
	Antimony	mg/kg	136	RFA	0.15	U	0.098	J	0.23	J		0.28		0.24		0.18	J	0.091	J	0.068	J	0.15	U				
	Arsenic	mg/kg	19.8	BKG	6.5		9.5		3.8		43	8.1		8.1		7		5		4.8		3.7					
	Barium	mg/kg	3,506	NG	37.6		51.7		62.4		25	30.2		32		61.7		38	E	31.2		27					
	Beryllium	mg/kg	160	RSL	0.28		0.41		0.47		25	0.31	B	0.3	B	0.55	B	0.31	B	0.41	B	0.21	B				
	Cadmium	mg/kg	109	NG	0.074	J	0.22		0.5			0.14	J	0.12	J	0.16	J	4.2		0.73		0.21					
	Calcium	mg/kg	NA	NA	2800		9600		12600	B	60	8890		5970		26300		13900	E	10600		11000					
	Chromium (as Cr-3)	mg/kg	196,942	NG	16.2		24.9		57.6		66	28.4		19		16.1		23.2		18.4		19.1					
	Cobalt	mg/kg	70.3	NG	5.4		6.3		6		8	4.4		5.7		2.9		3.4		3.2		2.5					
	Copper	mg/kg	27,138	RFA	9.8		13.9		15.1		22	13.8		13.8		11.7		10.4		8.1		6.1					
	Iron	mg/kg	190,104	RSL	13800		18600		19200		17	11700		16400		9460		11900	E	10500		6020					
	Lead	mg/kg	4,000	RSL	8.1		16.2		39.4		77	18.2		10.8		16.8		73.9	E	11.9		28.8					
	Magnesium	mg/kg	NA	NA	1310		1950		1940	B	21	1940		1850		3180		1650		1930		963					
	Manganese (1' - 5')	mg/kg	1,450	BKG1							18	337	B	397	B			766	B	488	B						
	Manganese (5' - 7')	mg/kg	3,030	BKG2	281		380		404							367	B					299	B				
	Nickel	mg/kg	13,463	RFA	13.4		20.4		13.1		26	20.7		18		12.3		14.8		13.2		10.1					
	Potassium	mg/kg	NA	NA	766	B	994	B	1210		22	624		644		579		479		512		465					
	Selenium	mg/kg	390	RSL	0.92		1.3		0.43	U		0.45	J	0.47	J	0.5	J	0.4	J	0.39	J	0.27	J				
	Silver	mg/kg	3,240	RFA	0.051	U	0.051	U	0.057	U		0.05	U	0.05	U	0.051	U	0.16		0.05	U	0.05	U				
	Sodium	mg/kg	NA	NA	37.8	J	87.5	J	328			56.7	J	53.9	J	94.1	J	54.4	J	76.9	J	46.7	J				
	Thallium	mg/kg	47.6	RFA	0.1	J	0.13	J	0.84			0.096	J	0.11	J	0.087	J	0.084	J	0.088	J	0.06	J				
	Vanadium	mg/kg	1,558	RFA	10.2		13		12.8		13	6.2		8.4		6.1		5.8		5.3		3.2					
	Zinc	mg/kg	196,589	RFA	58.2		89.7		86		22	56.9		49.1		50.2		50.5		48.6		51.7					
	Chromium, hexavalent	mg/kg	16.4	NG	0.81	U	0.33	J	6.6	U		0.54	J	0.81	U	0.81	U	0.7	J	4	U	0.56	J				
	Mercury	mg/kg	165	RFA	0.02	J	0.016	J	0.014			0.033	U	0.033	U	0.033	U	0.027	J	0.033	U	0.033	U				
					RSD % Average =				30																		

Table 8-7-B Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E				Building		CB-10						CB-4						CA-6A						CB-3-2						CA-6						CA-6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
				Sample ID		LL1SB-630M-0101-SO		LL1SB-630M-0102-SO		LL1SB-630M-0103-SO		LL1SB-632M-0101-SO		LL1SB-632M-0102-SO		LL1SB-632M-0103-SO		LL1SB-633M-0101-SO		LL1SB-633M-0102-SO		LL1SB-633M-0103-SO		LL1SB-634M-0101-SO		LL1SB-634M-0102-SO		LL1SB-634M-0103-SO		LL1SB-635M-0101-SO		LL1SB-631M-0101-SO		LL1SB-637M-0101-SO		RSD % of Three Samples		LL1SB-635M-0102-SO		LL1SB-631M-0102-SO		LL1SB-637M-0102-SO		RSD % of Three Samples																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Type Sample		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Blind Dup.		Field Dup.				Primary		Blind Dup.		Field Dup.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Sample Date		8/31/2010		8/31/2010		8/31/2010		9/1/2010		9/1/2010		9/1/2010		8/25/2010		8/25/2010		8/25/2010		9/1/2010		9/1/2010		9/1/2010		8/31/2010		8/31/2010		8/31/2010				8/31/2010		8/31/2010		8/31/2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7		1 - 3		1 - 3		1 - 3				3 - 5		3 - 5		3 - 5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Units		Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value	

All results were below the RL. No RSDs were calculated.

Table 8-7-B Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E				Building	CA-6								CB-3-1						CB-4A						CB-4A																
				Sample ID	LL1SB-635M-0103-SO	LL1SB-631M-0103-SO	LL1SB-637M-0103-SO	RSD % of Three Samples	LL1SB-636M-0101-SO	LL1SB-636M-0102-SO	LL1SB-636M-0103-SO	LL1SB-638M-0101-SO	LL1SB-638M-0102-SO	LL1SB-638M-0103-SO	LL1SB-638M-0001-SO	LL1SB-638M-0002-SO	LL1SB-638M-0004-SO	LL1SB-638M-0005-SO	LL1SB-638M-0006-SO	LL1SB-638M-0007-SO	LL1SB-638M-0008-SO	LL1SB-638M-0010-SO	LL1SB-638M-0011-SO																		
					Type Sample	Primary	Blind Dup.		Field Dup.		Primary	Primary	Primary	Primary	Primary	Primary	Primary V	Primary V	Primary V	Primary V	Primary V	Primary V	Primary V	Primary V	Primary V																
					Sample Date	8/31/2010	8/31/2010		8/31/2010		9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010	9/1/2010																
				Sample Depth	5 - 7	5 - 7	5 - 7		1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 7	1 - 7	1 - 6.5	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7	1 - 7			
Units				Value	Min LU or RSL	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q
Analyte						Value	Q			Value	Q			Value	Q			Value	Q			Value	Q			Value	Q			Value	Q			Value	Q			Value	Q		
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.096	U	0.44	U	0.1	U		0.038	J	0.099	U	0.1	U	1.8		8.7		0.088	J	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.021	J	200	U	0.13	J
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.029	J	0.44	U	0.055	J		0.041	J	0.099	U	0.1	U	150	EQ	2700	EQ	8.3		0.029	J	0.036	J	0.037	J	0.039	J	0.096	U	4400	Q	0.078	J	17000	Q	1.4	PG
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.12	J PG	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	1.6		0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	2-Nitrotoluene	mg/kg	60.3	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	3-Nitrotoluene	mg/kg	6.1	RSL	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	1.6		0.097	U	0.2	J	0.068	J	0.041	J	0.06	J	0.048	J	0.096	U	100	U	0.11	J	200	U	0.12	J
	4-Nitrotoluene	mg/kg	816	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	RDX HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	mg/kg	1,452	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.48	PG	490		0.097	U	8.6		1.1		0.097	U	0.47		0.099	U	0.096	U	100	U	0.045	J	200	U	6.4	
	TETRYL METHYL-2,4,6-TRINITROPHENYLNITRAMINE	mg/kg	240	RSL	0.096	U	0.5	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	Nitrobenzene	mg/kg	48	RFA	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	0.1	U	0.099	U	0.097	U	0.097	U	0.098	U	0.097	U	0.096	U	0.099	U	0.096	U	100	U	0.098	U	200	U	0.098	U
	Nitroglycerin	mg/kg	816	RFA	0.24	U	1.5	U	0.25	U		0.24	U	0.25	U	0.25	U	0.25	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.25	U	0.24	U	250	U	0.24	U	500	U	0.24	U
	HMX OCTAHYDRO-TETRANITRO-1,3,5,7-TETRAZOCIN	mg/kg	19,090	NG	0.096	U	0.44	U	0.1	U		0.098	U	0.099	U	1.3	PG	86	EQ	0.46	PG	2.8		1.6		0.097	U	0.22	J	0.099	U	0.096	U	100	U	0.098	U	200	U	2.7	
PETN	mg/kg	NA	NA	0.24	U	1.5	U	0.25	U		0.24	U	0.25	U	0.25	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.25	U	0.24	U	250	U	0.24	U	500	U	0.24	U	
Nitroguanadine	mg/kg	6,100	RSL	0.04	U	0.16	U	0.039	U		0.039	U	0.04	U	0.039	U	0.039	U	0.04	U	0.038	U	NA		NA		NA		NA		NA		NA		NA		NA		NA		
Nitrocellulose	mg/kg	NA	NA	1.2	J	NA		2.4	J		1.6	J	1.3	J	1.1	J	97.2	q	111	q	6.4		NA		NA		NA		NA		NA		NA		NA		NA		NA		

All results were below the RL. No RSDs were calculated.

Table 8-7-B Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E												Building										
												Sample ID	LL15B-638M-0012-SO		LL15B-638M-0013-SO		LL15B-638M-0015-SO		LL15B-638M-0016-SO			
													Type Sample		Primary V		Primary V		Primary V		Primary V	
													Sample Date		9/1/2010		9/1/2010		9/1/2010		9/1/2010	
													Sample Depth		1 - 7		1 - 7		1 - 7		1 - 7	
				Units	Value	Min LU or RSL																
Analyte							Value	Q	Value	Q	Value	Q										
Explosives & Propellants	1,3,5-Trinitrobenzene				mg/kg	15,280	RFA	0.1	U	9.5	U	0.021	J PG	0.022	J							
	1,3-Dinitrobenzene				mg/kg	59.4	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	2,4,6-Trinitrotoluene				mg/kg	211	RFA	0.12	J	23	J	0.12	J PG	0.27								
	2,4-Dinitrotoluene				mg/kg	7.53	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	2,6-Dinitrotoluene				mg/kg	7.69	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	2-Amino-4,6-dinitrotoluene				mg/kg	128	RFA	0.1	U	13	J	0.097	U	0.099	U							
	2-Nitrotoluene				mg/kg	60.3	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	3-Nitrotoluene				mg/kg	6.1	RSL	0.1	U	9.5	U	0.097	U	0.099	U							
	4-Amino-2,6-dinitrotoluene				mg/kg	128	RFA	0.057	J	6.1	J	0.027	J	0.065	J PG							
	4-Nitrotoluene				mg/kg	816	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	RDX HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE				mg/kg	1,452	RFA	0.15	J	1500		0.12	J	0.099	U							
	TETRYL METHYL-2,4,6-TRINITROPHENYLNITRAMINE				mg/kg	240	RSL	0.1	U	9.5	U	0.097	U	0.099	U							
	Nitrobenzene				mg/kg	48	RFA	0.1	U	9.5	U	0.097	U	0.099	U							
	Nitroglycerin				mg/kg	816	RFA	0.25	U	24	U	0.24	U	0.25	U							
	HMX OCTAHYDRO-TETRANITRO-1,3,5,7-TETRAZOCIN				mg/kg	19,090	NG	0.053	J	200	q	0.17	J	0.099	U							
	PETN				mg/kg	NA	NA	0.25	U	24	U	0.24	U	0.25	U							
	Nitroguanadine				mg/kg	6,100	RSL	NA		NA		NA		NA								
	Nitrocellulose				mg/kg	NA	NA	NA		NA		NA		NA								

All results were below the RL. No RSDs were calculated.

See Notes at end of Table 8-10-E

SURFACE AND SUBSURFACE MI SAMPLING	8-54	CONTRACT NO. W912QR-10-P-0037
Load Lines 1, 2, 3, and 4		

See Notes at end of Table 8-10-E

SURFACE AND SUBSURFACE MI SAMPLING

Load Lines 1, 2, 3, and 4

Table 8-7-C Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building		CA-6					CA-6					
			Sample ID	LL1SB-635M-0004-SO		LL1SB-631M-0004-SO		RPD % of Two Samples	LL1SB-635M-0005-SO		LL1SB-631M-0005-SO		RPD % of Two Samples		
				Type Sample		Primary V	Field Dup. V		Primary V	Field Dup. V					
				Sample Date		8/31/2010	8/31/2010		8/31/2010	8/31/2010					
			Sample Depth		1 - 6.5		1 - 6.5			1 - 7		1 - 7			
		Value	Min LU or RSL												
Analyte	Units			Value	Q	Value	Q		Value	Q	Value	Q			
Semivolatiles	1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	1,3-Dichlorobenzene	mg/kg	530	R9	0.34	U	0.4	U		0.55	U	0.4	U		
	1,4-Dichlorobenzene	mg/kg	24	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.34	U	0.5	U		0.55	U	0.5	U		
	2,4,6-Trichlorophenol	mg/kg	440	RSL	1	U	0.5	U		1.6	U	0.5	U		
	2,4-Dichlorophenol	mg/kg	180	RSL	0.34	U	0.5	U		0.55	U	0.5	U		
	2,4-Dimethylphenol	mg/kg	1,200	RSL	1	U	0.4	U		1.6	U	0.4	U		
	2,4-Dinitrophenol	mg/kg	120	RSL	1	U	2	U		1.6	U	2	U		
	2,4-Dinitrotoluene	mg/kg	16	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	2,6-Dinitrotoluene	mg/kg	61	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	2-Chloronaphthalene	mg/kg	6,300	RSL	0.042	U	0.4	U		0.067	U	0.4	U		
	2-Chlorophenol	mg/kg	390	RSL	0.34	U	0.5	U		0.55	U	0.5	U		
	2-Methylnaphthalene	mg/kg	2,378	RFA	0.042	U	0.4	U		0.067	U	0.4	U		
	2-Methylphenol	mg/kg	3,100	R9	1	U	1	U		1.6	U	1	U		
	2-Nitroaniline	mg/kg	6,100	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	2-Nitrophenol	mg/kg	NA	NA	0.34	U	0.5	U		0.55	U	0.5	U		
	3 & 4-Methylphenol	mg/kg	NA	NA	NA		2	U		NA		2	U		
	3,3'-Dichlorobenzidine	mg/kg	11	RSL	1	U	0.5	U		1.6	U	0.5	U		
	3-Methylphenol	mg/kg	NA	NA	2.5	U	NA			4.1	U	NA			
	3-Nitroaniline	mg/kg	NA	NA	1	U	1	U		1.6	U	1	U		
	4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	1	U	1	U		1.6	U	1	U		
	4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.34	U	0.4	U		0.55	U	0.4	U		
	4-Chloro-3-methylphenol	mg/kg	NA	NA	0.34	U	0.5	U		0.55	U	0.5	U		
	4-Chloroaniline	mg/kg	NA	NA	0.34	U	0.4	U		0.55	U	0.4	U		
	4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.34	U	0.4	U		0.55	U	0.4	U		
	4-Methylphenol	mg/kg	NA	NA	2.5	U	NA			4.1	U	NA			
	4-Nitroaniline	mg/kg	240	RSL	0.34	U	1	U		0.55	U	1	U		
	4-Nitrophenol	mg/kg	4,756	RFA	1	U	1	U		1.6	U	1	U		
	Acenaphthene	mg/kg	3,400	RSL	1		0.4	U		0.067	U	0.4	U		
	Acenaphthylene	mg/kg	NA	NA	0.042	U	0.4	U		0.067	U	0.4	U		
	Anthracene	mg/kg	22,000	RSL	2.3		0.4	U		0.067	U	0.4	U		
	Benzo(a)anthracene	mg/kg	2.21	RFA	5.5		0.058	J		0.067	U	0.026	J		
	Benzo(a)pyrene	mg/kg	0.221	RFA	3.5		0.03	J		0.067	U	0.4	U		
	Benzo(b)fluoranthene	mg/kg	2.21	RFA	5.5		0.051	J		0.067	U	0.4	U		
	Benzo(g,h,i)perylene	mg/kg	62	R9	1.6		0.4	U		0.067	U	0.4	U		
	Benzo(k)fluoranthene	mg/kg	22.1	RFA	2.1		0.027	J		0.067	U	0.4	U		
	Benzoic acid	mg/kg	240,000	RSL	4.2	U	0.99	U		6.7	U	0.99	U		
	Benzyl alcohol	mg/kg	6,100	RSL	0.34	U	1	U		0.55	U	1	U		
	Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.34	U	0.4	U		0.55	U	0.4	U		
	Bis(2-chloroethyl) ether	mg/kg	2	RSL	0.042	U	0.4	U		0.067	U	0.4	U		
	Bis(2-chloroisopropyl) ether	mg/kg	29	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.34	U	0.12	J		0.55	U	1	U		
	Butylbenzyl phthalate	mg/kg	2,600	RSL	0.34	U	0.4	U		0.55	U	0.4	U		
	Carbazole	mg/kg	694	RFA	1.1		0.4	U		0.55	U	0.4	U		
Chrysene	mg/kg	221	RFA	5.6		0.051	J		0.067	U	0.4	U			
Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	0.042	U	0.4	U		0.067	U	0.4	U			
Dibenzofuran	mg/kg	1,189	RFA	0.24	J	0.4	U		0.067	U	0.4	U			
Diethyl phthalate	mg/kg	49,000	RSL	0.34	U	0.4	U		0.55	U	0.4	U			
Dimethyl phthalate	mg/kg	610,000	R9	0.34	U	0.4	U		0.55	U	0.4	U			
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.34	U	0.13	J		0.55	U	0.11	J			
Di-n-octyl phthalate	mg/kg	2,400	R9	0.34	U	0.4	U		0.55	U	0.4	U			
Fluoranthene	mg/kg	2,765	RFA	16		0.13		98	0.067	U	0.046	J			
Fluorene	mg/kg	7,366	RFA	0.6		0.4	U		0.067	U	0.4	U			
Hexachlorobenzene	mg/kg	3	RSL	0.042	U	0.4	U		0.067	U	0.4	U			
Hexachlorobutadiene	mg/kg	62	RSL	0.34	U	0.4	U		0.55	U	0.4	U			
Hexachlorocyclopentadiene	mg/kg	370	R9	4.2	U	0.4	U		6.7	U	0.4	U			

Table 8-7-C Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-E					Building		CA-6						CA-6						
					Sample ID		LL1SB-635M-0004-SO		LL1SB-631M-0004-SO		RPD % of Two Samples		LL1SB-635M-0005-SO		LL1SB-631M-0005-SO		RPD % of Two Samples		
					Type Sample		Primary V		Field Dup. V				Primary V		Field Dup. V				
					Sample Date		8/31/2010		8/31/2010				8/31/2010		8/31/2010				
					Sample Depth		1 - 6.5		1 - 6.5				1 - 7		1 - 7				
		Value		Min LU or RSL		Value		Q		Value		Q		Value		Q			
Analyte	Units					Value	Q	Value	Q		Value	Q	Value	Q					
Hexachloroethane	mg/kg	350	RSL	0.34	U	0.4	U				0.55	U	0.4	U					
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	1.5		0.4	U				0.067	U	0.4	U					
Isophorone	mg/kg	5,100	RSL	0.34	U	0.4	U				0.55	U	0.4	U					
Naphthalene	mg/kg	3,678	RFA	0.14		0.4	U				0.067	U	0.4	U					
Nitrobenzene	mg/kg	48	RSL	0.042	U	0.4	U				0.067	U	0.4	U					
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.34	U	0.4	U				0.55	U	0.4	U					
N-Nitrosodiphenylamine	mg/kg	990	R9	0.34	U	0.81	U				0.55	U	0.81	U					
Pentachlorophenol	mg/kg	21.2	RFA	1	U	1	U				1.6	U	1	U					
Phenanthrene	mg/kg	2,300	R9	7.8		0.067	J				0.067	U	0.4	U					
Phenol	mg/kg	18,000	RSL	0.34	U	0.5	U				0.55	U	0.5	U					
Pyrene	mg/kg	2,074	RFA	11		0.091		98			0.067	U	0.035	J					
					RPD % Average =					98									

Table 8-7-D Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Pesticides and PCBs

		Building		CA-6								CA-6								CA-6							
		Sample ID		LL1SB-635M-0101-SO		LL1SB-637M-0101-SO		LL1SB-631M-0101-SO		RSD % of Three Samples		LL1SB-635M-0102-SO		LL1SB-637M-0102-SO		LL1SB-631M-0102-SO		RSD % of Three Samples		LL1SB-635M-0103-SO		LL1SB-637M-0103-SO		LL1SB-631M-0103-SO		RSD % of Three Samples	
		Type Sample		Primary		Blind Dup.		Field Dup.				Primary		Blind Dup.		Field Dup.				Primary		Blind Dup.		Field Dup.			
		Sample Date		8/31/2010		8/31/2010		8/31/2010				8/31/2010		8/31/2010		8/31/2010				8/31/2010		8/31/2010		8/31/2010			
		Sample Depth		1 - 3		1 - 3		1 - 3				3 - 5		3 - 5		3 - 5				5 - 7		5 - 7		5 - 7			
		Units	Value	Min LU or RSL																							
Analyte				Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q		
Pesticides & PCBs	4,4'-DDD	mg/kg	20	RSL		0.0014	U	0.00068	U	0.0012	U			0.00068	U	0.00068	U	0.0012	U			0.0034	U	0.0034	U	0.0012	U
	4,4'-DDE	mg/kg	40.8	RFA		0.0036	PG	0.003	PG	0.0011	U			0.0027	PG	0.0031	PG	0.0011	U			0.0034	U	0.0089	PG	0.0011	U
	4,4'-DDT	mg/kg	17	RSL		0.0014	U	0.00068	U	0.0015	U			0.00068	U	0.00068	U	0.0015	U			0.0034	U	0.0034	U	0.13	
	Aldrin	mg/kg	0.8	RFA		0.0027	U	0.0013	U	0.0017	U			0.0013	U	0.0013	U	0.0017	U			0.0067	U	0.0068	U	0.0017	U
	alpha-BHC	mg/kg	0.9	R9		0.0027	U	0.0013	U	0.013				0.0013	U	0.0013	U	0.0019	U			0.0067	U	0.0068	U	0.004	P
	alpha-Chlordane	mg/kg	0.0	NA		0.0027	U	0.0013	U	0.0011	U			0.0013	U	0.0013	U	0.0011	U			0.0067	U	0.0068	U	0.0011	U
	beta-BHC	mg/kg	7.7	NA		0.0036	J	0.0013	U	0.0038	P			0.0013	U	0.0013	U	0.002	U			0.0067	U	0.0068	U	0.002	U
	Chlorodane (Technical)	mg/kg	NA	NA		NA		NA		0.03	U			NA		NA		0.031	U			NA		NA		0.03	U
	delta-BHC	mg/kg	NA	NA		0.0027	U	0.0013	U	0.0022	P			0.0013	U	0.0013	U	0.0011	U			0.0067	U	0.0068	U	0.0017	P
	Dieldrin	mg/kg	0.9	RFA		0.0017	J	0.00087	J	0.0012	U			0.00068	U	0.0011	J	0.0012	U			0.0034	U	0.0034	U	0.013	P
	Endosulfan I	mg/kg	370	R9		0.0014	U	0.00068	U	0.0027	P			0.00068	U	0.00068	U	0.0022	U			0.0034	U	0.0034	U	0.0079	P
	Endosulfan II	mg/kg	370	R9		0.0027	U	0.0013	U	0.0012	P			0.0013	U	0.0013	U	0.00072	JP			0.0067	U	0.0068	U	0.0012	U
	Endosulfan sulfate	mg/kg	370	R9		0.0027	U	0.0013	U	0.0031	U			0.0013	U	0.0013	U	0.0032	U			0.0067	U	0.0091	J	0.0032	U
	Endrin	mg/kg	17.7	RFA		0.0014	U	0.00068	U	0.0011	JP			0.00068	U	0.00068	U	0.0014	U			0.0034	U	0.0034	U	0.0049	P
	Endrin aldehyde	mg/kg	0.0	NA		0.0045	J	0.0029	J	0.0037	U			0.0015	J	0.003		0.0037	U			0.0067	U	0.0068	U	0.0037	U
	Endrin ketone	mg/kg	18	R9		0.0014	U	0.00068	U	0.0028	U			0.00068	U	0.00068	U	0.0029	U			0.0034	U	0.0034	U	0.0028	U
	Gamma-BHC	mg/kg	NA	NA		0.0027	U	0.0013	U	NA				0.0013	U	0.0013	U	NA				0.0067	U	0.0068	U	NA	
	gamma-Chlordane	mg/kg	16	R9		0.0014	U	0.00068	U	0.003	P			0.00068	U	0.00068	U	0.0011	U			0.0034	U	0.0034	U	0.0011	U
	Heptachlor	mg/kg	3.1	RFA		0.0025	J	0.0013	U	0.0012	U			0.0013	U	0.0013	U	0.0041	P			0.0057	J	0.0068	U	0.0012	U
	Heptachlor epoxide	mg/kg	1.5	RFA		0.0027	U	0.0013	U	0.0017	U			0.0013	U	0.0013	U	0.0017	U			0.0067	U	0.0068	U	0.0017	U
	Lindane	mg/kg	NA	NA		NA		NA		0.0016	U			NA		NA		0.0016	U			NA		NA		0.0016	U
	Methoxychlor	mg/kg	310	RSL		0.0067	U	0.0033	U	0.0023	U			0.0033	U	0.0033	U	0.0024	U			0.017	U	0.017	U	0.0023	U
	Toxaphene	mg/kg	4.4	R9		0.041	U	0.02	U	0.03	U			0.02	U	0.02	U	0.031	U			0.1	U	0.1	U	0.03	U
	Aroclor 1016	mg/kg	2.0	RFA		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
	Aroclor 1221	mg/kg	1.4	RSL		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
	Aroclor 1232	mg/kg	1.4	RSL		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
	Aroclor 1242	mg/kg	2.2	RSL		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
	Aroclor 1248	mg/kg	2.0	RFA		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
	Aroclor 1254	mg/kg	2.0	RFA		0.16		0.096		0.063	J			0.13		0.14		0.16		11		0.021	J	0.46		0.69	
	Aroclor 1260	mg/kg	2.0	RFA		0.025	U	0.025	U	0.051	U			0.025	U	0.025	U	0.051	U			0.025	U	0.13	U	0.051	U
RSD % Average=														11													

Table 8-7-E Ravenna Load Line 1 Subsurface Soil MI Sampling Results
Volatile Organics

See Notes at end of Table 8-10-E				Building	CB-3-2						CA-6						CA-6						CA-6						CB-3-1								
				Sample ID	LL1SB-634V-0101-SO		LL1SB-634V-0102-SO		LL1SB-634V-0103-SO		LL1SB-635V-0101-SO		LL1SB-637V-0101-SO		LL1SB-631V-0101-SO		RSD % of Three Samples	LL1SB-635V-0102-SO		LL1SB-637V-0102-SO		LL1SB-631V-0102-SO		RSD % of Three Samples	LL1SB-635V-0103-SO		LL1SB-637V-0103-SO		LL1SB-631V-0103-SO		RSD % of Three Samples	LL1SB-636V-0101-SO		LL1SB-636V-0102-SO		LL1SB-636V-0103-SO	
Type Sample		Primary		Primary		Primary		Primary		Blind Dup.		Field Dup.			Primary		Blind Dup.		Field Dup.			Primary		Blind Dup.		Field Dup.			Primary		Primary		Primary				
Sample Date		9/1/2010		9/1/2010		9/1/2010		8/31/2010		8/31/2010		8/31/2010			8/31/2010		8/31/2010		8/31/2010			8/31/2010		8/31/2010		8/31/2010			9/1/2010		9/1/2010		9/1/2010				
Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		1 - 3		1 - 3			3 - 5		3 - 5		3 - 5			5 - 7		5 - 7		5 - 7			1 - 3		3 - 5		5 - 7				
Units	Value	Min LU or RSL																																			
Analyte			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q		Value	Q	Value	Q	Value	Q				
1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,1,2-Trichloroethane	mg/kg	11	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,1-Dichloroethane	mg/kg	33	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,1-Dichloroethene	mg/kg	120	R9	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,2-Dibromoethane	mg/kg	0.34	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,2-Dichloroethane	mg/kg	4.3	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
1,2-Dichloroethene (total)	mg/kg	700	RSL	0.3	U	0.42	U	0.73	U	0.41	U	0.42	U	NA			0.44	U	0.44	U	NA			0.52	U	0.52	U	NA			0.39	U	0.47	U	1.3	U	
1,2-Dichloropropane	mg/kg	8.8	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
2-Butanone	mg/kg	22000	R9	0.061	U	0.14	J	0.21	J	0.082	U	0.085	U	0.47	U		0.087	U	0.089	U	0.52	U		0.16	J B	0.16	J B	0.53	U		0.099	J	0.14	J	0.39	J	
2-Hexanone	mg/kg	210	RSL	0.03	U	0.042	U	0.073	U	0.041	U	0.042	U	0.47	U		0.044	U	0.044	U	0.52	U		0.052	U	0.052	U	0.53	U		0.039	U	0.047	U	0.13	U	
4-Methyl-2-pentanone	mg/kg	5300	R9	0.061	U	0.085	U	0.15	U	0.082	U	0.085	U	0.47	U		0.087	U	0.089	U	0.52	U		0.1	U	0.1	U	0.53	U		0.078	U	0.094	U	0.26	U	
Acetone	mg/kg	61000	RSL	0.12	U	0.17	U	0.29	U	0.16	U	0.17	U	0.94	U		0.17	U	0.18	U	1	U		0.21	U	0.21	U	1.1	U		0.16	U	0.19	U	0.52	U	
Benzene	mg/kg	11	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Bromochloromethane	mg/kg	8.2	R9	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Bromodichloromethane	mg/kg	2.7	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Bromoform	mg/kg	610	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Bromomethane	mg/kg	7.3	RSL	0.03	U	0.042	U	0.073	U	0.041	U	0.042	U	0.094	UA		0.044	U	0.044	U	0.1	UB		0.052	U	0.052	U	0.11	UA		0.039	U	0.047	U	0.13	U	
Carbon disulfide	mg/kg	820	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.039	J	0.094	U		0.022	U	0.022	U	0.1	U		0.051	J	0.047	J	0.11	U		0.035	J	0.024	U	0.065	U	
Carbon tetrachloride	mg/kg	6.1	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
Chlorobenzene	mg/kg	290	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
Chloroethane	mg/kg	30	R9	0.061	U	0.085	U	0.15	U	0.082	U	0.085	U	0.094	U		0.087	U	0.089	U	0.1	U		0.1	U	0.1	U	0.11	U		0.078	U	0.094	U	0.26	U	
Chloroform	mg/kg	2.9	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Chloromethane	mg/kg	120	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.094	U		0.022	U	0.022	U	0.1	U		0.026	U	0.026	U	0.11	U		0.02	U	0.024	U	0.065	U	
cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
Dibromochloromethane	mg/kg	6.8	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Ethylbenzene	mg/kg	54	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
Methylene chloride	mg/kg	110	RSL	0.067	J B	0.12	J B	0.17	J B	0.08	J B	0.11	J B	0.094	U		0.085	J B	0.097	J B	0.1	U		0.1	J B	0.11	J B	0.11	U		0.086	J B	0.11	J B	0.31	J B	
Styrene	mg/kg	6300	RSL	0.0061	U	0.0085	U	0.015	U	0.0082	U	0.0085	U	0.047	U		0.0087	U	0.0089	U	0.052	U		0.01	U	0.01	U	0.053	U		0.0078	U	0.0094	U	0.026	U	
Tetrachloroethene	mg/kg	4.8	R9	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
Toluene	mg/kg	5000	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.41			0.022	U	0.022	U	1			0.026	U	0.026	U	0.5			0.02	U	0.024	U	0.065	U	
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.047	U		0.022	U	0.022	U	0.052	U		0.026	U	0.026	U	0.053	U		0.02	U	0.024	U	0.065	U	
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.015	U	0.021	U	0.036	U	0.02	U	0.021	U	0.094	U		0.022	U	0.022	U	0.1	U		0.026	U	0.026	U	0.11	U		0.02</						

Metals

Metals

Table 8-8-A Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Metals

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E				Building		DA-6A						DB-3-1						DA-6						DB-4A					
				Sample ID		LL2SB-506M-0101-SO		LL2SB-506M-0102-SO		LL2SB-506M-0103-SO		LL2SB-507M-0101-SO		LL2SB-507M-0102-SO		LL2SB-507M-0103-SO		LL2SB-508M-0101-SO		LL2SB-508M-0102-SO		LL2SB-508M-0103-SO		LL2SB-509M-0101-SO		LL2SB-509M-0102-SO		LL2SB-509M-0103-SO	
Type Sample		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary					
Sample Date		8/24/2010		8/24/2010		8/24/2010		8/24/2010		8/24/2010		8/24/2010		8/25/2010		8/25/2010		8/25/2010		8/23/2010		8/23/2010		8/23/2010					
Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		5 - 7					
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q				
Aluminum	mg/kg	34,960	NG	10200.00	B	9820.00	B	10900.00	B	9610.00	B	9200.00	B	8550.00	B	7130		8910		9310	E	9290	B E	9210	B	7320	B		
Antimony	mg/kg	136	RFA	0.08	J	0.09	J	0.11	J	0.13	J	0.12	J	0.12	J	0.099	J	0.12	J	0.11	J	0.11	J	0.095	J	0.096	J		
Arsenic	mg/kg	19.8	BKG	13.00		10.30		14.10		17.60		8.50		11.40		10.4		8.6		12.8		14.9		13.6		15.3			
Barium	mg/kg	3,506	NG	60.70		68.70		57.00		56.50		59.10		59.30		44.2		60.3		66.1		51.4		54.7		40.1			
Beryllium	mg/kg	160	RSL	0.61		0.77		0.65		0.51		0.80		0.88		0.47		0.59		0.49		0.66		0.65		0.52			
Cadmium	mg/kg	109	NG	0.10	J	0.22		0.10	J	0.12	J	0.10	J	0.03	J	0.16	J	0.18	J	0.22		0.13	J	0.11	J	0.088	J		
Calcium	mg/kg	NA	NA	2440.00		15100.00		4340.00		1580.00		6760.00		2240.00		7100		6330		4480		12000		18000		13100			
Chromium (as Cr-3)	mg/kg	196,942	NG	17.20		34.20		37.30		24.40		26.70		17.40		24.8		24.6		20.8		22.3		23.1		23.9			
Cobalt	mg/kg	70.3	NG	9.70		10.60		10.20		7.00		8.20		9.10		6.4		9.5		7.9		10.5		10.4		9.1			
Copper	mg/kg	27,138	RFA	16.20		17.50		20.00		17.10		17.40		16.90		17.7		18.5		16.3		18.8		18.5		19.6			
Iron	mg/kg	190,104	RSL	23300.00		20100.00		26100.00		22400.00		20600.00		25200.00		17400		17500		23200		25500		24300		22900			
Lead	mg/kg	4,000	RSL	14.20		17.60		12.90		17.40		10.20		11.80		15		16.1		13.9		14.7		11.7		11.2			
Magnesium	mg/kg	NA	NA	2700.00		3580.00		3260.00		2080.00		2400.00		2230.00		2500		2230		2490		4540		6270		5210			
Manganese (1' - 5')	mg/kg	1,450	BKG1	442.00		711.00				381.00		580.00				421		325				384		458					
Manganese (5' - 7')	mg/kg	3,030	BKG2				408.00						395.00						278						392				
Nickel	mg/kg	13,463	RFA	24.00		29.50		34.90		24.00		28.90		28.80		22.7		21.4		23.9	E	28		28		26.9			
Potassium	mg/kg	NA	NA	1200.00		1140.00		1580.00		1100.00		1260.00		1320.00		878		1000		1350		1640		1670		1460			
Selenium	mg/kg	390	RSL	0.77		1.00		0.87		0.85		0.82		0.86		0.84		0.85		0.86		0.84		0.81		0.69			
Silver	mg/kg	3,240	RFA	0.03	J	0.03	J	0.02	J	0.02	J	0.02	J	0.04	J	0.024	J	0.032	J	0.025	J	0.023	J	0.023	J	0.024	J		
Sodium	mg/kg	NA	NA	63.50	J	122.00	J	75.40	J	54.50	J	70.50	J	55.40	J	78.8	J	70.5	J	66.2	J	82.5	J	98.9	J	75.2	J		
Thallium	mg/kg	47.6	RFA	0.15	J	0.13	J	0.15	J	0.15	J	0.14	J	0.19	J	0.14	J	0.16	J	0.15	J	0.15	J	0.17	J	0.14	J		
Vanadium	mg/kg	1,558	RFA	15.40		11.90		16.50		15.50		12.60		12.70		12.1		14.6		16		15.9		15.9		13.8			
Zinc	mg/kg	196,589	RFA	58.40		55.70		65.00		94.30		46.20		39.00		57.8		54.4		59.1		59.2		57.2		54.9			
Chromium, hexavalent	mg/kg	16.4	NG	0.28	J	0.81	U	0.57	J	0.68	J	0.55	J	0.39	J	0.59	J	0.5	J	0.82	U	0.81	U	0.38	J	0.81	U		
Mercury	mg/kg	165	RFA	0.02	J	0.03	U	0.03	U	0.02	J	0.03	U	0.03	J	0.019	J	0.025	J	0.034	U	0.034	U	0.034	U	0.033	U		

Table 8-8-B Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E				Building		DB-4						DB-10						DB-3-2						DB-3-2						DB-3-2						DA-6A					
				Sample ID		LL2SB-502M-0101-SO		LL2SB-502M-0102-SO		LL2SB-502M-0103-SO		LL2SB-503M-0101-SO		LL2SB-503M-0102-SO		LL2SB-505M-0101-SO		LL2SB-501M-0101-SO		LL2SB-504M-0101-SO		LL2SB-505M-0102-SO		LL2SB-501M-0102-SO		LL2SB-504M-0102-SO		LL2SB-505M-0103-SO		LL2SB-501M-0103-SO		LL2SB-504M-0103-SO		LL2SB-506M-0101-SO		LL2SB-506M-0102-SO		LL2SB-506M-0103-SO			
						Type Sample		Primary		Primary		Primary		Primary		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup		Primary		Primary		Primary			
						Sample Date		8/25/2010		8/25/2010		8/25/2010		8/28/2010		8/28/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/24/2010		8/24/2010		8/24/2010			
						Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		3 - 5		1 - 3		1 - 3		1 - 3		3 - 5		3 - 5		3 - 5		5 - 7		5 - 7		5 - 7		1 - 3		3 - 5		5 - 7	
Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q			
Explosives & Propellants	Analyte	Units	15,280	RFA	0.052	J PG	0.11	J	0.26		0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.49		1.1		0.09	J PG			
	1,3,5-Trinitrobenzene	mg/kg	59.4	RFA	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	1,3-Dinitrobenzene	mg/kg	211	RFA	2.1		0.4		0.5		0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	18.00		130	EQ	0.15	J			
	2,4,6-Trinitrotoluene	mg/kg	7.53	RFA	0.096	U	0.023	J PG	0.049	J	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	J	0.2	J PG	0.10	U			
	2,4-Dinitrotoluene	mg/kg	7.69	RFA	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	2,6-Dinitrotoluene	mg/kg	128	RFA	0.25		0.097	U	0.23		0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.51		0.73		0.34				
	2-Amino-4,6-dinitrotoluene	mg/kg	60.3	RFA	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	2-Nitrotoluene	mg/kg	6.1	RSL	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	3-Nitrotoluene	mg/kg	128	RFA	0.096	U	0.097	U	0.2	J	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.30		0.78	PG	0.13	J			
	4-Amino-2,6-dinitrotoluene	mg/kg	816	RFA	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	4-Nitrotoluene	mg/kg	1,452	RFA	0.096	U	0.097	U	0.092	J PG	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	mg/kg	240	RSL	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.5	U	0.097	U	0.095	U	0.5	U	0.096	U	0.1	U	0.5	U	0.10	U	0.096	U	0.10	U			
	METHYL-2,4,6-TRINITROPHENYLNITRAMINE	mg/kg	48	RFA	0.096	U	0.097	U	0.092	U	0.1	U	0.1	U	0.1	U	0.099	U	0.44	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.096	U	0.10	U			
	Nitrobenzene	mg/kg	816	RFA	0.24	U	0.24	U	0.23	U	0.26	U	0.25	U	0.25	U	0.25	U	1.5	U	0.24	U	0.24	U	1.5	U	0.24	U	0.25	U	1.5	U	0.25	U	0.24	U	0.25	U			
	Nitroglycerin	mg/kg	19,090	NG	0.096	U	0.097	U	0.047	J	0.1	U	0.1	U	0.1	U	0.099	U	1.5	U	0.097	U	0.095	U	0.44	U	0.096	U	0.1	U	0.44	U	0.10	U	0.25	PG	0.07	J PG			
	OCTAHYDRO-TETRANITRO-1,3,5,7-TETRAZOCINE	mg/kg	NA	NA	0.24	U	0.24	U	0.23	U	0.26	U	0.25	U	0.25	U	0.25	U	0.44	U	0.24	U	0.24	U	1.5	U	0.24	U	0.25	U	1.5	U	0.25	U	0.24	U	0.25	U			
	PETN	mg/kg	6,100	RSL	0.038	U	0.038	U	0.037	U	0.04	U	0.04	U	0.039	U	0.038	U	0.16	U	0.039	U	0.04	U	0.16	U	0.04	U	0.039	U	0.16	U	0.04	U	0.039	U	0.04	U			
	Nitroguanadine	mg/kg	NA	NA	1.4	J	2.2	J	3.5	J	1.8	U	1.8	U	1.3	J	1.7	J	NA		2.2	J	2.7	J	NA		2	J	2.3	J	NA		2.20	J	16.8		1.40	J			
Nitrocellulose	mg/kg																																								

All results were below the RL. No RSDs were calculated.

Table 8-8-B Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E				Building		DB-3-1								DA-6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				Sample ID		LL2SB-507M-0101-SO				LL2SB-507M-0102-SO				LL2SB-507M-0103-SO				LL2SB-508M-0101-SO				LL2SB-508M-0102-SO				LL2SB-508M-0103-SO				LL2SB-508M-0001-SO				LL2SB-508M-0002-SO				LL2SB-508M-0003-SO				LL2SB-508M-0004-SO				LL2SB-508M-0005-SO				LL2SB-509M-0101-SO				LL2SB-509M-0102-SO				LL2SB-509M-0103-SO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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						Sample Depth				1 - 3				3 - 5				5 - 7				3-Jan				3 - 5				5 - 7				1 - 7				1 - 7				1 - 7				1 - 7				1 - 7				1 - 3				3 - 5				5 - 7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Analyte	Units	15,280	RFA	0.03	J PG	0.10	U	0.10	U	0.023		0.092	U	0.028	J PG	0.1	U	0.033	J PG	0.1	U	0.03	J PG	0.079	J	0.13	J	1		0.71																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

All results were below the RL. No RSDs were calculated.

Table 8-8-C Ravenna Load Line 2 Subsurface Soil MI Sampling Results

Semivolatiles

See Notes at end of Table 8-10-
E

See Notes at end of Table 8-10-E			Building	DB-3-2									DB-3-2									DB-3-2												
				Sample ID	LL2SB-505M-0101-SO			LL2SB-501M-0101-SO			LL2SB-504M-0101-SO			LL2SB-505M-0102-SO			LL2SB-501M-0102-SO			LL2SB-504M-0102-SO			LL2SB-505M-0103-SO			LL2SB-501M-0103-SO			LL2SB-504M-0103-SO					
					Type Sample			Primary			Blind Dup			Field Dup			Primary			Blind Dup			Field Dup			Primary			Blind Dup			Field Dup		
					Sample Date			8/27/2010			8/27/2010			8/27/2010			8/27/2010			8/27/2010			8/27/2010			8/27/2010			8/27/2010			8/27/2010		
					Sample Depth			1 - 3			1 - 3			1 - 3			3 - 5			3 - 5			3 - 5			5 - 7			5 - 7			5 - 7		
Analyte		Units	Value	Min LU or RSL																														
Semivolatiles	1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	1,3-Dichlorobenzene	mg/kg	530	R9	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	1,4-Dichlorobenzene	mg/kg	24	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U												
	2,4,6-Trichlorophenol	mg/kg	440	RSL	0.082	U	0.082	U	0.51	U	0.082	U	0.082	U	0.51	U	0.082	U	0.082	U	0.52	U												
	2,4-Dichlorophenol	mg/kg	180	RSL	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U												
	2,4-Dimethylphenol	mg/kg	1,200	RSL	0.082	U	0.082	U	0.41	U	0.082	U	0.082	U	0.41	U	0.082	U	0.082	U	0.42	U												
	2,4-Dinitrophenol	mg/kg	120	RSL	0.082	U	0.082	U	2.1	U	0.082	U	0.082	U	2	U	0.082	U	0.082	U	2.1	U												
	2,4-Dinitrotoluene	mg/kg	16	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	2,6-Dinitrotoluene	mg/kg	61	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	2-Chloronaphthalene	mg/kg	6,300	RSL	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U												
	2-Chlorophenol	mg/kg	390	RSL	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U												
	2-Methylnaphthalene	mg/kg	2,378	RFA	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U												
	2-Methylphenol	mg/kg	3,100	R9	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U												
	2-Nitroaniline	mg/kg	6,100	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	2-Nitrophenol	mg/kg	NA	NA	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U												
	3 & 4-Methylphenol	mg/kg	NA	NA	NA		NA		2.1	U	NA		NA		2	U	NA		NA		2.1	U												
	3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.082	U	0.082	U	0.51	U	0.082	U	0.082	U	0.51	U	0.082	U	0.082	U	0.52	U												
	3-Methylphenol	mg/kg	NA	NA	0.2	U	0.21	U	NA		0.21	U	0.2	U	NA		0.21	U	0.21	U	NA													
	3-Nitroaniline	mg/kg	NA	NA	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U												
	4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U												
	4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	4-Chloro-3-methylphenol	mg/kg	NA	NA	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U												
	4-Chloroaniline	mg/kg	NA	NA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	4-Methylphenol	mg/kg	NA	NA	0.2	U	0.21	U	NA		0.21	U	0.2	U	NA		0.21	U	0.21	U	NA													
	4-Nitroaniline	mg/kg	240	RSL	0.028	U	0.028	U	1	U	0.028	U	0.028	U	1	U	0.028	U	0.028	U	1	U												
	4-Nitrophenol	mg/kg	4,756	RFA	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U												
	Acenaphthene	mg/kg	3,400	RSL	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.009		0.42	U												
	Acenaphthylene	mg/kg	NA	NA	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U												
	Anthracene	mg/kg	22,000	RSL	0.014		0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.025		0.42	U												
	Benzo(a)anthracene	mg/kg	2.21	RFA	0.059		0.003	U	0.12		0.003	U	0.029		0.41	U	0.003	U	0.13		0.42	U												
	Benzo(a)pyrene	mg/kg	0.221	RFA	0.055		0.003	U	0.12		0.003	U	0.03		0.41	U	0.003	U	0.13		0.42	U												
	Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.091		0.003	U	0.16		0.003	U	0.045		0.41	U	0.003	U	0.2		0.42	U												
	Benzo(g,h,i)perylene	mg/kg	62	R9	0.039		0.003	U	0.074	J	0.003	U	0.024		0.41	U	0.003	U	0.086		0.42	U												
	Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.045		0.003	U	0.068	J	0.003	U	0.019		0.41	U	0.003	U	0.089		0.42	U												
	Benzoic acid	mg/kg	240,000	RSL	0.34	U	0.34	U	1	U	0.34	U	0.34	U	1	U	0.34	U	0.34	U	1	U												
	Benzyl alcohol	mg/kg	6,100	RSL	0.028	U	0.028	U	1	U	0.028	U	0.028	U	1	U	0.028	U	0.028	U	1	U												
	Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	Bis(2-chloroethyl) ether	mg/kg	2	RSL	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U												
	Bis(2-chloroisopropyl) ether	mg/kg	29	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.028	U	0.028	U	0.83		0.028	U	0.028	U	0.35		0.028	U	0.028	U	1	U												
	Butylbenzyl phthalate	mg/kg	2,600	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	Carbazole	mg/kg	694	RFA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	Chrysene	mg/kg	221	RFA	0.063		0.003	U	0.11		0.003	U	0.031		0.41	U	0.003	U	0.13		0.42	U												
	Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U												
	Dibenzofuran	mg/kg	1,189	RFA	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.01	J	0.42	U												
	Diethyl phthalate	mg/kg	49,000	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												
	Dimethyl phthalate	mg/kg	610,000	R9	0.028	U	0.028	U	0.3		0.028	U	0.028	U	0.3		0.028	U	0.028	U	0.39													
	Di-n-butyl phthalate	mg/kg	6,100	RSL	0.021	J	0.028	U	0.41	U	0.028	U	0.018	J	0.12	J	0.019	J	0.028	U	0.42	U												
	Di-n-octyl phthalate	mg/kg	2,400	R9	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U												

Table 8-8-C Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-E				Building		DB-3-2						DB-3-2						DB-3-2							
				Sample ID		LL2SB-505M-0101-SO		LL2SB-501M-0101-SO		LL2SB-504M-0101-SO		LL2SB-505M-0102-SO		LL2SB-501M-0102-SO		LL2SB-504M-0102-SO		LL2SB-505M-0103-SO		LL2SB-501M-0103-SO		LL2SB-504M-0103-SO			
						Type Sample		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup	
						Sample Date		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010	
						Sample Depth		1 - 3		1 - 3		1 - 3		3 - 5		3 - 5		3 - 5		5 - 7		5 - 7		5 - 7	
		Value		Min LU or RSL																					
Analyte	Units			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q				
Fluoranthene	mg/kg	2,765	RFA	0.14		0.003	U	0.27		0.003	U	0.059		0.41	U	0.003	U	0.28		0.42	U				
Fluorene	mg/kg	7,366	RFA	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.016		0.42	U				
Hexachlorobenzene	mg/kg	3	RSL	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U				
Hexachlorobutadiene	mg/kg	62	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U				
Hexachlorocyclopentadiene	mg/kg	370	R9	0.34	U	0.34	U	0.41	U	0.34	U	0.34	U	0.41	U	0.34	U	0.34	U	0.42	U				
Hexachloroethane	mg/kg	350	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U				
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.034		0.003	U	0.071	J	0.003	U	0.021		0.41	U	0.003	U	0.082		0.42	U				
Isophorone	mg/kg	5,100	RSL	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U				
Naphthalene	mg/kg	3,678	RFA	0.009		0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.008		0.42	U				
Nitrobenzene	mg/kg	48	RSL	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.41	U	0.003	U	0.003	U	0.42	U				
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.41	U	0.028	U	0.028	U	0.42	U				
N-Nitrosodiphenylamine	mg/kg	990	R9	0.028	U	0.028	U	0.82	U	0.028	U	0.028	U	0.82	U	0.028	U	0.028	U	0.83	U				
Pentachlorophenol	mg/kg	21.2	RFA	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U	0.082	U	0.082	U	1	U				
Phenanthrene	mg/kg	2,300	R9	0.066		0.003	U	0.11		0.003	U	0.02		0.41	U	0.003	U	0.13		0.42	U				
Phenol	mg/kg	18,000	RSL	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.51	U	0.028	U	0.028	U	0.52	U				
Pyrene	mg/kg	2,074	RFA	0.11		0.003	U	0.19		0.003	U	0.05		0.41	U	0.003	U	0.23		0.42	U				

Table 8-8-D Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Pesticides and PCBs

See Notes at end of Table 8-10-E				Building	DB-3-2						DB-3-2						DB-3-2						
				Sample ID	LL2SB-505M-0101-SO	LL2SB-501M-0101-SO		LL2SB-504M-0101-SO		LL2SB-505M-0102-SO		LL2SB-501M-0102-SO		LL2SB-504M-0102-SO		LL2SB-505M-0103-SO		LL2SB-501M-0103-SO		LL2SB-504M-0103-SO			
					Type Sample	Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup	
					Sample Date	8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010	
					Sample Depth	1 - 3		1 - 3		1 - 3		3 - 5		3 - 5		3 - 5		5 - 7		5 - 7		5 - 7	
		Value	Min LU or RSL																				
Analyte	Units			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		
4,4'-DDD	mg/kg	20	RSL	0.00069	U	0.00069	U	0.0012	U	0.00069	U	0.00069	U	0.0012	U	0.00069	U	0.00069	U	0.0013	U		
4,4'-DDE	mg/kg	40.8	RFA	0.0035		0.00069	U	0.0011	U	0.00069	U	0.0011	J	0.0011	U	0.00069	U	0.00084	J	0.0011	U		
4,4'-DDT	mg/kg	17	RSL	0.00069	U	0.00069	U	0.0015	U	0.00069	U	0.00069	U	0.0015	U	0.00069	U	0.00069	U	0.0016	U		
Aldrin	mg/kg	0.8	RFA	0.0014	U	0.0014	U	0.0017	U	0.0014	U	0.0014	U	0.0017	U	0.0014	U	0.0014	U	0.0018	U		
alpha-BHC	mg/kg	0.9	R9	0.0014	U	0.0014	U	0.002	U	0.0014	U	0.0014	U	0.0019	U	0.0014	U	0.0014	U	0.002	U		
alpha-Chlordane	mg/kg	0.0	NA	0.0014	U	0.0014	U	0.0011	U	0.0014	U	0.0014	U	0.0011	U	0.0014	U	0.0014	U	0.0011	U		
beta-BHC	mg/kg	7.7	NA	0.0014	J	0.0014	U	0.0021	U	0.0014	U	0.0014	U	0.002	U	0.0014	U	0.0032	J	0.0021	U		
Chlorodane (Technical)	mg/kg	NA	NA	NA		NA		0.031	U	NA		NA		0.031	U	NA		NA		0.031	U		
delta-BHC	mg/kg	NA	NA	0.0014	U	0.0014	U	0.0011	U	0.0014	U	0.0014	U	0.0011	U	0.0014	U	0.0014	U	0.0011	U		
Dieldrin	mg/kg	0.9	RFA	0.00069	U	0.00069	U	0.0012	U	0.00069	U	0.00069	U	0.0043	P	0.00069	U	0.00069	U	0.0013	U		
Endosulfan I	mg/kg	370	R9	0.00069	U	0.00069	U	0.0023	U	0.00069	U	0.00069	U	0.0023	U	0.00069	U	0.00069	U	0.0023	U		
Endosulfan II	mg/kg	370	R9	0.0014	U	0.0014	U	0.00051	JP	0.0014	U	0.0014	U	0.0011	JP	0.0014	U	0.0014	U	0.0013	U		
Endosulfan sulfate	mg/kg	370	R9	0.0039	PG	0.0014	U	0.0032	U	0.0014	U	0.0011	J	0.0032	U	0.0014	U	0.0014	U	0.0032	U		
Endrin	mg/kg	17.7	RFA	0.00069	U	0.00069	U	0.0014	U	0.00069	U	0.00069	U	0.0014	U	0.00069	U	0.00069	U	0.0015	U		
Endrin aldehyde	mg/kg	0.0	NA	0.0014	U	0.0014	U	0.0037	U	0.0014	U	0.0014	U	0.0037	U	0.0014	U	0.0014	J	0.0038	U		
Endrin ketone	mg/kg	18	R9	0.00069	U	0.00069	U	0.0029	U	0.00069	U	0.00094	J	0.0029	U	0.00069	U	0.00069	U	0.0029	U		
Gamma-BHC	mg/kg	NA	NA	0.0014	U	0.0014	U	NA		0.0014	U	0.0014	U	NA		0.0014	U	0.0014	U	NA			
gamma-Chlordane	mg/kg	16	R9	0.00069	U	0.00069	U	0.0011	U	0.00069	U	0.00069	U	0.0011	U	0.00069	U	0.00069	U	0.0027	P		
Heptachlor	mg/kg	3.1	RFA	0.0014	U	0.0014	U	0.0012	U	0.0014	U	0.0014	U	0.0012	P	0.0014	U	0.0014	U	0.0013	U		
Heptachlor epoxide	mg/kg	1.5	RFA	0.0014	U	0.0014	U	0.0017	U	0.0014	U	0.0014	U	0.0017	U	0.0014	U	0.0014	U	0.0018	U		
Lindane	mg/kg	NA	NA	NA		NA		0.0016	U	NA		NA		0.0016	U	NA		NA		0.0017	U		
Methoxychlor	mg/kg	310	RSL	0.0034	U	0.0034	U	0.0024	U	0.0034	U	0.0034	U	0.0024	U	0.0034	U	0.0034	U	0.0024	U		
Toxaphene	mg/kg	4.4	R9	0.02	U	0.021	U	0.031	U	0.021	U	0.02	U	0.031	U	0.021	U	0.021	U	0.031	U		
Aroclor 1016	mg/kg	2.0	RFA	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		
Aroclor 1221	mg/kg	1.4	RSL	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		
Aroclor 1232	mg/kg	1.4	RSL	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		
Aroclor 1242	mg/kg	2.2	RSL	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		
Aroclor 1248	mg/kg	2.0	RFA	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		
Aroclor 1254	mg/kg	2.0	RFA	0.25		0.025	U	0.11		0.025	U	0.061		0.17		0.025	U	0.043	J	0.032	J		
Aroclor 1260	mg/kg	2.0	RFA	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U	0.025	U	0.025	U	0.052	U		

All results were below the RL. No RSDs were calculated.

Table 8-8-E Ravenna Load Line 2 Subsurface Soil MI Sampling Results
Volatile Organic Compounds

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building	Sample ID	DB-3-2						DB-3-2						DB-3-2							
					LL2SB-505M-0101-SO		LL2SB-501M-0101-SO		LL2SB-504M-0101-SO		LL2SB-505M-0102-SO		LL2SB-501M-0102-SO		LL2SB-504M-0102-SO		LL2SB-505M-0103-SO		LL2SB-501M-0103-SO		LL2SB-504M-0103-SO			
					Type Sample		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup		Primary		Blind Dup		Field Dup	
					Sample Date		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010		8/27/2010	
					Sample Depth		1 - 3		1 - 3		1 - 3		3 - 5		3 - 5		3 - 5		5 - 7		5 - 7		5 - 7	
Value		Min LU or RSL																						
Analyte	Units		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q						
Volatile Organic Compounds	1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,1,2-Trichloroethane	mg/kg	11	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,1-Dichloroethane	mg/kg	33	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,1-Dichloroethene	mg/kg	120	R9	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,2-Dibromoethane	mg/kg	0.34	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,2-Dichloroethane	mg/kg	4.3	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	1,2-Dichloroethene (total)	mg/kg	700	RSL	0.42	U	0.41	U	NA		0.48	U	0.56	U	NA		0.58	U	0.5	U	NA			
	1,2-Dichloropropane	mg/kg	8.8	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	2-Butanone	mg/kg	22000	R9	0.083	U	0.082	U	0.5	U	0.097	U	0.11	U	0.46	U	0.12	U	0.1	U	0.58	U		
	2-Hexanone	mg/kg	210	RSL	0.042	U	0.041	U	0.5	U	0.048	U	0.056	U	0.46	U	0.058	U	0.05	U	0.58	U		
	4-Methyl-2-pentanone	mg/kg	5300	R9	0.083	U	0.082	U	0.5	U	0.097	U	0.11	U	0.46	U	0.12	U	0.1	U	0.58	U		
	Acetone	mg/kg	61000	RSL	0.17	U	0.16	U	1	U	0.19	U	0.22	U	0.92	U	0.23	U	0.2	U	1.2	U		
	Benzene	mg/kg	11	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Bromochloromethane	mg/kg	8.2	R9	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Bromodichloromethane	mg/kg	2.7	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Bromoform	mg/kg	610	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Bromomethane	mg/kg	7.3	RSL	0.042	U	0.041	U	0.1	UA	0.048	U	0.056	U	0.092	UA	0.058	U	0.05	U	0.12	UA		
	Carbon disulfide	mg/kg	820	RSL	0.021	U	0.02	U	0.1	U	0.024	U	0.028	U	0.092	U	0.029	U	0.025	U	0.12	U		
	Carbon tetrachloride	mg/kg	6.1	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	Chlorobenzene	mg/kg	290	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	Chloroethane	mg/kg	30	R9	0.083	U	0.082	U	0.1	U	0.097	U	0.11	U	0.092	U	0.12	U	0.1	U	0.12	U		
	Chloroform	mg/kg	2.9	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Chloromethane	mg/kg	120	RSL	0.021	U	0.02	U	0.1	U	0.024	U	0.028	U	0.092	U	0.029	U	0.025	U	0.12	U		
	cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	Dibromochloromethane	mg/kg	6.8	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Ethylbenzene	mg/kg	54	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	Methylene chloride	mg/kg	110	RSL	0.1	J B	0.11	J B	0.1	U	0.14	J B	0.15	J B	0.092	U	0.16	J B	0.13	J B	0.12	U		
	Styrene	mg/kg	6300	RSL	0.0083	U	0.0082	U	0.05	U	0.0097	U	0.011	U	0.046	U	0.012	U	0.01	U	0.058	U		
	Tetrachloroethene	mg/kg	4.8	R9	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U		
	Toluene	mg/kg	5000	RSL	0.021	U	0.02	U	0.035		0.024	U	0.028	U	0.01	J	0.029	U	0.025	U	0.058	U		
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U			
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.021	U	0.02	U	0.1	U	0.024	U	0.028	U	0.092	U	0.029	U	0.025	U	0.12	U			
Trichloroethene	mg/kg	0.53	R9	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U			
Vinyl chloride	mg/kg	0.6	RSL	0.021	U	0.02	U	0.05	U	0.024	U	0.028	U	0.046	U	0.029	U	0.025	U	0.058	U			
m & p-Xylene	mg/kg	NA	NA	NA		NA		0.1	U	NA		NA		0.092	U	NA		NA		0.12	U			
o-Xylene	mg/kg	NA	NA	NA		NA		0.05	U	NA		NA		0.046	U	NA		NA		0.058	U			
Xylene (Total)	mg/kg	630	RSL	0.025	U	0.025	U	0.15	U	0.029	U	0.034	U	0.138	U	0.035	U	0.03	U	0.178	U			

All results were below the RL. No RSDs were calculated.

Table 8-9-A Ravenna Load Line 3 Subsurface Soil MI Sampling Results Metals

See Notes at end of Table 8-10-E			Building	Sample ID	EB-3-2									EB-4A									EA-6									EA-6									EB-3-1									EB-4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
					LL3SB-401M-0101-SO			LL3SB-401M-0102-SO			LL3SB-401M-0103-SO			LL3SB-402M-0101-SO			LL3SB-402M-0102-SO			LL3SB-402M-0103-SO			LL3SB-403M-0101-SO			LL3SB-403M-0102-SO			LL3SB-403M-0103-SO			LL3SB-403M-0001-SO			LL3SB-403M-0002-SO			LL3SB-403M-0003-SO			LL3SB-403M-0004-SO			LL3SB-403M-0005-SO			LL3SB-406M-0101-SO			LL3SB-406M-0102-SO			LL3SB-406M-0103-SO			LL3SB-407M-0101-SO			LL3SB-407M-0102-SO			LL3SB-407M-0103-SO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
					Type Sample			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary			Primary																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
					Sample Date			8/18/2010			8/18/2010			8/18/2010			8/20/2010			8/20/2010			8/20/2010			8/23/2010			8/23/2010			8/23/2010			8/23/2010			8/23/2010			8/23/2010			8/23/2010			8/23/2010			8/20/2010			8/20/2010			8/20/2010			8/19/2010			8/19/2010			8/19/2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
					Sample Depth			1 - 3			3 - 5			5 - 7			1 - 3			3 - 5			5 - 7			1 - 3			3 - 5			5 - 7			1 - 7			1 - 7			1 - 7			1 - 7			1 - 7			1 - 3			3 - 5			5 - 7			1 - 3			3 - 5			5 - 7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Analyte	Units	Value	Min LU or RSL	Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q	

Table 8-9-A Ravenna Load Line 3 Subsurface Soil MI Sampling Results Metals

See Notes at end of
Table 8-10-E

Metals

Table 8-9-A Ravenna Load Line 3 Subsurface Soil MI Sampling Results Metals

[illegible]

Table 8-9-A Ravenna Load Line 3 Subsurface Soil MI Sampling Results Metals

See Notes at end of
Table 8-10-E

See Notes at end of Table 8-10-E				Building		EB-10						EB-10						EB-10						EB-10						EB-10																																																	
						Sample ID		LL3SB-409M-0010-SO		LL3SB-404M-0010-SO		LL3SB-408M-0010-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0011-SO		LL3SB-404M-0011-SO		LL3SB-408M-0011-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0012-SO		LL3SB-404M-0012-SO		LL3SB-408M-0012-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0013-SO		LL3SB-404M-0013-SO		LL3SB-408M-0013-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0014-SO		LL3SB-404M-0014-SO		LL3SB-408M-0014-SO		% RSD % of Three Replicate Samples																																	
								Primary V		Blind Dup.		Field Dup.				Primary V		Blind Dup.		Field Dup.				Primary V		Blind Dup.		Field Dup.				Primary V		Blind Dup.		Field Dup.																																											
								Sample Date		8/30/2010		8/30/2010				8/30/2010		Sample Date		8/30/2010				8/30/2010		8/30/2010		Sample Date				8/30/2010		8/30/2010		8/30/2010				Sample Date		8/30/2010		8/30/2010				8/30/2010																															
								Sample Depth		1 - 7		1 - 7				1 - 7		Sample Depth		1 - 4.5				1 - 4		1 - 3		Sample Depth				1 - 4		1 - 3		1 - 3				Sample Depth		1 - 7		1 - 7				1 - 7		Sample Depth		1 - 4		1 - 3		1 - 3																							
Value		Min LU or RSL																																																																													
Analyte	Units			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q																																										
Aluminum	mg/kg	34,960	NG	7450		6890		9930	B	20	7180		6200		9450	B	22	6220		6070		9310	B	25	5460	E	6280		10200	B	35	9130		10300		10800	B	9																																									
Antimony	mg/kg	136	RFA	0.26		0.12	J	0.78	B		0.13	J	0.12	J	1.5			0.13	J	0.13	J	0.96			0.43		0.14	J	1.3		0.12	J	0.13	J	0.65	B																																											
Arsenic	mg/kg	19.8	BKG	23.2		30.3		28.1		13	13.9		16.8		10.7		22	13.7		15.6		13.3		9	13.1		18.5		20.2		22	14.4		12.1		11.7		11																																									
Barium	mg/kg	3,506	NG	50.4	B	39.9	B	52.9	B	15	55	B	44.2		59.8	B	15	36	B	38.6	B	59	B	28	46.8	B	38.8	B	54.8	B	17	55.8	B	82.4		69.8	B	19																																									
Beryllium	mg/kg	160	RSL	0.62		0.72		0.7		8	0.54		0.49	B	0.41		14	0.47		0.36		0.46		14	0.45		0.57		0.78		28	0.63		0.72	B	0.6		10																																									
Cadmium	mg/kg	109	NG	0.13	J	0.13	J	0.029			0.22		0.18	J	0.14			0.12	J	0.12	J	0.11			0.18	J	0.17	J	0.021	U		0.1	J	0.11	J	0.053																																											
Calcium	mg/kg	NA	NA	10400		2200		2860	B	88	9640		9380		8230	B	8	2150		1930		4100	B	44	4420		4110		4670	B	6	11300		29200		12800		56																																									
Chromium (as Cr-3)	mg/kg	196,942	NG	38		38.9		206		103	33.9		27.9		334		133	30.4		41.5		236		113	36.8		34.9		284		121	35.7		36.9		197	M	103																																									
Cobalt	mg/kg	70.3	NG	11.3		12.1		13.1		7	7.6		8.9		8.1		8	8.3		7.8		8.9		7	7.4	E	10.4		13.4		29	8.9		7.6		9		9																																									
Copper	mg/kg	27,138	RFA	22.7		23.5		23.8		2	19.4		21.6	B	23.7		10	19.1		21.8		24.5		12	18.2		24.2		23.7		15	18.7		16.4	B	20.5	M	11																																									
Iron	mg/kg	190,104	RSL	21400		23700		23800	B	6	19500		20000		23700		11	18100		19600		23100	B	13	36400		20400		23900	B	31	20500		20200		23500		9																																									
Lead	mg/kg	4,000	RSL	18.2		13.9		11.7		23	15.4		15.9		15.2		2	13.7		14.2		12		9	16.6		16.5		11.6		19	16.8		13.7		12.2		17																																									
Magnesium	mg/kg	NA	NA	2690		2570		2660	B	2	2570		2660		2680	B	2	2190		2220		2560	B	9	2270		2640		3050	B	15	2550		3670		2940	B	19																																									
Manganese (1' - 5')	mg/kg	1,450	BKG1	608		577		600		3	582		573	B	537		4	395		472		610		22	1090		469		513		50	469		679	B	505		20																																									
Manganese (5' - 7')	mg/kg	3,030	BKG1																																																																												
Nickel	mg/kg	13,463	RFA	42.5		51.2		38.8		14	28.4		30.7		20.7		20	28.6		32.8		20.7		22	32.2	E	36.7		33.8		7	30.8		28.5		1610		164																																									
Potassium	mg/kg	NA	NA	1440		1230		1840		21	1260		1150	B	1840		26	1150		974		1610		26	1010		1180		1770		30	1600		1390	B	0.4		87																																									
Selenium	mg/kg	390	RSL	0.82		1.2		0.53		40	0.77		0.75		0.29		45	0.75		0.71		0.18	J		0.76		0.83		0.43		32	0.83		0.76		0.057	U	78																																									
Silver	mg/kg	3,240	RFA	0.039	J	0.034	J	0.057	U		0.13		0.11		0.057	U	38	0.036	J	0.027	J	0.057	U		0.053	J	0.034	J	0.057	U		0.032	J	0.034	J	127																																											
Sodium	mg/kg	NA	NA	59.6	J	55.8	J	88.9			70	J	50.6	J	118			45.8	J	46.7	J	112			889		321		1290		58	89.7	J	137		1	M																																										
Thallium	mg/kg	47.6	RFA	0.16	J	0.16	J	1			0.13	J	0.14	J	1.1			0.15	J	0.14	J	0.99			0.13	J	0.14	J	0.92			0.14	J	0.13	J	15.8																																											
Vanadium	mg/kg	1,558	RFA	13.8		13.2		15.8	B	10	12.8		11.8		15		12	11		11.2		15.5	B	20	10.4		12.1		15.5	B	21	16.8		14.9		87.1	M	104																																									
Zinc	mg/kg	196,589	RFA	73.1		69		65.9		5	69.1		72.2		72.4		3	65.6		67.9		72.6		5	93.3		84.6		56.1		25	56.4		48.9		6.5	U																																										
Chromium, hexavalent	mg/kg	16.4	NG	NA		NA		6.5	U		NA		NA		6.5	U		NA		NA		6.5	U						6.5	U						0.016																																											
Mercury	mg/kg	165	RFA	0.019	J	0.017	J	0.016			0.033	U	0.017	J	0.018			0.033	U	0.015	J	0.015				0.033	U	0.023	J	0.01			0.015	J	0.034	U																																											
						% RSD Average =					22											% RSD Average =					22											% RSD Average =					24											% RSD Average =					31											% RSD Average =					45				

Table 8-9-B Ravenna Load Line 3 Subsurface Soil MI Sampling Results Explosives

See Notes at end of Table 8-10-E				Building	EB-3-2						EB-4A						EA-6						EB-3-1						EB-4											
				Sample ID	LL3SB-401M-0101-SO	LL3SB-401M-0102-SO	LL3SB-401M-0103-SO	LL3SB-402M-0101-SO	LL3SB-402M-0102-SO	LL3SB-402M-0103-SO	LL3SB-403M-0101-SO	LL3SB-403M-0102-SO	LL3SB-403M-0103-SO	LL3SB-406M-0101-SO	LL3SB-406M-0102-SO	LL3SB-406M-0103-SO	LL3SB-407M-0101-SO	LL3SB-407M-0102-SO	LL3SB-407M-0103-SO	LL3SB-409M-0101-SO	LL3SB-404M-0101-SO	LL3SB-408M-0101-SO																		
					Type Sample						Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary							
					Sample Date						8/18/2010	8/18/2010	8/18/2010	8/20/2010	8/20/2010	8/20/2010	8/23/2010	8/23/2010	8/23/2010	8/20/2010	8/20/2010	8/20/2010	8/19/2010	8/19/2010	8/19/2010	8/30/2010	8/30/2010	8/30/2010												
					Sample Depth						1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	1 - 3	1 - 3									
Analyte		Units	Value	Min LU or RSL	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.097	U	0.096	U	0.1	U	0.23	J	0.15	J	0.027	J P	0.078	J	0.031	J P	0.086	J	0.1	U	0.099	U	0.096	U	0.098	U	0.023	J P	0.046	J P	0.038	J	0.1	U	0.44	U
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.097	U	0.096	U	0.1	U	1.8		0.13	J	1.2		0.5		0.38		1		0.1	U	0.099	U	0.096	U	0.15	J	0.093	J	0.2	J	0.21	J	0.1	U	1.3	
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.33		0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	1.1		1.1		0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	2-Nitrotoluene	mg/kg	60.3	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	3-Nitrotoluene	mg/kg	6.1	RSL	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.058	J P	0.1	U	0.11	J	0.78		1.3		0.1	U	0.099	U	0.096	U	0.057	J	0.15	J	0.16	J	0.1	U	0.1	U	0.44	U
	4-Nitrotoluene	mg/kg	816	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	mg/kg	1,452	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.082	J	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	METHYL-2,4,6-TRINITROPHENYL	mg/kg	240	RSL	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.5	U
	Nitrobenzene	mg/kg	48	RFA	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
	Nitroglycerin	mg/kg	816	RFA	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.25	U	0.24	U	0.25	U	0.25	U	0.25	U	0.25	U	0.24	U	0.24	U	0.25	U	0.24	U	0.25	U	0.25	U	1.5	U
	OCTAHYDRO-TETRANITRO-1,3,5	mg/kg	19,090	NG	0.097	U	0.096	U	0.1	U	0.097	U	0.095	U	0.1	U	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U	0.096	U	0.098	U	0.1	U	0.096	U	0.1	U	0.1	U	0.44	U
PETN	mg/kg	NA	NA	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.25	U	0.24	U	0.25	U	0.25	U	0.25	U	0.25	U	0.24	U	0.24	U	0.25	U	0.24	U	0.25	U	0.25	U	1.5	U	
Nitroguanadine	mg/kg	6,100	RSL	0.039	U	0.039	U	0.038	U	0.04	U	0.039	U	0.041	U	0.041	U	0.04	U	0.04	U	0.04	U	0.039	U	0.04	U	0.04	U	0.041	U	0.04	U	0.038	U	0.04	U	0.16	U	
Nitrocellulose	mg/kg	NA	NA	0.97	J	1.5	J	0.86	J	7.2		9		4.1	J	1.2	J	1.2	J	1.3	J	3.9	J	1.8	U	2	J	1.9	U	1.5	J	1.4	J	6.2		1.6	J	NA		

All results were below the RL. No RSDs were calculated.

Table 8-9-B Ravenna Load Line 3 Subsurface Soil MI Sampling Results Explosives

See Notes at end of Table 8-10-E

				Building	EB-10													
				Sample ID	LL3SB-409M-0102-SO		LL3SB-404M-0102-SO		LL3SB-408M-0102-SO		LL3SB-409M-0103-SO		LL3SB-404M-0103-SO		LL3SB-408M-0103-SO			
				Type Sample	Primary		Primary		Primary		Primary		Primary		Primary			
				Sample Date	8/30/2010		8/30/2010		8/30/2010		8/30/2010		8/30/2010		8/30/2010			
				Sample Depth	3 - 5		3 - 5		3 - 5		5 - 7		5 - 7		5 - 7			
		Value	Min LU or RSL															
Analyte	Units			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.025	J PG	0.021	J PG	0.44	U	0.044	J	0.1	U	0.44	U		
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	2-Nitrotoluene	mg/kg	60.3	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	3-Nitrotoluene	mg/kg	6.1	RSL	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.095	U	0.1	U	0.44	U	0.06	J	0.1	U	0.44	U		
	4-Nitrotoluene	mg/kg	816	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	mg/kg	1,452	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	METHYL-2,4,6-TRINITROPHENYL	mg/kg	240	RSL	0.095	U	0.1	U	0.5	U	0.098	U	0.1	U	0.5	U		
	Nitrobenzene	mg/kg	48	RFA	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	Nitroglycerin	mg/kg	816	RFA	0.24	U	0.25	U	1.5	U	0.24	U	0.25	U	1.5	U		
	OCTAHYDRO-TETRANITRO-1,3,5	mg/kg	19,090	NG	0.095	U	0.1	U	0.44	U	0.098	U	0.1	U	0.44	U		
	PETN	mg/kg	NA	NA	0.24	U	0.25	U	1.5	U	0.24	U	0.25	U	1.5	U		
	Nitroguanadine	mg/kg	6,100	RSL	0.04	U	0.038	U	0.16	U	0.039	U	0.041	U	0.16	U		
	Nitrocellulose	mg/kg	NA	NA	1.6	J	1.9	J	NA		1.5	J	0.99	J	NA			

All results were below the RL. No RSDs were calculated.

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building	Sample ID	EB-3-2								EB-10								EB-10								EB-10							
					LL3SB-401M-0101-SO		LL3SB-401M-0102-SO		LL3SB-401M-0103-SO		LL3SB-409M-0101-SO		LL3SB-404M-0101-SO		LL3SB-408M-0101-SO		% RSD % of Three Replicate Samples	LL3SB-409M-0102-SO		LL3SB-404M-0102-SO		LL3SB-408M-0102-SO		% RSD % of Three Replicate Samples	LL3SB-409M-0103-SO		LL3SB-404M-0103-SO		LL3SB-408M-0103-SO		% RSD % of Three Replicate Samples					
					Primary		Primary		Primary		Primary		Blind Dup		Field Dup			Primary		Blind Dup		Field Dup			Primary		Blind Dup		Field Dup							
					Sample Date		8/18/2010		8/18/2010		8/18/2010		8/30/2010		8/30/2010			8/30/2010		8/30/2010		8/30/2010			8/30/2010		8/30/2010		8/30/2010			8/30/2010				
					Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		1 - 3			1 - 3		3 - 5		3 - 5			3 - 5		5 - 7		5 - 7			5 - 7				
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q							
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
1,3-Dichlorobenzene	mg/kg	530	R9	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
1,4-Dichlorobenzene	mg/kg	24	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	0.51	U		0.081	U	0.081	U	0.5	U		0.081	U	0.081	U	0.51	U							
2,4-Dichlorophenol	mg/kg	180	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	0.41	U		0.081	U	0.081	U	0.4	U		0.081	U	0.081	U	0.41	U							
2,4-Dinitrophenol	mg/kg	120	RSL	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	2	U		0.081	U	0.081	U	2	U		0.081	U	0.081	U	2	U							
2,4-Dinitrotoluene	mg/kg	16	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.035	J		0.027	U	0.027	U	0.41	U							
2,6-Dinitrotoluene	mg/kg	61	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.035	J		0.027	U	0.027	U	0.41	U							
2-Chloronaphthalene	mg/kg	6,300	RSL	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.003	U	0.003	U	0.41	U							
2-Chlorophenol	mg/kg	390	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
2-Methylnaphthalene	mg/kg	2,378	RFA	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.007		0.003	U	0.41	U							
2-Methylphenol	mg/kg	3,100	R9	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
2-Nitroaniline	mg/kg	6,100	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
2-Nitrophenol	mg/kg	NA	NA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
3 & 4-Methylphenol	mg/kg	NA	NA	NA		NA		NA		NA		NA		2	U		NA		NA		2	U		NA		NA		2	U							
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	0.51	U		0.081	U	0.081	U	0.5	U		0.081	U	0.081	U	0.51	U							
3-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NA			0.2	U	0.2	U	NA			0.2	U	0.2	U	NA								
3-Nitroaniline	mg/kg	NA	NA	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
4-Chloroaniline	mg/kg	NA	NA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
4-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NA			0.2	U	0.2	U	NA			0.2	U	0.2	U	NA								
4-Nitroaniline	mg/kg	240	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	1	U		0.027	U	0.027	U	1	U		0.027	U	0.027	U	1	U							
4-Nitrophenol	mg/kg	4,756	RFA	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
Acenaphthene	mg/kg	3,400	RSL	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.019		0.003	U	0.41	U							
Acenaphthylene	mg/kg	NA	NA	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.003	U	0.003	U	0.41	U							
Anthracene	mg/kg	22,000	RSL	0.003	U	0.003	U	0.003	U	0.02		0.024	J	0.052	J		0.008		0.014		0.024	J		0.038		0.009		0.41	U							
Benzo(a)anthracene	mg/kg	2.21	RFA	0.003	U	0.003	U	0.003	U	0.19		0.27		0.42		40		0.1		0.11		0.34		74		0.15		0.037		0.049	J					
Benzo(a)pyrene	mg/kg	0.221	RFA	0.003	U	0.003	U	0.003	U	0.17		0.27		0.39		40		0.099		0.1		0.35		79		0.12		0.038		0.041	J					
Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.012		0.003	U	0.003	U	0.22		0.36		0.49		38		0.14		0.16		0.44		68		0.2		0.056		0.074	J					
Benzo(g,h,i)perylene	mg/kg	62	R9	0.003	U	0.003	U	0.003	U	0.097		0.14		0.2		36		0.048		0.061		0.16		68		0.083		0.028		0.031	J					
Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.003	U	0.003	U	0.003	U	0.13		0.17		0.22		26		0.069		0.084		0.16		47		0.09		0.029		0.41	U					
Benzoic acid	mg/kg	240,000	RSL	0.34	U	0.34	U	0.34	U	0.34	U	0.34	U	0.99	U		0.34	U	0.34	U	0.99	U		0.34	U	0.34	U	1								

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building		Sample ID		EB-3-2						EB-10						EB-10						EB-10											
							LL3SB-401M-0101-SO		LL3SB-401M-0102-SO		LL3SB-401M-0103-SO		LL3SB-409M-0101-SO		LL3SB-404M-0101-SO		LL3SB-408M-0101-SO		% RSD of Three Replicate Samples		LL3SB-409M-0102-SO		LL3SB-404M-0102-SO		LL3SB-408M-0102-SO		% RSD of Three Replicate Samples		LL3SB-409M-0103-SO		LL3SB-404M-0103-SO		LL3SB-408M-0103-SO		% RSD of Three Replicate Samples	
Type Sample		Primary		Primary		Primary		Primary		Blind Dup		Field Dup				Primary		Blind Dup		Field Dup				Primary		Blind Dup		Field Dup								
Sample Date		8/18/2010		8/18/2010		8/18/2010		8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010								
Sample Depth		1 - 3		3 - 5		5 - 7		1 - 3		1 - 3		1 - 3				3 - 5		3 - 5		3 - 5				5 - 7		5 - 7		5 - 7								
Value		Min LU or RSL																																		
Analyte	Units			Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q					
Isophorone	mg/kg	5,100	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
Naphthalene	mg/kg	3,678	RFA	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.003	U	0.003	U	0.41	U							
Nitrobenzene	mg/kg	48	RSL	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	U		0.003	U	0.003	U	0.41	U							
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.41	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.41	U							
N-Nitrosodiphenylamine	mg/kg	990	R9	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.81	U		0.027	U	0.027	U	0.81	U		0.027	U	0.027	U	0.82	U							
Pentachlorophenol	mg/kg	21.2	RFA	0.081	U	0.081	U	0.081	U	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
Phenanthrene	mg/kg	2,300	R9	0.008		0.003	U	0.003	U	0.065		0.059		0.15		56	0.017		0.039		0.051	J		0.17		0.054		0.056	J							
Phenol	mg/kg	18,000	RSL	0.027	U	0.028	U	0.027	U	0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U							
Pyrene	mg/kg	2,074	RFA	0.008		0.003	U	0.003	U	0.24		0.3		0.47		35	0.11		0.13		0.37		71	0.29		0.081		0.078	J							
Where all results for replicates were below the RL, no RSDs were calculated.												% RSD Average =				39		% RSD Average =				69		% RSD Average =				75								

See Notes at end of Table 8-10-E

Semivolatile Organics

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E			Building		EB-10								EB-10								EB-10								EB-10								
					Sample ID		LL3SB-409M-0001-SO		LL3SB-404M-0001-SO		LL3SB-408M-0001-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0002-SO		LL3SB-404M-0002-SO		LL3SB-408M-0002-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0003-SO		LL3SB-404M-0003-SO		LL3SB-408M-0003-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0004-SO		LL3SB-404M-0004-SO		LL3SB-408M-0004-SO		
Type Sample		Primary V		Blind Dup		Field Dup				Primary V		Blind Dup		Field Dup				Primary V		Blind Dup		Field Dup				Primary V		Blind Dup		Field Dup							
Sample Date		8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010							
Sample Depth		1 - 6.5		1 - 7		1 - 7				1 - 2.5		1 - 2		1 - 2.5				1 - 4		1 - 5		1 - 4				1 - 7		1 - 6.5		1 - 7							
Value		Min LU or RSL																																			
Analyte	Units			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q							
Isophorone	mg/kg	5,100	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U							
Naphthalene	mg/kg	3,678	RFA	0.0033	U	0.0033	U	0.064	J		0.0097		0.0033	U	0.4	U		0.012		0.015		0.4	U		0.0033	U	0.0033	U	0.4	U							
Nitrobenzene	mg/kg	48	RSL	0.0033	U	0.0033	U	0.4	U		0.0033	U	0.0033	U	0.4	U		0.0033	U	0.0033	U	0.4	U		0.0033	U	0.0033	U	0.4	U							
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U		0.027	U	0.027	U	0.4	U							
N-Nitrosodiphenylamine	mg/kg	990	R9	0.027	U	0.027	U	0.8	U		0.027	U	0.027	U	0.8	U		0.027	U	0.027	U	0.81	U		0.027	U	0.027	U	0.81	U							
Pentachlorophenol	mg/kg	21.2	RFA	0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U		0.081	U	0.081	U	1	U							
Phenanthrene	mg/kg	2,300	R9	0.15		0.45		1.1		86	0.2		0.14		0.063	J		0.03		0.54		0.065	J		0.0033	U	0.0096		0.4	U							
Phenol	mg/kg	18,000	RSL	0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.5	U		0.027	U	0.027	U	0.51	U		0.027	U	0.027	U	0.51	U							
Pyrene	mg/kg	2,074	RFA	0.24		0.7		1.4		75	0.53		0.17		0.27		58	0.12		0.91		0.23		102	0.0033	U	0.0066	J	0.4	U							
Where all results for replicates were below the RL, no RSD						% RSD Average =				75				% RSD Average =				64				% RSD Average =				72											

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building	EB-10								EB-10								EB-10												
				Sample ID	LL3SB-409M-0005-SO		LL3SB-404M-0005-SO		LL3SB-408M-0005-SO		% RSD % of Three Replicate Samples	LL3SB-409M-0006-SO		LL3SB-404M-0006-SO		LL3SB-408M-0006-SO		% RSD % of Three Replicate Samples	LL3SB-409M-0007-SO		LL3SB-404M-0007-SO		LL3SB-408M-0007-SO		LL3SB-409M-0008-SO		LL3SB-404M-0008-SO		LL3SB-408M-0008-SO		% RSD % of Three Replicate Samples	
Type Sample	Primary V	Blind Dup	Field Dup		Primary V	Blind Dup	Field Dup		Primary V	Blind Dup	Field Dup		Primary V	Blind Dup	Field Dup		Primary V	Blind Dup	Field Dup		Primary V	Blind Dup	Field Dup									
Sample Date	8/30/2010	8/30/2010	8/30/2010		8/30/2010	8/30/2010	8/30/2010		8/30/2010	8/30/2010	8/30/2010		8/30/2010	8/30/2010	8/30/2010		8/30/2010	8/30/2010	8/30/2010		8/30/2010	8/30/2010	8/30/2010									
Sample Depth	1 - 5.5	1 - 2	1 - 3		1 - 4	1 - 3	1 - 4		1 - 7	1 - 7	1 - 7		1 - 4	1 - 4	1 - 2.5																	
Value	Min LU or RSL																															
Analyte	Units	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q							
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
1,3-Dichlorobenzene	mg/kg	530	R9	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
1,4-Dichlorobenzene	mg/kg	24	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.027	U	0.027	U	0.5	U		0.027	U	0.055	U	0.5	U		0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U			
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.081	U	0.081	U	0.5	U		0.081	U	0.16	U	0.5	U		0.081	U	0.081	U	0.51	U	0.081	U	0.081	U	0.5	U			
2,4-Dichlorophenol	mg/kg	180	RSL	0.027	U	0.027	U	0.5	U		0.027	U	0.055	U	0.5	U		0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U			
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.081	U	0.081	U	0.4	U		0.081	U	0.16	U	0.4	U		0.081	U	0.081	U	0.41	U	0.081	U	0.081	U	0.4	U			
2,4-Dinitrophenol	mg/kg	120	RSL	0.081	U	0.081	U	2	U		0.081	U	0.16	U	2	U		0.081	U	0.081	U	2	U	0.081	U	0.081	U	2	U			
2,4-Dinitrotoluene	mg/kg	16	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
2,6-Dinitrotoluene	mg/kg	61	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
2-Chloronaphthalene	mg/kg	6,300	RSL	0.0033	U	0.0033	U	0.4	U		0.0033	U	0.0067	U	0.4	U		0.0033	U	0.0033	U	0.41	U	0.0033	U	0.0033	U	0.4	U			
2-Chlorophenol	mg/kg	390	RSL	0.027	U	0.027	U	0.5	U		0.027	U	0.055	U	0.5	U		0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U			
2-Methylnaphthalene	mg/kg	2,378	RFA	0.0033	U	0.0033	U	0.4	U		0.0033	U	0.0067	U	0.4	U		0.0033	U	0.0033	U	0.41	U	0.0033	U	0.0033	U	0.4	U			
2-Methylphenol	mg/kg	3,100	R9	0.081	U	0.081	U	1	U		0.081	U	0.16	U	1	U		0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U			
2-Nitroaniline	mg/kg	6,100	RSL	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
2-Nitrophenol	mg/kg	NA	NA	0.027	U	0.027	U	0.5	U		0.027	U	0.055	U	0.5	U		0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U			
3 & 4-Methylphenol	mg/kg	NA	NA	NA		NA		2	U		NA		NA		2	U		NA		NA		2	U	NA		NA		2	U			
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.081	U	0.081	U	0.5	U		0.081	U	0.16	U	0.5	U		0.081	U	0.081	U	0.51	U	0.081	U	0.081	U	0.5	U			
3-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	NA			0.2	U	0.41	U	NA			0.2	U	0.2	U	NA		0.2	U	0.2	U	NA				
3-Nitroaniline	mg/kg	NA	NA	0.081	U	0.081	U	1	U		0.081	U	0.16	U	1	U		0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U			
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	0.081	U	0.081	U	1	U		0.081	U	0.16	U	1	U		0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U			
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.027	U	0.027	U	0.5	U		0.027	U	0.055	U	0.5	U		0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U			
4-Chloroaniline	mg/kg	NA	NA	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.027	U	0.4	U		0.027	U	0.055	U	0.4	U		0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U			
4-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	NA			0.2	U	0.41	U	NA			0.2	U	0.2	U	NA		0.2	U	0.2	U	NA				
4-Nitroaniline	mg/kg	240	RSL	0.027	U	0.027	U	1	U		0.027	U	0.055	U	1	U		0.027	U	0.027	U	1	U	0.027	U	0.027	U	1	U			
4-Nitrophenol	mg/kg	4,756	RFA	0.081	U	0.081	U	1	U		0.081	U	0.16	U	1	U		0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U			
Acenaphthene	mg/kg	3,400	RSL	0.011		0.023		0.4	U		0.0033	U	0.0067	U	0.4	U		0.0033	U	0.0033	U	0.41	U	0.013		0.015		0.041	J			
Acenaphthylene	mg/kg	NA	NA	0.0033	U	0.0033	U	0.4	U		0.0033	U	0.015		0.4	U		0.0033	U	0.0033	U	0.41	U	0.0033	U	0.0033	U	0.4	U			
Anthracene	mg/kg	22,000	RSL	0.024		0.047		0.044	J		0.017		0.075		0.076	J		0.0033	U	0.0033	U	0.41	U	0.028		0.036		0.069	J			
Benzo(a)anthracene	mg/kg	2.21	RFA	0.15		0.23		0.26		27		0.25		1.1		1.5		67		0.0033	U	0.0033	U	0.41	U	0.17		0.19		0.38		47
Benzo(a)pyrene	mg/kg	0.221	RFA	0.16		0.23		0.24		21		0.27		1.2		1.6		67		0.0033	U	0.0033	U	0.41	U	0.17		0.18		0.32		38
Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.23		0.33		0.41		28		0.3		1.5		2.2		72		0.0033	U	0.0033	U	0.41	U	0.24		0.23		0.44		39
Benzo(g,h,i)perylene	mg/kg	62	R9	0.1		0.15		0.13		20		0.13		0.58		0.53		60		0.0033	U	0.0033	U	0.41	U	0.1		0.1		0.2		43
Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.1		0.18		0.13		30		0.16		0.83		0.76		63		0.0033	U	0.0033	U	0.41	U	0.11		0.14		0.21		34

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E			Building		EB-10							EB-10							% RSD % of Three Replicate Samples		EB-10							EB-10							% RSD % of Three Replicate Samples					
			Sample ID		LL3SB-409M-0005-SO		LL3SB-404M-0005-SO		LL3SB-408M-0005-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0006-SO		LL3SB-404M-0006-SO		LL3SB-408M-0006-SO				% RSD % of Three Replicate Samples		LL3SB-409M-0007-SO		LL3SB-404M-0007-SO		LL3SB-408M-0007-SO		LL3SB-409M-0008-SO		LL3SB-404M-0008-SO		LL3SB-408M-0008-SO				% RSD % of Three Replicate Samples			
					Type Sample		Primary V		Blind Dup				Field Dup		Primary V		Blind Dup						Field Dup		Primary V		Blind Dup		Field Dup		Primary V		Blind Dup						Field Dup	
					Sample Date		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010						8/30/2010		8/30/2010		8/30/2010		8/30/2010		8/30/2010		8/30/2010						8/30/2010	
					Sample Depth		1 - 5.5		1 - 2				1 - 3		1 - 4		1 - 3						1 - 4		1 - 7		1 - 7		1 - 7		1 - 4		1 - 4						1 - 2.5	
Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q						
Analyte	Units																																							
Isophorone	mg/kg	5,100	RSL	0.027	U	0.027	U	0.4	U			0.027	U	0.055	U	0.4	U			0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U									
Naphthalene	mg/kg	3,678	RFA	0.0033	U	0.0033	U	0.4	U			0.0033	U	0.0067	U	0.4	U			0.0033	U	0.0033	U	0.41	U	0.0033	U	0.0033	U	0.4	U									
Nitrobenzene	mg/kg	48	RSL	0.0033	U	0.0033	U	0.4	U			0.0033	U	0.0067	U	0.4	U			0.0033	U	0.0033	U	0.41	U	0.0033	U	0.0033	U	0.4	U									
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.027	U	0.027	U	0.4	U			0.027	U	0.055	U	0.4	U			0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U									
N-Nitrosodiphenylamine	mg/kg	990	R9	0.027	U	0.027	U	0.81	U			0.027	U	0.055	U	0.8	U			0.027	U	0.027	U	0.81	U	0.027	U	0.027	U	0.8	U									
Pentachlorophenol	mg/kg	21.2	RFA	0.081	U	0.081	U	1	U			0.081	U	0.16	U	1	U			0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U									
Phenanthrene	mg/kg	2,300	R9	0.13		0.26		0.24		33		0.025		0.08		0.11		60		0.0033	U	0.0033	U	0.41	U	0.14		0.12		0.41		73								
Phenol	mg/kg	18,000	RSL	0.027	U	0.027	U	0.5	U			0.027	U	0.055	U	0.5	U			0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.5	U									
Pyrene	mg/kg	2,074	RFA	0.25		0.41		0.42		27		0.26		1.2		1.7		69		0.0033	U	0.0033	U	0.41	U	0.26		0.25		0.55		48								
Where all results for replicates were below the RL, no RSD						% RSD Average =					26		% RSD Average =					66		% RSD Average =					46															

8-80

SURFACE AND SUBSURFACE MI SAMPLING	8-80	CONTRACT NO. W912QR-10-P-0037
Load Lines 1, 2, 3, and 4		

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E			Building		EB-10										EB-10										EB-10										EB-10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					Sample ID		LL3SB-409M-0009-SO				% RSD % of Three Replicate Samples		LL3SB-404M-0009-SO				% RSD % of Three Replicate Samples		LL3SB-408M-0009-SO				% RSD % of Three Replicate Samples		LL3SB-409M-0010-SO				% RSD % of Three Replicate Samples		LL3SB-404M-0010-SO				% RSD % of Three Replicate Samples		LL3SB-408M-0010-SO				% RSD % of Three Replicate Samples		LL3SB-409M-0011-SO				% RSD % of Three Replicate Samples		LL3SB-404M-0011-SO				% RSD % of Three Replicate Samples		LL3SB-408M-0011-SO				% RSD % of Three Replicate Samples		LL3SB-409M-0012-SO				% RSD % of Three Replicate Samples		LL3SB-404M-0012-SO				% RSD % of Three Replicate Samples		LL3SB-408M-0012-SO				% RSD % of Three Replicate Samples																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
							Primary V		Blind Dup				Field Dup		Primary V				Blind Dup		Field Dup				Primary V		Blind Dup				Field Dup		Primary V				Blind Dup		Field Dup				Primary V		Blind Dup				Field Dup		Primary V				Blind Dup		Field Dup																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
							Sample Date		8/30/2010				8/30/2010		8/30/2010				Sample Date		8/30/2010				8/30/2010		8/30/2010				Sample Date		8/30/2010				8/30/2010		8/30/2010				Sample Date		8/30/2010				8/30/2010		8/30/2010				Sample Date		8/30/2010				8/30/2010		8/30/2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
							Sample Depth		1 - 3.5				1 - 3		1 - 3.5				Sample Depth		1 - 3.5				1 - 3		1 - 3.5				Sample Depth		1 - 3.5				1 - 3		1 - 3.5				Sample Depth		1 - 3.5				1 - 3		1 - 3.5				Sample Depth		1 - 3.5				1 - 3		1 - 3.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Value		Min LU or RSL		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q		Value		Q																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Analyte	Units	5,100	RSL	0.027	U	0.027	U	0.18				0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U					0.027	U	0.027	U	0.4	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Isophorone	mg/kg	3,678	RFA	0.0033	U	0.0033	U	0.4	U			0.0034	U	0.003	U	0.41	U	0.0033	U	0.0033	U	0.4	U					0.0033	U	0.0033	U	0.4	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Naphthalene	mg/kg	48	RSL	0.0033	U	0.0033	U	0.4	U			0.0034	U	0.003	U	0.41	U	0.0033	U	0.0033	U	0.4	U					0.0033	U	0.0033	U	0.4	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Nitrobenzene	mg/kg	1.27	RFA	0.027	U	0.027	U	0.4	U			0.027	U	0.027	U	0.41	U	0.027	U	0.027	U	0.4	U					0.027	U	0.027	U	0.4	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
N-Nitroso-di-n-propylamine	mg/kg	990	R9	0.027	U	0.027	U	0.8	U			0.027	U	0.027	U	0.81	U	0.027	U	0.027	U	0.81	U					0.027	U	0.027	U	0.8	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
N-Nitrosodiphenylamine	mg/kg	21.2	RFA	0.081	U	0.081	U	1	U			0.081	U	0.081	U	1	U	0.081	U	0.081	U	1	U					0.081	U	0.081	U	1	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Pentachlorophenol	mg/kg	2,300	R9	0.15		0.04		0.24		70		0.0034	U	0.003	U	0.41	U	0.023		0.026		0.49		150				0.01		0.0033	U	0.4	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Phenanthrene	mg/kg	18,000	RSL	0.027	U	0.027	U	0.5	U			0.027	U	0.027	U	0.51	U	0.027	U	0.027	U	0.51	U					0.027	U	0.027	U	0.5	U																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Phenol	mg/kg	2,074	RFA	0.51		0.29		0.8		48		0.014		0.003	U	0.027	J	0.18		0.31		1.2		99				0.024		0.0033	U	0.14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Pyrene	mg/kg	Where all results for replicates were below the RL, no RSD				% RSD Average =				45					% RSD Average =				98																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E

See Notes at end of Table 8-10-E			Building		EB-10							EB-10					
			Sample ID	LL3SB-409M-0013-SO		LL3SB-404M-0013-SO		LL3SB-408M-0013-SO		% RSD % of Three Replicate Samples	LL3SB-409M-0014-SO		LL3SB-404M-0014-SO		LL3SB-408M-0014-SO		
Type Sample	Primary V		Blind Dup		Field Dup				Primary V		Blind Dup		Field Dup				
Sample Date	8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010				
Sample Depth	1 - 7		1 - 7		1 - 7				1 - 4		1 - 3		1 - 3				
Analyte	Units	Value	Min LU or RSL														
				Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
1,3-Dichlorobenzene	mg/kg	530	R9	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
1,4-Dichlorobenzene	mg/kg	24	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.027	U	0.027	U	0.51	U		0.028	U	0.028	U	0.5	U	
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.081	U	0.081	U	0.51	U		0.082	U	0.082	U	0.5	U	
2,4-Dichlorophenol	mg/kg	180	RSL	0.027	U	0.027	U	0.51	U		0.028	U	0.028	U	0.5	U	
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.081	U	0.081	U	0.41	U		0.082	U	0.082	U	0.4	U	
2,4-Dinitrophenol	mg/kg	120	RSL	0.081	U	0.081	U	2	U		0.082	U	0.082	U	2	U	
2,4-Dinitrotoluene	mg/kg	16	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
2,6-Dinitrotoluene	mg/kg	61	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
2-Chloronaphthalene	mg/kg	6,300	RSL	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
2-Chlorophenol	mg/kg	390	RSL	0.027	U	0.027	U	0.51	U		0.028	U	0.028	U	0.5	U	
2-Methylnaphthalene	mg/kg	2,378	RFA	0.012		0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
2-Methylphenol	mg/kg	3,100	R9	0.081	U	0.081	U	1	U		0.082	U	0.082	U	1	U	
2-Nitroaniline	mg/kg	6,100	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
2-Nitrophenol	mg/kg	NA	NA	0.027	U	0.027	U	0.51	U		0.028	U	0.028	U	0.5	U	
3 & 4-Methylphenol	mg/kg	NA	NA	NA		NA		2	U		NA		NA		2	U	
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.081	U	0.081	U	0.51	U		0.082	U	0.082	U	0.5	U	
3-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	NA			0.2	U	0.2	U	NA		
3-Nitroaniline	mg/kg	NA	NA	0.081	U	0.081	U	1	U		0.082	U	0.082	U	1	U	
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	0.081	U	0.081	U	1	U		0.082	U	0.082	U	1	U	
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.027	U	0.027	U	0.51	U		0.028	U	0.028	U	0.5	U	
4-Chloroaniline	mg/kg	NA	NA	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
4-Methylphenol	mg/kg	NA	NA	0.2	U	0.2	U	NA			0.2	U	0.2	U	NA		
4-Nitroaniline	mg/kg	240	RSL	0.027	U	0.027	U	1	U		0.028	U	0.028	U	1	U	
4-Nitrophenol	mg/kg	4,756	RFA	0.081	U	0.081	U	1	U		0.082	U	0.082	U	1	U	
Acenaphthene	mg/kg	3,400	RSL	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Acenaphthylene	mg/kg	NA	NA	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Anthracene	mg/kg	22,000	RSL	0.0081		0.011		0.41	U		0.0034	U	0.0034	U	0.4	U	
Benzo(a)anthracene	mg/kg	2.21	RFA	0.084		0.17		0.27		53	0.0093		0.038		0.034	J	
Benzo(a)pyrene	mg/kg	0.221	RFA	0.092		0.18		0.28		51	0.0094		0.038		0.026	J	
Benzo(b)fluoranthene	mg/kg	2.21	RFA	0.1		0.21		0.39		63	0.0034	U	0.048		0.037	J	
Benzo(g,h,i)perylene	mg/kg	62	R9	0.052		0.098		0.15		49	0.0034	U	0.022		0.4	U	
Benzo(k)fluoranthene	mg/kg	22.1	RFA	0.057		0.13		0.16		46	0.0034	U	0.021		0.4	U	
Benzoic acid	mg/kg	240,000	RSL	0.34	U	0.34	U	1	U		0.34	U	0.34	U	0.99	U	
Benzyl alcohol	mg/kg	6,100	RSL	0.027	U	0.027	U	1	U		0.028	U	0.028	U	1	U	
Bis(2-chloroethoxy)methane	mg/kg	1,783	RFA	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Bis(2-chloroethyl) ether	mg/kg	2	RSL	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Bis(2-chloroisopropyl) ether	mg/kg	29	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Bis(2-ethylhexyl) phthalate	mg/kg	35	RSL	0.027	U	0.026	J	1	U		0.024	J	0.019	J	1	U	
Butylbenzyl phthalate	mg/kg	2,600	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Carbazole	mg/kg	694	RFA	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Chrysene	mg/kg	221	RFA	0.087		0.16		0.23		45	0.01		0.034		0.028	J	
Dibenzo(a,h)anthracene	mg/kg	0.221	RFA	0.012		0.044		0.052	J		0.0034	U	0.0034	U	0.4	U	
Dibenzofuran	mg/kg	1,189	RFA	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Diethyl phthalate	mg/kg	49,000	RSL	0.022	J	0.027	U	0.17	J		0.028	U	0.023	J	0.068	J	
Dimethyl phthalate	mg/kg	610,000	R9	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Di-n-butyl phthalate	mg/kg	6,100	RSL	0.023	J	0.033	J	0.61			0.026	J	0.045	J	0.25	J	
Di-n-octyl phthalate	mg/kg	2,400	R9	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Fluoranthene	mg/kg	2,765	RFA	0.099		0.16		0.34		63	0.011		0.039		0.036	J	
Fluorene	mg/kg	7,366	RFA	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Hexachlorobenzene	mg/kg	3	RSL	0.0033	U	0.0034	U	0.41	U		0.0034	U	0.0034	U	0.4	U	
Hexachlorobutadiene	mg/kg	62	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Hexachlorocyclopentadiene	mg/kg	370	R9	0.33	U	0.34	U	0.41	U		0.34	U	0.34	U	0.4	U	
Hexachloroethane	mg/kg	350	RSL	0.027	U	0.027	U	0.41	U		0.028	U	0.028	U	0.4	U	
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.041		0.089		0.15		59	0.0034	U	0.018		0.4	U	

Table 8-9-C Ravenna Load Line 3 Subsurface Soil MI Sampling Results Semivolatile Organic Compounds

See Notes at end of Table 8-10-E			Building		EB-10										EB-10						
					Sample ID		LL3SB-409M-0013-SO		LL3SB-404M-0013-SO		LL3SB-408M-0013-SO		% RSD % of Three Replicate Samples		LL3SB-409M-0014-SO		LL3SB-404M-0014-SO		LL3SB-408M-0014-SO		
Type Sample		Primary V		Blind Dup		Field Dup				Primary V		Blind Dup		Field Dup							
Sample Date		8/30/2010		8/30/2010		8/30/2010				8/30/2010		8/30/2010		8/30/2010							
Sample Depth		1 - 7		1 - 7		1 - 7				1 - 4		1 - 3		1 - 3							
Value		Min LU or RSL																			
				Value		Q		Value		Q		Value		Q		Value		Q			
Analyte	Units																				
Isophorone	mg/kg	5,100	RSL		0.027	U		0.027	U		0.41	U			0.028	U		0.4	U		
Naphthalene	mg/kg	3,678	RFA		0.0083			0.0034	U		0.41	U			0.0034	U		0.4	U		
Nitrobenzene	mg/kg	48	RSL		0.0033	U		0.0034	U		0.41	U			0.0034	U		0.4	U		
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA		0.027	U		0.027	U		0.41	U			0.028	U		0.4	U		
N-Nitrosodiphenylamine	mg/kg	990	R9		0.027	U		0.027	U		0.81	U			0.028	U		0.81	U		
Pentachlorophenol	mg/kg	21.2	RFA		0.081	U		0.081	U		1	U			0.082	U		1	U		
Phenanthrene	mg/kg	2,300	R9		0.022			0.014			0.04	J			0.0034	U		0.4	U		
Phenol	mg/kg	18,000	RSL		0.027	U		0.027	U		0.51	U			0.028	U		0.5	U		
Pyrene	mg/kg	2,074	RFA		0.096			0.16			0.29	RFA	54		0.0098			0.037		0.032	J
Where all results for replicates were below the RL, no RSD										% RSD Average =										54	

Table 8-9-D Ravenna Load Line 3 Subsurface Soil MI Sampling Results Pesticides and PCBs

See Notes at end of Table 8-10-E			Building		EB-3-2						EB-10																	
																											Sample ID	LL3SB-401M-0101-SO
			Type Sample	Primary	Primary	Primary	Primary	Field Dup	Blind Dup	Primary	Field Dup	Blind Dup	Primary	Field Dup	Blind Dup													
			Sample Date	8/18/2010	8/18/2010	8/18/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010													
Sample Depth	1 - 3	3 - 5	5 - 7	1 - 3	1 - 3	1 - 3	3 - 5	3 - 5	3 - 5	3 - 5	5 - 7	5 - 7	5 - 7															
Analyte	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q			
Pesticides and PCBs	4,4'-DDD	mg/kg	20	RSL	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0012	U	0.0068	U	0.0068	U	0.0012	U	0.0068	U	0.0012	U		
	4,4'-DDE	mg/kg	40.8	RFA	0.00068	U	0.0005	J	0.00068	U	0.0048	J	0.016	J	0.0011	U	0.0068	U	0.0068	U	0.0011	U	0.0068	U	0.0011	U		
	4,4'-DDT	mg/kg	17	RSL	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0015	U	0.0068	U	0.0068	U	0.0015	U	0.0068	U	0.0015	U		
	Aldrin	mg/kg	0.8	RFA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0017	U	0.013	U	0.013	U	0.0017	U	0.013	U	0.013	U		
	alpha-BHC	mg/kg	0.9	R9	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0019	U	0.013	U	0.013	U	0.0019	U	0.013	U	0.013	U		
	alpha-Chlordane	mg/kg	0.0	NA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0011	U	0.013	U	0.013	U	0.0011	U	0.013	U	0.013	U		
	beta-BHC	mg/kg	7.7	NA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.002	U	0.013	U	0.013	U	0.001	J	0.013	U	0.013	U		
	Chlordane (Technical)	mg/kg	NA	NA	NA		NA		NA		NA		NA		0.03	U	NA		NA		0.03	U	NA		NA			
	delta-BHC	mg/kg	NA	NA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0011	U	0.013	U	0.013	U	0.0011	U	0.013	U	0.013	U		
	Dieldrin	mg/kg	0.9	RFA	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0012	U	0.0068	U	0.0068	U	0.021	P	0.0068	U	0.0068	U		
	Endosulfan I	mg/kg	370	R9	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0022	U	0.0068	U	0.0068	U	0.0091	P	0.0068	U	0.0068	U		
	Endosulfan II	mg/kg	370	R9	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.00081	JP	0.013	U	0.013	U	0.0042	P	0.013	U	0.013	U		
	Endosulfan sulfate	mg/kg	370	R9	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0032	U	0.013	U	0.013	U	0.0031	U	0.013	U	0.013	U		
	Endrin	mg/kg	17.7	RFA	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0014	U	0.0068	U	0.0068	U	0.0014	U	0.0068	U	0.0068	U		
	Endrin aldehyde	mg/kg	0.0	NA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0037	U	0.013	U	0.013	U	0.0036	U	0.013	U	0.013	U		
	Endrin ketone	mg/kg	18	R9	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0028	U	0.0068	U	0.0068	U	0.0028	U	0.0068	U	0.0068	U		
	Gamma-BHC	mg/kg	NA	NA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	NA		0.013	U	0.013	U	NA		0.013	U	0.013	U		
	gamma-Chlordane	mg/kg	16	R9	0.00068	U	0.00068	U	0.00068	U	0.0068	U	0.0068	U	0.0011	U	0.0068	U	0.0068	U	0.0011	U	0.0068	U	0.0068	U		
	Heptachlor	mg/kg	3.1	RFA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0012	U	0.013	U	0.013	U	0.0012	U	0.013	U	0.013	U		
	Heptachlor epoxide	mg/kg	1.5	RFA	0.0014	U	0.0014	U	0.0013	U	0.013	U	0.013	U	0.0017	U	0.013	U	0.013	U	0.0017	U	0.013	U	0.013	U		
	Lindane	mg/kg	NA	NA	NA		NA		NA		NA		NA		0.0016	U	NA		NA		0.0016	U	NA		NA			
	Methoxychlor	mg/kg	310	RSL	0.0034	U	0.0034	U	0.0033	U	0.033	U	0.033	U	0.0023	U	0.033	U	0.033	U	0.0023	U	0.033	U	0.033	U		
	Toxaphene	mg/kg	4.4	R9	0.02	U	0.02	U	0.02	U	0.2	U	0.2	U	0.03	U	0.2	U	0.2	U	0.03	U	0.2	U	0.2	U		
	Aroclor 1016	mg/kg	2.0	RFA	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U		
	Aroclor 1221	mg/kg	1.4	RSL	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U		
	Aroclor 1232	mg/kg	1.4	RSL	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U		
Aroclor 1242	mg/kg	2.2	RSL	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U			
Aroclor 1248	mg/kg	2.0	RFA	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U			
Aroclor 1254	mg/kg	2.0	RFA	0.025	U	0.025	U	0.025	U	0.12		0.19		0.39		0.045	J	0.08		0.82		0.021	J	0.025	U			
Aroclor 1260	mg/kg	2.0	RFA	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.05	U	0.025	U	0.025	U	0.051	U	0.025	U	0.025	U			

All results were below the RL. No RSDs were calculated.

Table 8-9-E Ravenna Load Line 3 Subsurface Soil MI Sampling Results Volatile Organic Compounds

See Notes at end of Table 8-10- E			Building		EB-3-2						EB-3-1						EB-10						EB-10						EB-10					
			Sample ID	LL3SB-401M-0101-SO	LL3SB-401M-0102-SO	LL3SB-401M-0103-SO	LL3SB-406M-0101-SO	LL3SB-406M-0102-SO	LL3SB-406M-0103-SO	LL3SB-409M-0101-SO	LL3SB-404M-0101-SO	LL3SB-408M-0101-SO	LL3SB-409M-0102-SO	LL3SB-404M-0102-SO	LL3SB-408M-0102-SO	LL3SB-409M-0103-SO	LL3SB-404M-0103-SO	LL3SB-408M-0103-SO																
Type Sample	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Field Dup	Blind Dup	Primary	Field Dup	Blind Dup	Primary	Field Dup	Blind Dup																			
Sample Date	8/18/2010	8/18/2010	8/18/2010	8/20/2010	8/20/2010	8/20/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010	8/30/2010																			
Sample Depth	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	1 - 3	1 - 3	1 - 3	3 - 5	3 - 5	3 - 5	5 - 7	5 - 7	5 - 7																			
Value	Min LU or																																	
		RSL		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q					
Analyte	Units	8700	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
1,1,1-Trichloroethane	mg/kg	5.6	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,1,2,2-Tetrachloroethane	mg/kg	11	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,1,2-Trichloroethane	mg/kg	33	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,1-Dichloroethane	mg/kg	120	R9	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,1-Dichloroethene	mg/kg	0.34	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,2-Dibromoethane	mg/kg	4.3	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
1,2-Dichloroethane	mg/kg	700	RSL	0.44	U	0.47	U	0.44	U	0.43	U	0.36	U	0.35	U	0.46	U	0.44	U	NA		0.47	U	0.69	U	NA		1	U	1	U	NA		
1,2-Dichloroethene (total)	mg/kg	8.8	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
1,2-Dichloropropane	mg/kg	22000	R9	0.088	U	0.094	U	0.088	U	0.094	JB	0.071	U	0.07	U	0.12	JB	0.089	U	0.46	U	0.12	JB	0.14	U	0.17	J	0.27	JB	0.21	U	0.23	J	
2-Butanone	mg/kg	210	RSL	0.044	U	0.047	U	0.044	U	0.043	U	0.036	U	0.035	U	0.046	U	0.044	U	0.46	U	0.047	U	0.069	U	0.54	U	0.1	U	0.1	U	0.94	U	
2-Hexanone	mg/kg	5300	R9	0.088	U	0.094	U	0.088	U	0.086	U	0.071	U	0.07	U	0.092	U	0.089	U	0.46	U	0.094	U	0.14	U	0.54	U	0.21	U	0.21	U	0.94	U	
4-Methyl-2-pentanone	mg/kg	61000	RSL	0.18	U	0.19	U	0.18	U	0.17	U	0.14	U	0.14	U	0.18	U	0.18	U	0.92	U	0.19	U	0.28	U	1.1	U	0.42	U	0.42	U	1.9	U	
Acetone	mg/kg	11	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Benzene	mg/kg	8.2	R9	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Bromochloromethane	mg/kg	2.7	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Bromodichloromethane	mg/kg	610	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Bromoform	mg/kg	7.3	RSL	0.044	U	0.047	U	0.044	U	0.043	U	0.036	U	0.035	U	0.046	U	0.044	U	0.092	UA	0.047	U	0.069	U	0.11	UA	0.1	U	0.1	U	0.19	UA	
Bromomethane	mg/kg	820	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.092	U	0.042	J	0.034	U	0.11	U	0.052	U	0.052	U	0.19	U	
Carbon disulfide	mg/kg	6.1	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
Carbon tetrachloride	mg/kg	290	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
Chlorobenzene	mg/kg	30	R9	0.088	U	0.094	U	0.088	U	0.086	U	0.071	U	0.07	U	0.092	U	0.089	U	0.092	U	0.094	U	0.14	U	0.11	U	0.21	U	0.21	U	0.19	U	
Chloroethane	mg/kg	2.9	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Chloroform	mg/kg	120	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.092	U	0.024	U	0.034	U	0.11	U	0.052	U	0.052	U	0.19	U	
Chloromethane	mg/kg	NA	NA	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
cis-1,2-Dichloroethene	mg/kg	17	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
cis-1,3-Dichloropropene	mg/kg	6.8	RSL	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Dibromochloromethane	mg/kg	54	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
Ethylbenzene	mg/kg	110	RSL	0.19	JB	0.22	JB	0.18	JB	0.14	JB	0.12	JB	0.099	JB	0.12	JB	0.11	JB	0.092	U	0.13	JB	0.19	JB	0.11	U	0.27	JB	0.25	JB	0.19	U	
Methylene chloride	mg/kg	6300	RSL	0.0088	U	0.0094	U	0.0088	U	0.0086	U	0.0071	U	0.007	U	0.0092	U	0.0089	U	0.046	U	0.0094	U	0.014	U	0.054	U	0.021	U	0.021	U	0.094	U	
Styrene	mg/kg	4.8	R9	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	
Tetrachloroethene	mg/kg	5000	RSL	0.022	U	0.024	U	0.019	JB	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.32		0.024	U	0.034	U	0.93		0.052	U	0.052	U	1.3		
Toluene	mg/kg	NA	NA	0.022	U	0.024	U	0.022	U	0.022	U	0.018	U	0.018	U	0.023	U	0.022	U	0.046	U	0.024	U	0.034	U	0.054	U	0.052	U	0.052	U	0.094	U	

Table 8-10-A Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Metals

See Notes at end of Table 8-10-E			Building		G-8										G-8										G-8										
			Sample ID		LL4SB-402M-0101-SO		LL4SB-401M-0101-SO		LL4SB-403M-0101-SO		RSD (%) of Three Replicate Samples		LL4SB-402M-0102-SO		LL4SB-401M-0102-SO		LL4SB-403M-0102-SO		RSD (%) of Three Replicate Samples		LL4SB-402M-0103-SO		LL4SB-401M-0103-SO		LL4SB-403M-0103-SO		RSD (%) of Three Replicate Samples								
Type Sample	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.	Primary	Blind Dup.	Field Dup.								
Sample Date	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010								
Sample Depth	1 - 3	1 - 3	1 - 3	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5								
Value	Min LU or RSL																																		
Analyte	Units			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q										
Metals	Aluminum	mg/kg	34,960	NG		7500		8150		9320	B	11		9690	E	10100		9940	B	2		8000		8710		10800	B	16							
	Antimony	mg/kg	136	RFA		0.12	J	0.11	J	0.22	JY			0.16	J	0.077	J	0.28	U			0.08	J	0.067	J	0.28	U								
	Arsenic	mg/kg	19.8	BKG		11.5		13.3		2	Y	68		15.1		10.1		3.3		62		10.6		10.7		3.3		52							
	Barium	mg/kg	3,506	NG		45.9		54.8		70.1		21		65.2		65.4		70.3		4		53.6		60.6		71.4		14							
	Beryllium	mg/kg	160	RSL		0.46		0.48		0.63				0.6		0.55		0.57				0.45		0.47		0.6									
	Cadmium	mg/kg	109	NG		0.11	J	0.15	J	0.64				0.11	J	0.074	J	0.6				0.08	J	0.062	J	0.57									
	Calcium	mg/kg	NA	NA		21200		12200		10100	B			20500		15500		15300	B			18900		22700		29100	B								
	Chromium (as Cr-3)	mg/kg	196,942	NG		41.2		18.4		48.8		44		30.4		22.2		11.1		46		16.2		19.1		31.6		37							
	Cobalt	mg/kg	70.3	NG		8.5		9.5		10.3				9.5		10.6		11.7				9.7		10.8		10.6									
	Copper	mg/kg	27,138	RFA		21.9		19.4		22.6				18.1		19.5		23.5				20.2		20		20.6									
	Iron	mg/kg	190,104	RSL		22900		22200		26400		9		23900		25200		32400		17		22900		25000		28300		11							
	Lead	mg/kg	4,000	RSL		14.2		18.2		52.6				19.6		13.3		48.4				12		10.7		45.2									
	Magnesium	mg/kg	NA	NA		6180		4370		4010	B	24		5460		5320		5480	B	2		5970		6590		6710	B	6							
	Manganese (1' - 5')	mg/kg	1,450	BKG1		448		387		315	B	17		512		364		329	B	24															
	Manganese (5' - 7')	mg/kg	3,030	BKG2																		392		418		324	B	13							
	Nickel	mg/kg	13,463	RFA		32.8		23.7		24.3		19		29.5		27.2		28.3		4		24.5		27.6		26.8		6							
	Potassium	mg/kg	NA	NA		1110		1150		1540		19		1470		1510		1110		16		1340		1470		1830		16							
	Selenium	mg/kg	390	RSL		0.78		0.8		0.43	U			0.84		0.85		0.43	U			0.74		0.67		0.43	U								
	Silver	mg/kg	3,240	RFA		0.025	J	0.024	J	0.057	U			0.026	J	0.029	J	0.057	U			0.021	J	0.022	J	0.057	U								
	Sodium	mg/kg	NA	NA		74.8	J B	67.1	J B	215				97	J B	96.7	J B	194				97.5	J B	104	B	234									
	Thallium	mg/kg	47.6	RFA		0.16	J	0.15	J	0.84	B			0.18	J	0.17	J	1.1	B			0.18	J	0.18	J	1.2	B								
	Vanadium	mg/kg	1,558	RFA		13.8		14.9		15.8				16.6		18.3		15.9				15.4		16.7		17.5									
	Zinc	mg/kg	196,589	RFA		61.7		81.9		69.1		14		62.6		63.9		60.1		3		56.2		55.2		56.4		1							
	Chromium, hexavalent	mg/kg	16.4	NG		0.81	U	0.52	J	6.5	UM	129		0.65	J	0.82	U	6.5	U	125		0.81	U	0.81	U	6.5	U	121							
	Mercury	mg/kg	165	RFA		0.023	J	0.027	J	0.011		41		0.019	J	0.017	J	0.0068	J	46		0.015	J	0.034	U	0.0061	J	78							
	% RSD Average =										35		% RSD Average =										29		% RSD Average =										31

Table 8-10-B Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Explosives

See Notes at end of Table 8-10-E			Building		G-8										G-8										G-8									
			Sample ID	LL4SB-402M-0101-SO		LL4SB-401M-0101-SO		LL4SB-403M-0101-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0102-SO		LL4SB-401M-0102-SO		LL4SB-403M-0102-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0103-SO		LL4SB-401M-0103-SO		LL4SB-403M-0103-SO		RSD (%) of Three Replicate Samples										
Type Sample	Primary		Field Dup		Blind Dup		Primary	Field Dup		Blind Dup		Primary	Field Dup		Blind Dup																			
Sample Date	8/16/2010		8/17/2010		8/23/2010		8/16/2010	8/17/2010		8/23/2010		8/16/2010	8/17/2010		8/23/2010																			
Sample Depth	1 - 3		1 - 3		1 - 3		3 - 5	3 - 5		3 - 5		5 - 7	5 - 7		5 - 7																			
		Min LU or RSL																																
Analyte	Units	Value			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q											
Explosives & Propellants	1,3,5-Trinitrobenzene	mg/kg	15,280	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	1,3-Dinitrobenzene	mg/kg	59.4	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	2,4,6-Trinitrotoluene	mg/kg	211	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	2,4-Dinitrotoluene	mg/kg	7.53	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	2,6-Dinitrotoluene	mg/kg	7.69	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	2-Amino-4,6-dinitrotoluene	mg/kg	128	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	2-Nitrotoluene	mg/kg	60.3	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	3-Nitrotoluene	mg/kg	6.1	RSL	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	4-Amino-2,6-dinitrotoluene	mg/kg	128	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	4-Nitrotoluene	mg/kg	816	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	mg/kg	1,452	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	METHYL-2,4,6-TRINITROPHENYLNITRAMINE	mg/kg	240	RSL	0.098	U	0.087	U	0.5	U		0.095	U	0.1	U	0.5	U	0.094	U	0.097	U	0.5	U											
	Nitrobenzene	mg/kg	48	RFA	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
	Nitroglycerin	mg/kg	816	RFA	0.24	U	0.22	U	1.5	U		0.24	U	0.25	U	1.5	U	0.24	U	0.24	U	1.5	U											
	OCTAHYDRO-TETRANITRO-1,3,5,7-TETRAZOCINE	mg/kg	19,090	NG	0.098	U	0.087	U	0.44	U		0.095	U	0.1	U	0.44	U	0.094	U	0.097	U	0.44	U											
PETN	mg/kg	NA	NA	0.24	U	0.22	U	1.5	U		0.24	U	0.25	U	1.5	U	0.24	U	0.24	U	1.5	U												
Nitroguanadine	mg/kg	6,100	RSL	0.041	U	NA		0.16	U		0.041	U	NA		0.16	U	0.04	U	NA		0.16	U												
Nitrocellulose	mg/kg	NA	NA	1.8	U	1.9	U	NA			0.97	J	1.9	U	NA		1.8	U	1.9	U	NA													

See Notes at end of Table 8-10-
E

SURFACE AND SUBSURFACE MI SAMPLING	8-88	CONTRACT NO. W912QR-10-P-0037
Load Lines 1, 2, 3, and 4		

Table 8-10-C Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-
E

				Building	G8								G8								G8								G8							
				Sample ID	LL45B-402M-0101-SO								LL45B-401M-0101-SO								LL45B-403M-0101-SO								LL45B-402M-0001-SO							
					LL45B-402M-0101-SO								LL45B-401M-0101-SO								LL45B-403M-0101-SO								LL45B-402M-0001-SO							
				Type Sample	Primary								Blind Dup								Field Dup.								Primary V							
				Sample Date	8/16/2010								8/17/2010								8/23/2010								8/16/2010							
				Sample Depth	1 - 3								1 - 3								1 - 3								1-7							
				Min LU or																																
				RSL																																
Parameter	Units	Value			Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q		
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA		0.11		0.240		0.089		56		2.1		0.08		0.41	U			1.1		0.003	U	0.41	U			0.003	U	0.013		0.097			
Isophorone	mg/kg	5,100	RSL		0.027	U	0.027	U	0.4	U			0.14	U	0.028	U	0.41	U			0.18	U	0.027	U	0.41	U			0.027	U	0.027	U	0.41	U		
Naphthalene	mg/kg	3,678	RFA		0.0033	U	0.003	U	0.4	U			0.017	U	0.0034	U	0.41	U			0.17		0.003	U	0.41	U			0.003	U	0.003	U	0.41	U		
Nitrobenzene	mg/kg	48	RSL		0.0033	U	0.003	U	0.4	U			0.017	U	0.0034	U	0.41	U			0.022	U	0.003	U	0.41	U			0.003	U	0.003	U	0.41	U		
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA		0.027	U	0.027	U	0.4	U			0.14	U	0.028	U	0.41	U			0.18	U	0.027	U	0.41	U			0.027	U	0.028	U	0.41	U		
N-Nitrosodiphenylamine	mg/kg	990	R9		0.027	U	0.027	U	0.81	U			0.14	U	0.028	U	0.81	U			0.18	U	0.027	U	0.82	U			0.027	U	0.028	U	0.81	U		
Pentachlorophenol	mg/kg	21.2	RFA		0.081	U	0.081	U	1	UM			0.41	U	0.082	U	1	U			0.54	U	0.081	U	1	U			0.081	U	0.082	U	1	U		
Phenanthrene	mg/kg	2,300	R9		0.14		0.400		0.093		78		11		0.16		0.049	J			6.2		0.009		0.41	U			0.012		0.003	U	0.41	U		
Phenol	mg/kg	18,000	RSL		0.027	U	0.027	U	0.51	U			0.14	U	0.028	U	0.51	U			0.18	U	0.027	U	0.51	U			0.027	U	0.028	U	0.51	U		
Pyrene	mg/kg	2,074	RFA		0.26		0.700		0.2		71		9		0.22		0.036	J			4.9		0.003	U	0.41	U			0.003	U	0.020		0.24			

Table 8-10-C Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-
E

See Notes at end of Table 8-10-E			Building		G8										G8										G8										G8										G8										G8																															
					Sample ID		G8								G8								G8								G8								G8								G8																																							
							LL4SB-402M-0003-SO				LL4SB-401M-0003-SO				LL4SB-403M-0003-SO				RSD (%) of Three Replicate Samples				LL4SB-402M-0004-SO				LL4SB-401M-0004-SO				LL4SB-403M-0004-SO				RSD (%) of Three Replicate Samples				LL4SB-402M-0005-SO				LL4SB-401M-0005-SO				LL4SB-403M-0005-SO				RSD (%) of Three Replicate Samples				LL4SB-402M-0006-SO				LL4SB-401M-0006-SO				LL4SB-403M-0006-SO				RSD (%) of Three Replicate Samples				LL4SB-402M-0007-SO				LL4SB-401M-0007-SO				LL4SB-403M-0007-SO				RSD (%) of Three Replicate Samples			
							Primary V		Blind Dup		Field Dup.		RSD (%)		Primary V		Blind Dup		Field Dup.		RSD (%)		Primary V		Blind Dup		Field Dup.		RSD (%)		Primary V		Blind Dup		Field Dup.		RSD (%)		Primary V		Blind Dup		Field Dup.		RSD (%)		Primary V		Blind Dup		Field Dup.		RSD (%)																																	
							Sample Date		8/16/2010		8/17/2010		8/23/2010		RSD (%)		Sample Date		8/16/2010		8/17/2010		8/23/2010		RSD (%)		Sample Date		8/16/2010		8/17/2010		8/23/2010		RSD (%)		Sample Date		8/16/2010		8/17/2010		8/23/2010		RSD (%)		Sample Date		8/16/2010		8/17/2010		8/23/2010		RSD (%)																															
Sample Depth		1-7		1-7		1-7		RSD (%)		Sample Depth		1-7		1-7		1-7		RSD (%)		Sample Depth		1-7		1-7		1-7		RSD (%)		Sample Depth		1-7		1-7		1-7		RSD (%)		Sample Depth		1-7		1-7		1-7		RSD (%)																																						
Parameter		Units	Value	Min LU or RSL	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q																																										
1,2,4-Trichlorobenzene	mg/kg	220	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
1,2-Dichlorobenzene	mg/kg	1,900	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
1,3-Dichlorobenzene	mg/kg	530	R9		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
1,4-Dichlorobenzene	mg/kg	24	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
2,4,5-Trichlorophenol	mg/kg	6,100	RSL		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U		3.4	U	0.028	U	0.51	U																																																
2,4,6-Trichlorophenol	mg/kg	440	RSL		0.330	U	0.082	U	0.51	U		0.082	U	0.082	U	0.51	U		0.082	U	0.082	U	0.51	UM,Y		0.330	U	0.082	U	0.51	U		10.0	U	0.082	U	0.51	U																																																
2,4-Dichlorophenol	mg/kg	180	RSL		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U		3.4	U	0.028	U	0.51	U																																																
2,4-Dimethylphenol	mg/kg	1,200	RSL		0.330	U	0.082	U	0.41	U		0.082	U	0.082	U	0.41	U		0.082	U	0.082	U	0.4	UM,Y		0.330	U	0.082	U	0.41	U		10.0	U	0.082	U	0.41	U																																																
2,4-Dinitrophenol	mg/kg	120	RSL		0.330	U	0.082	U	2	U		0.082	U	0.082	U	2	U		0.082	U	0.082	U	2	UM,Y		0.330	U	0.082	U	2.1	U		10.0	U	0.082	U	2.1	U																																																
2,4-Dinitrotoluene	mg/kg	16	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
2,6-Dinitrotoluene	mg/kg	61	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
2-Chloronaphthalene	mg/kg	6,300	RSL		0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U		0.4	U	0.003	U	0.41	U																																																
2-Chlorophenol	mg/kg	390	RSL		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U		3.4	U	0.028	U	0.51	U																																																
2-Methylnaphthalene	mg/kg	2,378	RFA		0.013	U	0.003	U	0.41	U		0.010		0.003	U	0.41	U		0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U		0.4	U	0.003	U	0.41	U																																																
2-Methylphenol	mg/kg	3,100	R9		0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	U		0.082	U	0.082	U	1	UM,Y		0.330	U	0.082	U	1	U		10.0	U	0.082	U	1	U																																																
2-Nitroaniline	mg/kg	6,100	RSL		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
2-Nitrophenol	mg/kg	NA	NA		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U		3.4	U	0.028	U	0.51	U																																																
3 & 4-Methylphenol	mg/kg	NA	NA		NA		NA		2	U		NA		NA		2	U		NA		NA		2	UM,Y		NA		NA		2.1	U		NA		NA		2.1	U																																																
3,3'-Dichlorobenzidine	mg/kg	11	RSL		0.330	U	0.082	U	0.51	U		0.082	U	0.082	U	0.51	U		0.082	U	0.082	U	0.51	UM,Y		0.330	U	0.082	U	0.51	U		10.0	U	0.082	U	0.51	U																																																
3-Methylphenol	mg/kg	NA	NA		0.820	U	0.200	U				0.210	U	0.200	U				0.200	U	0.200	U				0.820	U	0.210	U				25.0	U	0.200	U																																																		
3-Nitroaniline	mg/kg	NA	NA		0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	U		0.082	U	0.082	U	1	UM,Y		0.330	U	0.082	U	1	U		10.0	U	0.082	U	1	U																																																
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA		0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	U		0.082	U	0.082	U	1	UM,Y		0.330	U	0.082	U	1	U		10.0	U	0.082	U	1	U																																																
4-Bromophenyl phenyl ether	mg/kg	NA	NA		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
4-Chloro-3-methylphenol	mg/kg	NA	NA		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U		3.4	U	0.028	U	0.51	U																																																
4-Chloroaniline	mg/kg	NA	NA		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
4-Chlorophenyl phenyl ether	mg/kg	NA	NA		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U		0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U		3.4	U	0.028	U	0.41	U																																																
4-Methylphenol	mg/kg	NA	NA		0.820	U	0.200	U	1	U		0.210	U	0.200	U				0.200	U	0.200	U				0.820	U	0.210	U				25.0	U	0.200	U																																																		
4-Nitroaniline	mg/kg	240	RSL		0.110	U	0.028	U				0.028	U	0.028	U	1	U		0.028	U	0.028	U	1	UM,Y		0.110	U	0.028	U	1	U		3.4	U	0.028	U	1	U																																																
4-Nitrophenol	mg/kg	4,756	RFA		0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	U		0.082	U	0.082	U	1	UM,Y		0.330	U	0.082	U	1	U		10.0	U	0.082	U	1	U																																																
Acenaphthene	mg/kg	3,400	RSL		0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.035	J		0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U		16.0		0.150		0.41	U																																																
Acenaphthylene	mg/kg	NA	NA		0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U		0.4	U	0.003	U	0.41	U																																																
Anthracene	mg/kg	22,000	RSL		0.013	U	0.010		0.41	U		0.007		0.003	U	0.21			0.003	U	0.003	U	0.069	JM,Y		0.013	U	0.003	U	0.41	U		37.0		0.300		0.41	U																																																
Benzo(a)anthracene	mg/kg	2.21	RFA		0.013	U	0.059		0.049	J		0.008		0.020		0.16		135	0.043		0.007		0.35	M,Y	141	0.013	U	0.003	U	0.41	U		54.0		0.530		0.03	J																																																
Benzo(a)pyrene	mg/kg	0.221	RFA		0.013</																																																																																	

Table 8-10-C Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-
E

See Notes at end of Table 8-10-E				Building		G8								G8								G8								G8											
				Sample ID	LL4SB-402M-0003-SO		LL4SB-401M-0003-SO		LL4SB-403M-0003-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0004-SO		LL4SB-401M-0004-SO		LL4SB-403M-0004-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0005-SO		LL4SB-401M-0005-SO		LL4SB-403M-0005-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0006-SO		LL4SB-401M-0006-SO		LL4SB-403M-0006-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0007-SO		LL4SB-401M-0007-SO		LL4SB-403M-0007-SO		RSD (%) of Three Replicate Samples		
Type Sample	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.								
Sample Date	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010								
Sample Depth	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7								
	Min LU or RSL																																								
Parameter	Units	Value		Value	Q	Value	Q				Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q			Value	Q	Value	Q	Value	Q									
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA	0.013	U	0.054		0.04	J		0.003	U	0.018		0.035	J			0.036		0.003	U	0.19	M,Y		0.013	U	0.003	U	0.41	U			29.0		0.290		0.41	U		
Isophorone	mg/kg	5,100	RSL	0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U			0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U			3.4	U	0.028	U	0.41	U		
Naphthalene	mg/kg	3,678	RFA	0.013	U	0.003	U	0.41	U		0.007		0.003	U	0.41	U			0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U			1.1		0.008		0.41	U		
Nitrobenzene	mg/kg	48	RSL	0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U			0.003	U	0.003	U	0.4	UM,Y		0.013	U	0.003	U	0.41	U			0.4	U	0.003	U	0.41	U		
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA	0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U			0.028	U	0.028	U	0.4	UM,Y		0.110	U	0.028	U	0.41	U			3.4	U	0.028	U	0.41	U		
N-Nitrosodiphenylamine	mg/kg	990	R9	0.110	U	0.028	U	0.82	U		0.028	U	0.028	U	0.82	U			0.028	U	0.028	U	0.81	UM,Y		0.110	U	0.028	U	0.82	U			3.4	U	0.028	U	0.82	U		
Pentachlorophenol	mg/kg	21.2	RFA	0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	U			0.082	U	0.082	U	1	UM,Y		0.330	U	0.082	U	1	U			10.0	U	0.082	U	1	U		
Phenanthrene	mg/kg	2,300	R9	0.013	U	0.015		0.41	U		0.021		0.014		0.4		152		0.031		0.009		0.077	JM,Y		0.013	U	0.012		0.41	U			130.0		1.100		0.027	J		
Phenol	mg/kg	18,000	RSL	0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U			0.041	J	0.028	U	0.51	UM,Y		0.110	U	0.028	U	0.51	U			3.4	U	0.028	U	0.51	U		
Pyrene	mg/kg	2,074	RFA	0.013	U	0.087		0.065	J		0.008		0.031		0.35		148		0.073		0.011		0.24	M,Y		0.013	U	0.003	U	0.41	U			120.0		1.200		0.045	J		

Table 8-10-C Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-
E

See Notes at end of Table 8-10-E			Building		G8										G8										G8										G8											
					Sample ID		LL45B-402M-0008-SO		LL45B-401M-0008-SO		LL45B-403M-0008-SO		RSD (%) of Three Replicate Samples		LL45B-402M-0009-SO		LL45B-401M-0009-SO		LL45B-403M-0009-SO		RSD (%) of Three Replicate Samples		LL45B-402M-0010-SO		LL45B-401M-0010-SO		LL45B-403M-0010-SO		RSD (%) of Three Replicate Samples		LL45B-402M-0011-SO		LL45B-401M-0011-SO		LL45B-403M-0011-SO		RSD (%) of Three Replicate Samples		LL45B-402M-0012-SO		LL45B-401M-0012-SO		LL45B-403M-0012-SO		RSD (%) of Three Replicate Samples	
Type Sample	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.	Primary V	Blind Dup	Field Dup.							
Sample Date	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010	8/16/2010	8/17/2010	8/23/2010							
Sample Depth	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7							
Value	Min LU or RSL	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q	Value	Q					
1,2,4-Trichlorobenzene	mg/kg	220	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
1,2-Dichlorobenzene	mg/kg	1,900	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
1,3-Dichlorobenzene	mg/kg	530	R9	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
1,4-Dichlorobenzene	mg/kg	24	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
2,4,5-Trichlorophenol	mg/kg	6,100	RSL	0.028	U	0.027	U	0.51	U			0.028	U	0.028	U	0.51	U			0.110	U	0.027	U	0.5	U			0.110	U	0.028	U	0.51	U			0.028	U	0.028	U	0.51	UM					
2,4,6-Trichlorophenol	mg/kg	440	RSL	0.082	U	0.081	U	0.51	U			0.082	U	0.082	U	0.51	U			0.330	U	0.081	U	0.5	U			0.330	U	0.082	U	0.51	U			0.082	U	0.082	U	0.51	U					
2,4-Dichlorophenol	mg/kg	180	RSL	0.028	U	0.027	U	0.51	U			0.028	U	0.028	U	0.51	U			0.110	U	0.027	U	0.5	U			0.110	U	0.028	U	0.51	U			0.028	U	0.028	U	0.51	U					
2,4-Dimethylphenol	mg/kg	1,200	RSL	0.082	U	0.081	U	0.41	U			0.082	U	0.082	U	0.41	U			0.330	U	0.081	U	0.4	U			0.330	U	0.082	U	0.41	U			0.082	U	0.082	U	0.41	U					
2,4-Dinitrophenol	mg/kg	120	RSL	0.082	U	0.081	U	2.1	U			0.082	U	0.082	U	2	U			0.330	U	0.081	U	2	U			0.330	U	0.082	U	2	U			0.082	U	0.082	U	2	UM					
2,4-Dinitrotoluene	mg/kg	16	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
2,6-Dinitrotoluene	mg/kg	61	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
2-Chloronaphthalene	mg/kg	6,300	RSL	0.003	U	0.003	U	0.41	U			0.003	U	0.003	U	0.41	U			0.014	U	0.003	U	0.4	U			0.013	U	0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
2-Chlorophenol	mg/kg	390	RSL	0.028	U	0.027	U	0.51	U			0.028	U	0.028	U	0.51	U			0.110	U	0.027	U	0.5	U			0.110	U	0.028	U	0.51	U			0.028	U	0.028	U	0.51	U					
2-Methylnaphthalene	mg/kg	2,378	RFA	0.003	U	0.028		0.41	U			0.003	U	0.003	U	0.41	U			0.014	U	0.027		0.4	U			0.013	U	0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
2-Methylphenol	mg/kg	3,100	R9	0.082	U	0.081	U	1	U			0.082	U	0.082	U	1	U			0.330	U	0.081	U	1	U			0.330	U	0.082	U	1	U			0.082	U	0.082	U	1	U					
2-Nitroaniline	mg/kg	6,100	RSL	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
2-Nitrophenol	mg/kg	NA	NA	0.028	U	0.027	U	0.51	U			0.028	U	0.028	U	0.51	U			0.110	U	0.027	U	0.5	U			0.110	U	0.028	U	0.51	U			0.028	U	0.028	U	0.51	U					
3 & 4-Methylphenol	mg/kg	NA	NA	NA		NA		2.1	U			NA		NA		2	U			NA		NA		2	U			NA		NA		2	U			NA		NA		2	U					
3,3'-Dichlorobenzidine	mg/kg	11	RSL	0.082	U	0.081	U	0.51	U			0.082	U	0.082	U	0.51	U			0.330	U	0.081	U	0.5	U			0.330	U	0.082	U	0.51	U			0.082	U	0.082	U	0.51	U					
3-Methylphenol	mg/kg	NA	NA	0.200	U	0.200	U					0.200	U	0.200	U					0.830	U	0.200	U			87		0.820	U	0.200	U					0.200	U	0.210	U							
3-Nitroaniline	mg/kg	NA	NA	0.082	U	0.081	U	1	U			0.082	U	0.082	U	1	U			0.330	U	0.081	U	1	U			0.330	U	0.082	U	1	U			0.082	U	0.082	U	1	U					
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	0.082	U	0.081	U	1	U			0.082	U	0.082	U	1	U			0.330	U	0.081	U	1	U			0.330	U	0.082	U	1	U			0.082	U	0.082	U	1	UM					
4-Bromophenyl phenyl ether	mg/kg	NA	NA	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
4-Chloro-3-methylphenol	mg/kg	NA	NA	0.028	U	0.027	U	0.51	U			0.028	U	0.028	U	0.51	U			0.110	U	0.027	U	0.5	U			0.110	U	0.028	U	0.51	U			0.028	U	0.028	U	0.51	U					
4-Chloroaniline	mg/kg	NA	NA	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
4-Chlorophenyl phenyl ether	mg/kg	NA	NA	0.028	U	0.027	U	0.41	U			0.028	U	0.028	U	0.41	U			0.110	U	0.027	U	0.4	U			0.110	U	0.028	U	0.41	U			0.028	U	0.028	U	0.41	U					
4-Methylphenol	mg/kg	NA	NA	0.200	U	0.200	U	NA				0.200	U	0.200	U					0.830	U	0.200	U			87		0.820	U	0.200	U					0.200	U	0.210	U	NA						
4-Nitroaniline	mg/kg	240	RSL	0.028	U	0.027	U	1	U			0.028	U	0.028	U	1	U			0.110	U	0.027	U	1	U			0.110	U	0.028	U	1	U			0.028	U	0.028	U	1	U					
4-Nitrophenol	mg/kg	4,756	RFA	0.082	U	0.081	U	1	U			0.082	U	0.082	U	1	U			0.330	U	0.081	U	1	U			0.330	U	0.082	U	1	U			0.082	U	0.082	U	1	U					
Acenaphthene	mg/kg	3,400	RSL	0.003	U	0.036		0.41	U			0.003	U	0.003	U	0.41	U			0.014	U	0.026		0.4	U			0.068		0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
Acenaphthylene	mg/kg	NA	NA	0.003	U	0.032		0.41	U			0.003	U	0.003	U	0.41	U			0.014	U	0.031		0.4	U			0.013	U	0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
Anthracene	mg/kg	22,000	RSL	0.003	U	0.098		0.031	J			0.003	U	0.003	U	0.41	U			0.044		0.090		0.4		109		0.170		0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
Benzo(a)anthracene	mg/kg	2.21	RFA	0.028		0.260		0.11		89		0.028		0.015		0.063	J			0.170		0.200		0.34		38		0.290		0.003	U	0.41	U			0.003	U	0.003	U	0.41	U					
Benzo(a)pyrene	mg/kg	0.221	RFA	0.035		0.360		0.09		108		0.028		0.018		0.074	J			0.280		0.310		0.29		5		0.380		0.003	U	0.41	U			0.003	U	0.008								

Table 8-10-C Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Semivolatiles

See Notes at end of Table 8-10-
E

See Notes at end of Table 8-10-E				Building		G8								G8								G8								G8																																																	
				Sample ID	LL4SB-402M-0008-SO		G8				LL4SB-401M-0008-SO				LL4SB-403M-0008-SO				RSD (%) of Three Replicate Samples	LL4SB-402M-0009-SO		G8				LL4SB-401M-0009-SO				LL4SB-403M-0009-SO				RSD (%) of Three Replicate Samples	LL4SB-402M-0010-SO		G8				LL4SB-401M-0010-SO				LL4SB-403M-0010-SO				RSD (%) of Three Replicate Samples	LL4SB-402M-0011-SO		G8				LL4SB-401M-0011-SO				LL4SB-403M-0011-SO				RSD (%) of Three Replicate Samples	LL4SB-402M-0012-SO		G8				LL4SB-401M-0012-SO				LL4SB-403M-0012-SO				RSD (%) of Three Replicate Samples
Type Sample	Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.		Primary V	Blind Dup	Field Dup.																																				
Sample Date	8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010		8/16/2010	8/17/2010	8/23/2010																																				
Sample Depth	1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7		1-7	1-7	1-7																																				
	Min LU or RSL																																																																														
Parameter	Units	Value			Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q																																		
Indeno(1,2,3-cd)pyrene	mg/kg	2.21	RFA		0.022		0.220		0.056	J		0.016		0.011		0.044	J		0.200		0.320		0.2		29	0.300		0.003	U	0.41	U		0.003	U	0.008	Q	0.41	U																																									
Isophorone	mg/kg	5,100	RSL		0.028	U	0.027	U	0.41	U		0.028	U	0.028	U	0.41	U		0.110	U	0.027	U	0.4	U		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U																																									
Naphthalene	mg/kg	3,678	RFA		0.003	U	0.033		0.41	U		0.003	U	0.003	U	0.41	U		0.014	U	0.025		0.4	U		0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U																																									
Nitrobenzene	mg/kg	48	RSL		0.003	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U		0.014	U	0.003	U	0.4	U		0.013	U	0.003	U	0.41	U		0.003	U	0.003	U	0.41	U																																									
N-Nitroso-di-n-propylamine	mg/kg	1.27	RFA		0.028	U	0.027	U	0.41	U		0.028	U	0.028	U	0.41	U		0.110	U	0.027	U	0.4	U		0.110	U	0.028	U	0.41	U		0.028	U	0.028	U	0.41	U																																									
N-Nitrosodiphenylamine	mg/kg	990	R9		0.028	U	0.027	U	0.82	U		0.028	U	0.028	U	0.81	U		0.110	U	0.027	U	0.81	U		0.110	U	0.028	U	0.82	U		0.028	U	0.028	U	0.82	U																																									
Pentachlorophenol	mg/kg	21.2	RFA		0.082	U	0.081	U	1	U		0.082	U	0.082	U	1	U		0.330	U	0.081	U	1	U		0.330	U	0.082	U	1	U		0.082	U	0.082	U	1	UM,Y																																									
Phenanthrene	mg/kg	2,300	R9		0.025		0.830		0.081	J		0.030		0.015		0.41	U		0.200		0.660		0.2		75	0.570		0.003	U	0.41	U		0.014		0.007		0.41	U																																									
Phenol	mg/kg	18,000	RSL		0.038	J	0.027	U	0.51	U		0.028	U	0.028	U	0.51	U		0.110	U	0.027	U	0.5	U		0.110	U	0.028	U	0.51	U		0.028	U	0.028	U	0.51	U																																									
Pyrene	mg/kg	2,074	RFA		0.045		0.750		0.17		117	0.042		0.029		0.079	J		0.390		0.940		0.71		41	0.600		0.003	U	0.41	U		0.003	U	0.010		0.03	J																																									

Table 8-10-D Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Pesticides and PCBs

See Notes at end of Table 8-10-E				Building	G-8							G-8							G-8								
				Sample ID	LL4SB-402M-0101-SO		LL4SB-401M-0101-SO		LL4SB-403M-0101-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0102-SO		LL4SB-401M-0102-SO		LL4SB-403M-0102-SO		RSD (%) of Three Replicate Samples	LL4SB-402M-0103-SO		LL4SB-401M-0103-SO		LL4SB-403M-0103-SO		RSD (%) of Three Replicate Samples		
					Primary		Blind Dup		Field Dup			Primary		Blind Dup		Field Dup			Primary		Blind Dup		Field Dup				
					8/16/10		8/17/10		8/23/10			8/16/10		8/17/10		8/23/10			8/16/10		8/17/10		8/23/10				
					1 - 3		1 - 3		1 - 3			3 - 5		3 - 5		3 - 5			5 - 7		5 - 7		5 - 7				
Parameter	Units	Value	Min LU or RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q				
Pesticides and PCBs	4,4'-DDD	mg/kg	20	RSL	0.0034	U	0.0034	U	0.0012	U		0.014	U	0.00068	U	0.0012	U		0.014	U	0.00068	U	0.0012	U			
	4,4'-DDE	mg/kg	40.8	RFA	0.0034	U	0.0034	U	0.0011	U		0.014	U	0.00068	U	0.0011	U		0.014	U	0.00068	U	0.0011	U			
	4,4'-DDT	mg/kg	17	RSL	0.0034	U	0.0034	U	0.0015	U		0.014	U	0.00068	U	0.0015	U		0.014	U	0.00068	U	0.0015	U			
	Aldrin	mg/kg	0.8	RFA	0.0067	U	0.0068	U	0.0017	U		0.027	U	0.0014	U	0.0017	U		0.027	U	0.0014	U	0.0017	U			
	alpha-BHC	mg/kg	0.9	R9	0.0067	U	0.0068	U	0.0019	U		0.027	U	0.0014	U	0.0019	U		0.027	U	0.0014	U	0.0019	U			
	alpha-Chlordane	mg/kg	0.0	NA	0.0067	U	0.0068	U	0.0011	U		0.027	U	0.0014	U	0.0011	U		0.027	U	0.0014	U	0.0011	U			
	beta-BHC	mg/kg	7.7	NA	0.0072	J	0.0056	J	0.002	U		0.027	J	0.0091	PG	0.002	U		0.027	U	0.0014	U	0.002	U			
	Chlordane (Technical)	mg/kg	NA	NA	NA		NA		0.031	U		NA		NA		0.031	U		NA		NA		0.031	U			
	delta-BHC	mg/kg	NA	NA	0.0067	U	0.0068	U	0.0011	U		0.027	U	0.0014	U	0.0011	U		0.027	U	0.0014	U	0.0011	U			
	Dieldrin	mg/kg	0.9	RFA	0.0034	U	0.0034	U	0.0012	U		0.014	U	0.00068	U	0.0012	U		0.014	U	0.00068	U	0.0012	U			
	Endosulfan I	mg/kg	370	R9	0.0034	U	0.0034	U	0.0022	U		0.014	U	0.00068	U	0.0022	U		0.014	U	0.00068	U	0.0022	U			
	Endosulfan II	mg/kg	370	R9	0.0067	U	0.0068	U	0.0012	U		0.027	U	0.0014	U	0.0012	U		0.027	U	0.0014	U	0.0012	U			
	Endosulfan sulfate	mg/kg	370	R9	0.0067	U	0.0068	U	0.0032	UM,Y		0.027	U	0.0014	U	0.0032	U		0.027	U	0.0014	U	0.0032	U			
	Endrin	mg/kg	17.7	RFA	0.0034	U	0.0034	U	0.0014	U		0.014	U	0.00068	U	0.0014	U		0.014	U	0.00068	U	0.0014	U			
	Endrin aldehyde	mg/kg	0.0	NA	0.0067	U	0.0068	U	0.0037	UM		0.027	U	0.0014	U	0.0037	U		0.027	U	0.0014	U	0.0037	U			
	Endrin ketone	mg/kg	18	R9	0.0034	U	0.0055	J	0.0029	U		0.014	U	0.0015	J	0.0029	U		0.014	U	0.00068	U	0.0029	U			
	Gamma-BHC	mg/kg	NA	NA	0.0067	U	0.0068	U	NA			0.027	U	0.0014	U				0.027	U	0.0014	U	NA				
	gamma-Chlordane	mg/kg	16	R9	0.0034	U	0.0034	U	0.0041	P		0.014	U	0.00068	U	0.0011	U		0.014	U	0.00068	U	0.0011	U			
	Heptachlor	mg/kg	3.1	RFA	0.0067	U	0.0068	U	0.0012	U		0.027	U	0.0014	U	0.0016	P		0.027	U	0.0014	U	0.0012	U			
	Heptachlor epoxide	mg/kg	1.5	RFA	0.0067	U	0.0068	U	0.0017	U		0.027	U	0.0014	U	0.0017	U		0.027	U	0.0014	U	0.0017	U			
	Lindane	mg/kg	NA	NA	NA		NA		0.0016	U		NA		NA		0.0016	U		NA		NA		0.0016	U			
	Methoxychlor	mg/kg	310	RSL	0.017	U	0.017	U	0.0023	U		0.067	U	0.0034	U	0.0023	U		0.067	U	0.0034	U	0.0023	U			
	Toxaphene	mg/kg	4.4	R9	0.1	U	0.1	U	0.031	U		0.41	U	0.02	U	0.031	U		0.41	U	0.02	U	0.031	U			
	Aroclor 1016	mg/kg	2.0	RFA	0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U			
	Aroclor 1221	mg/kg	1.4	RSL	0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U			
	Aroclor 1232	mg/kg	1.4	RSL	0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U			
Aroclor 1242	mg/kg	2.2	RSL	0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U				
Aroclor 1248	mg/kg	2.0	RFA	0.025		0.025		0.051	U		0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051	U				
Aroclor 1254	mg/kg	2.0	RFA	0.074		0.083		0.078		6	0.068		0.025	U	0.051			0.046	J	0.025	U	0.051	U				
Aroclor 1260	mg/kg	2.0	RFA	0.025	U	0.025	U	0.051	U		0.025	U	0.025	U	0.051			0.025	U	0.025	U	0.051	U				
% RSD Average =					6																						

Table 8-10-E Ravenna Load Line 4 Subsurface Soil MI Sampling Results
Volatile Organics

See Notes at end of Table 8-10-E			Building		G-8										G-8										G-8									
					Sample ID		LL4SB-402M-0101-SO		LL4SB-401M-0101-SO		LL4SB-403M-0101-SO		RSD (%) of Three Replicate Samples		LL4SB-402M-0102-SO		LL4SB-401M-0102-SO		LL4SB-403M-0102-SO		RSD (%) of Three Replicate Samples		LL4SB-402M-0103-SO		LL4SB-401M-0103-SO		LL4SB-403M-0103-SO		RSD (%) of Three Replicate Samples					
Type Sample	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup	Primary	Blind Dup	Field Dup							
Sample Date	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10	8/16/10	8/17/10	8/23/10							
Sample Depth	1 - 3	1 - 3	1 - 3	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5							
Value	Min LU or RSL	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q	Value		Q						
Analyte	Units	Value	RSL	Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q		Value	Q	Value	Q	Value	Q	Value	Q		Value	Q						
1,1,1-Trichloroethane	mg/kg	8700	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
1,1,2,2-Tetrachloroethane	mg/kg	5.6	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,1,2-Trichloroethane	mg/kg	11	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,1-Dichloroethane	mg/kg	33	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,1-Dichloroethene	mg/kg	120	R9	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,2-Dibromoethane	mg/kg	0.34	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,2-Dichloroethane	mg/kg	4.3	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
1,2-Dichloroethene (total)	mg/kg	700	RSL	0.26	U	0.31	U	NA			0.38	U	0.4	U	NA			0.36	U	0.42	U	NA												
1,2-Dichloropropane	mg/kg	8.8	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
2-Butanone	mg/kg	22000	R9	0.086	J B	0.062	U	0.49	U		0.095	J B	0.08	U	0.41	U		0.082	J B	0.084	U	0.42	U											
2-Hexanone	mg/kg	210	RSL	0.026	U	0.031	U	0.49	U		0.038	U	0.04	U	0.41	U		0.036	U	0.042	U	0.42	U											
4-Methyl-2-pentanone	mg/kg	5300	R9	0.052	U	0.062	U	0.49	U		0.075	U	0.08	U	0.41	U		0.071	U	0.084	U	0.42	U											
Acetone	mg/kg	61000	RSL	0.1	U	0.12	U	0.97	U		0.15	U	0.16	U	0.81	U		0.14	U	0.17	U	0.84	U											
Benzene	mg/kg	11	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.0078	J											
Bromochloromethane	mg/kg	8.2	R9	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Bromodichloromethane	mg/kg	2.7	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Bromoform	mg/kg	610	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Bromomethane	mg/kg	7.3	RSL	0.026	U	0.031	U	0.097	UA		0.038	U	0.04	U	0.081	UA		0.036	U	0.042	U	0.084	UA											
Carbon disulfide	mg/kg	820	RSL	0.013	U	0.016	U	0.097	U		0.034	J	0.02	U	0.081	U		0.018	U	0.021	U	0.084	U											
Carbon tetrachloride	mg/kg	6.1	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
Chlorobenzene	mg/kg	290	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
Chloroethane	mg/kg	30	R9	0.052	U	0.062	U	0.097	U		0.075	U	0.08	U	0.081	U		0.071	U	0.084	U	0.084	U											
Chloroform	mg/kg	2.9	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Chloromethane	mg/kg	120	RSL	0.013	U	0.016	U	0.097	U		0.019	U	0.02	U	0.081	U		0.018	U	0.021	U	0.084	U											
cis-1,2-Dichloroethene	mg/kg	NA	NA	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
cis-1,3-Dichloropropene	mg/kg	17	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
Dibromochloromethane	mg/kg	6.8	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Ethylbenzene	mg/kg	54	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
Methylene chloride	mg/kg	110	RSL	0.11	J B	0.13	J B	0.097	U		0.19	B	0.18	J B	0.081	U		0.16	J B	0.18	J B	0.084	U											
Styrene	mg/kg	6300	RSL	0.0052	U	0.0062	U	0.049	U		0.0075	U	0.008	U	0.041	U		0.0071	U	0.0084	U	0.042	U											
Tetrachloroethene	mg/kg	4.8	R9	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Toluene	mg/kg	5000	RSL	0.026	J B	0.016	U	0.02	J		0.015	J B	0.02	J B	0.008	J		0.012	J B	0.021	U	0.0061	J											
trans-1,2-Dichloroethene	mg/kg	NA	NA	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
trans-1,3-Dichloropropene	mg/kg	17	RSL	0.013	U	0.016	U	0.097	U		0.019	U	0.02	U	0.081	U		0.018	U	0.021	U	0.084	U											
Trichloroethene	mg/kg	0.53	R9	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
Vinyl chloride	mg/kg	0.6	RSL	0.013	U	0.016	U	0.049	U		0.019	U	0.02	U	0.041	U		0.018	U	0.021	U	0.042	U											
m & p-Xylene	mg/kg	NA	NA	NA		NA		0.097	U		NA		NA		0.081	U		NA		NA		0.084	U											
o-Xylene	mg/kg	NA	NA	NA		NA		0.049	U		NA		NA		0.041	U		NA		NA		0.042	U											
Xylene (Total)	mg/kg	630	RSL	0.016	U	0.019	U	0.146	U		0.022	U	0.024	U	0.122	U		0.021	U	0.025	U	0.126	U											

All results were below the RL. No %RSDs were calculated.

Table Legend

LU	Land Use
RSL	US EPA Regional Screening Level
NG	National Guard Trainee Land Use
RFA	Resident Farmer Adult Land Use
BKG1	Surface Soil Background – Used for screening against surface soil MI samples and 1' – 3' and 3' – 5' subsurface MI samples
BKG2	Subsurface Soil Background – Used for screening against 5' – 7' subsurface MI samples
RSL	Regional Screening Level
R9	US EPA Region 9 Screening Criteria
NA	Not Analyzed
Primary	Primary Horizontal Subsurface MI Sample
Primary V	Primary Vertical Subsurface MI Sample
QC-H	Quality Control Horizontal Subsurface MI Sample
QC-V	Quality Control Vertical Subsurface MI Sample
QA-H	Quality Assurance Horizontal Subsurface MI Sample
WA-V	Quality Assurance Vertical Subsurface MI Sample
RSD	Relative Standard Deviation
RSD%	Relative Standard Deviation Percent
RPD	Relative Percent Difference

Data Qualifiers

A	Analyte averaged calibration criteria within acceptable limits
B	Analyte detected in associated Method Blank
D or Dil	Diluted Out
E	No coliform detected in the Total Coliform Analysis
H	Holding time exceeded
J	Estimated value
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptable limits
P or G	Concentration of analyte differs more than 40% between primary and confirmation analysis
U	Analyte concentration was not above the detection level
V	Raised quantitation or reporting limit due to dilution from matrix interference
Y	Replicate duplicate precision outside acceptance limits

Figure 8-1: Load Line 1 Building CA-6 Exceedances, Subsurface ISM Sampling

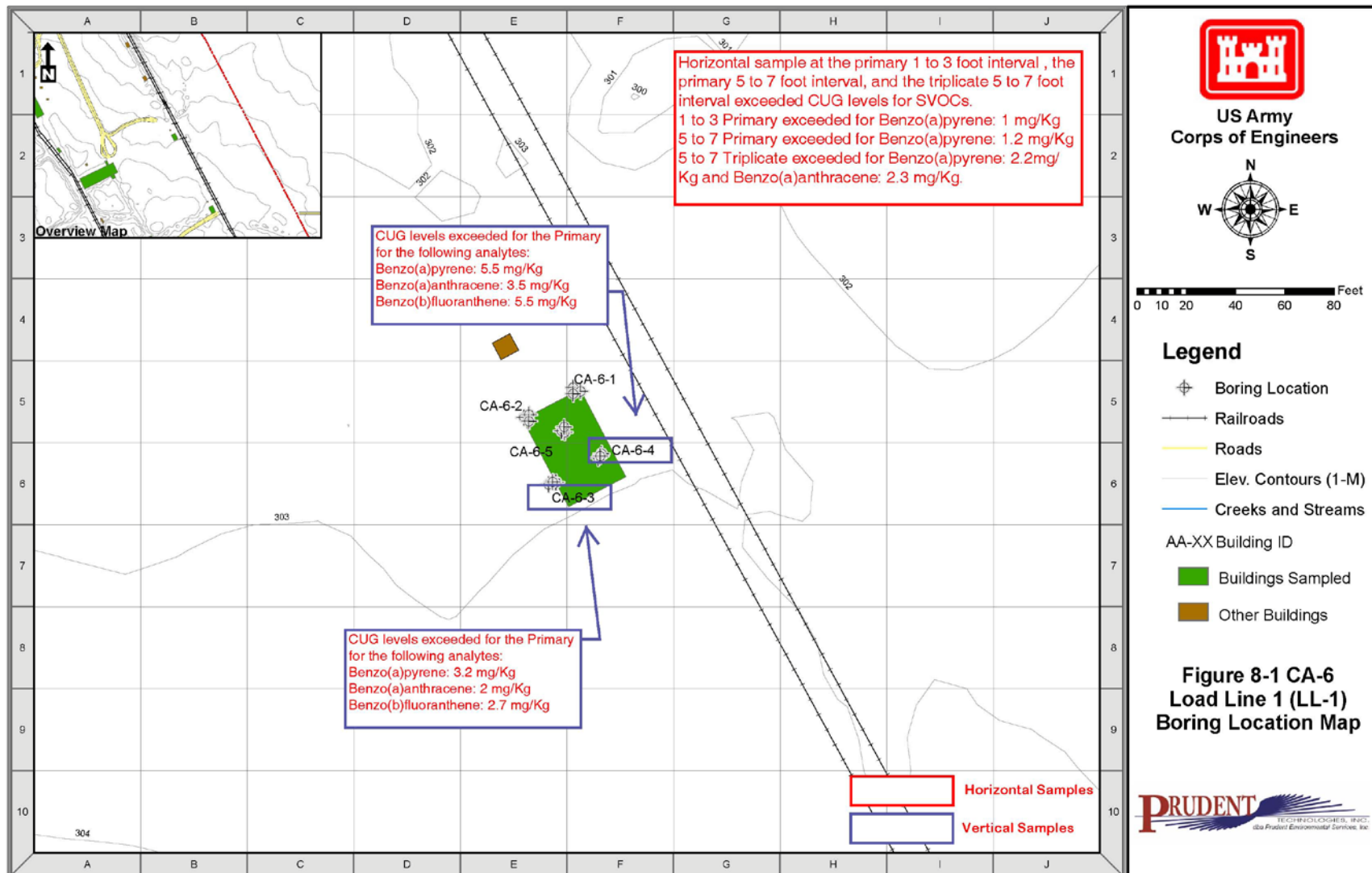


Figure 8-2: Load Line 1 Building CB-4A Exceedances, Subsurface ISM Sampling

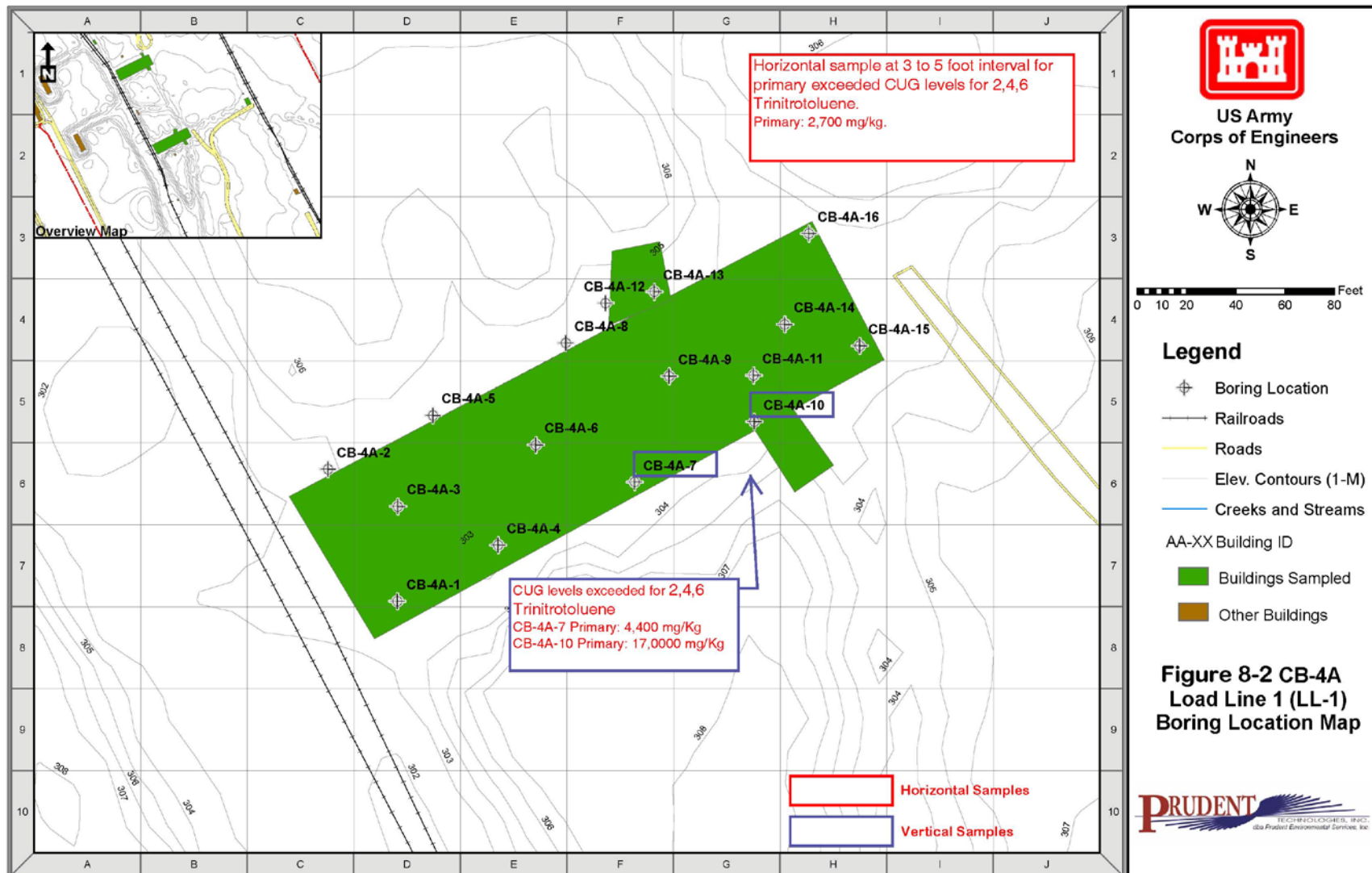


Figure 8-3: Load Line 2 Building DA-6 Exceedances, Subsurface ISM Sampling

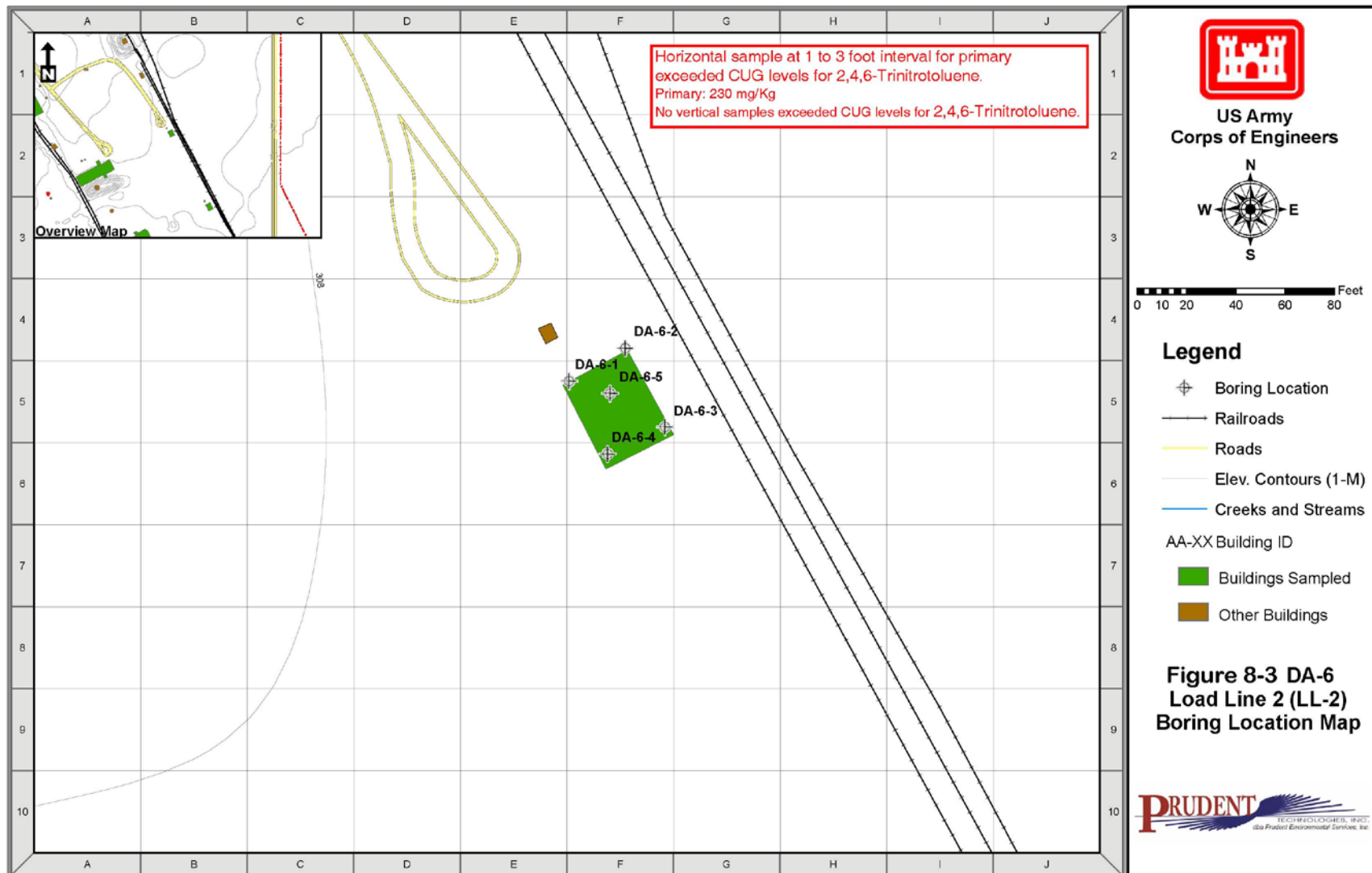


Figure 8-4: Load Line 3 Building EA-6 Exceedances, Subsurface ISM Sampling

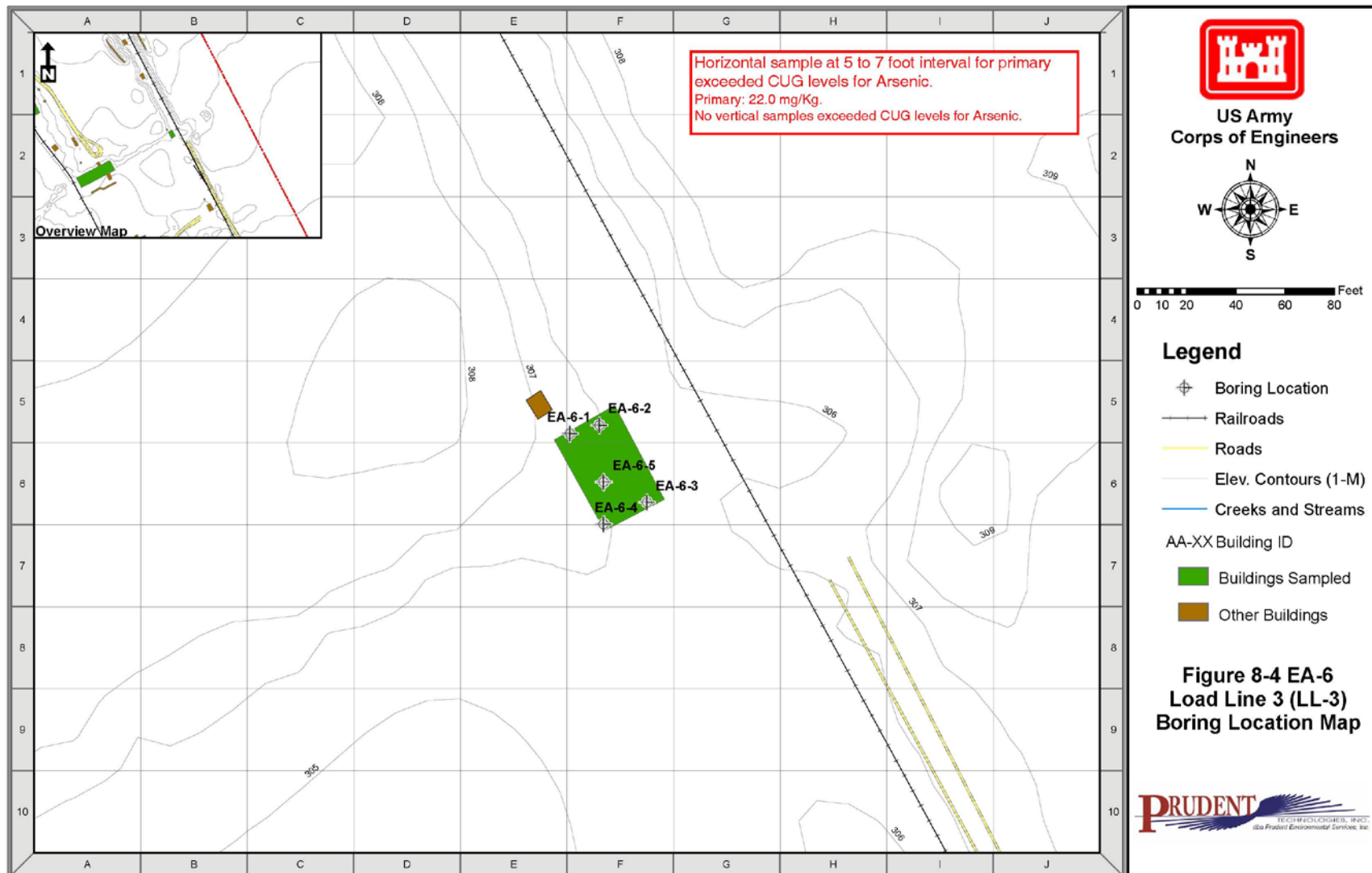


Figure 8-5: Load Line 3 Building EB-10 Exceedances, Subsurface ISM Sampling

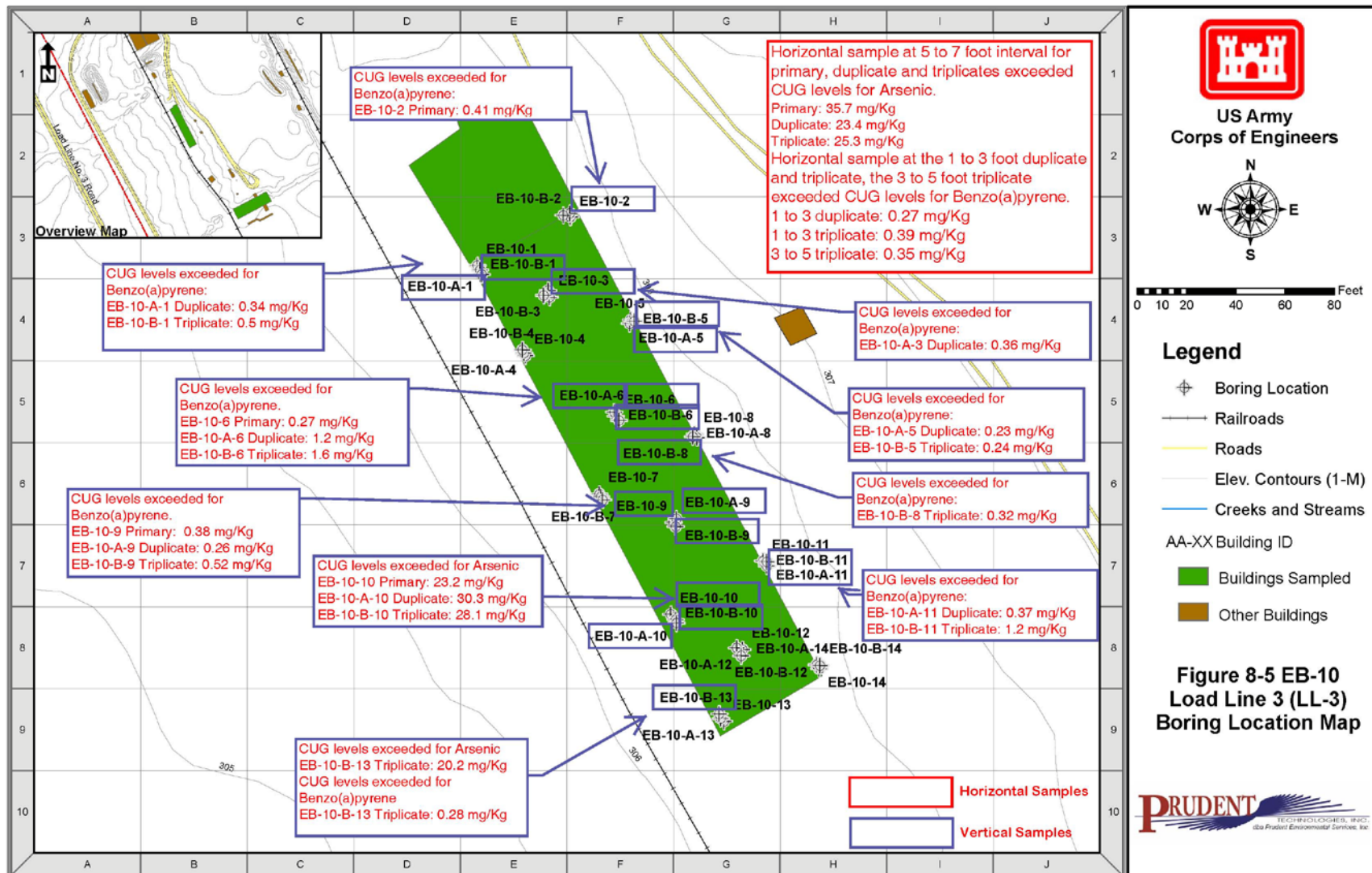
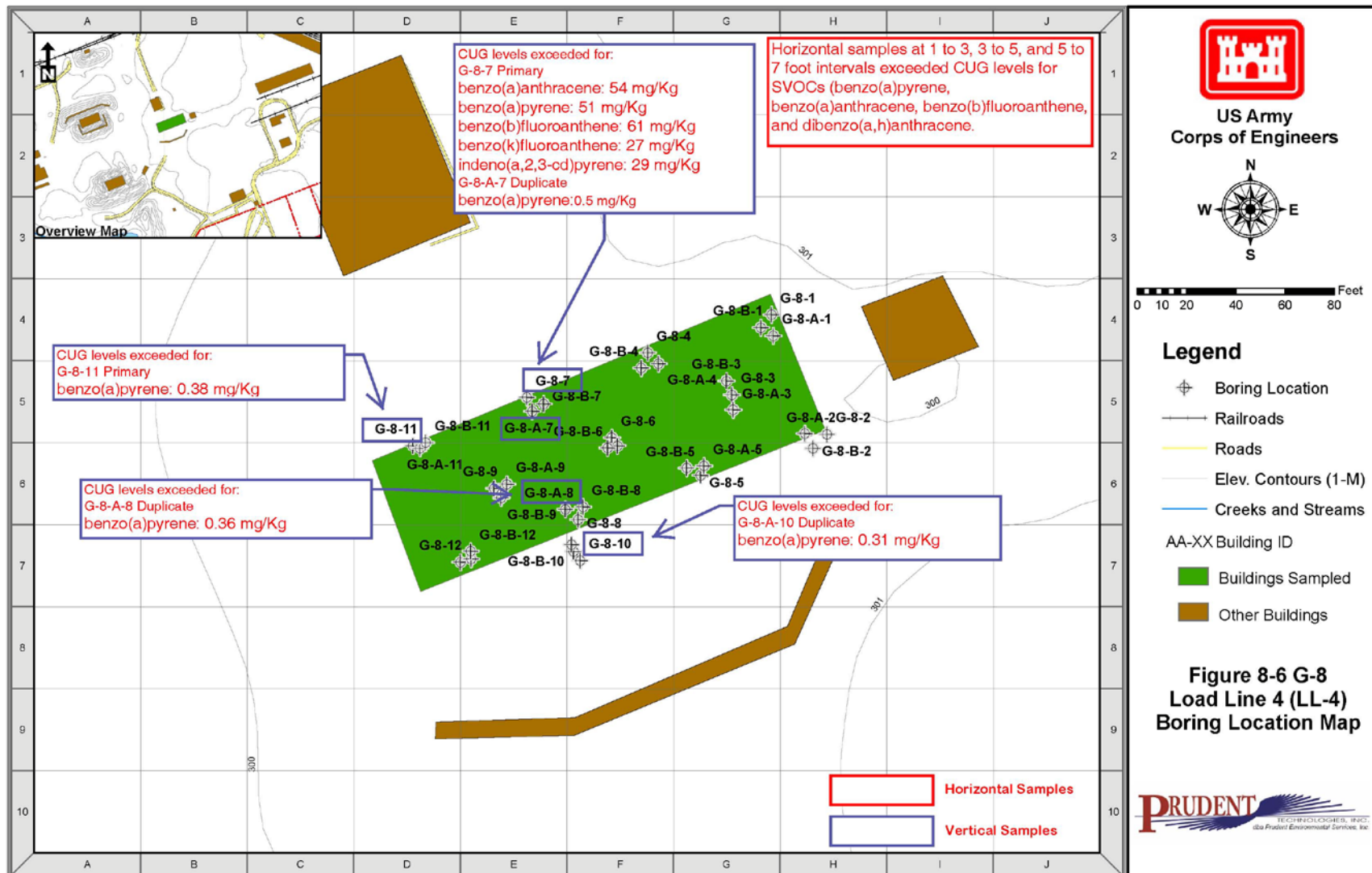


Figure 8-6: Load Line 4 Building G-8 Exceedances, Subsurface ISM Sampling



9.0 QUALITY CONTROL/ASSURANCE

9.1 ANALYTICAL PROBLEM REPORT

9.1.1 Semi-Volatile Organic Compounds (SVOCs) by Method 8270C

TestAmerica, Inc. discussed the analytical problems it had encountered in method 8270C with Prudent on September 14, 2010 in a teleconference. Cement and concrete matrices in soil samples from RVAPP had produced interference peaks in the chromatograms causing shifted retention times, distorted peak shapes, inaccuracies in peak integration and quantitative accuracy. This was the result of high aldol condensation peaks, most likely caused by the presence of acetone in the extraction solvents. These aldol condensation peaks also affected recoveries of phenolic compounds because the surrogate recoveries of 2,4,6-tribromophenol were very low, below the acceptable QSM (Quality Systems Manual) 4.1 lower limit of 35 percent.

TestAmerica sent an email describing the above problem on September 15, 2010 and proposed extraction of the soil samples with dichloromethane alone, instead of a mixture of dichloromethane and acetone. (See Attachment 1, Appendix G)

A follow up teleconference was held September 16, 2010 to discuss the resolution of the SVOC issues. Mr. Derek Kinder, Technical Manager for the USACE also participated in this teleconference along with members of TestAmerica and Prudent. Dr. Mark Bruce, technical director of TestAmerica, explained that using dichloromethane alone as the extracting solvent and with additional improvements in the analysis, eliminated the aldol condensation peaks from the chromatograms. These changes yielded acceptable recoveries of the matrix spikes and the surrogate 2,4,6-tribromophenol.

He also pointed out that the recoveries of polynuclear aromatic compounds (PAHs) were not affected by the aldol condensation peaks. This observation was important for the RVAAP project, because PAHs are considered chemicals of concern and the test results of the PAHs were considered valid from the original chromatograms.

At the teleconference, Prudent directed TestAmerica to proceed with re-extraction of the soil samples with dichloromethane alone and to complete the analyses.

A summary of TestAmerica's findings was sent to all members concerned by email on September 23, 2010 (see Attachment 2, Appendix G).

However, the 14-day holding time for method 8270C for all soil samples collected in Ravenna had expired. TestAmerica pointed out that Ravenna had allowed a double holding time prior to rejection for SVOCs in some of the previous projects. In order to provide proof that the double holding time is scientifically defensible, Prudent directed TestAmerica to reanalyze field samples collected on August 16, 2010, that showed high concentrations of PAHs. These samples were extracted even beyond the double holding time. The results of the original and the second extraction and analysis are presented in Table 9-1.

Table 9-1: Summary of Extraction Results

Sample # and Analyte	Results from extraction on 8/24/2010, on 8th day (ug/kg)	Results from extraction on 9/22/2010, on 37th day (ug/kg)	RPD	Clean up Goal (ug/kg)
LL4SB-402M-0102-SO				
Benzo(a)anthracene	4600	4100	12	2210
Benzo(b)fluoranthene	4900	4500	9	2210
Benzo(a)pyrene	4100	3700	10	221
Dibenzo(a,h)anthracene	620	480	26	221
LL4SB-402M-0103-SO				
Benzo(a)anthracene	2100	2200	5	2210
Benzo(b)fluoranthene	2200	2400	9	2210
Benzo(a)pyrene	1900	1900	0	221
Dibenzo(a,h)anthracene	310	300	3	221

Even after 37 days, re-extraction and analyses of the field samples showed comparable results for four PAHs. The Relative Percent Difference (RPD) for the PAH results are at or below 26 percent between the 2 sets of results. QSM 4.1 allows RPD of 35 percent for laboratory duplicates and 50 percent for field duplicates

9.1.2 Chromium (VI) by method 7196A

TestAmerica reported that some of the samples from Ravenna were exhibiting an unusual colorimetric interference, probably due to samples having redox characteristics. The laboratory proposed three different options to overcome this interference in an email (see Attachment 3, Appendix G).

The laboratory reported that the Option 1, re-preparing, and reanalyzing with a method of standard addition spikes at a concentration 5 times higher, and then diluting the digestate 5X prior to analysis, produced acceptable results. However, under these conditions the reporting limit is 4 mg/kg instead of 0.8 mg/kg. All samples that exhibited colorimetric interferences were analyzed by this procedure. The elevated reporting limit had no effect on the data quality objective because the cleanup goal for hexavalent chromium is 16.4 mg/kg.

9.2 DATA VERIFICATION REPORT

TestAmerica assigned a unique laboratory lot number for each of the sample delivery group for all the horizontal samples. A different lot number for vertical samples was assigned when they were analyzed.

For each laboratory lot number, TestAmerica submitted a hard copy of the summary report and an electronic data deliverable (EDD) copy containing the summary report and an expanded report containing all the calibration, instrument print outs and chromatograms. Prudent used the EDD to verify the data through the Automated Data Review (ADR) software and reviewed the calibration data manually. The ADR software currently does not have the capability of reviewing calibration information. In this report, the findings of the instrument calibration are presented first followed by ADR findings.

Prudent is providing CDs containing all TestAmerica's analytical data files in Appendix F. The Data Verification Reports are provided in Appendix H.

9.2.1 Calibration

All instrument checks, initial calibrations, calibration verifications and continuing calibrations were found acceptable. The exceptions are discussed below by lot numbers. The affected sample numbers are listed only if they are deemed necessary.

Lot AOH210401: In Method 8081, the closing Continuing Calibration Verification (CCV) failed high for some of the analytes. Since the sample results were non-detects, no corrective actions were taken.

Lot AOH210402: In Method 8081, the toxaphene Initial Calibration Verification (ICV) failed Department of Defense (DOD) criteria. The true value for the ICV is 1.0. Recoveries for front and back were 0.485 and 0.563 respectively. Based on the variance between vendors, the ICV is always low for Toxaphene. Acceptance limits for ICVs are +/- 20 percent. The toxaphene closing CCV failed high on the confirmation column but passed criteria on the primary column. All data were reported from the primary column. The field samples were all non-detects and no corrective actions were taken.

Lot AOI070415: in Method 8330, the CCV for nitroglycerin had a high percent difference. The associated sample results were all non-detects. No corrective action was needed.

9.2.2 Automated Data Review (ADR)

Prudent purchased the ADR software from Laboratory Data Consultants (LDC) as per USACE requirements and developed an electronic Quality Assurance Project Plan (eQAPP, Final Ravenna ISM10192010) for the Ravenna project. The eQAPP contained all the analytical methods and the corresponding reporting and control limits required for this project. The analytical specifications for the eQAPP were taken from:

- 1) The Facility-wide Sampling and Analysis Plan for Environmental Investigations, Ravenna Army Ammunition Plant, Ravenna, Ohio, March 2001.
- 2) The DOD QSM for Environmental Laboratories, version 4.1.
- 3) The Appendix C, Laboratory Control Samples (LCS) Recovery Limits, method detection limits (MDLs), reporting limits (RLs) and preliminary remediation goals (PRGs) for SW-846 Methods, USACE Louisville District, and
- 4) The TestAmerica Laboratory Quality Control Manual.

Electronic copies of the completed eQAPPs were supplied to TestAmerica and C.T. Laboratories. TestAmerica processed the project analytical data using the eQAPP supplied by Prudent.

Prudent independently reviewed all the analytical data supplied by TestAmerica in electronic format using the ADR software and the eQAPP. The ADR review flagged results according to eQAPP, checked for blank contamination and exceedances of control and spike limits, and produced a project summary report for each laboratory sample lot.

Prudent found that all data produced by TestAmerica are usable and no data were rejected by ADR; however, double holding times were used prior to extraction for semi volatile compounds by Method 8270C (see Analytical Problem Report., Section 9.1 of this report)

Prudent is providing CDs containing all ADR reviewed data.

9.2.3 Laboratory Control Samples (LCS)

The ADR review showed at least one LCS was analyzed for each analytical batch for all analytical methods and no negative quality impact on the results.

9.2.4 Surrogates

The ADR review showed that recoveries of surrogates in the organic analytical methods were satisfactory and provided assurance that the data are usable.

9.3 MATRIX SPIKE AND MATRIX SPIKE DUPLICATES

Table 9-2 shows the number of samples collected for each analytical method and the associated MS/MSDs (matrix spike/matrix spike duplicate) analyzed by TestAmerica.

TestAmerica included sufficient numbers of MS/MSD pairs and in some cases more than one pair for every 20 field samples. The additional MS/MSDs were included to meet preparatory batch requirements. When matrix spikes and matrix spike duplicates were recovered beyond acceptance criteria or when the percent RPD between the spike and spike duplicates were outside acceptance criteria, the laboratory flagged corresponding analytes with a J flag according to QSM 4.1 requirements. When MS/MSD recoveries or RPDs were beyond acceptance criteria, the laboratory comments indicated that, for those analytical batches, the method blanks and the laboratory control recoveries met the acceptance criteria.

9.4 FIELD QUALITY CONTROL

9.4.1 Field Blanks for VOCs

Multi incremental sample collection took place between August 16, 2010 and September 2, 2010. During this time field blanks were collected for each load line as follows:

Load Line 1: Samples LL1SB-635B-0101, 0102, and 0103 were collected on August 31, 2010.

Load Line 2: Samples LL2SB-505B-0101, 0102 and 0103 were collected on August 27, 2010.

Load Line 3: Samples LL3SB-409B-0101, 0102 and 0103 were collected on August 30, 2010.

Load Line 4: Samples LL4SB-402B-0101 and 0103 were collected on August 16, 2010.

When soil samples were transferred from the soil core to bottles containing methanol for analyses of volatile organic compounds, the field blank bottles also containing methanol, were kept open simultaneously. At the end of soil transfer to soil bottles, the blanks were capped and sent to the laboratory for analyses of VOCs along with the field samples.

The results of the field blanks show no contamination except for common laboratory contaminants, methylene chloride, toluene and 2-butanone. Methylene chloride was detected between the method detection limit and the reporting limit in method blanks, field blanks and the associated samples. All methylene chloride values were qualified JB (See Table Legend on Page 8-43 for qualifier definitions). Toluene was detected below the reporting limits in method blank, one field blank and three associated samples. All toluene values for those blank and field samples were qualified JB. 2-Butanone was detected between the method detection and the reporting limits in five field blanks and six field samples. All the 2-butanone values were qualified JB.

9.4.2 Equipment Rinsates

Equipment rinsate was collected on August 20, August 28, and September 2, 2010. The rinsate was submitted to TestAmerica and analyzed for all of the project analytical methods. No contamination from any target analyte was found in these rinsates.

Table 9-2: Matrix Spike and Matrix Spike Duplicates

Analytical Method	Horizontal Samples Analyzed	Vertical Samples Analyzed	MS/MSD analyzed	Comments
Semi volatiles by 8270C	33	27	2 for horizontals 3 for verticals 1 for rinsates	
Volatiles by 8260B	33	Not required	4 for horizontals	
Pesticides by 8081	27	Not required	4 for horizontals	
PCBs by 8082	27	Not required	4 for horizontals 1 for rinsates	
Explosives by 8330	74	18	11 for horizontals 2 for verticals	
Nitroguanidine by 8330 Modified	74	N/A	10 for horizontals 1 for rinsates	
Metals by 6020	74	19	5 for horizontals 2 for verticals 2 for rinsates	
Mercury by 7471A	74	19	8 for horizontals 3 for rinsates	
Nitrocellulose by WS-WC-0050	74	Not Required	7 for horizontals 1 for verticals	
Hexavalent Chromium by 7196A	74	Not Required	2 for rinsates	Horizontals analyzed with method of standard additions

9.4.3 Completeness

TestAmerica completed all sample analyses according to project requirements and provided usable data. The completeness is 100%

9.5 TEMPERATURE BLANKS

As per the protocol detailed in the FWSAP, temperature blanks were included in all coolers transported to the laboratories. TestAmerica documented that all cooler temperatures ranged from 0.2 to 5.7 degrees, except one cooler at 29.3 degrees Celsius. Samples were taken to the TestAmerica Laboratory at the end of each day or immediately after field sampling was completed in several instances. TestAmerica did not record the sample identifications from any cooler.

The cooler temperature blank with a reading of 29.3 degrees Celsius was from one of four coolers sent directly from the field to the TestAmerica lab on the afternoon of 20 August 2010 at approximately 5:25 PM Eastern Standard Time (EST). When the four coolers were processed at TestAmerica no ice was found in one of the coolers. At that time, all samples in that cooler were put on ice at the laboratory. Presently, the identity of the cooler without ice cannot be made. It is believed, by Prudent, that as the three coolers in the field were recombined into four coolers to make room for more ice and safe shipment to the laboratory, ice was inadvertently left out of one of the coolers. Because the methanol bottles for the

horizontal samples were larger (1-liter bottles) compared to the smaller (250 ml) bottles, it is more than likely that the three large methanol bottles with field ice were not recombined and remained in the original field cooler and maintained ice until the lab received the coolers. The three volatile horizontal samples had non-detections of vertical volatile organic compounds, therefore the vertical methanol samples were analyzed for volatile organic compounds.

The soil plugs for volatile organic analyses were placed in methanol, bottles were capped, sealed and wrapped with tape to prevent escape of any volatile organic compounds, and kept on ice to maintain the integrity of samples while sampling progressed. However, the one cooler without ice had also soil samples in methanol bottles but without ice for at most 2-1/2 hours. The raised temperature of 29.3 degrees Celsius was below the boiling point for methanol of 64.5 degrees Celsius. This raised temperature of the surrounding environment in the cooler would enhance dissolving volatile organic compounds from soil matrix into methanol, and one would expect higher levels of volatile organic compounds be detected than corresponding samples at 4 degrees Celsius. Analytical Results indicated none of volatile organic compounds were detected. This is an indication of the absence of volatile organic compounds in the soil matrix. Therefore, the results of VOC analyses are valid. All the ISM soil samples were air-dried upon receipt at the laboratory. Thus, the cooler not having ice for at most 2-1/2 hours is of no consequence for all the other analyses.

9.6 COLLECTION OF TRIPLICATE MULTI INCREMENT SAMPLES

To statistically and comprehensively evaluate the total sampling and analysis repeatability for each sample area/decision unit (DU), completely separate replicate ISM samples (collected from a set of systematic random or stratified random locations within the DU that are different from those used for the initial ISM samples) were collected from selected DUs (see Hawaii Dept. of Health, Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan). The replicate subsurface ISM sample that was sent to the primary laboratory was called the Field Blank, and the second replicate subsurface ISM sample that was sent to the quality assurance laboratory was called the Duplicate. The replicates were made up of the same number of aliquots as the initial or primary sample. The replicate samples were prepared and analyzed in the same manner as carried out for the initial sample. Triplicate samples (i.e., initial ISM sample plus two replicates) are preferred and more useful than duplicates for statistical evaluation. The Primary and QC samples were sent to the primary laboratory, and the QA samples were sent to a second independent laboratory.

If only one sample area is being investigated, a triplicate sample is recommended for evaluation, as at Building G-8 at Load Line 4. For sites with a number of sample areas, "batch" type replicates can be used. For example, a triplicate sample in one sample area can provide data for evaluating precision for up to 10 similar sample areas. Each site will be unique in terms of numbers of sample areas and how similar these sample areas are, so decisions on numbers of replicates are unique to each site and are addressed clearly in the Sampling and Analysis Plan (SAP). Replicate sample increments were generally collected along the same approximate directional lines established through the sample area for the initial or primary ISM sample. The replicate samples were sent to the laboratories as "blind" samples, meaning the laboratories did not know they represented replicate samples of the initial or primary ISM samples.

9.6.1 Statistical Evaluation of Replicate Multi Increment Samples

When field sampling is representative, repeat measurements within the same DU would be expected to estimate the average contaminant concentration similarly. Data from replicate sampling are used to determine:

1. The amount of variation from the mean that will be considered when comparing average contaminant concentrations in the sample areas to applicable CUGs and
2. Whether the estimate of average contaminant concentration(s) is adequately representative for the sample areas under investigation.

There are a number of options available for determining what measure of data variation from the mean will be used when evaluating the ISM sample replicate measurements and comparing ISM sample data to the CUGs. The measure of data variation from the mean that is chosen is a function of the DQO for the site investigation. Two common approaches are:

1. Use of the RSD of the triplicate values, or
2. Use of the 95 percent Upper Confidence Level (UCL) of the replicate (triplicate) values.

9.6.2 Evaluation of Replicates and Data Representativeness

The field replicate data collected for sample areas are also used to demonstrate that the investigation error for each contaminant is within a reasonable range that supports a conclusion that average contaminant concentrations (e.g., mean plus standard deviation or 95 percent UCL of the mean) are below or above the relevant CUG. In other words, this evaluation addresses the question of whether the data are good enough to make a decision that the average contaminant concentration is below or above the CUG.

Typically, the Relative Standard Deviation (RSD) of the field replicates (triplicates) is used for this evaluation. The RSD is expressed as a percentage and is calculated using the following formula:

$$RSD\% = 100\% \times \text{Standard Deviation} / \text{average}$$

The lower the RSD% of the replicate data the better the quality of measurement is. Generally, an RSD% of approximately 35% or less indicates the amount of estimated total error is within a reasonable range for decision making. However, this evaluation will also depend on the DQO established for the site investigation, as well as how close the contaminant concentrations are to the relevant CUGs. For example, if the RSD% of replicates for a contaminant concentration in a sample area was determined to be 40% to 50%, but the contaminant concentration was a factor of 3 or 4 below the relevant CUG, then a decision that the contaminant is below levels of concern would still be valid. In general, the closer the contaminant level is to the CUG, the more impact this statistical measure will have on site decisions.

The ISM sampling approach provides averages that approximate a statistically “normal distribution” if the RSD% of replicates is reasonably low (this is assumed, for example, when determining the 95 percent UCL of replicate data). The higher the RSD%, the less confidence there is that the averages approximate a normal distribution, and that the average contaminant concentrations are adequately representative of the sample areas. As the RSD% exceeds 50 percent, and if the average sample area concentrations are near the relevant CUGs, there is increasing uncertainty that the data are adequately representative. In this case, additional ISM sampling may be necessary, utilizing a larger number of sample increments and/or larger sample increment masses to obtain a more representative measure of the (very heterogeneous) contaminant concentrations in the sample area. Careful evaluation of the sample processing and analysis procedures would also be indicated. In some cases, grinding samples may serve to reduce the RSD% and provide more representative sampling data. As the RSD% approaches 100 percent there is little confidence that the sampling data are useful for decision making.

9.6.2.1 Evaluation of Surface Soil ISM Samples

A summary of the RSD of the surface soil samples is provided in Table 9-3. The RSDs were only calculated for a given chemical when there were detections in the primary, field duplicate, and blind duplicate samples. An average of the RSDs associated with a given analysis was then calculated. For instance, if there were RSDs of 8, 7, 9, 5, 12, and 13 for metals of a given set of primary, field duplicates, and blind duplicates, then the average RSD for metals for that sample group would be 9. For some chemical groups there were more RSDs typically than for others. For instance, there were generally many more individual RSDs for metals than for PCBs. From Table 9-3:

- Average RSD of metals was 25 percent with generally 11-17 RSDs for individual metals;
- Average RSD of explosives was 73 percent with generally one or two RSDs for individual explosives;
- Average RSD of SVOCs was 54 percent with only three RSDs for individual SVOCs;
- Average RSD of Pesticides and PCBs was 87 percent with only one RSDs for individual pesticides and PCBs.

Although the average metals RSD of 25 percent is below the 35 percent threshold generally accepted as indicating good repeatability, this value is probably not very meaningful in that if only background values of metals are present then the 25 percent value is probably reflective of small variations in background values and the sampling and laboratory processing. The much larger RSDs for the other contaminant groups reflect averages based on very few detections of generally very low values. In summary, the use of 30 increments in a surface soil sample is probably adequate for situations where there is minimal variation and thus provides a good evaluation of the field and laboratory processing. However, determination of the adequacy of the use of 30 increments is probably not possible because there appears to be limited contamination within the surface soils.

9.6.2.2 Evaluation of Subsurface Soil ISM Samples

Summaries of the relative standard deviations (RSD%) of the horizontal subsurface soil ISM samples are provided on Table 9-4, and summaries of the RSD% of the vertical subsurface soil ISM samples are provided on Table 9-5. There were no instances of either horizontal or vertical triplicates of explosives or propellant detections. The same general trends noted for the surface soil ISM samples were observed with the subsurface soil ISM samples. Thus, from Table 9-4 for horizontal subsurface ISM samples:

- Average RSD of metals was 20 percent with generally 12-18 RSDs for individual metals;
- Average RSD of SVOCs was 81 percent with either 1 or 2 RSDs or 10 – 13 RSDs for individual SVOCs;
- Average RSD of Pesticides and PCBs was 9 percent with only one RSDs for individual pesticides and PCBs at only two horizontal samples.

From Table 9-5 for vertical subsurface ISM samples:

- Average RSD of metals was 24 percent with generally 16-19 RSDs for individual metals;
- Average RSD of SVOCs was 80 percent with a large range of RSDs for individual SVOCs.

In addition to the trends noted for surface soil ISM samples in Paragraph, 9.6.2.1, the wide range of individual RSDs for SVOCs did appear to reflect an inverse trend in that the more the number of RSDs

for SVOCs, the lower the average RSD value. Additionally, there appears to be more SVOCs contamination in the subsurface than the surface at some locations, as at Building EB-10 in Load Line 3 and at Building G-8 in Load Line 4.

Table 9-3: Relative Standard Deviations (RSD%) of the Surface Soil Samples

Load Line	Building with Triplicate Samples	Type Building	Number of Borings in Horizontal Subsurface MI Sample	Nominal Depth Range (ft.)	Type Contamination	Number of Chemicals w/ Detections in All Three Horizontal Subsurface MI Samples	Average RSD %
1	CB-4/CB-4WS	Melt Pour	30	0 - 1.0	Metals	13	25
	CB-4/CB-4AWN	Melt Pour	30	0 - 1.0	Metals	11	22
	CB-4/CB-4WS	Melt Pour	30	0 - 1.0	Explosives	1	120
	CB-4A/CB-4AWN	Melt Pour	30	0 - 1.0	Explosives	1	63
	CB-4/CB-4WS	Melt Pour	30	0 - 1.0	SVOCs	3	54
	CB-4A/CB-4AWN	Melt Pour	30	0 - 1.0	SVOCs	0	
	CB-4/CB-4WS	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	93
	CB-4/CB-4AWN	Melt Pour	30	0 - 1.0	Pesticides & PCBs	0	
	CB-4/CB-4WS	Melt Pour	30	0 - 1.0	VOCs	0	
2	CB-4/CB-4AWN	Melt Pour	30	0 - 1.0	VOCs	0	
	DB-4/DB-4WN	Melt Pour	30	0 - 1.0	Metals	11	16
	DB-4/DB-4WS	Melt Pour	30	0 - 1.0	Metals	11	36
	DB-4/DB-4WN	Melt Pour	30	0 - 1.0	Explosives	1	77
	DB-4/DB-4WS	Melt Pour	30	0 - 1.0	Explosives	1	65
	DB-4/DB-4WN	Melt Pour	30	0 - 1.0	SVOCs	0	
	DB-4/DB-4WS	Melt Pour	30	0 - 1.0	SVOCs	0	
	DB-4/DB-4WN	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	85
3	DB-4/DB-4WS	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	166
	EB-4/EB-4WS/	Melt Pour	30	0 - 1.0	Metals	15	24
	EB-4/EB-4AWS/-4WN	Melt Pour	30	0 - 1.0	Metals	16	21
	EB-4/EB-4WS/	Melt Pour	30	0 - 1.0	Explosives	1	70
	EB-4/EB-4AWS/-4WN	Melt Pour	30	0 - 1.0	Explosives	2	42
	EB-4/EB-4WS/	Melt Pour	30	0 - 1.0	SVOCs	0	
	EB-4/EB-4AWS/-4WN	Melt Pour	30	0 - 1.0	SVOCs	0	
	EB-4/EB-4WS/	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	67
4	EB-4/EB-4AWS/-4WN	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	42
	G-8/G-7	Melt Pour	30	0 - 1.0	Metals	16	25
	G-8/G-7	Melt Pour	30	0 - 1.0	Explosives	0	
	G-8/G-7	Melt Pour	30	0 - 1.0	SVOCs	0	
2	G-8/G-7	Melt Pour	30	0 - 1.0	Pesticides & PCBs	1	71
	DC-1 (LL-2)	Coal Storage	30	0 - 1.0	Metals	17	30
	DC-1 (LL-2)	Coal Storage	30	0 - 1.0	Explosives	0	
	DC-1 (LL-2)	Coal Storage	30	0 - 1.0	SVOCs	0	
2	DC-1 (LL-2)	Coal Storage	30	0 - 1.0	Pesticides & PCBs	0	

Average RSD of Surface Soil MI Samples Analyzed for Metals = 25%

Average RSD of Surface Soil MI Samples Analyzed for Explosives = 73%

Average RSD of Surface Soil MI Samples Analyzed for SVOCs = 54

Average RSD of Surface Soil MI Samples Analyzed for Pesticides & PCBs = 87%

Table 9-4: Relative Standard Deviations (RSD%) of the Horizontal Subsurface Soil ISM Samples

Load Line	Building with Triplicate Samples	Type Building	Number of Borings in Horizontal Subsurface MI Sample	Depth Range (ft.)	Type Contamination	Number of Chemicals w/ Detections in All Three Horizontal Subsurface MI Samples	Average RSD %
1	CA-6	Explosives Preparation	5	1 - 3	Metals	17	32
			5	1 - 3	Explosives	0	
			5	1 - 3	SVOCs	1	157
			5	1 - 3	Pesticides & PCBs	0	
			5	1 - 3	VOCs	0	
			5	3 - 5	Metals	16	22
			5	3 - 5	Explosives	0	
			5	3 - 5	SVOCs	0	
			5	3 - 5	Pesticides & PCBs	1	11
			5	3 - 5	VOCs	0	
			5	5 - 7	Metals	16	30
			5	5 - 7	Explosives	0	
			5	5 - 7	SVOCs	13	84
			5	5 - 7	Pesticides & PCBs	0	
			5	5 - 7	VOCs	0	
2	DB-3-2	Shell Receiving	11	1 - 3	Metals	18	33
			11	1 - 3	Explosives	0	
			11	1 - 3	SVOCs	0	
			11	1 - 3	Pesticides & PCBs	0	
			11	1 - 3	VOCs	0	
			11	3 - 5	Metals	17	23
			11	3 - 5	Explosives	0	
			11	3 - 5	SVOCs	0	
			11	3 - 5	Pesticides & PCBs	0	
			11	3 - 5	VOCs	0	
			11	5 - 7	Metals	18	31
			11	5 - 7	Explosives	0	
			11	5 - 7	SVOCs	0	
			11	5 - 7	Pesticides & PCBs	0	
			11	5 - 7	VOCs	0	
3	EB-10	Drill & Assembly	14	1 - 3	Metals	16	20
			14	1 - 3	Explosives	0	
			14	1 - 3	SVOCs	10	39
			14	1 - 3	Pesticides & PCBs	0	
			14	1 - 3	VOCs	0	
			14	3 - 5	Metals	17	23
			14	3 - 5	Explosives	0	
			14	3 - 5	SVOCs	9	69
			14	3 - 5	Pesticides & PCBs	0	
			14	3 - 5	VOCs	0	
			14	5 - 7	Metals	17	28
			14	5 - 7	Explosives	0	
			14	5 - 7	SVOCs	1	75
			14	5 - 7	Pesticides & PCBs	0	
			14	5 - 7	VOCs	0	
4	G-8	Melt Pour	16	1 - 3	Metals	12	35
			16	1 - 3	Explosives	0	
			16	1 - 3	SVOCs	10	61
			16	1 - 3	Pesticides & PCBs	1	6
			16	1 - 3	VOCs	0	
			16	3 - 5	Metals	12	29
			16	3 - 5	Explosives	0	
			16	3 - 5	SVOCs	0	
			16	3 - 5	Pesticides & PCBs	0	
			16	3 - 5	VOCs	0	
			16	5 - 7	Metals	12	31
			16	5 - 7	Explosives	0	
			16	5 - 7	SVOCs	0	
			16	5 - 7	Pesticides & PCBs	0	
			16	5 - 7	VOCs	0	

Average RSD of Horizontal Subsurface MI Samples Analysed for Metals = 28%

Average RSD of Horizontal Subsurface MI Samples Analysed for SVOCs = 81%

Average RSD of Horizontal Subsurface Samples Analyzed for Pesticides and PCBs = 9%

Table 9-5: Relative Standard Deviation (RSD%) of Vertical Subsurface ISM Samples

Load Line	Building with Triplicate Samples	Type Building	Number of Borings in Horizontal Subsurface ISM Sample	Boring Number of Vertical Subsurface ISM Sample w/ Detections in the Primary, Field & Blind Duplicates	Depth Range (ft)	Type Contamination	Number of Chemicals w/ Detections in All 3 Vertical Subsurface ISM Samples	Average RSD (%)
1	CA-6	Explosive Preparation	5	3	1 - 6.5	SVOCs	6	94
				4	1 - 6.5	SVOCs	2	98
3	EB-10	Drill & Assembly	14	1	1 - 6.5	Metals	18	23
				2	1 - 2.5	Metals	18	32
				3	1 - 4	Metals	18	23
				4	1 - 7	Metals	17	11
				5	1 - 5.5	Metals	18	21
				6	1 - 4	Metals	18	16
				7	1 - 7	Metals	18	13
				8	1 - 4	Metals	19	24
				9	1 - 3.5	Metals	19	34
				10	1 - 7	Metals	17	22
				11	1 - 4.5	Metals	18	22
				12	1 - 4	Metals	16	24
				13	1 - 7	Metals	18	31
				14	1 - 4	Metals	16	45
				1	1 - 6.5	SVOCs	14	75
				2	1 - 2.5	SVOCs	9	64
				3	1 - 4	SVOCs	8	72
				5	1 - 5.5	SVOCs	10	26
				6	1 - 4	SVOCs	10	66
				8	1 - 4	SVOCs	10	46
				9	1 - 3.5	SVOCs	10	45
				11	1 - 4.5	SVOCs	11	98
				13	1 - 7	SVOCs	9	54
4	G-8	Melt Pour	12	2	1 - 7	SVOCs	4	142
				3	1 - 7	SVOCs	1	55
				4	1 - 7	SVOCs	6	136
				5	1 - 7	SVOCs	6	128
				8	1 - 7	SVOCs	6	109
				9	1 - 7	SVOCs	2	79
				10	1 - 7	SVOCs	13	49

10.0 SAMPLING CHRONOLOGY

The table below shows when Prudent collected samples at each building.

Table 10-1: Field Sampling Chronology

Date	Non-Sampling	Sampling			
		Load Line	Building	Horizontal Sample IDs	Type
Aug 11 - 15	Mobilization				
Aug 16		4	G-8	LL4SB-402V,M ---	Primary
Aug 17		4	G-8	LL4SB-401V,M ---	QC
Aug 18		3	EB-3-2	LL3SB-401V,M ---	Primary
Aug 19		3	EB-4	LL3SB-407M ---	Primary
Aug 20		3	EB-4A	LL3SB-402M ---	Primary
		3	EB-3-1	LL3SB-406V,M ---	Primary
				Equipment Rinsate	
Aug 23		2	DB-4A	LL2SB-509M ---	Primary
		3	EA-6	LL3SB-403M ---	Primary
Aug 24		2	DB-3-1	LL2SB-507V,M ---	Primary
		2	DA-6A	LL2SB-506M ---	Primary
Aug 25		2	DB-4	LL2SB-502M ---	Primary
		2	DA-6	LL2SB-508M ---	Primary
		1	CA-6A	LL1SB-633M ---	Primary
Aug 26		4	G-8	LL4SB-403V,M ---	QA
		4	G-8	LL2SB-402V,M ---	MS/MSD
Aug 27		2	DB-3-2	LL2SB-505V,M ---	Primary
		2	DB-3-2	LL2SB-501V,M ---	QC
		2	DB-3-2	LL2SB-504V,M ---	QA
		2	DB-10	LL2SB-503M ---	Primary
Aug 28				Equipment Rinsate	
Aug 30		3	EB-10	LL3SB-409V,M ---	Primary
		3	EB-10	LL3SB-404V,M ---	QC
		3	EB-10	LL3SB-408V,M ---	QA
Aug 31		1	CA-6	LL1SB-635V,M ---	Primary
		1	CA-6	LL1SB-637V,M ---	QC
		1	CA-6	LL1SB-631V,M ---	QA
		1	CB-10	LL1SB-630M ---	Primary
Sep 1		1	CB-4A	LL1SB-638M ---	Primary
		1	CB-4	LL1SB-632M ---	Primary
		1	CB-3-1	LL1SB-636V,M ---	Primary
		1	CB-3-2	LL1SB-634V,M ---	Primary
Sep 2				Equipment Rinsate	
	Demobilization				

11.0 FINAL SITE ACTIVITIES

11.1 FIELD INSPECTION

On September 2, 2010 Prudent personnel inspected the locations where sampling was performed during this project at Load Lines 1, 2, 3, and 4 and removed any remaining materials associated with its sampling work, except for the pin flags at Load Line 1, which remained until the surveyor completed his work.

11.2 REMOVAL OF ANCILLARY FACILITIES

The temporary sanitary facilities and potable water tank were removed on September 2, 2010.

11.3 FINAL INSPECTION

After final cleanup and storage of remaining materials, Mark Patterson, the RVAAP Facility Manager, inspected the Prudent area at Building 1036 and indicated that the area was acceptable. Mr. Patterson asked for yellow caution tape to be placed around the Prudent work area and subsequently that was done.

12.0 SUMMARY & CONCLUSIONS

Of the total of 411 (81 horizontal and 330 vertical) planned subsurface ISM samples, a total of 86 horizontal subsurface ISM soil samples and 314 vertical subsurface ISM soil samples were collected over a period of 13 work days.

The tools and procedures utilized to prepare subsurface ISM soil samples from the Geoprobe liners for both VOC and non-VOC analyses worked well.

The Geoprobe rig successfully collected subsurface materials down to a depth below ground surface of 7 feet through original clays and fill over weathered rock in most cases, and generally to depths of at least several feet into weathered rock.

Triplicate surface and subsurface ISM sample results used to evaluate repeatability indicated good repeatability when there were at least ten detections that occurred in the primary, field blank, and duplicate samples.

The information provided herein along with all recent (1995 onward) environmental sampling will be utilized to conduct a comprehensive evaluation of the most cost effective means of providing the OHARNG with the least restrictive future land use. This evaluation will be conducted per the Guidance Document for the Evaluation of Land Use Controls at the Ravenna Army Ammunition Plant, Ohio and will be presented as the Land Use Control Assessment Report.

13.0 REFERENCES

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11. URS, 2009, Final Multi-Increment Sampling and Analysis of Soils Below Floor Slabs at RVAAP-9 Load Line 2, RVAAP-10 Load Line 3, and RVAAP-11 Load Line 4 at Ravenna Army Ammunition Plant, Dec 2009
12. URS, 2010, Final Sampling and Analysis of Soils Below Floor Slabs at RVAAP-08 Load Line 1 and Other Building Locations, Sep, 2010

Appendix A – Tailgate Health & Safety Meeting Logs

Appendix B – Activity Field Logs

Appendix C – Daily QC Reports

Appendix D – Field Boring Logs

Appendix E – Typed Field Boring Logs

(Provided in the attached DVD)

Appendix F – Laboratory Data

(Provided in the attached DVD)

Appendix G – Email Correspondence

Appendix H – Data Verification Report

Appendix I – Chemical Quality Assurance Report for Corps Surface Soil Investigation

Appendix J – Chemical Quality Assurance Report for Prudent Subsurface Soil Sampling

Appendix K – Comment Response Tables from Draft Review