FUEL STORAGE TANK
REMOVAL ACTION ADDENDUM REPORT

Environmental Investigation at the Formerly Used Defense Site (FUDS)
at the Benicia Army Arsenal, Benicia, California

FUDS Number: J09CA075600

UPDATED DRAFT FINAL

Prepared for:

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April 2008

Contract Number:
GS-10F-0101L

FUEL STORAGE TANK REMOVAL ACTION ADDENDUM REPORT
BENICIA ARMY ARSENAL, BENICIA, CALIFORNIA

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LIST OF ACRONYMS AND ABBREVIATIONS

Arsenal	former Benicia Army Arsenal
AST	above ground storage tank
BC	Brown and Caldwell
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DoD	United States Department of Defense
ECI	Ecology Control Industries, Inc.
EMLL	electromagnetic line locating
EPA	United States Environmental Protection Agency
ESL	Environmental Screening Level
FA/BC	Forsgren Associates/Brown and Caldwell
Fuel RA	Fuel Storage Tank Removal Action Report
Fuel RA Plan	Fuel Storage Tank Removal Action Plan
FUDS	Formerly Used Defense Site
GPR	ground penetrating radar
IDW	investigative derived waste
MCL	maximum contaminant level
MD	metal detection
MDL	method detection limit
mg/kg	milligram per kilogram
mg/L	milligram per liter
MtBE	methyl tertiary-butyl ether
NORCAL	NORCAL Geophysical Consultants
PA	Preliminary Assessment
PAH	polynuclear aromatic hydrocarbon
PCBs	polychlorinated biphenyls
QC	quality control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
ROE	right-of-entry

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

SI	Site Inspection
Solano County	Solano County Department of Resource Management, Environmental Health Services Division
SVOCs	semivolatile organic compounds
TCE	trichloroethene
TDS	total dissolved solids
TPH	total petroleum hydrocarbons
TPHD	total petroleum hydrocarbons-diesel fuel range organics
TPHG	total petroleum hydrocarbons-gasoline range organics
TPHMO	total petroleum hydrocarbons-motor oil range organics
µg/kg	microgram per kilogram
µg/L	microgram per liter
USACE	United States Army Corps of Engineers
UST	underground storage tank
VOC	volatile organic compound
VMG	vertical magnetic gradient
Water Board	San Francisco Bay Regional Water Quality Control Board

EXECUTIVE SUMMARY

This addendum to the Fuel Storage Tank Removal Action (Fuel RA) Report presents data from an additional environmental site investigation conducted at the former Benicia Army Arsenal (Arsenal), a formerly used defense site (FUDS), located in Benicia, California. This work was performed on behalf of and with oversight by the United States Army Corps of Engineers (USACE), Sacramento District.

The Fuel RA (Brown and Caldwell [BC], 2005a) recommended further investigation to identify and/or remove underground storage tanks (USTs) at Buildings 27, 45, 161, and CL2. The Expanded Site Inspection (SI) Report also recommended additional investigation at Buildings 50 and 111 to identify and/or remove possible USTs. Of these six sites, one site, former Building CL2, could not be investigated because the landowner would not grant the USACE access to the property. The remaining sites were investigated for:

- Removal of a UST at Building 161 and determine the lateral extent of petroleum hydrocarbons in soil from the former UST. Also to identify if there is a fuel line extending from Building 31 (a former fuel station) to Building 161 (a former maintenance facility) and remove a fuel fill pipe located in an underground vault.

- Determine the presence or absence of PCBs in soil and groundwater in response to a November 28, 2006 San Francisco Bay Regional Water Quality Control Board (Water Board) comment on the June 2006 draft final version of this report. The Water Board requested that USACE collect additional soil and groundwater samples in the vicinity of the former UST at Building 161. TPH was added to the investigation to further delineate the extent of TPH in groundwater in the area of the former UST for the feasibility study.

- Locating, confirmation, and removal of the remaining USTs at Buildings 27, 45, 50, and 111.

Summary of Field Activities

The following activities were completed during this project:

- Four potential UST sites were identified: Building 27, Building 45, Building 50, and Building 111.

- Right-of-entry (ROE) agreements were arranged with the current property owners for the Building 27, Building 45, Building 50, Building 111, and Building 161 sites. ROE was not granted by the landowner to USACE to search for the suspected UST at CL2.

- Geophysical surveys were performed at Buildings 27, 45, 50, and 111. A geophysical survey had been conducted previously at Building 161 to search for the UST during the initial *Fuel Storage Tank Removal Action* (BC, 2005a).

- A geophysical anomaly the size and shape of UST was identified at the Building 27 site. At Building 27, a test pit was excavated and the tank was removed. At Buildings 45, 50, and 111, it was concluded that the anomalies were not related to a UST. No anomalies were identified at

Building 45. Reinforced concrete and a metal fence provided inconclusive evidence of a UST during the geophysical survey in the suspected area of the Building 161 UST. However, there was physical evidence found during the geophysical survey that indicated that the UST remained at Building 161. A fill port was found within a covered vault. A bailer was used to determine the contents and the approximate height of the UST. The UST contained a mixture of water and old waste oil. The approximate height of the tank was 4 feet.

- After removal of the USTs, soil and/or groundwater samples were collected and analyzed to evaluate the presence or absence of Department of Defense (DoD) related fuel contamination.

Recommendations

Geophysical and visual investigations determined that there were no USTs found at Buildings 45, 50, or 111. No further DoD action is indicated at these locations.

The location of the tank at Building 27 was over-excavated to 11 feet below ground surface (bgs) through fractured and weathered sandstone bedrock. The fractures within the sandstone contain residual petroleum hydrocarbon concentrations within the diesel range, consistent with fuel oil and exceed the Water Board Environmental Screening Levels (ESLs). There is no threat to groundwater. Therefore, no further DoD action is recommended at this location.

Suspected DoD sources appear to have petroleum hydrocarbon-impacted soil on the south side of the former Building 161 UST and some limited PCB impact on the north side of the former UST. Groundwater is impacted with diesel range and motor oil range petroleum hydrocarbons. The extent has been delineated. An evaluation of the remedial alternatives is recommended for the remaining petroleum hydrocarbons. An evaluation for the non-petroleum related compounds is recommended in a risk evaluation.

1.0 INTRODUCTION AND BACKGROUND

This addendum to the Fuel Storage Tank Removal Action Report (Fuel RA) was conducted at the former Benicia Army Arsenal (Arsenal) under General Services Administration Contract No. GS-10F-0101L, Veterans Administration Purchase Order 674-V40113 to comply with requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation Recovery Act (RCRA), as appropriate. This investigation was conducted in accordance with the *Fuel Storage Tank Removal Action Plan* (Fuel RA Plan) (BC, 2004) and the *Quality Assurance Project Plan* (QAPP) (Forsgren Associates/Brown and Caldwell [FA/BC], 2001). Figure 1-1 shows the location of the former Arsenal.

A description of the relationship between the Fuel RA and the formerly used defense site (FUDS) program, the methodology of choosing these sites, the location, and the historical and subsequent post-Army use of the Arsenal is provided in the Fuel RA (BC, 2005a).

This Fuel RA Addendum report is organized into six sections. Section 1.0 presents background information, including the historical uses and a summary of previous activities. Section 2.0 presents a summary of field methods and sampling rationale. Section 3.0 discusses the investigation results. It also summarizes disposal of investigation derived waste (IDW). Section 4.0 describes the quality and usability of the data collected during this site inspection. Section 5.0 presents the conclusions and recommendations and references are included as Section 6.0.

This report contains eight appendices. Each appendix is described briefly below.

- **Appendix A – Background Details of the Fuel Storage Tank Sites.** This appendix includes Preliminary Assessment (PA) summary forms for each site investigated in this addendum report. These forms have been updated with information gathered from the Fuel RA and other relevant investigations since the PA (FA/BC, 2004).

- **Appendix B –NORCAL Geophysical 17 March 2005 Report and 2 December 2005 Report.** A summary report of the geophysical survey conducted at Buildings 27, 45, 50 and 111.

- **Appendix C – Legend for Analytical Results.** Definitions of data acronyms, quality control flags, and reason codes.

- **Appendix D – Analytical Results for Soil.** The analytical results for soil are tabulated for all samples collected for this addendum investigation.

- **Appendix E – Analytical Results for Groundwater.** The analytical results for groundwater are tabulated for all samples collected for this addendum investigation.

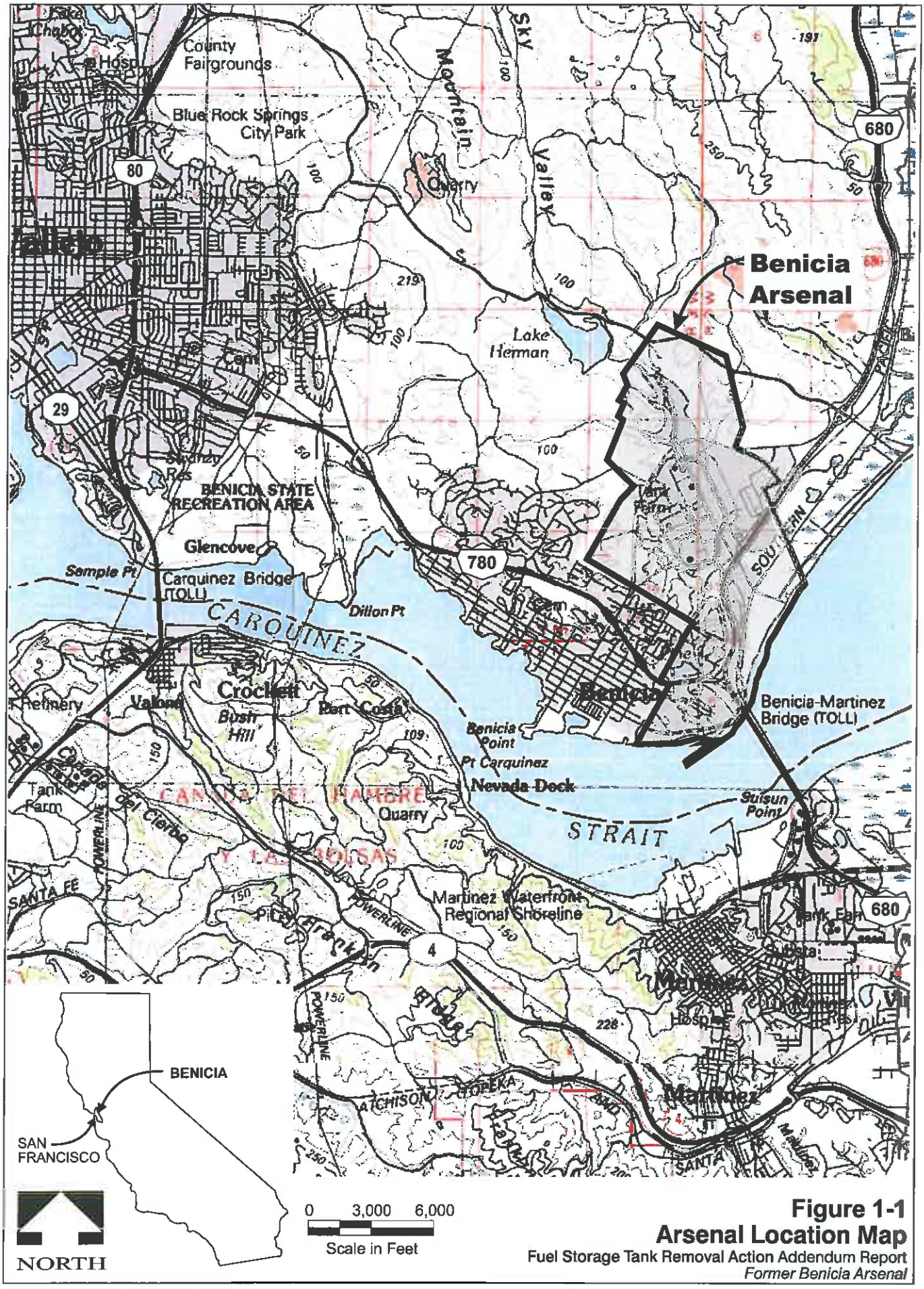

Figure 1-1
Arsenal Location Map
Fuel Storage Tank Removal Action Addendum Report
Former Benicia Arsenal

- **Appendix F – Investigative Derived Waste Manifests.** Soil and water disposal manifests are presented.

- **Appendix G – Tank Manifests and Tank Destruction Certificates.** Certificates from Ecology Control Industries, Incorporated are provided in this appendix.

1.1 Problem Definition and Scope

Because of all the data already collected and summarized in the Fuel RA, this addendum fieldwork only required an investigation at a few sites. All of the work was not completed in the Fuel RA because a right-of-entry (ROE) agreement was not reached.

Two sites were recommended in the Expanded SI (BC, 2005b) and four sites were recommended in the Fuel RA for investigation. Therefore, there are a total of six sites requiring further investigation.

Of these six sites, one site (CL2) could not be investigated because the landowner would not grant the United States Army Corps of Engineers (USACE) access to the property. All six sites are listed below with recommended activities and comments, United States Department of Defense (DoD) use, features and likely contents present based on its former DoD use (Table 1-1). Their locations are shown on Figure 1-2. Further details and background information are provided in Appendix A.

The overall objectives of this RA include the following:

1) Locate underground storage tanks (USTs) using geophysical techniques.
2) Confirm the location of the USTs and associated piping by pot-holing.
3) Identify DoD-related contamination from leakage from the fuel storage tanks and associated piping.
4) Remove the fuel storage tanks and associated piping.
5) Restore each site.
6) Delineate the residual contamination, if possible.

Table 1-1. Fuel Storage Tank Sites Information

Location	DoD Use	Number of Suspected USTs/ASTs	Installation date	Capacity (gallons)	Contents	Tank status	Summary
Building 27	Captain's quarters	1 UST	1928	250	Heating oil	Located and removed during this RA	A 250-gallon heating oil tank was reportedly installed in 1928 to accompany an enterprise rotary oil burner. The UST was located with geophysics and then confirmed by excavating.
Building 45	Enlisted Men's Barracks	1 UST	1929	400	Heating oil	Not present	Scaffolding was present in the area where the UST was suspected. Scaffolding was eventually removed and a geophysical investigation was performed. Geophysics scanned the area along the entire length of the western side of Building 45. No anomalies were identified that indicated the presence of a UST.
Building 50	Motor Cleaning Building	1 UST	1945 (estimated)	3,000-4,000	Kerosene, Waste Oil, Diesel	Not present	A contract was awarded in 1950 to install new gas mains and convert the fuel oil furnace to natural gas. Jim Milburn, a former Arsenal employee, also recalled refueling a diesel UST. During the Expanded SI Investigation (BC, 2005b), a hydropunch groundwater sample collected contained post-DoD contaminants (methyl tertiary-butyl ether [MtBE]). Geophysics was used to scan the area along the entire length of the eastern side of former Building 50. No anomalies were identified that indicated the presence of a UST. The survey trenching did not reveal a UST.
Building 111	Motor Cleaning Building	1 UST	1945 (estimated)	3,000-4,000	Kerosene, Waste Oil, Diesel	Not present	A contract was awarded in 1950 to install new gas mains and convert the fuel oil furnace to natural gas. Jim Milburn, a former Arsenal employee, also recalled refueling a diesel UST. During the Expanded SI Investigation (BC, 2005b), a hydropunch groundwater sample collected contained post-DoD contaminants (MtBE). Geophysics was used to scan the area along the entire length of the northern side of former Building 111. No anomalies were identified that indicated the presence of a UST. The survey trenching did not reveal a UST.

Table 1-1. Fuel Storage Tank Sites Information (continued)

Location	DoD Use	Number of Suspected USTs/ASTs	Installation date	Capacity (gallons)	Contents	Tank status	Summary
Building 161	Motor Cleaning Building	1 UST	1945 (estimated)	3,000-4,000	Kerosene, Waste Oil, Diesel	Located and removed during this removal action.	Tank identified in a 1945 drawing. Tank fill pipe located, waste oil-like substance found in tank. Tank limits not determined due to interference of concrete surface and metal fence during geophysical survey. UST confirmed by excavating.
Building CL2	Boiler House	1 UST	1942	3,180	Fuel Oil	Potentially removed	Request for demolition of the UST was approved in 1955, to be replaced with a 5,000-gallon above ground storage tank (AST). The AST is not present. It is unknown if the UST was removed. ROE was not granted to USACE to determine the status of the UST. A geophysical survey is recommended to determine the status of the UST. Until USACE is granted access to the property, no further USACE actions can be conducted at this site.

AST = aboveground storage tank
UST = underground storage tank

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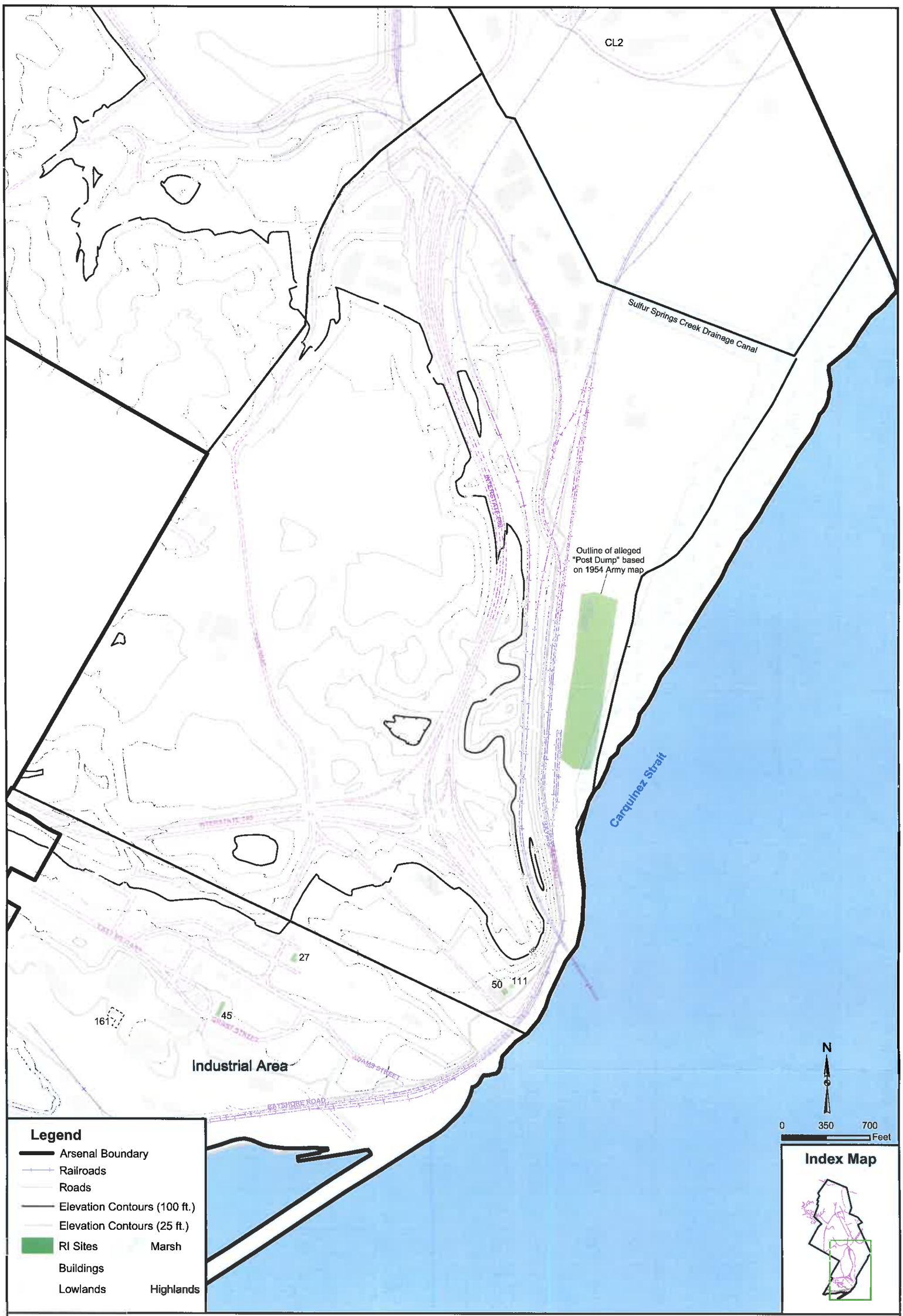

BROWN AND CALDWELL

PROJECT: 128336

DATE: 3/6/2006

TITLE: **Fuel Storage Tank Removal Action Addendum Sites**

SITE: **Benicia Arsenal, Benicia, California**

Figure 1-2

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1.2 Site Locations and Historical Use

The Army operated industrial and manufacturing shops, maintenance facilities, and fuel and waste storage areas. Potential sources of chemical releases from these activities include USTs, vapor degreasers, maintenance pits, degreasing tanks and suspected waste disposal areas. Fuel-related petroleum hydrocarbons were expected at the former Arsenal due to known releases from former USTs and possibly from the remaining suspected USTs. The contents of these USTs included fuel oil, diesel fuel and gasoline. These petroleum products were used in vehicles, machinery and other equipment.

The above descriptions of fuel storage activities do not account for any post-Army use. After closure of the Arsenal in 1964, the fuel storage tanks remained. Tenants and landowners may have used these tanks.

1.3 Previous Activities Conducted at Buildings 27, 45, 50, 111, 161, and CL2

Activities and information that led to the investigation at each of the six sites included in this addendum are provided below. This text has been summarized from the Expanded SI (BC, 2005b) and the Fuel RA (BC, 2005a). For detailed information about each, please refer to the Expanded SI Report (BC, 2005b), the Fuel RA (BC, 2005a), or the PA (FA/BC, 2004).

Captain's Quarters (Building 27). The building that housed the Captain's Quarters reportedly contained a 250-gallon fuel oil tank and burner (FA/BC, 2004). USACE had made multiple attempts to get ROE approval; however, the property owner denied access and no previous sampling has occurred. After years of negotiations with the landowner, USACE was allowed access to the property to search for the fuel oil tank using geophysics for this addendum investigation. In the Preliminary Assessment (FA/BC, 2004), a geophysical investigation was recommended to determine if the UST is still present.

Enlisted Men's Barracks (Building 45). Previously used as the enlisted men's barracks, Building 45 is believed to have a 400-gallon fuel oil tank and burner (FA/BC, 2004). During the Fuel Only and Fuel RA investigations in 2002 and 2005, respectively, the current landowner was remodeling the building and had scaffolding in the area where the UST is suspected. The scaffolding prohibited any geophysical or exploratory work to find the UST. Recently, the scaffolding was removed and USACE pursued another ROE with the landowner. Access was granted to search for the UST using geophysical techniques for this addendum investigation.

Former Heavy Equipment Yard (Buildings 50 and 111). A paint shop (Building 50) and an equipment shop (Building 111) were part of the former heavy equipment yard located east of the industrial area and near the Carquinez Strait (Figure 1-2). Building 50 reportedly maintained a 500-gallon stove oil tank and two 5,500-gallon road oil tanks (FA/BC, 2004). After the Army left the installation in 1964, a 3,000-gallon kerosene UST was removed in 1987 and a 10,000-gallon

gasoline UST was removed in 1995. These tanks are assumed to be installed post Army. Solano County Department of Environmental Management issued a UST site closure letter in 1995 and no further investigation or action was required for these removed USTs.

Two borings (B050HP001 and B111HP001) were advanced downgradient of the buildings to determine the presence or absence of a possible release of solvents and fuels from former DoD cleaning and fueling activities at these buildings.

The result from this sampling effort indicates no DoD impact due to any release from these stove oil or road oil ASTs. Residual concentrations of xylenes and methyl tertiary butyl ether (MtBE) were reported in the groundwater and are the result of the post Army release.

Former Motor Cleaning Building/Steam Cleaning/Paint Spray/Fuel Storage (Building 161). Operations in this building included motor cleaning, steam cleaning, and spray painting. Drawings of the building shows the location of a kerosene storage tank, a paint spray booth, a degreaser, a steam cleaner, a service pit, a boiler house, four drain trenches, and six catch basins. Other historic records indicate that the building contained a dip tank line, stripping tank, two acid dip tanks, two water dip tanks, and a neutralizer tank. Locations of these structures are unknown. The service pit measures 10 feet long by 3.5 feet wide and has a 6-inch drain connecting to the storm drain. In 1952, the building operations included steam cleaning of large components, dipping and painting (FA/BC, 2004). The building had been constructed in a temporary-type manner on reclaimed tidelands without pilings. The building was later demolished after the Army left the Arsenal in 1964.

According to historic records, temporary construction of buildings resulted in uneven settling, creating excessive stresses in trussed members to the extent that numerous failures occurred. Floors sank so badly that the floor drains could not operate (FA/BC, 2004). In 1952, there was sewer system deficiencies noted at Building 161, such that frequent rodding was needed to keep the sewage lines open (FA/BC, 2004). Currently, the building foundation with the drain trenches, catch basins and service pit remain.

As part of the Expanded SI, two borings (B161HP001 and B161HP002) were advanced downgradient of Building 161 to determine the presence or absence of fuels, metals and solvents in groundwater from a suspected release from former DoD cleaning activities in the building and from a possible release of fuels from the fuel storage UST. Cobalt and nickel were identified above their respective San Francisco Bay Regional Water Quality Control Board (Water Board) Environmental Screening Levels (ESLs) in groundwater samples. A risk assessment was recommended for the constituents found in groundwater.

Petroleum hydrocarbons were not reported above Water Board ESLs in groundwater.

Trichloroethylene (TCE) and its daughter products were detected in groundwater (BC, 2005b). TCE and vinyl chloride exceed their respective Water Board ESLs. The occurrence of TCE and its

daughter products are part of a larger plume that is discussed further in the Expanded SI (BC, 2005b). There is no documented DoD use of solvents at Building 161.

As part of the Fuel RA (BC, 2005a), a tank fill pipe was located and waste oil-like substance found in the UST. The tank limits were not determined due to interference of a concrete surface during the geophysical survey. The property owner did not initially grant access to the property to remove this UST. After additional correspondence with the landowner, USACE was granted access to the property for the removal and investigation of the UST.

CL2 Boiler House. CL2 was a former boiler house. A 3,180-gallon UST was installed near Building CL2 at the time of the building's construction in 1942. In 1955, a request to remove the UST was approved but it is unknown if the tank was removed. A 5,000-gallon capacity AST reportedly replaced the UST adjacent to Building CL2. The AST is not present at the site but it is not known if the UST was removed. The chemicals of interest at CL2 are fuels.

The investigation to determine if a UST is present at the former UST remains unfinished. The landowner refused ROE to USACE. Once access to CL2 is granted, a geophysical investigation is recommended at CL2 to determine if a UST is present.

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2.0 FIELD METHODS

This section presents the technical approach to investigation at UST sites and a description of the field sampling procedures and analytical parameters for the Fuel Storage Tank Addendum RA. Additional description of the field methods and procedures, field quality control (QC) procedures and the site Health and Safety Plan are included in the Fuel RA Plan (BC, 2004). Standard operating procedures implemented during the project are listed in Table 6-1 of the RA Plan and are included in Appendix F of the QAPP for environmental investigations at the former Arsenal (FA/BC, 2001).

2.1 Technical Approach

The following technical approach was used to investigate the potential UST sites:

- A ROE agreement with USACE was arranged with the landowner.
- Geophysical surveys were performed to identify anomalous areas that may indicate the presence of USTs and associated piping. Geophysical surveys were also used to identify buried utilities in the vicinity of the anomaly.
- If an anomaly was identified the size and shape of the suspected UST, a permit for the removal of the UST was obtained from Solano County Department of Resource Management, Environmental Health Services Division (Solano County).
- After the UST removal permit was approved, a test pit was excavated to determine the reason for the anomaly. Lithologic data was obtained during excavation.
- If tanks were found, they were removed from site.
- Soil and/or groundwater samples were collected from each confirmed fuel storage tank location and analyzed to determine the presence or absence of DoD-fuel related contamination at each location.
- If contamination was discovered or suspected to be above project criteria, additional direct-push soil and/or groundwater samples were collected to delineate the DoD-related fuel contamination.
- The site was restored.

2.2 Sampling Procedures

Samples were collected to identify and delineate DoD-related fuel contamination. As part of this addendum investigation, soil samples were collected at each of the UST removal sites in accordance with the Fuel RA Plan (BC, 2004), which included Solano County's procedures required for UST

closures. Direct-push soil samples were collected in order to delineate the DoD-related fuel contamination identified at the Fuel RA sites. The methods, locations, and results of the direct push soil and/or groundwater sampling are described in the following sections.

2.2.1 Sample Collection

Samples were collected from the UST excavations, and from stockpiles of excavated soil. Depth-discrete soil samples were collected using either an impact slide hammer with an attached sampler or using geoprobe direct push technology. The bucket on the excavator was used for samples collected from the excavations greater than 4 feet deep. All decontamination was performed as specified in the QAPP (FA/BC, 2001).

UST Excavations. In accordance with Solano County requirements, one soil sample was collected from under the UST or the concrete slab (if present) for tanks less than 1,000 gallons. For USTs between 1,000 gallons and 10,000 gallons, one sample was collected from under each end of the UST. If groundwater was encountered the same number of samples were collected from the side walls of the excavation instead of from saturated soil beneath the UST.

Excavated Soil. Soil excavated from around the USTs was stockpiled into separate soil bins at each UST site. Four grab samples were collected and composited into one sample from each soil bin. There were two-20 cubic yard bins used for the Building 27 UST and four-20 cubic yard bins for the Building 161 UST. Therefore, a total of six soil samples were collected.

2.2.2 Analytical Parameters

Soil samples from the heating oil UST at Building 27 were analyzed for the following parameters:

- Total petroleum hydrocarbons as diesel (TPHD)/total petroleum hydrocarbons as motor oil (TPHMO) range organics/total petroleum hydrocarbons as gasoline (TPHG) range organics by Environmental Protection Agency (EPA) Modified Method 8015;
- Benzene, toluene, ethylbenzene, total xylenes, and fuel oxygenates by EPA Method 8260B;
- Total lead by EPA Method 6010;
- Napthalene by EPA Method 8270; and
- Methanol/ethanol by EPA modified Method 8015B.

Soil and groundwater samples from the suspected waste oil UST at Building 161 were analyzed for the following parameters:

- TPHD/TPHMO/TPHG range organics by EPA Modified Method 8015;
- VOCs, benzene, toluene, ethylbenzene, total xylenes, and fuel oxygenates by EPA Method 8260B;
- Oil and grease by EPA Method 1664;
- Cadmium, total chromium, lead, nickel, and zinc by 6010B;
- Polychlorinated biphenyls (PCBs) by EPA Method 8080; and
- Polynuclear aromatic hydrocarbons (PAHs) and semivolatiles (SVOCs) by EPA Method 8270.

Soil and groundwater samples were collected around the Building 161 tank site to delineate suspected impacts from the UST. These soil samples were analyzed for the following parameters based on visual observations of the soil sampled in the tank excavation and analytical results from the waste oil-like substance removed from the UST:

- TPHD/TPHMO/TPHG range organics by EPA Modified Method 8015;
- Volatile organic compounds (VOCs), benzene, toluene, ethylbenzene, total xylenes, and fuel oxygenates by EPA Method 8260B;
- Cadmium, total chromium, lead, nickel, and zinc by 6010B;
- PCBs by EPA Method 8080; and
- PAHs and SVOCs by EPA Method 8270 and EPA Method 8310.

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3.0 RESULTS AND ANALYSIS

This section presents the investigation and laboratory results for the six potential fuel tank sites. Two USTs were located and removed. A total of four soil samples and one grab groundwater sample were collected from the excavations and eight direct-push borings were advanced to delineate suspected contamination observed during the Building 161 tank removal. This section also summarizes the disposal of IDW generated during the project.

3.1 Underground Storage Tanks

The potential UST sites, consisting of Buildings 27, 45, 50, 111, and 161 were investigated following the methods described in the following sections.

3.1.1 Results of Geophysical Surveys

NORCAL Geophysical Consultants (NORCAL) performed geophysical investigations at Building 161 on May 17, 18 and 24, 2004, at Buildings 50 and 111 on February 2, 2005, and Buildings 27 and 45 on October 25, 2005. Geophysical methods used include: metal detection (MD), electromagnetic line locating (EMLL), vertical magnetic gradient (VMG) and ground penetrating radar (GPR). Appendix B contains letter reports by NORCAL, dated March 17, 2005 and December 2, 2005 that describe the geophysical surveys. The NORCAL report on Building 161 dated May 17, 18 and 24, 2004 is included in the Fuel RA Report (BC, 2005a).

EMLL techniques are used to locate the magnetic field resulting from an electric current flowing on a line. Buried objects can be detected using MD techniques. MD is used to detect near surface metal objects such as rebar and USTs. VMG measures the vertical rate of change of the total field magnetic intensity and detects ferrous objects. GPR provides resolution and depth penetration characterizing the upper three to four feet of the subsurface. It is used to detect buried metallic objects. It is the combination of all three of these techniques that allows for the interpretation that an anomalies maybe a UST.

Photo 1. Building 50 and 111 GPR Survey. Photo taken 2/22/2005 looking east towards Bayshore Road the Carquinez Strait.

Vertical magnetic gradient anomalies were identified east of Building 50, but MD and GPR data suggest the anomalies are small amounts of localized buried metal debris or a suspected petroleum transfer line already marked on the asphalt in yellow paint (NORCAL letter, March 17, 2005). A photograph of the GPR survey at Building 50 is shown in Photo 1.

At Buildings 45, 50, and 111, no anomalies were found in the areas searched that suggested the presence of a UST. The areas searched at each site are shown in the NORCAL report (Appendix B).

NORCAL identified anomalies suggesting the presence of a UST and fuel lines at Building 27. But interference from an existing fence and reinforced concrete provided inconclusive results at the suspected location of the Building 161 UST. However during the geophysical survey, a tank fill pipe was located (Photo 2) and a waste oil-like substance was found in the UST. The tank limits were not determined due to interference of a concrete surface during the geophysical survey. Buildings 27 and 161 were investigated further as described in Section 3.1.2.

Photo 2. Building 161 UST fill pipe located in vault. Photo taken 5/28/2004. Fence (track shown in photo) overlies the UST.

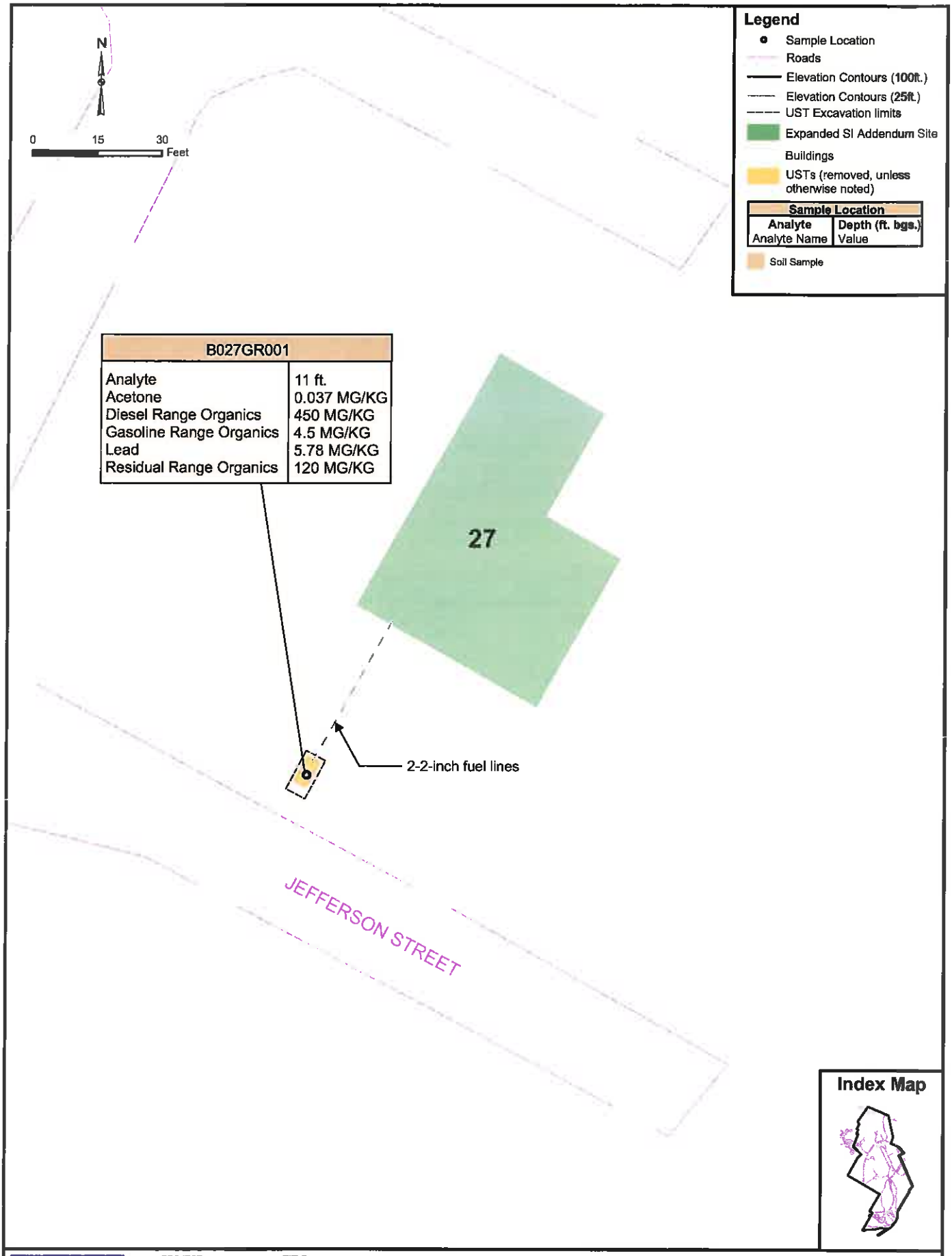
3.1.2 Findings of Removal Activities

Test pits were excavated and tanks were removed at Buildings 27 and 161. The removal activities are described in detail below. Removal activities were overseen by Mr. Mike Rees of the Solano County Environmental Health Department.

Building 27. A 250-gallon single-walled steel tank was located near Building 27. The location of the UST correlated with the location of the geophysical anomaly. Based on the results of the analytical samples, the tank was used to hold fuel oil (C14 to C20) which is reported in this report as part of the diesel fuel range (C10-C24). The tank was located south of former Building 27, between the sidewalk and the edge of Jefferson Street (Figure 3-1, Photo 3). The tank was seven feet long and two and a half feet in diameter, and the ends of the tank were orientated approximately north-south.

Photo 3. Building 27 UST. Photo Taken 1/3/2006. Looking north towards the building.

Surface grass and soil were removed and the soil around the tank was excavated with a backhoe to uncover the tank. The top of the UST was encountered at 3 feet bgs. The UST had liquid inside that appeared to be consistent with rainwater. Approximately 220 gallons were pumped into 55-gallon drums.



PROJECT: 128336-005
DATE: 3/6/2006
TITLE:
SITE:

Sampling Locations and Detected Results at Building 27
Benicia Arsenal, Benicia, California

Figure 3-1

S:\Benicia_USTRA Addendum\Figure 3-1 B27.mxd

No groundwater was observed in the excavation. The tank appeared to have small holes from rust but was otherwise in good condition.

Two pipes were found connected to the tank, as shown in Photo 3. As the 2-inch product pipe was disconnected from the tank, fuel began to drain out. Approximately 1 gallon of fuel drained from the product pipe. The fuel was contained and transferred to a 55-gallon drum. Absorbent was placed inside the end of the pipes, see Photo 4. These pipes were traced into the basement of Building 27, pass through the basement wall, elbow down into the basement floor, and then exit the basement floor at the former location of the boiler. The location of the fuel lines are shown in a photo provided by the landowner of the former boiler (Photo 5).

Photo 4. Building 27 UST pipes. Photo taken 1/6/2006. Looking west.

The property owner requested that these pipes not be removed or backfilled. The landowner planned to use them as conduits to insert future irrigation pipes. Solano County approved the plan. As a result, the pipes were left in place.

Beneath the grass surface was brown silty clay to approximately 7 feet bgs. Dark gray to greenish weathered sandstone with brownish red layers overlaid gray, fractured sandstone encountered at 11 feet bgs. A petroleum odor was observed in the silty clay and within the weathered sandstone. A section of the excavation wall is shown in Photo 4.

The tank was removed from the excavation on 5 January 2006 under the supervision of the Solano County and the City of Benicia Fire Department and then transported to Ecology Control Industries, Inc. (ECI), located in Richmond, California.

The soil excavation appeared to be impacted by the fuel in the tank. A soil sample was collected at approximately the middle of the excavation at 90-inches bgs. The excavation was deepened to approximately 11 feet bgs to remove impacted soil. An additional soil sample was collected at the bottom of the over-excavation.

Photo 5. Former boiler in Building 27 basement.

Building 161. A 3,000-gallon single-walled steel tank was located at Building 161. Based on the results of the PA and Fuel RA, the tank was historically used to hold kerosene (typically between C4-C19) and the analytical results indicated hydrocarbons within the gasoline range (C6-C10), diesel fuel range (C10-C24) and motor oil (C20-C34) range hydrocarbons with predominantly diesel range hydrocarbons. The tank was located on the north side of the former building, as shown in Figure 3-2 and in Photo 6.

Surface concrete was removed using a saw-cutter and the soil around the tank was excavated with a backhoe to uncover the tank. The tank had a quarter-sized hole and several pitted areas that were pin-sized holes. A two-inch pipe existed above the UST with water draining into the excavation. It also appears that a second pipe ran to the UST from the Building 31 UST site (noted in Expanded SI Report on Building 31 removal activities). However, upon uncovering the Building 161 UST, there was a 6-inch pipe, likely a conduit for a smaller pipe. The second pipe from the Building 31 UST was not inside this conduit (Photo 7). During removal of the UST at Building 31, this pipe was extended above the restored pavement and capped. This pipe was backfilled with cement during the activities at the Building 161 UST and the extension removed to below grade.

Photo 6. Building 161 UST. Photo taken 1/6/2006. Looking east towards Jackson Street

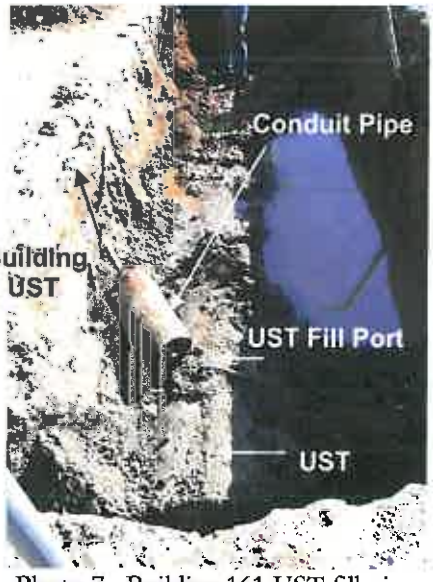


Photo 7. Building 161 UST fill pipe located in vault. Photo taken 1/3/2006.

Below the 6-inches of concrete at the surface were 6-inches of sand and another 6-inches of rebar-reinforced concrete. Under the concrete layers was alternating layers of gravelly sand, sandy gravel and sand to 5.5 feet bgs. Between 5.5 feet bgs and 7.5 feet bgs, a grayish green sand and gravel was encountered with a strong hydrocarbon odor. This sand and gravel is tank fill material. Groundwater was encountered at approximately 9.5 feet bgs. Static groundwater level rose to 4.5 feet bgs. The top of the UST was encountered at 4.3 feet bgs.

The tank contained an oil-like substance floating on top of water and viscous sludge at the bottom of the tank. The excavation contained water with an oily sheen which was pumped into a vacuum truck. Approximately 2,200 gallons were pumped into the vacuum truck: 2,100 gallons of liquid from the UST (emptied the tank) and 100 gallons of the oily sheen in the excavation on 4 January 2006.

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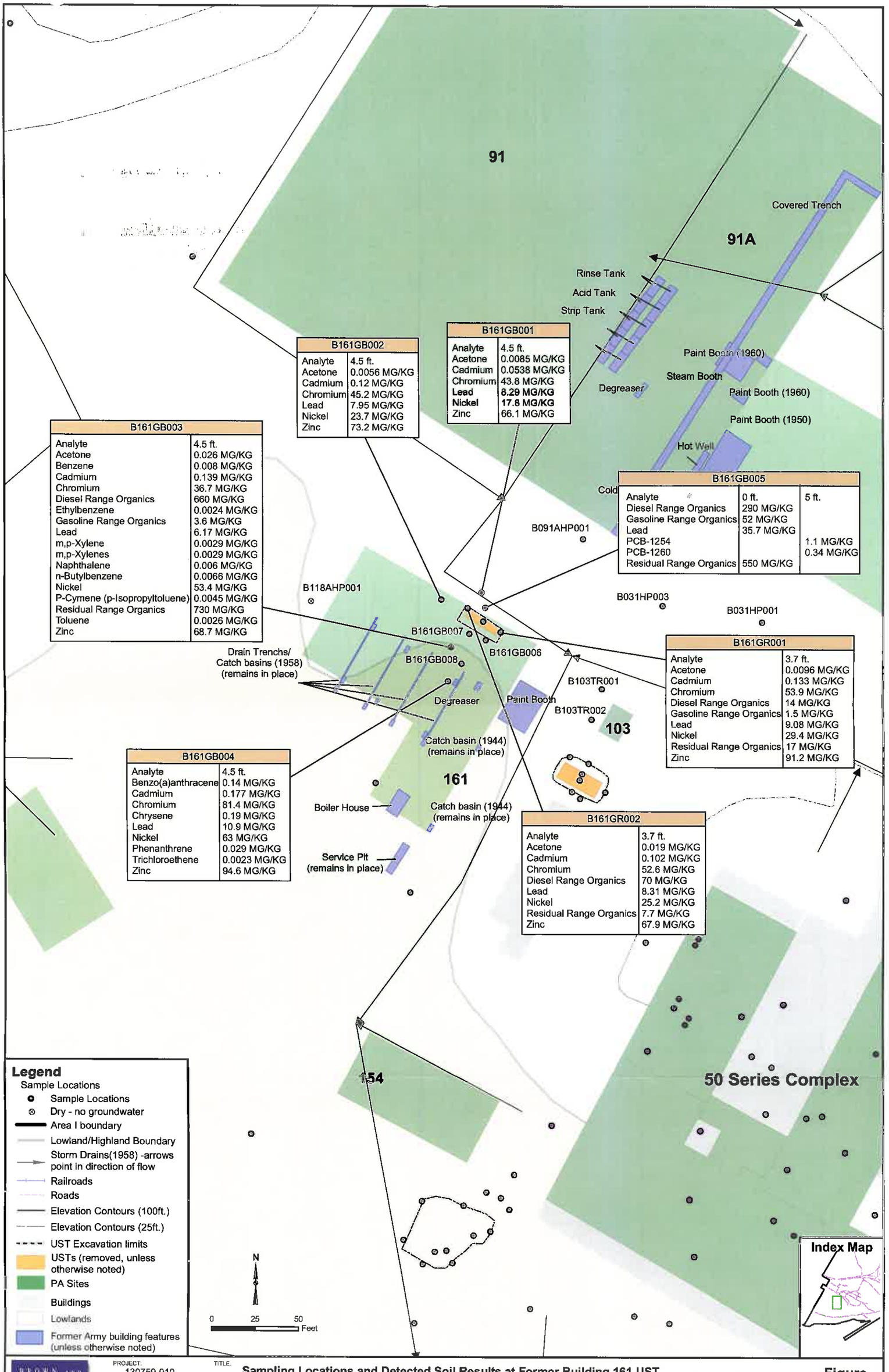


BROWN AND CALDWELL

PROJECT: 130759-010
DATE: 4/7/2008

TITLE. SITE:

Sampling Locations and Detected Soil Results at Former Building 161 UST
Benicia Arsenal, Benicia, California

Figure 3-2

S:\Benicia_expandedsi_ USTRA Addendum\Figure 3-2 B161 Soil Detected Results.mxd

Just above groundwater at approximately 1 to 2 feet bgs, was a strong petroleum odor. The excavation is shown in Photo 8.

The steel tank dimensions were 22 feet long by 5 feet in diameter, equating to 3,400 gallons (Photo 9). The UST was secured with three tie down straps – one at each end and one over the middle of the UST. It was removed from the excavation on 5 January 2006 under the supervision of the Solano County and the City of Benicia Fire Department and then transported to ECI along with the Building 27 UST.

Photo 8. Water in excavation at Building 161. Approximate depth to water = 4.5 feet. Photo taken 1/6/2006 looking east. Jackson Street is on the left side of the photo.

3.1.3 Sampling Activities

At the Building 27 site, one soil sample (B027GR001-A-S01) was collected from under the 250-gallon tank per Solano County protocols. After the UST was removed, the soil in the bottom of the excavation (approximately 9 feet bgs) was greenish in color and had a moderate petroleum hydrocarbon odor. The soil in the bottom of the excavation was over-excavated to approximately 11 feet bgs. Another soil sample (B027GR001-A-S02) was collected from the center of the over-excavation. The sample location is shown on Figure 3-1.

Groundwater was encountered at the Building 161 tank site, therefore two soil samples (B161GR001 and B161GR002) were collected from the east and west ends of the 3,400 gallon tank excavation per Solano County protocols. Soil samples were collected approximately 6 inches above the soil/groundwater interface, which were at approximately 4 feet bgs. In addition, one groundwater sample was collected from the water in the excavation. The sample locations are shown on Figure 3-2.

Photo 9. Building 161 UST. Photo taken 1/5/2006.

A hydrocarbon odor was observed on the far west side of the excavation where soil sample B161GR002 was collected. As part of a rapid decision strategy used in the Expanded SI, the team did not wait for the results from the UST excavation samples. Four soil borings (B161GB001 through B161GB004) were advanced the day after the UST was removed. The boring locations are shown on Figure 3-2.

Groundwater samples were not collected from the four soil borings because the combination of the results from the Expanded SI groundwater samples (BC, 2005b) surrounding the UST and the grab

groundwater sample collected from the UST excavation was enough data to delineate any impacted groundwater. Results from the Expanded SI borings are discussed in the Expanded SI Report (BC, 2005b).

After addressing the November 28, 2006 comments by the Water Board on the June 2006 draft final version of this report, USACE agreed to perform additional investigation to determine the presence or absence of PCBs in soil and groundwater due to reported PCBs in the grab groundwater sample (B161GR001) collected from the UST excavation. The analysis for TPH was added to groundwater samples to further delineate the extent of TPH in the area of the former UST for the feasibility study. Four borings (B161GB005 thru B161GB008) by direct push for the following analyses:

- B161GB005: Soil at 4.5 to 5.5 ft bgs and 8 to 9 ft bgs for PCBs. Groundwater for PCBs and TPHG, TPHD, and TPHMO.
- B161GB006: Soil at 4.5 to 5.5 ft bgs and 8 to 9 ft bgs for PCBs. Groundwater for PCBs.
- B161GB007: Soil at 4.5 to 5.5 ft bgs and 8 to 9 ft bgs for PCBs. Groundwater for PCBs.
- B161GB008: Soil at 4.5 to 5.5 ft bgs and 8 to 9 ft bgs for PCBs. Groundwater for PCBs and TPHG, TPHD, and TPHMO.

3.1.4 Analytical Results

Analytical results for parameters detected in soil samples at Building 27 are presented on Figure 3-1. Appendices C through E present a legend and the analytical laboratory reports for these samples.

Comparisons to soil results were made to Water Board ESLs. For metals in soil, ambient concentrations were also considered. A recent update of the ambient concentrations has been conducted and will be included in the Arsenal risk assessment.

Comparisons of groundwater results to MCLs were used as a criterion for possible drinking water sources at sites located in the highlands since groundwater quality meets the total dissolved solids (TDS) (less than 3,000 milligrams per liter [mg/L])or 200 gallon per day criteria (State Board Resolution No. 889-63, Regional Board Resolution No. 89-39 , and the Basin Plan). If maximum contaminant levels (MCLs) were not established for a particular analyte, then the representative Water Board ESL was used. However, MCLs are not appropriate in the lowland areas, where TDS is high (>3,000 mg/L). In the lowland areas, comparison criteria of Water Board ESLs (Water Board, 2007) were used for groundwater categorized as not a source of drinking water. For the sites sampled for this addendum report, Building 27 is located in the highlands and Building 161 is located in the lowlands.

Building 27. During tank removal at Building 27, the soil at the bottom of the excavation was visibly stained at 7 feet bgs and sampled (B027GR001-A-S01). Additional soil was excavated and another soil sample (B027GR001-A-S02) was collected at the bottom of the excavation at 11 feet bgs. Detected soil results from both samples collected are shown on Table 3-1. Since the first soil sample was removed during the over-excavation only the second and deeper soil sample is presented on Figure 3-1.

Diesel fuel is only analyte that exceeded its Water Board ESL value (83 milligrams per kilogram [mg/kg]) with a concentration of 450 mg/kg. The excavation could not be over-excavated deeper than 11 feet bgs because sandstone was increasing in competency and the backhoe could not dig anymore. Visual observations indicated that the remaining hydrocarbons were found within the fractures of the sandstone.

There was no groundwater encountered at this site. Therefore, there is no potential impact from the residual hydrocarbons from fractured sandstone to reach groundwater.

Table 3-1. Detected Results in B027GR001

Analyte	Concentration (mg/kg)			
	B027GR001-A-S01* (depth: 7 to 7.5 feet bgs)	B027GR001-A-S02 (depth: 11-12 feet bgs)	Water Board ESL	Ambient Concentration Limit
Acetone	0.026	0.037	2.1	NE
Lead	3.6	5.78	200	36.8
Diesel range (C10-C24)**	**2,500**	**450**	83	NE
Gasoline range (C6-C10)	6.2	4.5	83	NE
Motor oil range (C20-C34)	**570**	120	410	NE

BOLD indicates concentration exceeds ESL
bgs – below ground surface
mg/kg – milligrams per kilogram
NE – Not established
ESL – Environmental Screening Level for deep soil (>3 meters) where groundwater is a potential source of drinking water, residential land use (Water Board, 2007)
*Removed during the over-excavation of the pit
** fuel oil (C14 to C20), the fuel used in the Building 27 UST, coincides within the diesel range

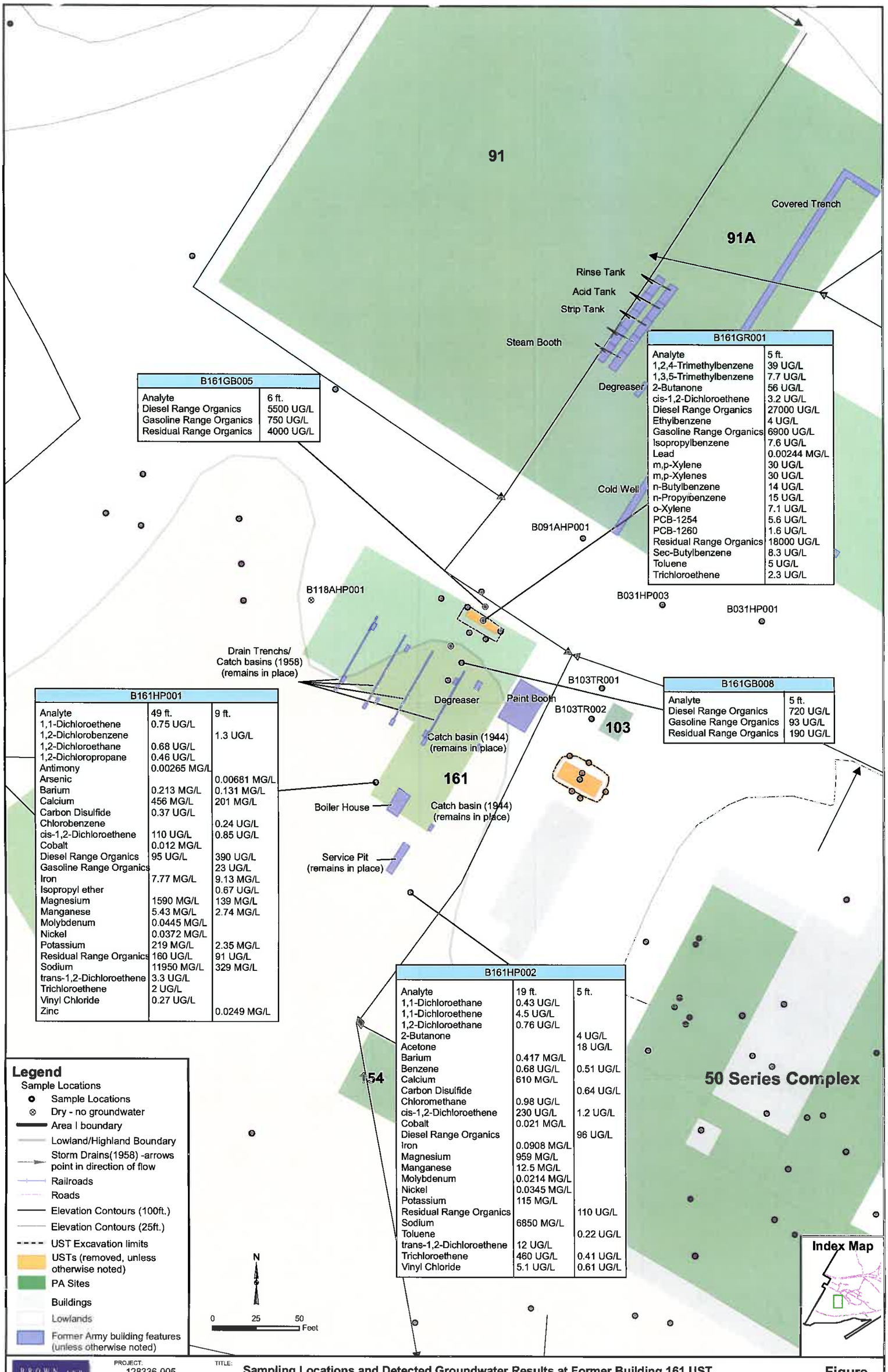
Building 161. On January 5, 2006, soil samples collected from the north and west walls of the excavation (B161GR001 and B161GR002) did not exceed their respective commercial/industrial Water Board ESLs. Sample locations and results are shown on Figure 3-2 for soil and Figure 3-3 for groundwater.

During tank removal, the west side of the excavation appeared to be impacted with hydrocarbons. Four soil borings (B161GB001, B161GB002, B161GB003, and B161GB004) were advanced surrounding the suspected impact (Figure 3-2) on January 6, 2006. The borings on the north and west side of the excavation (B161GB001 and B161GB002) contained very low to no concentrations above the method detection limits (MDLs) for petroleum hydrocarbons. The borings south of the excavation, B161GB003 and B161GB004, did contain petroleum hydrocarbons and/or TCE and are shown in Table 3-2.

On January 22 and 23, 2008, four direct push borings (B161GB005 through B161GB008) were advanced and soil samples collected at pre-selected depths (4.5 to 5.5 feet bgs and 8 to 9 feet bgs) and groundwater samples were collected in each boring. These sample depths were agreed upon by the Water Board to represent soil samples from the top of the tank and at the bottom of the tank as presented in Geologic Cross Section A-A' (Figure 3-4). Additionally, the placements of the borings were deliberate such that three borings (B161GB005, B161GB006, and B161GB007) were placed closer to the UST than the borings drilled and sampled in 2006, B161GB005 was upgradient of the UST, and the other three borings downgradient of the UST (B161GB006 through B161GB008) in a triangular pattern with B161GB008 furthest downgradient.

Diesel fuel range hydrocarbons were detected above the Water Board ESL of 150 mg/kg in boring B161GB003 (660 mg/kg). A downgradient location, B161GB004, was sampled and diesel fuel range hydrocarbons were not detected above laboratory method detection limits. Therefore, diesel range hydrocarbons have been delineated. There was no gasoline range hydrocarbons detected in soil around the UST. Kerosene was indicated by the Army as the fuel stored in the UST. Typically its range is between C4-C19, which coincides with the gasoline range (C6-C10) and diesel range (C10-C24). Gasoline range hydrocarbons were not reported above the MDLs in any of the soil samples collected from the UST excavation. Therefore, the presence of kerosene is difficult to substantiate. It is possible that the tank leaked kerosene and the kerosene has degraded to concentrations below MDLs. Otherwise, the results indicate a hydrocarbon in the diesel range. It was possible that UST may have contained diesel fuel at a later date.

Lead was reported in all of the soil samples but none of the concentrations exceeded the Water Board ESL or its ambient concentration limit (Table 3-2). Likewise, none of the other analytes reported in soil in the UST excavation or the other borings advanced during the January 2006 addendum investigation exceeded their respective Water Board ESLs, including PCBs (Table 3-2).



B161GB005	
Analyte	6 ft.
Diesel Range Organics	5500 UG/L
Gasoline Range Organics	750 UG/L
Residual Range Organics	4000 UG/L

B161GR001	
Analyte	5 ft.
1,2,4-Trimethylbenzene	39 UG/L
1,3,5-Trimethylbenzene	7.7 UG/L
2-Butanone	56 UG/L
cis-1,2-Dichloroethene	3.2 UG/L
Diesel Range Organics	27000 UG/L
Ethylbenzene	4 UG/L
Gasoline Range Organics	6900 UG/L
Isopropylbenzene	7.6 UG/L
Lead	0.00244 MG/L
m,p-Xylene	30 UG/L
m,p-Xylenes	30 UG/L
n-Butylbenzene	14 UG/L
n-Propylbenzene	15 UG/L
o-Xylene	7.1 UG/L
PCB-1254	5.6 UG/L
PCB-1260	1.6 UG/L
Residual Range Organics	18000 UG/L
Sec-Butylbenzene	8.3 UG/L
Toluene	5 UG/L
Trichloroethene	2.3 UG/L

B161GB008	
Analyte	5 ft.
Diesel Range Organics	720 UG/L
Gasoline Range Organics	93 UG/L
Residual Range Organics	190 UG/L

B161HP001		
Analyte	49 ft.	9 ft.
1,1-Dichloroethene	0.75 UG/L	
1,2-Dichlorobenzene		1.3 UG/L
1,2-Dichloroethane	0.68 UG/L	
1,2-Dichloropropane	0.46 UG/L	
Antimony	0.00265 MG/L	
Arsenic		0.00681 MG/L
Barium	0.213 MG/L	0.131 MG/L
Calcium	456 MG/L	201 MG/L
Carbon Disulfide	0.37 UG/L	
Chlorobenzene		0.24 UG/L
cis-1,2-Dichloroethene	110 UG/L	0.85 UG/L
Cobalt	0.012 MG/L	
Diesel Range Organics	95 UG/L	390 UG/L
Gasoline Range Organics		23 UG/L
Iron	7.77 MG/L	9.13 MG/L
Isopropyl ether		0.67 UG/L
Magnesium	1590 MG/L	139 MG/L
Manganese	5.43 MG/L	2.74 MG/L
Molybdenum	0.0445 MG/L	
Nickel	0.0372 MG/L	
Potassium	219 MG/L	2.35 MG/L
Residual Range Organics	160 UG/L	91 UG/L
Sodium	11950 MG/L	329 MG/L
trans-1,2-Dichloroethene	3.3 UG/L	
Trichloroethene	2 UG/L	
Vinyl Chloride	0.27 UG/L	
Zinc		0.0249 MG/L

B161HP002		
Analyte	19 ft.	5 ft.
1,1-Dichloroethane	0.43 UG/L	
1,1-Dichloroethene	4.5 UG/L	
1,2-Dichloroethane	0.76 UG/L	
2-Butanone		4 UG/L
Acetone		18 UG/L
Barium	0.417 MG/L	
Benzene	0.68 UG/L	0.51 UG/L
Calcium	610 MG/L	
Carbon Disulfide		0.64 UG/L
Chloromethane	0.98 UG/L	
cis-1,2-Dichloroethene	230 UG/L	1.2 UG/L
Cobalt	0.021 MG/L	
Diesel Range Organics		96 UG/L
Iron	0.0908 MG/L	
Magnesium	959 MG/L	
Manganese	12.5 MG/L	
Molybdenum	0.0214 MG/L	
Nickel	0.0345 MG/L	
Potassium	115 MG/L	
Residual Range Organics		110 UG/L
Sodium	6850 MG/L	
Toluene		0.22 UG/L
trans-1,2-Dichloroethene	12 UG/L	
Trichloroethene	460 UG/L	0.41 UG/L
Vinyl Chloride	5.1 UG/L	0.61 UG/L

Legend

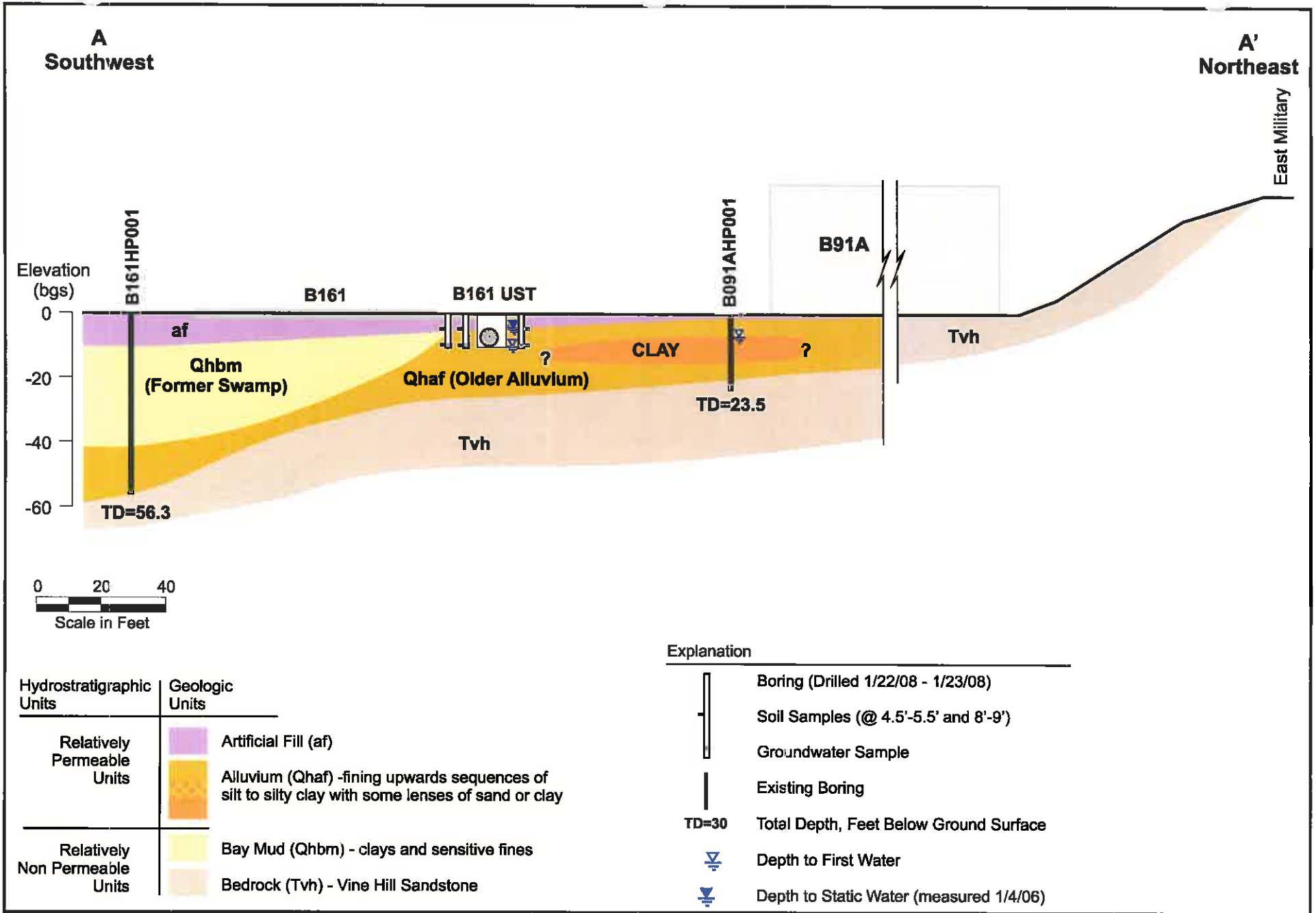
Sample Locations
- Sample Locations
- Dry - no groundwater
- Area I boundary
- Lowland/Highland Boundary
- Storm Drains(1958) -arrows point in direction of flow
- Railroads
- Roads
- Elevation Contours (100ft.)
- Elevation Contours (25ft.)
- UST Excavation limits
- USTs (removed, unless otherwise noted)
- PA Sites
- Buildings
- Lowlands
- Former Army building features (unless otherwise noted)

BROWN AND CALDWELL

PROJECT: 128336-005
DATE: 3/9/2006
TITLE: Sampling Locations and Detected Groundwater Results at Former Building 161 UST
SITE: Benicia Arsenal, Benicia, California

Figure 3-3

S:\Benicia_USTRA Addendum\Figure 3-3 B161 Groundwater Detected Results.mxd



BROWN AND CALDWELL

PROJECT: 130759-004
DATE: 4-7-08

TITLE: **Geologic Cross Section A-A' in Vicinity of Former Building 161 UST**
SITE: **Benicia Arsenal, Benicia, California**

Figure 3-4

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Table 3-2. Petroleum Hydrocarbon, Lead, TCE, and PCB Results in Soil at Former UST 161

Analyte	B161GB001	B161GB002	B161GB003	B161GB004	Water Board ESL	Ambient Concentration Limit
Sample Depth is 4.5 feet bgs and concentrations in mg/kg						
Lead	8.29	7.95	6.17	10.9	750	36.8
Trichloroethene	< 0.0022	<0.0022	<0.0022	0.0023	4	NE
Gasoline range (C6-C10)**	<0.6	<0.56	3.6	<0.6	450	NE
Diesel range (C10-C24)**	4*	<2.7	**660**	<2.6	150	NE
Motor oil range (C20-C34)	<2.7	<2.6	730	<2.5	2,500	NE
PCBs	<0.024	<0.023	<0.023	<0.022	0.3	NE

BOLD indicates concentration exceeds BSL
mg/kg- milligrams per kilogram NE – Not established
ESL – Environmental Screening Level for shallow soil (<3 meters) where groundwater is NOT a potential source of drinking water , industrial/commercial land use (Water Board, 2007)
bgs – below ground surface
* reported in the duplicate sample
**kerosene (typically between C4-C19), a product allegedly used in the Building 27 UST, coincides within the gasoline and diesel range

Additional soil samples were collected in January 2008 closer to the former UST and analyzed for PCBs. PCB-1254 and PCB-1260 were reported at 1.1 mg/kg and 0.34 mg/kg, respectively in B161GB005 at 5 feet bgs to 5.5 feet bgs. B161GB005 is located 4 feet north of the UST excavation. The Water Board ESL for PCBs is 0.3 mg/kg (commercial/industrial use and groundwater is not a potential source of drinking water). All other 2008 soil samples collected (including all samples collected at a depth of 8 to 9 feet bgs) were reported at concentrations below their respective MDLs and thusly, below the Water Board ESL for PCBs.

Grab groundwater sample results, collected from the excavation sample (B161GR001) and shallow groundwater from borings B161GB006 through B161GB008, are shown on Figure 3-3 and Table 3-3. Petroleum hydrocarbons, diesel fuel, gasoline, and motor oil are all above their respective Water Board ESLs but have been delineated. Broader investigations for these constituents were performed for the Expanded SI (Brown and Caldwell, 2005b). The grab groundwater sample also contained two PCBs cogeners, 1254 and 1260, which are above their Water Board ESLs but not in the shallow groundwater samples.

Table 3-3. Results above ESL in Groundwater at Former UST 161

Analyte	Concentrations in µg/L					
	B161GB001 (excavation grab sample)	**B161GB005**	**B161GB006**	**B161GB007**	**B161GB008**	**Water Board ESL**
Diesel fuel range (C10-C24)	**27,000**	**5,500**	Not analyzed	Not analyzed	720	2,500
Gasoline range (C6-C10)	**6,900**	750	Not analyzed	Not analyzed	93	5,000
Motor oil range (C20-C34)	**18,000**	**4,000**	Not analyzed	Not analyzed	190	2,500
PCB-1254	5.6	<0.24	<0.24	<0.24	<0.24	16
PCB-1260	1.6	<0.24	<0.24	<0.24	<0.24	16

BOLD indicates concentration exceeds its ESL
µg/L - micrograms per liter
ESL – Environmental Screening Level for groundwater is not a potential source of drinking water, industrial/commercial land use (Water Board, 2007)

A product sample was collected from the UST for waste characterization. Methylene chloride, TCE, PCB-1254 and PCB-1260 were detected in the product sample (Table 3-4). The density of the product sample is 0.94 grams per millimeter which means it is lighter than water. The product was observed floating on water which substantiates that a light aqueous phase liquid was contained in the tank, like kerosene or diesel fuel. The presence of VOCs and PCBs in the product sample means they have co-eluted in the sample. TCE and the PCB congeners were also reported in the grab groundwater sample from the tank excavation (Figure 3-3).

Table 3-4. Building 161 UST Product Sample Results

Analyte	Result (µg/kg)	% of product
Methylene chloride	28,000	0.003%
Trichloroethene	930,000	0.093%
PCB-1254	27,000	0.003%
PCB-1260	8,200	0.001%
	Total	0.099%

µg /kg- micrograms per kilogram = parts per billion

According to the World Health Organization (1993), the commercial production of the PCBs began in 1930, and, during the 1930s, as dielectric and heat-exchange fluids and in a variety of other applications. Now they are almost entirely restricted to use in closed systems, such as isolating oils in transformers, capacitors, and other electrical systems, and as a heat transfer medium and hydraulic liquid. They have become widely distributed in the environment throughout the world, and are persistent and accumulate in food webs. All congeners of PCBs are lipophilic and have very low water solubility (World Health Organization, 1993).

Based on the historical use of PCBs provided above and the use of electrical equipment at the Arsenal, it is possible that Arsenal equipment contained PCB-laden dielectric oil; however, how it got into the UST is a mystery. One soil sample in close proximity to the UST (B161GB005 at 5 feet bgs to 5.5 feet bgs) contained the same PCB cogeners as reported in the grab groundwater sample from the UST and in the UST product sample. The impact to soil is not extensive. PCB concentrations are very low and the 2006 PCB soil sample, approximately 5 feet north of B161GB005 did not report any PCBs. The presence of PCBs in soil will be addressed in the risk assessment. PCBs have not impacted groundwater. The presence of PCBs in the grab groundwater sample was from the UST. As mentioned in the next section, Section 3.2, a volume of contaminated groundwater was removed from the open excavation, as well as, all of the contents from the UST. Therefore, the source PCBs and the petroleum hydrocarbons have been removed.

3.2 Investigative Derived Waste Disposal

IDW generated as part of the field effort included soil, liquids (including tank contents and decontamination rinsate from sampling equipment), asphalt and concrete, tanks and associated piping from tank excavation activities, and disposable protective clothing and ground covers.

Table 3-5 presents the quantities of soil IDW generated during this investigation. Soil was containerized in 20-yard bins and stored at secured temporary waste staging area next to the Building 161 site, at Building 103. Four grab samples were collected and composited into one sample from each of the soil containers (one at each UST site). IDW samples were analyzed for the following parameters:

- TPHD, TPHMO, and TPHG by EPA Modified Method 8015;
- VOCs by EPA Method 8260B;
- Total chromium, nickel, and zinc by 6010B, cadmium and lead by 6010B ICP trace; and
- PCBs by EPA Method 8082.

Table 3-5. Quantities of IDW

Location	Quantity	Waste Classification
Building 27	18.87 tons 220 gallons	Non-hazardous waste, solid (soil) Non-hazardous waste, liquid (includes decontamination water)
Building 161	46.97 tons 2,200 gallons	Non-hazardous waste, solid (soil) F001 hazardous waste, liquid (includes 100 gallons of any groundwater from Building 161 UST excavation)

Based on analytical results, IDW soil from the Building 27 excavation contained low levels of petroleum hydrocarbons and was manifested as non-hazardous soil. IDW soil from the Building 161 excavation contained petroleum hydrocarbons, VOCs, and total lead. Phillips Services Corporation of San Martin, CA transported the non-hazardous soil to the Waste Management Facility, Altamont Landfill, in Livermore, CA. Soil IDW waste manifests are included in Appendix F.

One grab product sample was collected from the oily substance within the Building 161 UST and analyzed for the PCBs by EPA 8082 and halogenated organics by EPA 8260B. Based on analytical results (Table 3-4), the tank contents were manifested as F001 RCRA hazardous. Approximately 2,100 gallons of liquid from the tank and approximately 100 gallons of oily water in the excavation was removed using a vacuum truck. The liquid was transported by Phillips Services Corporation to Burlington Environmental, located in Tacoma, Washington.

One grab water sample was collected from the four 55-gallon drums of water pumped from the Building 27 UST. Decontamination water from Expanded SI Addendum activities were combined with this water. The sample was analyzed for diesel range and motor oil range hydrocarbons by EPA Modified Method 8015. Results indicated a concentration of 65,000 µg/L diesel range hydrocarbons and 9,200 µg/L motor oil range hydrocarbons. The water was profiled as non-hazardous and transported by Phillips Services Corporation to Tacoma, Washington. The water IDW waste manifests are included in Appendix F.

Concrete was removed from the surface at Building 161 and transported to a recycling facility by Geocon. ECI transported the fuel storage tanks and associated piping to their recycling and disposal facility in Richmond, California. ECI also cleaned residual solids from the tanks as part of its recycling activities. Tank manifests and tank destruction certificates are included in Appendix G.

Excess disposable wastes derived from sampling, such as gloves, and bailers were disposed by BFI, which provides local garbage disposal service for the area.

3.3 Geotracker

Analytical data with the coordinate location of each UST removed was submitted electronically into the Geotracker database.

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4.0 DATA USABILITY

This section summarizes the data quality assessment of analytical results reported for soil, and groundwater samples collected during this investigation. Validation and/or verification of the laboratory analytical data was performed per the criteria specified in the Benicia QAPP (FA/BC, 2001).

Soil, and water samples were collected by Brown and Caldwell in one mobilization (January 2006). Soil and groundwater samples were delivered by overnight courier to EMAX Laboratories, Inc. Torrance, California. Data was received in both hard copy and electronic formats.

Individual analytical results were qualified during the data verification procedures. The percentage of results that are qualified as estimated or rejected due to QC deficiencies is an indication of the overall data quality for a given analytical method. Table 4-1 provides a summary of the number of results that were qualified by method.

Table 4-1. Analytical Completeness by Method

				Number of results				Completeness	
Method	Parameter	Samples Analyzed (N+FD)	Analytes per sample	Total	Rejected	Estimated due to QC deficiencies	Estimated due to >MDL but <PQL	Percent usable	Percent quantitative*
E1664	Oil and Grease	2	1	2	0	0	0	100%	100%
SW6010B	Metals	10+1	5	43	0	1	8	100%	97.6%
SW8015B	GRO, DRO, RRO, ethanol, methanol	15+2	3/5	50	0	0	4	100%	100%
SW8082	PCBs	21+2	7	154	0	0	0	100%	100%
SW8260B	Volatiles	9+1	71	710	0	1	22	100%	99.9%
SW8270C	Semivolatiles	6	variable	266	2	49	0	99.2%	81.6%
SW8310	PAHs	3+1	16	64	0	1	1	100%	98.4%

* Note: Estimations due solely to results <PQL do not affect the calculated completeness
Calculations do not include any required field or laboratory QC samples, except field duplicates.
DRO = diesel range organics
GRO = gasoline range organics
FD = field duplicate samples
N = normal environmental samples
RRO = residual range or motor oil range organics

In general, the results are of acceptable quality and are usable for their intended purpose. All holding time requirements were met. No global problems were identified. Results for the semivolatiles, benzoic acid and hexachlorcyclopentadiene in sample B161GR001-A-W01 have been rejected due to very low matrix spike recoveries. These results are not usable for any purpose. All methods met the analytical completeness goals with a high percentage of unqualified results (greater than 80 percent).

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5.0 CONCLUSIONS AND RECOMMENDATIONS

The following section summarizes the results of this addendum Fuel RA.

- At Buildings 45, 50, and 111 no geophysical anomalies were reported in the areas searched that suggested the presence of a UST.
- A geophysical anomaly was identified at Building 27 that suggested the presence of a UST. A 250-gallon single-walled steel tank was located and removed at Building 27.
- A fill pipe was found at Building 161 indicating the location of the UST. A 3,400-gallon single-walled steel tank was removed near Building 161.
- ROE was denied by the landowner at Building CL2.

5.1 Recommendations

Additional investigations are warranted to identify and/or remove USTs at Building CL2. An investigation at this location was not performed because an ROE agreement was not reached.

Geophysical and visual investigations determined that there were no USTs found at Building 45, Building 50, or Building 111. No further DoD action is indicated at these locations.

Fractured sandstone and rainwater from the Building 27 UST contained diesel range hydrocarbons consistent with fuel oil. There is a residual impact at a concentration of 450 mg/kg in the fractured sandstone that exceeds the Water Board ESLs of 83 mg/kg. Most of the impacted soil/weathered sandstone was removed to a depth 11 feet bgs. Since there are physical limitations in trying to remove the remaining residuals within the fractures of the sandstone and there is no groundwater being impacted at this site, USACE recommends no further action.

Suspected DoD sources appear to have impacted soil in the area of the former Benicia 161 UST; however, the impact has been delineated. Diesel range hydrocarbons are present above its ESL in soil samples south of the former Building 161 UST. PCBs were reported in soil a few feet north of the former UST. The impact is not extensive. Groundwater is impacted with petroleum hydrocarbons but the extent has been delineated in combination with the Expanded SI data. The outcome of the petroleum DoD-related compounds will be evaluated in the Feasibility Study. Non-petroleum related compounds will be evaluated in the risk assessment.

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6.0 REFERENCES

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APPENDIX A

Background Details of Fuel Storage Tank Sites

PA Summary

DoD Site #
27
Area: I

☑ NDAI ☐ FAR ☐ IRR ☐ Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-150-200	ROBBINS J REED	1063 JEFFERSON STREET

Year Bldg. Built 1861 **Year Bldg. Removed** Not applicable **Site Area (SqFt)** 7725

Current Land Use Mixed Use-Lower Arsenal

OPERATIONAL HISTORY

DoD Use Type
Housing

DoD Uses
Captain's Quarters

Secondary DoD Uses
Fuel Type

Post-Army Uses
Residence

Flooring
Wood

Disposal Information
None Listed

Activities (inside/outside)
Inside

Records Research Report Addenda Data
250-gallon fuel oil tank and burner installed in October 1928.

Records Research Report Comments
Located east of Buildings 25 and 26.

ENVIRONMENTAL SUMMARY

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	UST	US Army	250	Steel	Fuel oil	1928	1/5/2006	Unknown	☐

Uses: Fuel Storage

Comments: Unknown if tank is still present.

Furthest Stage of Environmental Investigation
RI

COMMENTS

A geophysical survey performed in December 2005 identified a fuel oil UST on the south side of the property. A 250-gallon steel UST was uncovered. The UST appeared to be in good condition with a few minor holes. Rainwater was removed from the tank. Soil was visibly impacted beneath the UST. Additional soil and sandstone was over excavated to a depth of 11 feet bgs. Residual hydrocarbons were reported in the fractures of the sandstone. There is no groundwater at the site. Therefore, there is no threat to groundwater.

PA Summary

DoD Site #
27
Area: I

RECOMMENDATIONS

No further DoD action is indicated for this site.

PA Summary

DoD Site #
45
Area: I

☑ NDAI ☐ FAR ☐ IRR ☐ Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-150-130	WATSON KAREN ANN	983 GRANT STREET

Year Bldg. Built 1872 **Year Bldg. Removed** Not applicable **Site Area (SqFt)** 10239

Current Land Use Mixed Use-Lower Arsenal

OPERATIONAL HISTORY

DoD Use Type
. Housing

DoD Uses
Enlisted Men's Barracks

Secondary DoD Uses
Fuel type

Post-Army Uses
None Identified

Flooring
Wood

Disposal Information
None Listed

Activities (inside/outside)
Outside

Records Research Report Addenda Data
400-gallon fuel oil tank and burner installed in 1929 (ref 130).

Records Research Report Comments
Located north of Grant Street at Roosevelt

ENVIRONMENTAL SUMMARY

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	UST	US Army	400	Unknown (likely steel)	Fuel oil	1929	Unknown	Unknown	☐

Uses: Fuel Storage
Comments:

Furthest Stage of Environmental Investigation
SI

COMMENTS

Unknown what happened to the fuel tank. No investigation could be conducted during the Fuel only investigation in 2002 and the UST RA Investigation in June 2004 due to the landowner's renovation of the building (ref 1063). In December 2005, a geophysical investigation was conducted to determine if a UST is present. No anomalies were found in the areas searched that suggested the presence of a UST.

PA Summary

DoD Site #
45
Area: I

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #
111
Area: M

☑ NDAI ☐ FAR ☐ IRR ☐ Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-140-050	BENICIA CITY	

Year Bldg. Built	Pre-1945	Year Bldg. Removed	1957-1961	Site Area (SqFt)	1728

Current Land Use Industrial-General

OPERATIONAL HISTORY

DoD Use Type
Heavy Equipment Yard

DoD Uses
Heavy Equipment Shop

Secondary DoD Uses
Unknown

Post-Army Uses
None Identified

Flooring
Unknown

Disposal Information
None Identified

Activities (inside/outside)
Outside/Inside

Records Research Report Addenda Data
(According to ref 167, the building was present in 1957). Presumably, building was demolished by DoD prior to 1961, because the buildings is not listed in the 1961 Facility Data Sheet (ref 196), and no building remains today.

Records Research Report Comments
The third sanitary line handled waste from Buildings 50, 111, and 136 and discharged at Point D (ref 405). Building 136 is shown attached to the east side of Building 111. Records research offered little detail regarding operations in the heavy equipment yard.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation
SI

COMMENTS

Records Research is unclear on site activities. Unknown what happened to the shop. During the 2004 Expanded Site Inspection investigation, downgradient groundwater and soil gas samples were collected. The only analyte detected was MTBE at a concentration of 0.32 ug/L in groundwater. The army never used fuel with MTBE, therefore, this is a post-Army release. A geophysical survey was performed on behalf of USACE on 18 February 2005 to determine if the Army tanks were USTs. The area was surveyed with vertical magnetics, line-locators and ground penetrating radar. The area surveyed was around the footprint of the existing building. The geophysical survey found a reinforced concrete pad, some anomalies that were confirmed by GPR to likely be buried debris, and a buried petroleum pipeline. Otherwise, there were no other anomalies that would indicate the presence of any USTs in this area.

PA Summary

DoD Site #
111
Area: M

RECOMMENDATIONS

No additional DoD action is indicated.

PA Summary

DoD Site #
161
Area: I

☐ NDAI ☑ FAR ☐ IRR ☐ Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-280-010	HISTORIC ARSENAL PARK LTD	920 JACKSON STREET

Year Bldg. Built	Pre-1945	**Year Bldg. Removed**	1981-1998	**Site Area (SqFt)**	11200

Current Land Use Mixed Use-Lower Arsenal

OPERATIONAL HISTORY

DoD Use Type
Industrial/Manufacturing Shops

DoD Uses
Motor Cleaning Building/Steam Cleaning/Paint Spray/Fuel Storage

Secondary DoD Uses
Fuel/Paint/Fuel Storage Facilities

Post-Army Uses
1967-1981: International Manufacturing Company for office space and a facility for the manufacture and storage of pumps, water systems, swimming pools, automobile wheels and accessories (ref 425, 587, 702).

Flooring
Concrete

Disposal Information
Drawing 4619, dated 6 October 1949 identifies service pit in the floor of paint booth and the sump connected to the storm drain along the eastern side of the building.

Activities (inside/outside)
Inside and Outside

Records Research Report Addenda Data
A drawing dated 31 May 1944 (ref 609) shows a kerosene storage tank (adjacent to the north side of the building), paint spray booth, degreaser, steam cleaner, storm drains, catch basins and underground gas lines (ref 609). Record Research identified a dip tank line, stripping tank, acid dip tank (2), water dip tank (2), neutralizer tank (ref 714). Drawing 4619, dated 6 October 1949 identifies service pit in the floor of paint booth. The pit measured 10x3.5 feet and had a 6-inch drain that ran directly to the storm drain. A 1952 survey by Brown and Caldwell indicated the building operations included steam cleaning of large components, dipping and painting (ref 405). Guide Sheet A dated 1957 stated the building had been constructed in a temporary-type manner on reclaimed tidelands without pilings. Drawing 6105, dated 28 August 1958 identifies 4 catch basins and 4 drain trenches proposed as part of the building rehabilitation. Drawing 6270, dated 22 Sept. 1959 identifies boiler house, spray paint booth, and proposed drying oven. 1962 vacate date (ref 713).

Records Research Report Comments
Demolished by Benicia Industries. Temporary construction of building resulted in uneven settling, creating excessive stresses in trussed members to the extent that numerous failures occurred. Floors sank so badly that the floor drains could not operate (ref 54). A 1952 report indicated that there were sewer system deficiencies in the area of Buildings 56, 57, 89, and 161 which frequently needed rodding to keep the sewage lines open. Drain trenches and foundation remain.

ENVIRONMENTAL SUMMARY

Vessel Inventory

Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army

PA Summary

DoD Site #
161
Area: I

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	UST	US Army	3000	Steel	Kerosene, Diesel?	1945	1/5/2006	Unknown	☐
Uses: Fuel Storage									
Comments: Assumed size based on reports of a similar kerosene tank at adjacent Building 103 that was not found in 1999 but likely this tank at Building 161 (FA/BC Ref 1077). Pre-1944 based on Reference 609, 1944 Map									
Vessel # 2	Trench	US Army	0	Unknown	Wastes	1945 -1958	Present	Unknown	☐
Uses: Drain Trench									
Comments: Constructed with a catch basin at each end. Still exists. Pre-1958 based on Reference 610, 1958 Drawing.									
Vessel # 3	Trench	US Army	0	Unknown	Wastes	1945 -1958	Present	Unknown	☐
Uses: Drain Trench									
Comments: Constructed with a catch basin at each end. Still exists. Pre-1958 based on Reference 610, 1958 Drawing.									
Vessel # 4	Trench	US Army	0	Unknown	Wastes	1945 -1958	Present	Unknown	☐
Uses: Drain Trench									
Comments: Constructed with a catch basin at each end. Still exists. Pre-1958 based on Reference 610, 1958 Drawing.									
Vessel # 5	Trench	US Army	0	Unknown	Wastes	1945 -1958	Present	Unknown	☐
Uses: Drain Trench									
Comments: Constructed with a catch basin at each end. Still exists. Pre-1958 based on Reference 610, 1958 Drawing.									
Vessel # 6	Pit	US Army	0	Unknown	Wastes	Pre-1949	Present	Unknown	☐
Uses: Service Pit									
Comments: Still exists. Pre-1949 based on Reference 612, 1949 Drawing.									
Vessel # 7	AST	US Army	0	Unknown	Solvents	Pre-1944	Unknown	Unknown	☐
Uses: Degreasing Dip Tank									
Comments: Pre-1944 based on Reference 609, 1944 Drawing.									
Vessel # 8	Booth	US Army	0	Unknown	Paints	Pre-1944	Not present	Unknown	☐
Uses: Paint Booth									
Comments: Pre 1944 based on Reference 609, 1944 Drawing.									
Vessel # 9	AST	US Army	0	Unknown	Unknown	Pre-1957	Not present	Unknown	☐
Uses: Stripping Tank									
Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.									
Vessel # 10	AST	US Army	0	Unknown	Water	Pre-1957	Not present	Unknown	☐
Uses: Dip Tank									
Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.									
Vessel # 11	AST	US Army	0	Unknown	Water	Pre-1957	Not present	Unknown	☐
Uses: Dip Tank									
Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.									
Vessel # 12	AST	US Army	0	Unknown	Acid	Pre-1957	Not present	Unknown	☐
Uses: Dip Tank									
Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.									
Vessel # 13	AST	US Army	0	Unknown	Acid	Pre-1957	Not present	Unknown	☐
Uses: Dip Tank									
Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.									

PA Summary

DoD Site #
161
Area: I

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 14	AST	US Army	0	Unknown	Unknown	Pre-1957	Not present	Unknown	☐

Uses: Neutralizer Tank

Comments: Pre-1957 based on Reference 714, Equipment List for New Facility. Tank is listed as being 3' deep.

Furthest Stage of Environmental Investigation

RI

COMMENTS

Service pit below paint booth had a drain going directly to the storm drain. The site is being used beneficially. During a site visit by Brown and Caldwell in 2003, the area is being used for storage of heavy equipment. The concrete was heavily stained with oils, especially in the area of several catch basins. The service pit was partially filled with water. In June 2004, a tank fill pipe was located and waste oil found in the tank. The tank limits were not determined due to interference of a concrete surface during the geophysical survey. Downgradient groundwater samples reported fuels and lead below their respective BSLs and ESLs. TCE and its degradation products were detected in groundwater. In January 2006, a 3,400-gallon single-walled steel tank was uncovered. The UST appeared to be is good condition with a few minor holes. Rainwater and residual fuels/waste oil-like substance was removed from the tank. Soil was visibly impacted on the west side of the excavation. Four soil borings were advanced around the impacted soil and delineated the impact.

RECOMMENDATIONS

A risk evaluation is recommended for the non-petroleum related fuels in soil. The remedial alternative for the residual fuels in groundwater will be evaluated in the Feasibility Study.

PA Summary

DoD Site # CL2
Area: W

☐ NDAI ☑ FAR ☐ IRR ☐ Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-090-300	DRESSER-RAND COMPANY	

Year Bldg. Built	1942	Year Bldg. Removed	1962-1998	Site Area (SqFt)	494

Current Land Use Industrial-General

OPERATIONAL HISTORY

DoD Use Type
NIKE Missile Repair and Support Facilities

DoD Uses
Boiler House

Secondary DoD Uses
None Listed

Post-Army Uses
None Identified

Flooring
Concrete Foundation

Disposal Information
None Identified

Activities (inside/outside)
Inside

Records Research Report Addenda Data
On 16 November 1955, a request for the demolition of the 3,180-gallon UST was approved by the installation Commander. The disposal was recommended due to the excessive maintenance cost of the UST (ref 74), which was later replaced with a 5,000-gallon capacity above-ground storage tank (AST) placed adjacent to Building CL2 (ref 605) and (ref 167). According to a 1962 Building Zone List, CL2 was scheduled with an approximate date to vacate of December 1962.

Records Research Report Comments
Constructed to provide heat to Building CL1. Located 100 feet west of the western corner of Building CL1, Building CL2 was constructed on a concrete foundation with 8-inch concrete walls and a concrete slab roof; the building covered an area of 494 ft2 and contained one oil boiler (ref 196). To supply fuel oil to the boiler, a 3,180-gallon underground storage tank (UST) was installed near Building CL2 at the time of the building's construction (ref 74) in 1942. The records search indicates that the building is no longer present. The records did not indicate when the building was demolished.

ENVIRONMENTAL SUMMARY

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	UST	US Army	3180	Unknown	Fuel Oil	1940s	1955	None	☐

Uses: Fuel Storage
Comments:

PA Summary

DoD Site #
CL2
Area: W

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 2	AST	US Army	5000	Unknown	Fuel Oil	1955	Unknown	Unknown	☐

Uses: Fuel Storage
Comments:

Furthest Stage of Environmental Investigation
NONE

COMMENTS
Status of the UST is unknown. Right-of-Entry was not granted to USACE to determine the status of the UST.

RECOMMENDATIONS
A geophysical survey is recommended to determine the status of the UST. The property owner denied access. Until USACE is granted access to the property, no further USACE actions can be conducted at this site.

APPENDIX B

March 17, 2005 and December 2, 2005
NORCAL Geophysical Consultants
Survey Reports

NORCAL GEOPHYSICAL CONSULTANTS, INC.

March 17, 2005

Rachael Goldberg
Brown & Caldwell
201 North Civic Drive
Walnut Creek, CA 94956

NORCAL Project No. 05-141.42

Subject : Geophysical Survey
Former Buildings 50 and 111
Former Benicia Arsenal

Dear Ms. Goldberg,

The purpose of this letter is to confirm that NORCAL Geophysical Consultants, Inc. has completed the geophysical investigation of the subject property. The investigation was conducted by NORCAL Geophysicist David Bissiri and Field Technician Travis Black on February 2, 2005. Field logistics and site information were provided by Ms. Rachael Goldberg of Brown & Caldwell.

I SITE DESCRIPTION

The former Benicia Arsenal is a deactivated military facility located on the northern shore of Carquinez Straits in Benicia, California. Many of the original buildings are still standing but are either closed or converted to various civilian uses. The two buildings that are the subject of this investigation (Buildings 50 and 111), however, have been demolished and a newer structure currently stands in their place. The exact locations of the former buildings relative to the current structure are not known, but documents shown to NORCAL at the time of the investigation indicate that their approximate location would be under the floor of the current structure.

The current structure houses an automobile auction facility and is composed of a metal-sided, one story building with a large awning and concrete pad attached to its east side and a fenced-in area located on its south side (see Plate 1). An additional large concrete pad is located north of the building. Other than the concrete pads, the pavement surrounding the building is composed of asphalt. Notable above-ground features include chain-link fences located along the southern and northeastern boundaries, two railroad spurs that terminate east of the large awning, and several parked cars in the fenced-in area.

The investigation area, as delineated by Brown & Caldwell, consisted of an approximately 240- by 120-foot irregularly-shaped area located to the south, east and north of the current building. The approximate limits of the investigation area is depicted on Plate 1 by the dashed green and blue lines.

II PURPOSE

It is known that many of the buildings at the Benicia Arsenal had small USTs that were used for storing heating and waste oils. In the case of former Buildings 55 and 111 it is not known if any such USTs are associated with them, or if any were removed. The purpose of the investigation, therefore, was to look for evidence of large buried ferrous objects that could be former USTs or their associated piping in the accessible portions of the investigation area.

III METHODOLOGY

We conducted the investigation using a combination of vertical magnetic gradient (VMG), hand-held metal-detection (MD), and ground penetrating radar (GPR) methods. The VMG method is a geophysical technique that measures variations in the vertical gradient (the change of magnetic intensity with elevation) of the earth's magnetic field. Since ferrous objects locally distort this field, mapping the lateral variations of the gradient can assist in determining the general locations of buried metal objects. The MD method is a technique that uses radio-frequency induction to energize near-surface metal objects with a radio signal. By measuring lateral variations in the intensity of the re-radiated radio signal, the general locations and outlines of buried metal objects may be delineated. This method is often used to further refine the findings of the VMG method. The GPR method uses pulses of electromagnetic energy aimed into the ground to generate a radar image, or "profile", of the shallow sub-surface. The GPR profile is analyzed to determine the general size, shape and depth of buried objects. This method is typically used to further refine the findings of the VMG and MD methods.

A more detailed description of these geophysical methods and the specific equipment used is provided in Appendix A.

IV DATA COLLECTION and INTERPRETATION

Prior to the collection of the VMG data we established a data collection grid in the accessible portions of the investigation area. The grid consisted of a series of parallel east-west lines spaced five feet apart with data stations placed at five-foot intervals along the lines. For logistics reasons, following the grid set-up we used the MD to conduct a reconnaissance of an approximately 70- by 35-foot area in the southwestern portion of the investigation area next to the fence. This was done because several cars needed to be moved to this portion of the investigation before VMG data could be collected elsewhere on the site. After the cars were parked in their final location we were able to collect VMG data.

Because of the expected magnetic interference from the building walls, awning supports, parked cars, and chain-link fences, the VMG survey was limited to the relatively open portions of the investigation area (as shown on Plate 1 by the dashed green lines). We then collected VMG data at the previously marked data stations of the data grid. Following the VMG data collection, the data

were up-loaded to a field computer and processed on-site to produce a VMG contour map. The contour map was then evaluated for areas of strong magnetic variations. Strong magnetic variations are usually due to the presence of nearby ferrous objects. Variations that could not be attributed to the effects of obvious above-ground objects such as the building walls, awning supports, steel rails, reinforced concrete pads, etc. were considered anomalous and thus were further investigated with the MD in an attempt to determine their source(s). The MD was also used to conduct a reconnaissance of the accessible portions of the investigation area that could not be investigated with VMG, such as next to the building walls and under the edge of the awning. The MD reconnaissance consisted of a series of bidirectional traverses spaced 2-3 feet apart oriented both north-south and east-west. The outlines or alignments of detected sub-surface objects were painted on the ground with spray paint.

Finally, the GPR was used to both conduct a reconnaissance of the area under the awning and to investigate specific localized VMG / MD anomalies. The GPR reconnaissance under the awning consisted of four north-to-south traverses oriented parallel to the building wall and spaced approximately five feet apart as shown on Plate 1. The GPR investigation of localized VMG / MD anomalies consisted of four bidirectional traverses located in the southeast corner of the investigation area and two bidirectional traverses located in the south-central portion of the investigation area, north of the parked cars.

VI RESULTS

The results of the VMG survey are presented on Plate 1. This plate depicts the VMG data contours, the VMG survey limits, the MD survey limits and the locations of pertinent above-ground and underground features. The criteria we use to distinguish contour distributions (anomalies) caused by buried metal are described in Appendix A. The VMG variations characteristic of significant amounts of sub-surface ferrous material at this site are evident primarily in two areas. The first area is defined by the assemblage of closely spaced and highly convoluted contours roughly coincident with the concrete pad north of the building. Based on the VMG values and the response of the MD instrument during the follow-up work, we believe that these VMG variations can be attributed to reinforcing bars embedded in the concrete. The second area of anomalous VMG variations is along the southern boundary of the survey area, south of the Grid North 40 line. Follow-up investigation of this area with the MD and GPR suggest that all of the VMG variations (beyond those attributable to the parked cars and chain-link fence) can be attributed to the effects of small amounts of localized buried metal debris or a suspected pair of petroleum transfer lines that already had their alignments marked on the ground in yellow paint by others prior to this investigation.

The GPR profiles of the investigation of the area underneath the awning did not display reflection patterns suggesting the presence of any USTs. The GPR profiles of the localized VMG / MD anomalies in the southern portion of the investigation area likewise did not indicate the presence of UST, but rather displayed the reflection patterns typically associated with disturbed soils and minor amounts of buried debris.

VII STANDARD CARE and WARRANTY

The scope of NORCAL's services for this project consisted of using geophysical methods to assess the area of investigation for buried metal objects. The accuracy of our findings is subject to specific site conditions and limitations inherent to the techniques used. The services were performed in a manner consistent with the standard of care ordinarily exercised by members of the profession currently employing similar methods. No warranty, with respect to the services or products delivered under this agreement, expressed or implied, is made by NORCAL.

We appreciate having the opportunity to provide you with this information.

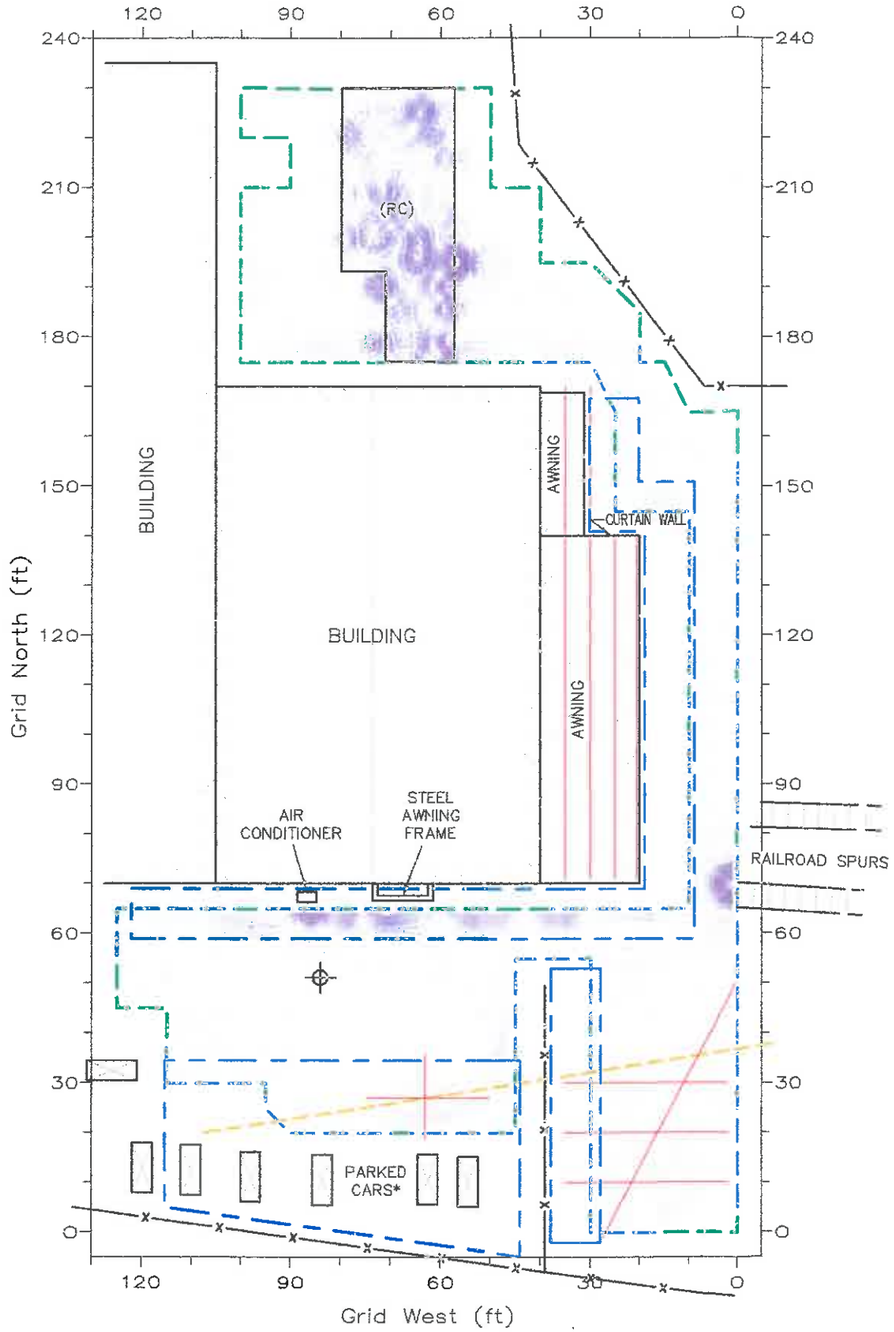
Respectfully,

NORCAL Geophysical Consultants, Inc.

David Bissiri
Geophysicist GP - 1009

DJB/KGB/tt

Enclosure: Plate 1 - Geophysical Survey Map
Appendix A - Geophysical Instrumentation, Methods, and Data Interpretation



SCALE

0 15 30 60

(1 inch = 30 feet)

LEGEND	
	LIMITS OF VERTICAL MAGNETIC GRADIENT SURVEY
	LIMITS OF METAL DETECTOR SURVEY AREAS
	VERTICAL MAGNETIC GRADIENT CONTOUR (CONTOUR INTERVAL = 200 nT/m)
	GPR TRAVERSE
	CENTERLINE OF SUSPECTED PAIR OF PETROLEUM TRANSFER PIPELINES
	CHAIN-LINK FENCE
	EXISTING PAIR OF SAMPLE POINTS
(RC)	REINFORCED CONCRETE

*PARKED CARS ABSENT DURING METAL DETECTOR SURVEY

NORCAL

GEOPHYSICAL SURVEY MAP FORMER BUILDINGS 50 AND 111 BENICIA ARSENAL

LOCATION: BENICIA, CALIFORNIA

CLIENT: BROWN & CALDWELL

PLATE 1

JOB #: 05-141.42

NORCAL GEOPHYSICAL CONSULTANTS INC.

DATE: FEB. 2005

DRAWN BY: G.RANDALL

APPROVED BY: DJB

Appendix A

Geophysical Methodology, Instrumentation, Data Analysis, and Limitations

Vertical Magnetic Gradient (VMG)

VMG Methodology

VMG is a method commonly used to detect ferrous objects. This is accomplished by measuring the lateral variations of the earth's magnetic field. Since the magnetic field at any given point on the earth's surface is the vector sum of the earth's field combined with the magnetic fields of nearby metal objects, by removing or suppressing the earth's field the local magnetic variations due to ferrous objects may be detected. The basis for vertical magnetic gradient surveying starts with measuring the total intensity of the magnetic field. These are referred to as total field measurements (TF) and are recorded in units of nanoTesla (nT). In environmental and engineering investigations it is often more useful to measure the vertical rate of change of the total field magnetic intensity. This is referred to as the vertical magnetic gradient (VMG) measurements, and is measured in units of nanoTesla/meter (nT/m).

While both TF and VMG measurements are related to the same phenomena (i.e. the magnetic field), each has certain advantages over the other. However, the VMG method is often chosen for environmental/engineering investigations because of the following:

1) VMG measurements are generally less affected by nearby *above* ground objects, especially objects to the side of the instrument. This reduces magnetic interference caused by such objects.

2) VMG measurements are not affected by temporal (diurnal) variations in the earth's magnetic field, unlike TF measurements. This eliminates one more variable from the data.

3) VMG effects attenuate more rapidly with increasing distance from magnetic sources, thus allowing more precise determination of a buried object's location.

It should be noted, however, that because the VMG method is very sensitive, the effects of small near surface objects can be amplified and act as a source of noise in VMG data.

Instrumentation

A vertical magnetic gradiometer is the device that is used to obtain the VMG data. The instrument typically used by NORCAL is a Geometrics 858 Cesium-vapor magnetometer. This instrument operates on the"optical pumping" principle and consists of a console and two total field magnetic sensors that are mounted on a vertical staff. One sensor is mounted at about shoulder-height and the other sensor is mounted at about knee-height. The magnetometer console features a built-in computer that stores the raw TF data, calculates the VMG values, and records survey grid

information. The instrument obtains the VMG values by simultaneously measuring the total magnetic field intensity at the two sensors, taking their difference in magnetic intensity, and then dividing by their separation distance. The survey information is recorded and later uploaded to a field computer for further processing.

Computer Processing

VMG data are typically processed in the field on a portable computer. The uploaded data are converted into a format suitable for contouring using the program SURFER from Golden Software. This program calculates an evenly spaced array of values (data grid) based on the measured field data. These gridded values are then contoured to produce VMG contour maps for interpretation.

Contour Map Interpretation

Generally speaking, in a region with fairly uniform magnetic conditions the VMG values will vary smoothly from one area to another. Under these conditions, contour lines are usually spaced far apart. In contrast, in those areas where VMG variations are stronger, the contours are closely spaced. In some cases the variations are so strong that the contours become highly contorted and convoluted. These contorted contours may form roughly concentric circles, tightly wound loops and whorls, or elongated parallel lines. Actual magnitude and shape of the contour lines is dependent on the relative position and size of the magnetic object with respect to the location of the magnetic sensors.

Roughly concentric circles that look like bull's-eyes are generally referred to as monopoles. Monopoles that are roughly limited in extent to the data point spacing of the sampling grid are often caused by relatively small, near surface objects with limited cross-section. These typically consist of well caps, pull boxes, balls of wire, etc. On the other hand, larger monopoles that extend across an area of several data points are typically associated with larger, deeper objects such as well casings, reinforced concrete footers, ends of pipelines, etc. In other cases, two monopoles, one positive and one negative, may be in close proximity and form a paired of high-low closures known as a dipole. Dipoles are often, but not always, attributed to larger objects such as USTs, vaults, buried ordnance, etc. that have a substantial diameter or width.

Irregular patterns of loops and whorls are often indicative of several magnetic objects being present with variable shape, mass, and distribution. These VMG patterns are the most difficult to interpret. Past experience has shown that such patterns are usually associated with debris fields, landfills, and demolition sites.

A series of parallel contours typically indicates that an elongate object such as a building wall, fence, or underground pipeline is the magnetic source.

Regardless of whether the contours form monopoles, dipoles, or irregular whorls, if there are no obvious nearby above ground sources that could cause such magnetic variations, then subsurface objects are suspected. Contours are typically considered anomalous when large differences in data readings (on the order of several hundred to several thousands of nT/m) from one data station to the next are displayed. The anomalous variations are called VMG anomalies.

Limitations

Buried ferrous metal objects produce localized variations in the earth's magnetic field. The magnetic intensity associated with these objects depends on the mass of the metal and the distance the metal object is from the magnetometer sensor. As a general rule, anomaly magnitude typically decreases and anomaly width increases as distance (depth) to the source increases, thereby making detection more difficult. In addition, the ability to detect a buried metal object is based on the intensity of these variations in contrast to the intensity of background variations. The intensity of background variations is based on the amount of above and below ground metal that is present within the survey area. Cultural features such as chain-link fences, buildings, debris, railroad spurs, utilities, above ground electric lines, etc. typically produce magnetic variations with high intensities. These variations may mask the magnetic effects from buried metal objects and thus make it very difficult to determine whether the magnetic variations are associated with below ground metal or above/below ground cultural features.

Metal Detection (MD)

MD Methodology

This method uses the principle of electromagnetic induction to detect shallowly buried metal objects such as USTs, metal utility conduits, rebar in concrete, manhole covers, and various metallic debris. This is done by carrying a hand-held radio transmitter-receiver unit above the ground and continuously scanning the surface. A primary coil broadcasts a radio signal from a transmitter which induces secondary electrical currents in metal objects. These secondary currents in turn produce a magnetic field which is detected by the receiver.

Instrumentation

The MD instrument that we typically use for shallow subsurface investigations is a Fisher TW-6 pipe and cable locator. This instrument is expressly designed to detect metallic pipes, cables, USTs, manhole covers, and other large, shallowly buried metallic objects. The instrument operates by generating both a meter reading (unitless) and an audible response when near a metal object. The peak instrument response usually occurs when the unit is directly over the object. The TW-6 does not provide a recordable data output that can be used for later computer processing. Results are generally limited to marking the interpreted outlines of detected objects in the field and mapping their locations.

Limitations

In general, the response of the MD instrument is roughly proportional to the horizontal surface area of near surface buried objects (typically in the upper three or four feet). This relationship can be used to advantage in discriminating between metal debris, reinforced concrete pads, and pipelines. However, in the presence of above ground metal objects such as fences, walls, parked cars, and metal debris, this is no longer valid. In some instances, the presence of such objects can make it very difficult to determine whether the instrument responses are associated with below ground targets or above ground cultural features. When multiple sources are present it may not be possible to identify individual targets. Also, relatively large objects that have a limited horizontal cross-section such as well casing and fence posts are sometimes difficult to detect.

Ground Penetrating Radar (GPR)

GPR Methodology

Ground penetrating radar is a method that provides a continuous, high resolution graphical cross-section of the shallow subsurface. The method entails repeatedly radiating an electromagnetic pulse into the ground from an antenna as it is moved along a traverse. Reflected signals are received by an antenna (often the same one used to generate the signal) and sent to a control unit for processing. The control unit then converts the varying amplitude of reflected radar signals as a function of time into a cross-sectional image showing signal amplitude as a function of depth.

GPR is particularly sensitive to variations of two electrical properties. One property is conductivity (the ability of a material to conduct a charge when a field is applied) and the other is permittivity (the ability of a material to hold a charge when a field is applied). These two properties determine how far a signal can propagate. They also determine the strength of reflected signals that can be generated at material boundaries. Most soil and earthen-like materials such as concrete are electrically resistive and have a relatively low permittivity. As a result, they are relatively transparent to electromagnetic energy. This means that only a portion of the radar signal incident upon them is reflected back to the surface. On the other hand, when the signal encounters an object composed of a material that has the opposite electrical properties, especially one with a high permittivity (such as metal) much of the incident energy is reflected.

Instrumentation

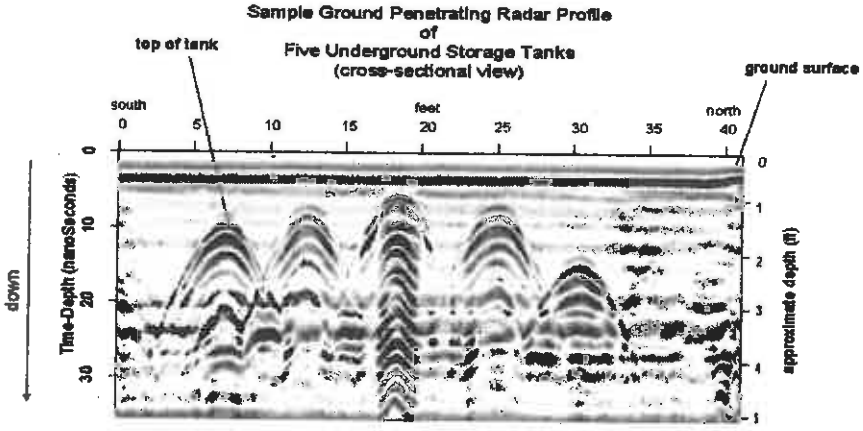
We typically perform GPR surveys using a Geophysical Survey Systems, Inc. SIR-2000 Subsurface Interface Radar System equipped with a 500 megahertz (MHz) transducer. This unit is comprised of a combined control/data recording console that is connected by a telemetry cable to the antenna. This system is often chosen for investigating environmental sites since it usually provides both the resolution and depth penetration needed for characterizing the upper three to four feet of the subsurface.

Data Interpretation

The interpretation of GPR data involves examining the graphical records for reflections from buried objects. GPR records display changes in reflected signal strength and arrival time with changes in horizontal position. Strong signals appear dark and weak reflections appear light. Reflections that arrive earlier in time are placed in the upper portions of the record and reflections that arrive later are placed lower, towards the bottom of the records. Horizontal position is across the top of the record.

In areas with relatively uniform conditions, with no buried objects producing reflections, the records typically appear as a series of alternating dark and light horizontal bands. In areas where there are subsurface objects producing reflections, the horizontal banding is disrupted. Discrete objects typically produce reflections having the appearance of inverted "U"s, forming what are known as "hyperbolic reflections". Metallic objects often produce markedly strong reflections, in many cases forming multiple reflections appearing as a series of inverted U's cascading down the record. Non-metallic objects can produce similar reflections, but the multiples are typically much weaker.

A sample profile from a different site with five adjacent steel USTs is presented below:



Note: the "Time Depth" of 35 nanoSeconds at the bottom of this profile corresponds to a true depth of approximately 5 feet for this example only. Actual depth to bottom of other profiles may be different.

An object's burial depth may also be estimated from GPR profiles. As mentioned above, GPR measures signal amplitude as a function of time. However, the translation of the radar signal's travel time (technically known as time-depth) to an actual distance (true depth) is not always a simple one. Strictly speaking, in order to translate from time-depth to true depth the signal velocity within each time interval must be known. Since this is not routinely determined in the field, estimated velocities are often used for determining the approximate depth to a reflector. The empirical values for GPR signal propagation velocities within commonly encountered soils are obtained from published tables.

Limitations

The ability to detect subsurface targets is dependent on specific site conditions. These conditions include depth of burial, the size or diameter of the target, the condition of the specific target in question, the type of backfill material associated with the target, and the surface conditions over the target. Typically, the depth of detection will be reduced as the clay and/or moisture content in the subsurface increases. As a result, depths of detection (using a 500 Mhz antenna) typically range from as deep as six feet to as little as a few inches.

NORCAL GEOPHYSICAL CONSULTANTS, INC

December 2, 2005

Ms. Wendy Linck
Brown and Caldwell
10540 White Rock Road, Ste 180
Rancho Cordova, CA 96570

Subject: Geophysical Surveys
Benicia Arsenal Environmental Restoration Project
Benicia, California
NORCAL Job # 05-141.47

Dear Ms. Linck:

This report presents the findings of geophysical surveys performed by NORCAL Geophysical Consultants, Inc. at the former Benicia Arsenal. The field investigations were performed on October 25, 2005 by NORCAL Geophysicists Donald J. Kirker and Sierra Boyd. Site information and logistical support was provided by Brown and Caldwell personnel Wendy Linck.

These investigations were conducted under the guidelines presented in Brown and Caldwell's Task Order Authorization, Prism Project Number 128336, dated March 18, 2005. All geophysical work performed at the Benicia Arsenal was governed by the Brown and Caldwell Master Subcontract dated March 29, 2004.

SCOPE OF WORK

The scope of work, as outlined in the Task Order Authorization, includes conducting geophysical investigations within Brown & Caldwell designated survey areas at Buildings 27 and 45. These sites are located within the central portion of the former arsenal, as shown on Plate 1.

PURPOSE

Information, provided by Brown and Caldwell, indicates that underground storage tanks (USTs) may be located at Buildings 27 and 45. However, records are incomplete regarding their exact locations or whether they have been removed. Therefore, the purpose of the geophysical investigations is to obtain subsurface information to aid in determining the location of the possible USTs within the designated survey areas.

FIELD INVESTIGATION

We used three methods, referred to as the metal detection (MD), ground penetrating radar (GPR), and electromagnetic line locating (EMLL) methods, to survey for possible USTs. Descriptions of the MD, EMLL, and GPR methods are provided in Appendix A.

Prior to proceeding with the geophysical data acquisition at Buildings 27 and 45, we established a horizontal control grid using a fiberglass measuring tape at each site. The survey grids were based on a rectangular coordinate system. The limits of each grid (survey area) are shown on Plates 2 and 3.

At Building 27, we used the EMLL technique to trace former fuel oil lines that were exposed inside the basement of the building. MD and GPR techniques were then used to survey for USTs where the former fuel lines terminated. At Building 45, we scanned the survey area with the MD and EMLL equipment along east-west and/or south-north trending traverses spaced five feet apart. All detected features were marked on the ground surface with pink spray paint. We then obtained GPR data over the same traverses. The GPR records were examined for reflection patterns characteristic of USTs, utilities, and other buried objects.

SITE DESCRIPTIONS AND RESULTS

The results of the geophysical investigations at Buildings 27 and 45 are presented on the Geophysical Survey Maps, Plates 2 and 3, respectively. These plates show pertinent site features as well as our findings for each site. Although the plates show detected utility alignments, it should be noted that since a utility search was not the primary objective of the UST surveys, there may be additional utilities at each site that are not shown. A description of the site features and geophysical survey results for each site is presented below.

Building 27

Site Description

The survey area at Building 27, as shown on Plate 2, is located south of the building. Ground cover consists primarily of grass. The survey area is bound by a sidewalk to the north and Jefferson Street to the south, and is free of above ground cultural objects. Two pipe stubs, associated with a boiler that has been removed, exit the basement at the southwest corner of the building. It is suspected that these pipes are former fuel oil lines associated with an UST.

Results

The results of the geophysical survey at Building 27 is shown on Plate 2. The suspected fuel lines and a possible UST were detected. The fuel lines trend south approximately 39 feet from the basement of the building and terminate between the sidewalk and curb near Jefferson Street. Beneath this area, we detected a shallow metal object, measuring approximately 3 by 3 feet, that we believe may represent a possible UST. While these dimensions are not typical of a standard UST, they may represent an atypical UST with a volume of approximately 200 gallons. The GPR data obtained in this area defined flat, truncated reflection patterns over the possible UST instead of typical broad hyperbolic patterns, indicating that it may be oriented vertically.

Building 45

Site Description

The survey area at Building 45, as shown on Plate 3, comprises approximately 1,400 square feet and covers portions of the asphalt lot on the west side of the building, as shown on Plate 3. The only

above ground features in the survey area is a pallet of stacked rock slabs, a table, and some stored household goods. They are all located along the wall of the building.

Results

An undifferentiated utility and a sanitary sewer line were detected within the limits of the survey at building 45 (Plate 3). The undifferentiated utility trends south to north and parallels the building. The sanitary sewer line crosses the site diagonally from southwest to northeast. No other subsurface utilities or buried metal objects that could represent a UST were detected within the limits of the survey by the MD technique.

The GPR data displayed reflection patterns related to the utilities and shallow fill horizons associated with the pavement. However, the data did not display hyperbolic reflection patterns within the upper 2 to 4 feet of the subsurface large enough to represent a UST.

STANDARD CARE AND WARRANTY

The scope of NORCAL's services for this project consisted of using geophysical methods to characterize the shallow subsurface. The accuracy of our findings is subject to specific site conditions and limitations inherent to the techniques used. We performed our services in a manner consistent with the level of skill ordinarily exercised by members of the profession currently employing similar methods. No warranty, with respect to the performance of services or products delivered under this agreement, expressed or implied, is made by NORCAL.

We appreciate having the opportunity to provide you with this information.

Respectfully,

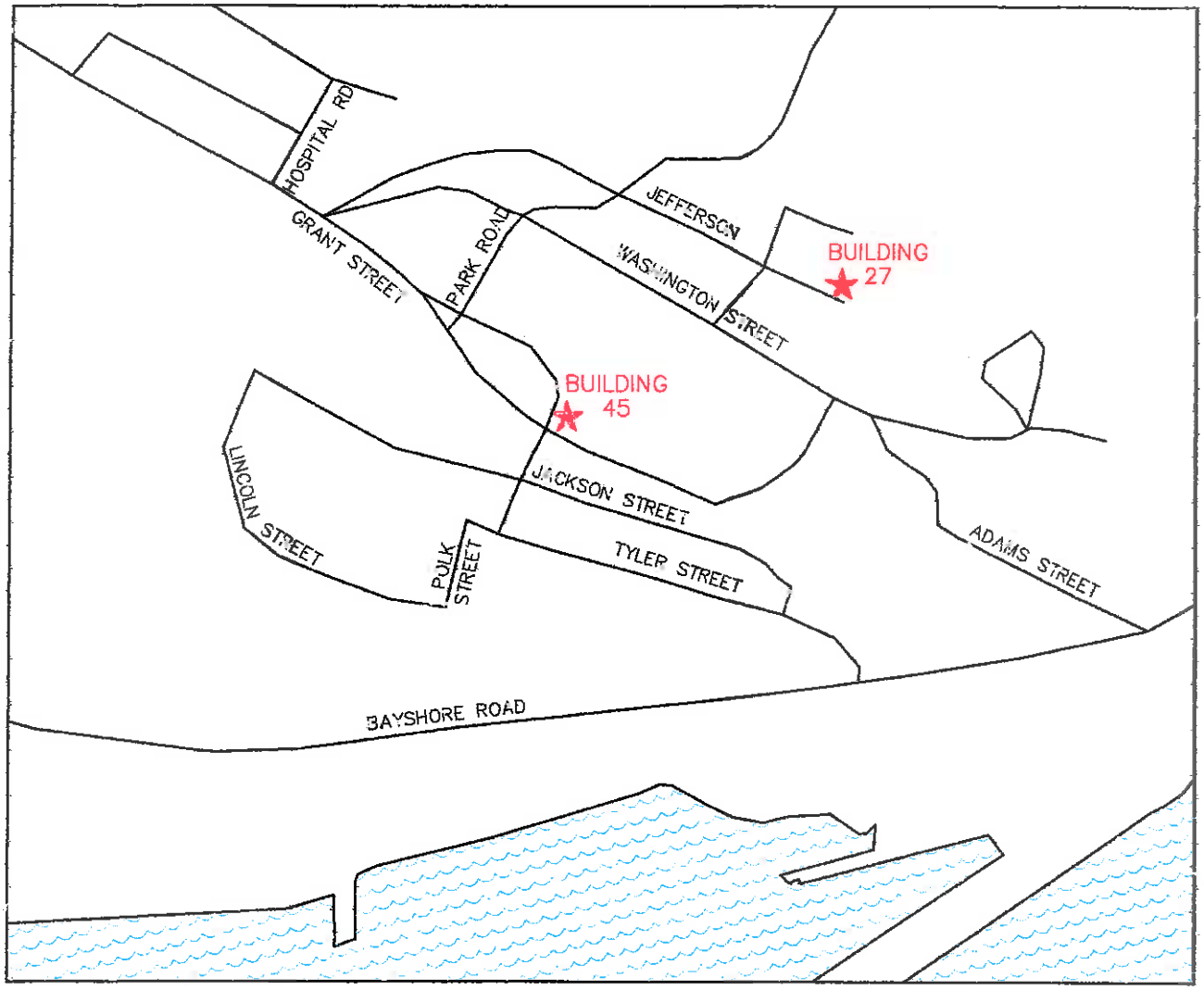
NORCAL Geophysical Consultants, Inc.

Donald J. Kirker

Donald J. Kirker
Geophysicist, GP-997

DJK/tt

Enclosure: Plates 1 through 3
Appendix A GEOPHYSICAL METHODOLOGY



SCALE

0 250 500 1000

(1 inch = 500 feet)

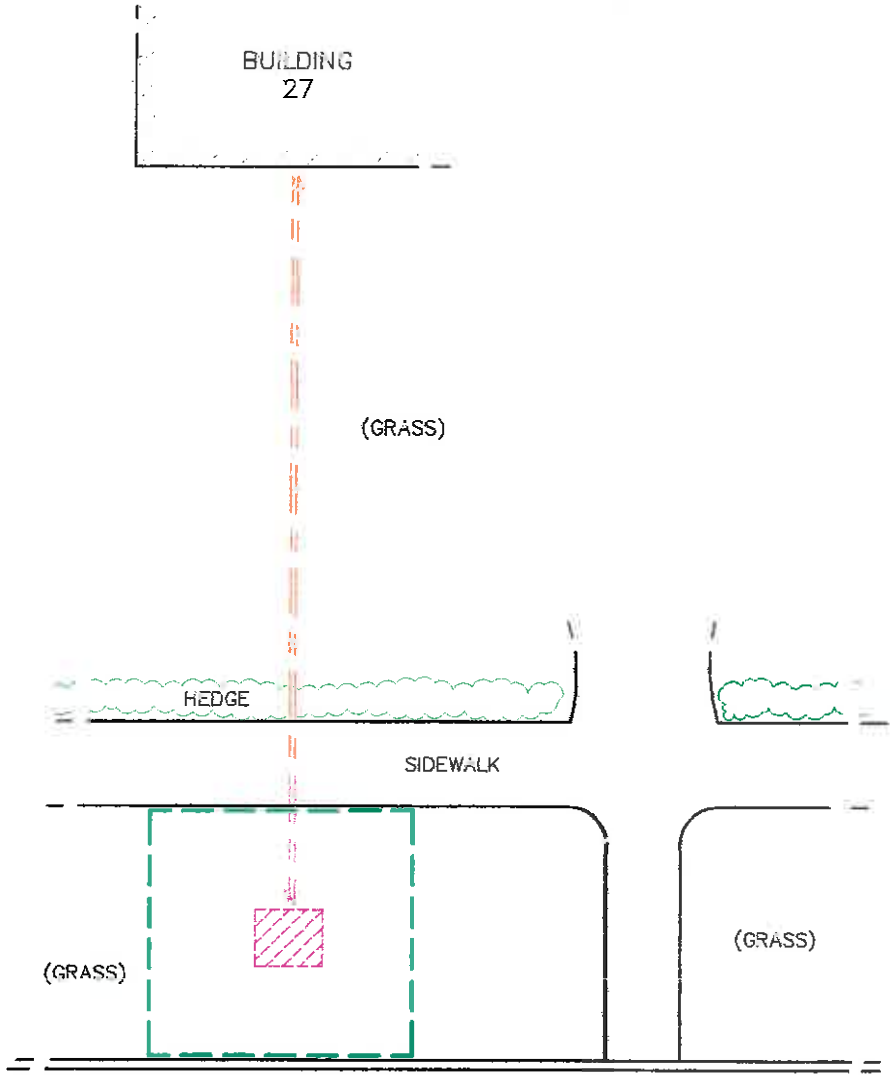
LEGEND

★	SITE LOCATION

NORCAL

SITE LOCATION MAP
GEOPHYSICAL SURVEY
BENICIA ARSENAL

LOCATION: BENICIA, CALIFORNIA		
CLIENT: BROWN & CALDWELL		PLATE 1
JOB #: 05-141.47	NORCAL GEOPHYSICAL CONSULTANTS, INC.	
DATE: NOV. 2005	DRAWN BY: G.RANDALL	APPROVED BY: DJK



SCALE

0 5 10 20

(1 inch = 10 feet)

LEGEND

— — —	LIMITS OF GEOPHYSICAL SURVEY
— — —	FUEL LINE
▨	SUSPECTED UST

NORCAL

GEOPHYSICAL SURVEY MAP
BUILDING 27
BENICIA ARSENAL

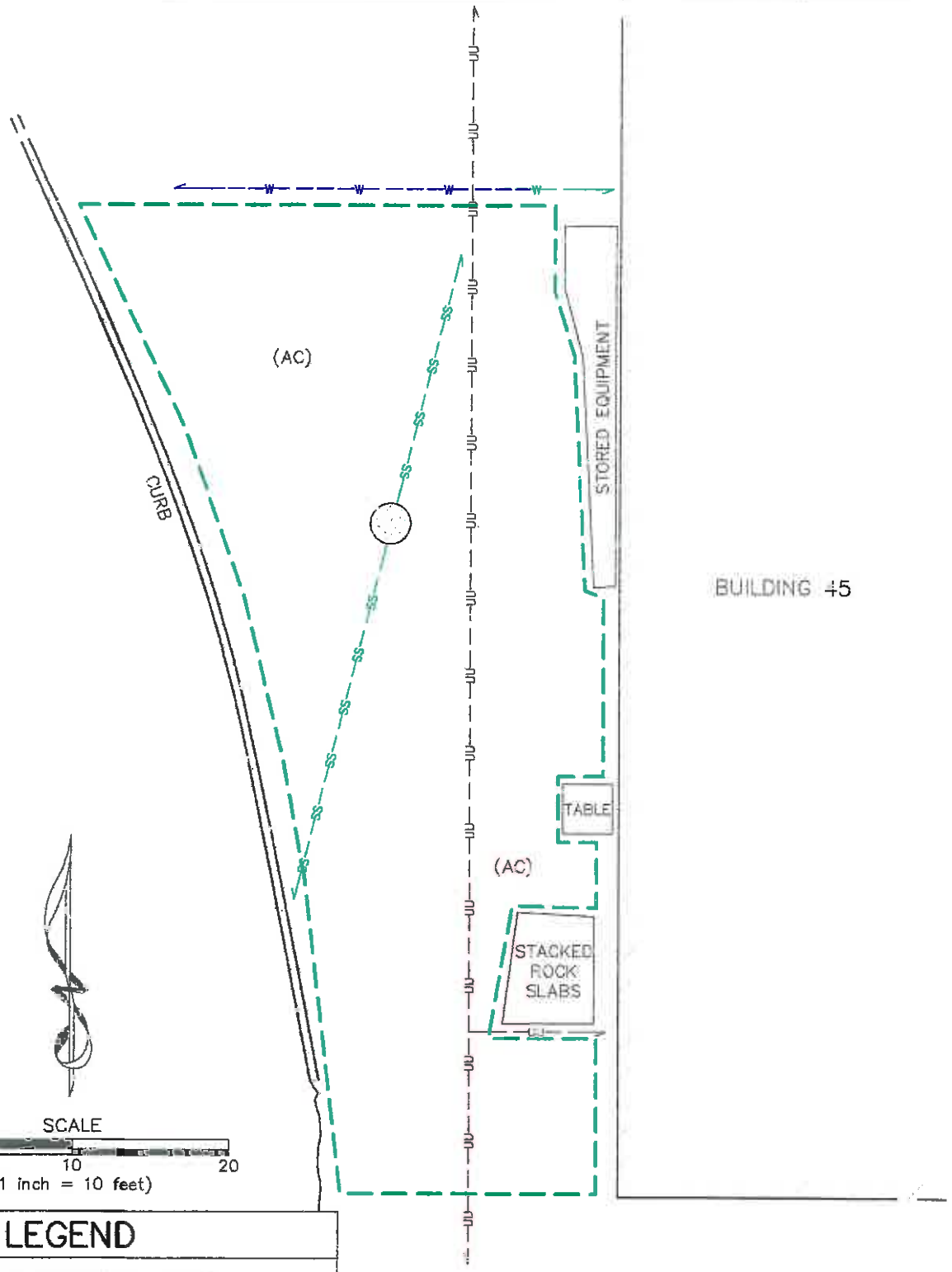
LOCATION: BENICIA, CALIFORNIA

CLIENT: BROWN & CALDWELL

JOB # 05-141.47 | NORCAL GEOPHYSICAL CONSULTANTS INC.

DATE: NOV. 2005 | DRAWN BY: G.RANDALL | APPROVED BY: DJK

PLATE 2



SCALE

0 5 10 20

(1 inch = 10 feet)

LEGEND

— — —	LIMITS OF GEOPHYSICAL SURVEY
—SS—	SANITARY SEWER LINE
— —uu— —	UNDIFFERENTIATED UTILITY LINE
— —W— —	WATER LINE
○	SEWER MANWAY
(AC)	ASPHALT

NORCAL

GEOPHYSICAL SURVEY MAP
BUILDING 45
BENICIA ARSENAL

LOCATION: BENICIA, CALIFORNIA

CLIENT: BROWN & CALDWELL

NORCAL GEOPHYSICAL CONSULTANTS INC.

JOB #: C5-141.47

DATE: NOV. 2005

DRAWN BY: G.RANDALL

APPROVED BY: DJK

PLATE 3

Appendix A

GEOPHYSICAL METHODOLOGY

Appendix A

ELECTROMAGNETIC LINE LOCATION/METAL DETECTION (EMLL/MD)

Methodology

Electromagnetic line location techniques (EMLL) are used to locate the magnetic field resulting from an electric current flowing on a line. These magnetic fields can arise from currents already on the line (passive) or currents applied to a line with a transmitter (active). The most common passive signals are generated by live electric lines and re-radiated radio signals. Active signals can be introduced by connecting the transmitter to the line at accessible locations or by induction.

The detection of underground utilities is affected by the composition and construction of the line in question. Utilities detectable with standard line location techniques include any continuously connected metal pipes, cables/wires or utilities with tracer wires. Unless the utilities carry a passive current, they must be exposed at the surface or in accessible utility vaults. These generally include water, electric, natural gas, telephone, and other conduits related to facility operations. Utilities that are not detectable using standard electromagnetic line location techniques include those made of non-electrically conductive materials such as PVC, fiberglass, vitrified clay, and pipes with insulated connections.

Buried objects can also be detected, without direct contact, by using the metal detection technique (MD). This is used to detect buried near surface metal objects such as rebar, manhole covers, USTs, and various metallic debris. The MD transmitter-receiver unit is held above the ground and continuously scanned over the surface. The unit utilizes two orthogonal coils that are separated by a specified distance. One of the coils transmits an electromagnetic signal (primary magnetic field) which in turn produces a secondary magnetic field about the subsurface metal object. Since the receiver coil is orthogonal to the transmitter coil, it is unaffected by the primary field. Therefore, the secondary magnetic fields produced by buried metal object will generate an audible response from the unit. The peak of this response indicates when the unit is directly over the metal object.

The instrumentation we used for the EMLL and MD survey consists of a Radio Detection RD-400 and a Fisher TW-6 inductive pipe and cable locator.

Data Analysis

The EMLL/MD instrumentation indicates the presence of buried metal by emitting an audible tone; there are no recorded data to analyze. Therefore, the locations of buried objects detected with these methods are marked on the ground surface during the survey.

Limitations

The detection of underground utilities is dependent upon the composition and construction of the line of interest, as well as depth. Utilities detectable with standard line location techniques include any continuously connected metal pipes, cables/wires or utilities with tracer wires. Unless carrying a passive current these utilities must be exposed at the surface or accessible in an utility vaults. These generally include water, electric, natural gas, telephone, and other conduits related to facility operations. Utilities that may not be detectable using standard electromagnetic line location techniques include certain abandoned utilities, utilities not exposed at the ground surface, or those made of non-electrically conductive materials such as PVC, fiberglass, vitrified clay, and metal pipes with insulating joints. Pipes generally deeper than about five to seven feet may not be detected.

GROUND PENETRATING RADAR (GPR)

Methodology

Ground penetrating radar is a method that provides a continuous, high resolution cross-section depicting variations in the electrical properties of the shallow subsurface. The method is particularly sensitive to variations in electrical conductivity and electrical permittivity (the ability of a material to hold a charge when an electrical field is applied).

The GPR system operates by radiating electromagnetic pulses into the ground from a transducer (antenna) as it is moved along a traverse. Since most earth materials are transparent to electromagnetic energy, the signal spreads downward into the subsurface. However, when the signal encounters a variation in electrical permittivity, a portion of the electromagnetic energy is reflected back to the surface. When the signal encounters a metal object, all of the incident energy is reflected. The reflected signals are received by the same transducer and are printed in cross-section form on a graphical recorder. Changes in subsurface reflection character on the GPR records can provide information regarding the location of USTs, sumps, buried debris, underground utilities, and variations in the shallow stratigraphy.

The GPR system used was a Geophysical Survey Systems, Inc. SIR-2 Subsurface Interface Radar Systems equipped with a 500 megahertz (MHz) transducer. This transducer is near the center of the available frequency range and is used to provide high resolution at shallow depths.

Data Analysis

GPR records are examined to identify reflection patterns characteristic of USTs, utilities, and other buried debris. Typically, USTs are manifested by broad localized hyperbolic (upside-down "U" shape) reflection patterns that vary in intensity. The intensity of a reflection pattern is usually dependent upon the condition of the respective UST, its burial depth, and the type of fill over the UST. Utilities and other buried debris are typically manifested by narrow localized hyperbolic reflections that also vary in intensity.

Limitations

The ability to detect subsurface targets is dependent on site specific conditions. These conditions include depth of burial, the size or diameter of the target, the condition of the specific target in question, the type of backfill material associated with the target, and the surface conditions over the target. Under ideal conditions, the GPR can generally detect objects buried to approximately six feet. However, as the clay content in the subsurface increases, the GPR depth of detection decreases. Therefore, it is possible that on-site soil conditions and target features may limit the depth of detection to the upper one to two feet below ground surface.

APPENDIX C

Legend for Analytical Result Tables

Appendix C.
Legend for Analytical Results

Sample Types	
SampleTypeID	Description
N	Normal Environmental Sample

Laboratories	
Lab ID	Description
EMXT	EMAX Labs., Inc., Torrance, CA

Analytes	
AnalyteID	Analyte Name
1560-96-9	2-METHYLTRIDECANE
1618-22-0	Naphthalene, Decahydro-2,6-dimethyl-
17301-23-4	Undecane, 2,6-Dimethyl-
1921-70-6	2,6,10,14-TETRAMETHYLPENTADECANE
26730-14-3	7-METHYLTRIDECANE
2958-75-0	1-METHYL-DECAHYDRONAPHTHALENE
2958-76-1	DECAHYDRO-2-METHYL-NAPHTHALENE
2MTD	2-METHYL-TRANS-DECALIN
41446-68-8	(E)-3-TETRADECENE
493-02-7	TRANS-DECAHYDRONAPHTHALENE
544-76-3	N-HEXADECANE (C16)
54676-39-0	2-BUTYL-1,1,3-TRIMETHYL-CYCLOHEXANE
5617-41-4	HEPTYLCYCLOHEXANE
71186-27-1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE
74645-98-0	2,7,10-TRIMETHYLDODECANE
ACE	ACETONE
ACNP	ACENAPHTHENE
ACNPY	ACENAPHTHYLENE
ANILINE	ANILINE (PHENYLAMINE, AMINOBENZENE)
ANTH	ANTHRACENE
BBP	BENZYL BUTYL PHTHALATE
BDCME	BROMODICHLOROMETHANE
BECEM	bis(2-CHLOROETHOXY) METHANE
BIS2CEE	bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)
BIS2CIE	bis(2-CHLOROISOPROPYL) ETHER
BIS2EHP	bis(2-ETHYLHEXYL) PHTHALATE
BPPE4	4-BROMOPHENYL PHENYL ETHER
BRBZ	BROMOBENZENE
BRCLME	BROMOCHLOROMETHANE
BRME	BROMOMETHANE
BTBZN	n-BUTYLBENZENE
BTBZS	SEC-BUTYLBENZENE
BTBZT	t-BUTYLBENZENE
BZ	BENZENE
BZAA	BENZO(a)ANTHRACENE

Appendix C.
Legend for Analytical Results

Analytes	
AnalyteID	Analyte Name
BZACID	BENZOIC ACID
BZAP	BENZO(a)PYRENE
BZBF	BENZO(b)FLUORANTHENE
BZGHIP	BENZO(g,h,i)PERYLENE
BZKF	BENZO(k)FLUORANTHENE
BZLAL	BENZYL ALCOHOL
BZME	TOLUENE
C4M3PH	4-CHLORO-3-METHYLPHENOL
CD	CADMIUM
CDS	CARBON DISULFIDE
CHRYSENE	CHRYSENE
CLANIL4	4-CHLOROANILINE
CLBZ	CHLOROBENZENE
CLBZME2	2-CHLOROTOLUENE
CLBZME4	4-CHLOROTOLUENE
CLEA	CHLOROETHANE
CLME	CHLOROMETHANE
CLPH2	2-CHLOROPHENOL
CNPH2	2-CHLORONAPHTHALENE
CPPE4	4-CHLOROPHENYL PHENYL ETHER
CR	CHROMIUM, TOTAL
CTCL	CARBON TETRACHLORIDE
CYMP	P-CYMENE (p-ISOPROPYLTOLUENE)
DBAHA	DIBENZ(a,h)ANTHRACENE
DBCME	DIBROMOCHLOROMETHANE
DBCP	1,2-DIBROMO-3-CHLOROPROPANE
DBF	DIBENZOFURAN
DBMA	DIBROMOMETHANE
DBZD33	3,3'-DICHLOROBENZIDINE
DCA11	1,1-DICHLOROETHANE
DCA12	1,2-DICHLOROETHANE
DCBZ12	1,2-DICHLOROBENZENE
DCBZ13	1,3-DICHLOROBENZENE
DCBZ14	1,4-DICHLOROBENZENE
DCE11	1,1-DICHLOROETHENE
DCE12C	cis-1,2-DICHLOROETHYLENE
DCE12T	trans-1,2-DICHLOROETHENE
DCP11	1,1-DICHLOROPROPENE
DCP13C	cis-1,3-DICHLOROPROPENE
DCP13T	trans-1,3-DICHLOROPROPENE
DCP24	2,4-DICHLOROPHENOL
DCPA12	1,2-DICHLOROPROPANE
DCPA13	1,3-DICHLOROPROPANE
DCPA22	2,2-DICHLOROPROPANE
DEPH	DIETHYL PHTHALATE

Appendix C.
Legend for Analytical Results

Analytes	
AnalyteID	Analyte Name
DMP24	2,4-DIMETHYLPHENOL
DMPH	DIMETHYL PHTHALATE
DN46M	4,6-DINITRO-2-METHYLPHENOL
DNBP	DI-n-BUTYL PHTHALATE
DNOP	DI-n-OCTYLPHTHALATE
DNP24	2,4-DINITROPHENOL
DNT24	2,4-DINITROTOLUENE
DNT26	2,6-DINITROTOLUENE
DRO	DIESEL RANGE ORGANICS
EBZ	ETHYLBENZENE
EDB	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)
ETBE	TERT-BUTYL ETHYL ETHER
ETHANOL	ETHANOL
FC11	TRICHLOROFLUOROMETHANE
FC113	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
FC12	DICHLORODIFLUOROMETHANE
FL	FLUORENE
FLA	FLUORANTHENE
GRO	GASOLINE RANGE ORGANICS (C
HCBU	HEXACHLOROBUTADIENE
HCCP	HEXACHLOROCYCLOPENTADIENE
HCLBZ	HEXACHLOROBENZENE
HCLEA	HEXACHLOROETHANE
HXO2	2-HEXANONE
IME	IODOMETHANE (METHYL IODIDE)
INP123	INDENO(1,2,3-c,d)PYRENE
IPBZ	ISOPROPYLBENZENE (CUMENE)
ISOP	ISOPHORONE
ISOPRE	ISOPROPYL ETHER
MEK	METHYL ETHYL KETONE (2-BUTANONE)
MEOH	METHANOL
MEPH2	2-METHYLPHENOL (o-CRESOL)
MEPH4	4-METHYLPHENOL (p-CRESOL)
MIBK	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)
MTLNCL	METHYLENE CHLORIDE
MTNPH2	2-METHYLNAPHTHALENE
NAPH	NAPHTHALENE
NI	NICKEL
NNSM	N-NITROSODIMETHYLAMINE
NNSPH	N-NITROSODIPHENYLAMINE
NNSPR	N-NITROSODI-n-PROPYLAMINE
NO2ANIL2	2-NITROANILINE
NO2ANIL3	3-NITROANILINE
NO2ANIL4	4-NITROANILINE
NO2BZ	NITROBENZENE

Appendix C.
Legend for Analytical Results

Analytes	
AnalyteID	Analyte Name
NTPH2	2-NITROPHENOL
NTPH4	4-NITROPHENOL
OILGREASE	OIL & GREASE, TOTAL REC
PB	LEAD
PBZN	n-PROPYLBENZENE
PCA	1,1,2,2-TETRACHLOROETHANE
PCB1016	PCB-1016 (AROCHLOR 1016)
PCB1221	PCB-1221 (AROCHLOR 1221)
PCB1232	PCB-1232 (AROCHLOR 1232)
PCB1242	PCB-1242 (AROCHLOR 1242)
PCB1248	PCB-1248 (AROCHLOR 1248)
PCB1254	PCB-1254 (AROCHLOR 1254)
PCB1260	PCB-1260 (AROCHLOR 1260)
PCE	TETRACHLOROETHYLENE(PCE)
PCP	PENTACHLOROPHENOL
PHAN	PHENANTHRENE
PHENOL	PHENOL
PYR	PYRENE
RRO	RESIDUAL RANGE ORGANICS
STY	STYRENE
TAME	TERT-AMYL METHYL ETHER
TBME	BROMOFORM
TBUTMEE	tert-BUTYL METHYL ETHER
TC1112	1,1,1,2-TETRACHLOROETHANE
TCA111	1,1,1-TRICHLOROETHANE
TCA112	1,1,2-TRICHLOROETHANE
TCB123	1,2,3-TRICHLOROBENZENE
TCB124	1,2,4-TRICHLOROBENZENE
TCE	TRICHLOROETHYLENE (TCE)
TCLME	CHLOROFORM
TCP245	2,4,5-TRICHLOROPHENOL
TCP246	2,4,6-TRICHLOROPHENOL
TCPR123	1,2,3-TRICHLOROPROPANE
TMB124	1,2,4-TRIMETHYLBENZENE
TMB135	1,3,5-TRIMETHYLBENZENE (MESITYLENE)
VA	VINYL ACETATE
VC	VINYL CHLORIDE
XYLMP	M,P-XYLENE (SUM OF ISOMERS)
XYLO	O-XYLENE (1,2-DIMETHYLBENZENE)
ZN	ZINC

Appendix C.
Legend for Analytical Results

Parvq	
ParvqID	Description
=	Detected Above Reporting Limit
ND	Not Detected Above Detection Limit
TI	Tentatively Identified Compound
TR	Trace Detection; Below RL, Above DL

QC Flags	
QCFlag	Description
NJ	The analyte identification is presumptive. Reported value is an estimated concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UR	The material was analyzed for and was reported as not deteced by the laboratory. The data are unusable. The analyte may or may not be present.

Reason Codes	
ReasonCode	Description
2	Method blank contamination
3L	Low surrogate recovery
4L	Low MS/MSD recovery
4H	High MS/MSD recovery
5	MS/MSD precision outside limits
A	Absence of supporting QC
T	Trace level compound, poor quantitation

Units	
UnitsID	Description
MG/KG	Milligrams per Kilogram
MG/L	Milligrams per Liter
UG/L	Micrograms/Liter

APPENDIX D

Analytical Results for All Constituents in Soil

Appendix D
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,1-TRICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1,2-TRICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1-DICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1-DICHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1-DICHLOROETHENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1-DICHLOROETHENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROETHENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROETHENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROETHENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,1-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,1-DICHLOROPROPENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,1-DICHLOROPROPENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROPROPENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,1-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,1-DIMETHYL-2-PROPYL-CYCLOHEXANE	0.0085	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,3-TRICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,3-TRICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	1,2,4-TRICHLOROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,2,4-TRICHLOROBENZENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,2,4-TRICHLOROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,4-TRICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2,4-TRIMETHYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2-DICHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	1,2-DICHLOROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,2-DICHLOROBENZENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,2-DICHLOROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2-DICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2-DICHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,2-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,2-DICHLOROPROPANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,2-DICHLOROPROPANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROPROPANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,2-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,3-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,3-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,3-DICHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	1,3-DICHLOROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,3-DICHLOROBENZENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3-DICHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,3-DICHLOROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,3-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,3-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,3-DICHLOROPROPANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,3-DICHLOROPROPANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3-DICHLOROPROPANE	< 0.0023	MG/KG	0.0023	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,3-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1,4-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	1,4-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,4-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	1,4-DICHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,4-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,4-DICHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	1,4-DICHLOROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1,4-DICHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,4-DICHLOROBENZENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,4-DICHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	1,4-DICHLOROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	1,4-DICHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	**0.021**	MG/KG	0	TI	NJ	A
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	**0.057**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	1-METHYL-DECAHYDRONAPHTHALENE	**0.0098**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	2,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2,2-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	2,2-DICHLOROPROPANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2,2-DICHLOROPROPANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2,2-DICHLOROPROPANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2,2-DICHLOROPROPANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2,2-DICHLOROPROPANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2,3-DIHYDRO-1,2-DIMETHYL-1H-INDENE	**0.0081**	MG/KG	0	TI	NJ	A
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4,5-TRICHLOROPHENOL	< 4.7	MG/KG	4.7	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4,5-TRICHLOROPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4,5-TRICHLOROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4,6-TRICHLOROPHENOL	< 5.1	MG/KG	5.1	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4,6-TRICHLOROPHENOL	< 0.22	MG/KG	0.22	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4,6-TRICHLOROPHENOL	< 0.22	MG/KG	0.22	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4-DICHLOROPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DICHLOROPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DICHLOROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4-DIMETHYLPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DIMETHYLPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DIMETHYLPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4-DINITROPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DINITROPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DINITROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,4-DINITROTOLUENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DINITROTOLUENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,4-DINITROTOLUENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2,6-DINITROTOLUENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,6-DINITROTOLUENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2,6-DINITROTOLUENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	2-BUTYL-1,1,3-TRIMETHYL-CYCLOHEXANE	**0.015**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2-BUTYL-1,1,3-TRIMETHYL-CYCLOHEXANE	**0.012**	MG/KG	0	TI	NJ	A
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-CHLORONAPHTHALENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLORONAPHTHALENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLORONAPHTHALENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-CHLOROPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLOROPHENOL	< 0.21	MG/KG	0.21	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLOROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	2-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2-CHLOROTOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	2-CHLOROTOLUENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-CHLOROTOLUENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2-CHLOROTOLUENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2-CHLOROTOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	2-HEXANONE	< 0.0055	MG/KG	0.0055	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2-HEXANONE	< 0.0052	MG/KG	0.0052	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-HEXANONE	< 0.0054	MG/KG	0.0054	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	2-HEXANONE	< 0.0059	MG/KG	0.0059	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-HEXANONE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-HEXANONE	< 0.0056	MG/KG	0.0056	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	2-HEXANONE	< 0.0049	MG/KG	0.0049	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2-HEXANONE	< 0.0057	MG/KG	0.0057	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	2-HEXANONE	< 0.0053	MG/KG	0.0053	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-METHYLNAPHTHALENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-METHYLNAPHTHALENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-METHYLNAPHTHALENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-METHYLPHENOL (o-CRESOL)	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-METHYLPHENOL (o-CRESOL)	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-METHYLPHENOL (o-CRESOL)	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	2-METHYL-TRANS-DECALIN	**0.014**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	2-METHYL-TRANS-DECALIN	**0.014**	MG/KG	0	TI	NJ	A

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-NITROANILINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-NITROANILINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-NITROANILINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-NITROPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-NITROPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-NITROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	3,3'-DICHLOROBENZIDINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	3,3'-DICHLOROBENZIDINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	3,3'-DICHLOROBENZIDINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	3-METHYL-DECANE	0.051	MG/KG	0	TI	NJ	A
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	3-NITROANILINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	3-NITROANILINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	3-NITROANILINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4,6-DINITRO-2-METHYLPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4,6-DINITRO-2-METHYLPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4,6-DINITRO-2-METHYLPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-BROMOPHENYL PHENYL ETHER	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-BROMOPHENYL PHENYL ETHER	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-BROMOPHENYL PHENYL ETHER	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-CHLORO-3-METHYLPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLORO-3-METHYLPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLORO-3-METHYLPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-CHLOROANILINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLOROANILINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLOROANILINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-CHLOROPHENYL PHENYL ETHER	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLOROPHENYL PHENYL ETHER	< 0.21	MG/KG	0.21	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-CHLOROPHENYL PHENYL ETHER	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	4-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	4-CHLOROTOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	4-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	4-CHLOROTOLUENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	4-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	4-CHLOROTOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	4-CHLOROTOLUENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	4-CHLOROTOLUENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	4-CHLOROTOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-METHYLPHENOL (p-CRESOL)	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-METHYLPHENOL (p-CRESOL)	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-METHYLPHENOL (p-CRESOL)	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-NITROANILINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-NITROANILINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-NITROANILINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	4-NITROPHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-NITROPHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	4-NITROPHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHENE	< 0.012	MG/KG	0.012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	ACENAPHTHENE	< 0.012	MG/KG	0.012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHENE	< 0.011	MG/KG	0.011	ND	UJ	4L
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	ACENAPHTHENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHENE	< 0.055	MG/KG	0.055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ACENAPHTHENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ACENAPHTHENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHYLENE	< 0.024	MG/KG	0.024	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	ACENAPHTHYLENE	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHYLENE	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	ACENAPHTHYLENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	ACENAPHTHYLENE	< 0.11	MG/KG	0.11	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ACENAPHTHYLENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ACENAPHTHYLENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	ACETONE	**0.026**	MG/KG	0.0055	=	-	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	ACETONE	**0.037**	MG/KG	0.0052	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ACETONE	**0.0085**	MG/KG	0.0054	TR	J	T
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	ACETONE	**0.0076**	MG/KG	0.0059	TR	J	T
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ACETONE	**0.0056**	MG/KG	0.0055	TR	J	T
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ACETONE	**0.026**	MG/KG	0.0056	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ACETONE	< 0.0049	MG/KG	0.0049	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ACETONE	**0.0096**	MG/KG	0.0057	TR	J	T
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ACETONE	**0.019**	MG/KG	0.0053	TR	J	T
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ANILINE (PHENYLAMINE, AMINOBENZENE)	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ANILINE (PHENYLAMINE, AMINOBENZENE)	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	ANTHRACENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	ANTHRACENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	ANTHRACENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	ANTHRACENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	ANTHRACENE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ANTHRACENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ANTHRACENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BENZENE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BENZENE	0.008	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)ANTHRACENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	BENZO(a)ANTHRACENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)ANTHRACENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZO(a)ANTHRACENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)ANTHRACENE	0.14	MG/KG	0.0055	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(a)ANTHRACENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(a)ANTHRACENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	BENZO(a)PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)PYRENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZO(a)PYRENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(a)PYRENE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(a)PYRENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(a)PYRENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(b)FLUORANTHENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	BENZO(b)FLUORANTHENE	< 0.0025	MG/KG	0.0025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(b)FLUORANTHENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZO(b)FLUORANTHENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(b)FLUORANTHENE	< 0.011	MG/KG	0.011	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(b)FLUORANTHENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(b)FLUORANTHENE	< 0.2	MG/KG	0.2	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(g,h,i)PERYLENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	BENZO(g,h,i)PERYLENE	< 0.0025	MG/KG	0.0025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(g,h,i)PERYLENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZO(g,h,i)PERYLENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(g,h,i)PERYLENE	< 0.011	MG/KG	0.011	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(g,h,i)PERYLENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(g,h,i)PERYLENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(k)FLUORANTHENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	BENZO(k)FLUORANTHENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(k)FLUORANTHENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZO(k)FLUORANTHENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	BENZO(k)FLUORANTHENE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(k)FLUORANTHENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZO(k)FLUORANTHENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZOIC ACID	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZOIC ACID	< 0.2	MG/KG	0.2	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZYL ALCOHOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZYL ALCOHOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	BENZYL BUTYL PHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZYL BUTYL PHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	BENZYL BUTYL PHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	bis(2-CHLOROETHOXY) METHANE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-CHLOROETHOXY) METHANE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-CHLOROETHOXY) METHANE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETH	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETH	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETH	< 0.2	MG/KG	0.2	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	bis(2-CHLOROISOPROPYL) ETHER	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-CHLOROISOPROPYL) ETHER	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-CHLOROISOPROPYL) ETHER	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	bis(2-ETHYLHEXYL) PHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-ETHYLHEXYL) PHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	bis(2-ETHYLHEXYL) PHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BROMOBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BROMOBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BROMOBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BROMOCHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BROMOCHLOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOCHLOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOCHLOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOCHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BROMODICHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BROMODICHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMODICHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BROMODICHLOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMODICHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMODICHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMODICHLOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMODICHLOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMODICHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BROMOFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BROMOFORM	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BROMOFORM	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOFORM	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOFORM	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOFORM	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	BROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	BROMOMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	BROMOMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	BROMOMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	BROMOMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CADMIUM	**0.0538**	MG/KG	0.0368	TR	J	T
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW6010B	CADMIUM	**0.0516**	MG/KG	0.0376	TR	J	T
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CADMIUM	**0.12**	MG/KG	0.035	TR	J	T

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CADMIUM	**0.139**	MG/KG	0.0365	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CADMIUM	**0.177**	MG/KG	0.0336	TR	J	T
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	CADMIUM	**0.133**	MG/KG	0.0372	TR	J	T
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	CADMIUM	**0.102**	MG/KG	0.0368	TR	J	T
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CARBON DISULFIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CARBON DISULFIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON DISULFIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CARBON DISULFIDE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON DISULFIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON DISULFIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON DISULFIDE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CARBON DISULFIDE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CARBON DISULFIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CARBON TETRACHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CARBON TETRACHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON TETRACHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CARBON TETRACHLORIDE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON TETRACHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON TETRACHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CARBON TETRACHLORIDE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CARBON TETRACHLORIDE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CARBON TETRACHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CHLOROBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CHLOROETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CHLOROFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CHLOROFORM	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CHLOROFORM	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROFORM	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROFORM	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROFORM	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROFORM	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	CHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	CHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	CHLOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	CHLOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	CHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CHROMIUM, TOTAL	**43.8**	MG/KG	0.599	=	-	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW6010B	CHROMIUM, TOTAL	**48.2**	MG/KG	0.613	=	-	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CHROMIUM, TOTAL	**45.2**	MG/KG	0.57	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CHROMIUM, TOTAL	**36.7**	MG/KG	0.595	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW6010B	CHROMIUM, TOTAL	**81.4**	MG/KG	0.548	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	CHROMIUM, TOTAL	**53.9**	MG/KG	0.606	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	CHROMIUM, TOTAL	**52.6**	MG/KG	0.6	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	CHRYSENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	CHRYSENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	CHRYSENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	CHRYSENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	CHRYSENE	**0.19**	MG/KG	0.0055	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	CHRYSENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	CHRYSENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	cis-1,2-DICHLOROETHYLENE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	cis-1,3-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DECAHYDRO-2-METHYL-NAPHTHALENE	**0.076**	MG/KG	0	TI	NJ	A
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	DIBENZ(a,h)ANTHRACENE	< 0.0048	MG/KG	0.0048	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	DIBENZ(a,h)ANTHRACENE	< 0.0049	MG/KG	0.0049	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	DIBENZ(a,h)ANTHRACENE	< 0.0046	MG/KG	0.0046	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DIBENZ(a,h)ANTHRACENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	DIBENZ(a,h)ANTHRACENE	< 0.022	MG/KG	0.022	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIBENZ(a,h)ANTHRACENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIBENZ(a,h)ANTHRACENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DIBENZOFURAN	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIBENZOFURAN	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIBENZOFURAN	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOCHLOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DIBROMOCHLOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DIBROMOCHLOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	DIBROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	DIBROMOMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	DIBROMOMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DIBROMOMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DIBROMOMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DIBROMOMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	DICHLORODIFLUOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8015B	DIESEL RANGE	290	MG/KG	2.4	=	-	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8015B	DIESEL RANGE ORGANICS	2500	MG/KG	2.7	=	-	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8015B	DIESEL RANGE ORGANICS	450	MG/KG	2.7	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8015B	DIESEL RANGE ORGANICS	< 2.8	MG/KG	2.8	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8015B	DIESEL RANGE ORGANICS	4	MG/KG	2.9	TR	J	T
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8015B	DIESEL RANGE ORGANICS	< 2.7	MG/KG	2.7	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8015B	DIESEL RANGE ORGANICS	660	MG/KG	2.8	=	-	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8015B	DIESEL RANGE ORGANICS	< 2.6	MG/KG	2.6	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	DIESEL RANGE ORGANICS	14	MG/KG	2.9	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	DIESEL RANGE ORGANICS	70	MG/KG	2.8	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DIETHYL PHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIETHYL PHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIETHYL PHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DIMETHYL PHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIMETHYL PHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DIMETHYL PHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DI-n-BUTYL PHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DI-n-BUTYL PHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DI-n-BUTYL PHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	DI-n-OCTYLPHTHALATE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DI-n-OCTYLPHTHALATE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	DI-n-OCTYLPHTHALATE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8015B	ETHANOL	< 0.58	MG/KG	0.58	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8015B	ETHANOL	< 0.56	MG/KG	0.56	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	ETHANOL	< 0.61	MG/KG	0.61	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	ETHANOL	< 0.6	MG/KG	0.6	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	ETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	ETHYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	ETHYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ETHYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ETHYLBENZENE	0.0024	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ETHYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ETHYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ETHYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORANTHENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	FLUORANTHENE	< 0.0025	MG/KG	0.0025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORANTHENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	FLUORANTHENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORANTHENE	< 0.011	MG/KG	0.011	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	FLUORANTHENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	FLUORANTHENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	FLUORENE	< 0.0025	MG/KG	0.0025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	FLUORENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	FLUORENE	< 0.011	MG/KG	0.011	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	FLUORENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	FLUORENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8015B	Gasoline range organics	52	MG/KG	1.2	=	-	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8015B	GASOLINE RANGE ORGANICS (C	6.2	MG/KG	0.58	=	-	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8015B	GASOLINE RANGE ORGANICS (C	4.5	MG/KG	0.53	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8015B	GASOLINE RANGE ORGANICS (C	< 0.6	MG/KG	0.6	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8015B	GASOLINE RANGE ORGANICS (C	< 0.6	MG/KG	0.6	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8015B	GASOLINE RANGE ORGANICS (C	< 0.56	MG/KG	0.56	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8015B	GASOLINE RANGE ORGANICS (C	3.6	MG/KG	0.65	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8015B	GASOLINE RANGE ORGANICS (C	< 0.6	MG/KG	0.6	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	GASOLINE RANGE ORGANICS (C	1.5	MG/KG	0.53	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	GASOLINE RANGE ORGANICS (C	< 0.51	MG/KG	0.51	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	HEXACHLOROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROBENZENE	< 0.21	MG/KG	0.21	ND	U	-

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	HEXACHLOROBUTADIENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	HEXACHLOROBUTADIENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	HEXACHLOROBUTADIENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	HEXACHLOROBUTADIENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	HEXACHLOROBUTADIENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	HEXACHLOROBUTADIENE	< 5.3	MG/KG	5.3	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	HEXACHLOROBUTADIENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	HEXACHLOROBUTADIENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROBUTADIENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	HEXACHLOROBUTADIENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROBUTADIENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	HEXACHLOROBUTADIENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	HEXACHLOROCYCLOPENTADIENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROCYCLOPENTADIENE	< 0.23	MG/KG	0.23	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROCYCLOPENTADIENE	< 0.23	MG/KG	0.23	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	HEXACHLOROETHANE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROETHANE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	HEXACHLOROETHANE	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	INDENO(1,2,3-c,d)PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	INDENO(1,2,3-c,d)PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	INDENO(1,2,3-c,d)PYRENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	INDENO(1,2,3-c,d)PYRENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	INDENO(1,2,3-c,d)PYRENE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	INDENO(1,2,3-c,d)PYRENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	INDENO(1,2,3-c,d)PYRENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0055	MG/KG	0.0055	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0052	MG/KG	0.0052	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0054	MG/KG	0.0054	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0059	MG/KG	0.0059	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0055	MG/KG	0.0055	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0056	MG/KG	0.0056	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0049	MG/KG	0.0049	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0057	MG/KG	0.0057	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	IODOMETHANE (METHYL IODIDE)	< 0.0053	MG/KG	0.0053	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	ISOPHORONE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ISOPHORONE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	ISOPHORONE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	ISOPROPYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	ISOPROPYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	ISOPROPYL ETHER	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYL ETHER	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ISOPROPYL ETHER	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ISOPROPYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0019	MG/KG	0.0019	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	ISOPROPYLBENZENE (CUMENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW6010B	LEAD	3.6	MG/KG	0.167	=	-	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW6010B	LEAD	5.78	MG/KG	0.162	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW6010B	LEAD	8.29	MG/KG	0.174	=	-	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW6010B	LEAD	9.09	MG/KG	0.178	=	-	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW6010B	LEAD	7.95	MG/KG	0.165	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW6010B	LEAD	6.17	MG/KG	0.172	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW6010B	LEAD	10.9	MG/KG	0.159	=	-	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW6010B	LEAD	35.7	MG/KG	0.178	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	LEAD	9.08	MG/KG	0.176	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	LEAD	8.31	MG/KG	0.174	=	-	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	0.0029	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8015B	METHANOL	< 0.58	MG/KG	0.58	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8015B	METHANOL	< 0.56	MG/KG	0.56	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	METHANOL	< 0.61	MG/KG	0.61	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	METHANOL	< 0.6	MG/KG	0.6	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0055	MG/KG	0.0055	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0052	MG/KG	0.0052	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0054	MG/KG	0.0054	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0059	MG/KG	0.0059	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0055	MG/KG	0.0055	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0056	MG/KG	0.0056	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0049	MG/KG	0.0049	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0057	MG/KG	0.0057	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	< 0.0053	MG/KG	0.0053	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0055	MG/KG	0.0055	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0052	MG/KG	0.0052	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0054	MG/KG	0.0054	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0059	MG/KG	0.0059	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0055	MG/KG	0.0055	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0056	MG/KG	0.0056	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0049	MG/KG	0.0049	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0057	MG/KG	0.0057	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 0.0053	MG/KG	0.0053	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	METHYLENE CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	METHYLENE CHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYLENE CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	METHYLENE CHLORIDE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYLENE CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYLENE CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	METHYLENE CHLORIDE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	METHYLENE CHLORIDE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	METHYLENE CHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	NAPHTHALENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8270C	NAPHTHALENE	< 0.012	MG/KG	0.012	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8270C	NAPHTHALENE	< 0.011	MG/KG	0.011	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	NAPHTHALENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	NAPHTHALENE	< 0.012	MG/KG	0.012	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	NAPHTHALENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	NAPHTHALENE	< 0.012	MG/KG	0.012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	NAPHTHALENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	NAPHTHALENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	NAPHTHALENE	< 0.011	MG/KG	0.011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	NAPHTHALENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	NAPHTHALENE	**0.006**	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	NAPHTHALENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	NAPHTHALENE	< 0.055	MG/KG	0.055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	NAPHTHALENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	NAPHTHALENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	NAPHTHALENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	NAPHTHALENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	Naphthalene, Decahydro-2,6-dimethyl-	**0.01**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	n-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	n-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	n-BUTYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-BUTYLBENZENE	**0.0066**	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-BUTYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	n-BUTYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	n-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	N-HEPTADECYL ESTER TRIFLUOROACETIC ACID	**0.058**	MG/KG	0	TI	NJ	A

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW6010B	NICKEL	17.8	MG/KG	0.549	=	-	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW6010B	NICKEL	17.9	MG/KG	0.561	=	-	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW6010B	NICKEL	23.7	MG/KG	0.522	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW6010B	NICKEL	53.4	MG/KG	0.545	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW6010B	NICKEL	63	MG/KG	0.502	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	NICKEL	29.4	MG/KG	0.555	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	NICKEL	25.2	MG/KG	0.549	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	NITROBENZENE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	NITROBENZENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	NITROBENZENE	< 0.2	MG/KG	0.2	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODIMETHYLAMINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODIMETHYLAMINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	N-NITROSODI-n-PROPYLAMINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODI-n-PROPYLAMINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODI-n-PROPYLAMINE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	N-NITROSODIPHENYLAMINE	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODIPHENYLAMINE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	N-NITROSODIPHENYLAMINE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	n-PROPYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	n-PROPYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-PROPYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	n-PROPYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-PROPYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-PROPYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	n-PROPYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	n-PROPYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	n-PROPYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	E1664	OIL & GREASE, TOTAL REC	< 36.4	MG/KG	36.4	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	E1664	OIL & GREASE, TOTAL REC	< 36	MG/KG	36	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.021	MG/KG	0.021	ND	U	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.024	MG/KG	0.024	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.021	MG/KG	0.021	ND	U	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.021	MG/KG	0.021	ND	U	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.022	MG/KG	0.022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.021	MG/KG	0.021	ND	U	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.025	MG/KG	0.025	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.021	MG/KG	0.021	ND	U	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1254 (AROCHLOR 1254)	1.1	MG/KG	0.1	=	-	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.02	MG/KG	0.02	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.024	MG/KG	0.024	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.025	MG/KG	0.025	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.023	MG/KG	0.023	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.024	MG/KG	0.024	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.022	MG/KG	0.022	ND	U	-
B161GB005	B161GB005-A-S01	N	1/22/2008	5 - 5.5	SW8082	PCB-1260 (AROCHLOR 1260)	0.34	MG/KG	0.021	=	-	-
B161GB005	B161GB005-A-S02	N	1/22/2008	8 - 8.5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.02	MG/KG	0.02	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.02	MG/KG	0.02	ND	U	-
B161GB006	B161GB006-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.022	MG/KG	0.022	ND	U	-
B161GB006	B161GB006-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.021	MG/KG	0.021	ND	U	-
B161GB007	B161GB007-A-S01	N	1/23/2008	5.5 - 6	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.021	MG/KG	0.021	ND	U.	-
B161GB007	B161GB007-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-A-S01	N	1/23/2008	5 - 5.5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.018	MG/KG	0.018	ND	U	-
B161GB008	B161GB008-A-S02	N	1/23/2008	8.5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.02	MG/KG	0.02	ND	U	-
B161GB008	B161GB008-B-S02	FD	1/23/2008	8 - 8.5	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.021	MG/KG	0.021	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.024	MG/KG	0.024	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.024	MG/KG	0.024	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	**0.0045**	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	PENTACHLOROPHENOL	< 4.9	MG/KG	4.9	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PENTACHLOROPHENOL	< 0.22	MG/KG	0.22	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PENTACHLOROPHENOL	< 0.22	MG/KG	0.22	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	PHENANTHRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	PHENANTHRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	PHENANTHRENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	PHENANTHRENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	PHENANTHRENE	**0.029**	MG/KG	0.0055	TR	J	T
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PHENANTHRENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PHENANTHRENE	< 0.2	MG/KG	0.2	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	PHENOL	< 4.7	MG/KG	4.7	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PHENOL	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PHENOL	< 0.2	MG/KG	0.2	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8310	PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8310	PYRENE	< 0.0012	MG/KG	0.0012	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8310	PYRENE	< 0.0011	MG/KG	0.0011	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8270C	PYRENE	< 4.7	MG/KG	4.7	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8310	PYRENE	< 0.0055	MG/KG	0.0055	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PYRENE	< 0.21	MG/KG	0.21	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8270C	PYRENE	< 0.2	MG/KG	0.2	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8015B	RESIDUAL RANGE ORGANICS	**570**	MG/KG	2.6	=	-	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8015B	RESIDUAL RANGE ORGANICS	**120**	MG/KG	2.6	=	-	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8015B	RESIDUAL RANGE ORGANICS	< 2.7	MG/KG	2.7	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8015B	RESIDUAL RANGE ORGANICS	< 2.8	MG/KG	2.8	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8015B	RESIDUAL RANGE ORGANICS	< 2.6	MG/KG	2.6	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8015B	RESIDUAL RANGE ORGANICS	730	MG/KG	2.7	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8015B	RESIDUAL RANGE ORGANICS	< 2.5	MG/KG	2.5	ND	U	-
B161GB005	B161GB005-IDW	N	1/23/2008	0 - 0	SW8015B	RESIDUAL RANGE ORGANICS	550	MG/KG	2.3	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	RESIDUAL RANGE ORGANICS	17	MG/KG	2.8	TR	J	T
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8015B	RESIDUAL RANGE ORGANICS	7.7	MG/KG	2.7	TR	J	T
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	SEC-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	SEC-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	SEC-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	SEC-BUTYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	SEC-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	SEC-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	SEC-BUTYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	SEC-BUTYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	SEC-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	STYRENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	STYRENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	STYRENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	STYRENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	STYRENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	STYRENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	STYRENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	STYRENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	STYRENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	t-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	t-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	t-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	t-BUTYLBENZENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	t-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	t-BUTYLBENZENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	t-BUTYLBENZENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	t-BUTYLBENZENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	t-BUTYLBENZENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-AMYL METHYL ETHER	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TERT-AMYL METHYL ETHER	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TERT-AMYL METHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TERT-BUTYL ETHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	tert-BUTYL METHYL ETHER	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	tert-BUTYL METHYL ETHER	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	tert-BUTYL METHYL ETHER	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TETRACHLOROETHYLENE(PCE)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TOLUENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TOLUENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TOLUENE	**0.0026**	MG/KG	0.0022	TR	J	T
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TOLUENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TOLUENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TOLUENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	trans-1,2-DICHLOROETHENE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	trans-1,3-DICHLOROPROPENE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRANS-DECAHYDRONAPHTHALENE	**0.15**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROETHYLENE (TCE)	**0.0023**	MG/KG	0.0019	TR	J	T
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TRICHLOROETHYLENE (TCE)	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-

Appendix D, continued

Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	TRICHLOROFLUOROMETHANE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	UNDECANE	**0.26**	MG/KG	0	TI	NJ	A
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	VINYL ACETATE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	VINYL ACETATE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL ACETATE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	VINYL ACETATE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL ACETATE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL ACETATE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL ACETATE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	VINYL ACETATE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	VINYL ACETATE	< 0.0021	MG/KG	0.0021	ND	U	-
B027GR001	B027GR001-A-S01	N	1/5/2006	7 - 7.5	SW8260B	VINYL CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B027GR001	B027GR001-A-S02	N	1/6/2006	11 - 11.5	SW8260B	VINYL CHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW8260B	VINYL CHLORIDE	< 0.0024	MG/KG	0.0024	ND	U	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL CHLORIDE	< 0.0022	MG/KG	0.0022	ND	U	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW8260B	VINYL CHLORIDE	< 0.0019	MG/KG	0.0019	ND	U	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	VINYL CHLORIDE	< 0.0023	MG/KG	0.0023	ND	U	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW8260B	VINYL CHLORIDE	< 0.0021	MG/KG	0.0021	ND	U	-

Appendix D, continued
Analytical Results for all Constituents in Soil

Soil Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB001	B161GB001-A-S01	N	1/6/2006	4.5 - 5	SW6010B	ZINC	**66.1**	MG/KG	0.299	=	-	-
B161GB001	B161GB001-B-S01	FD	1/6/2006	4 - 4.5	SW6010B	ZINC	**69.1**	MG/KG	0.306	=	-	-
B161GB002	B161GB002-A-S01	N	1/6/2006	4.5 - 5	SW6010B	ZINC	**73.2**	MG/KG	0.285	=	-	-
B161GB003	B161GB003-A-S01	N	1/6/2006	4.5 - 5	SW6010B	ZINC	**68.7**	MG/KG	0.297	=	-	-
B161GB004	B161GB004-A-S01	N	1/6/2006	4.5 - 5	SW6010B	ZINC	**94.6**	MG/KG	0.274	=	-	-
B161GR001	B161GR001-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	ZINC	**91.2**	MG/KG	0.303	=	-	-
B161GR002	B161GR002-A-S01	N	1/5/2006	3.7 - 4.17	SW6010B	ZINC	**67.9**	MG/KG	0.3	=	-	-

APPENDIX E

Analytical Results for All Constituents in Groundwater

Appendix E

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	(E)-3-TETRADECENE	98	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1,1,2-TETRACHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1,1-TRICHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1,2,2-TETRACHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1,2-TRICHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1-DICHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1-DICHLOROETHENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,1-DICHLOROPROPENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2,3-TRICHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2,3-TRICHLOROPROPANE	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	1,2,4-TRICHLOROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2,4-TRICHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2,4-TRIMETHYLBENZENE	39	UG/L	2	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2-DIBROMO-3-CHLOROPROPANE	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2-DICHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	1,2-DICHLOROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2-DICHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,2-DICHLOROPROPANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	7.7	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,3-DICHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	1,3-DICHLOROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,3-DICHLOROPROPANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1,4-DICHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	1,4-DICHLOROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	1-METHYL-DECAHYDRONAPHTHALENE	220	UG/L	0	TI	NJ	A

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	2,2-DICHLOROPROPANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4,5-TRICHLOROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4,6-TRICHLOROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4-DICHLOROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4-DIMETHYLPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4-DINITROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,4-DINITROTOLUENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,6,10,14-TETRAMETHYLPENTADECANE	190	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2,6-DINITROTOLUENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	2,7,10-TRIMETHYLDODECANE	410	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-CHLORONAPHTHALENE	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-CHLOROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	2-CHLOROTOLUENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	2-HEXANONE	< 50	UG/L	50	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-METHYLNAPHTHALENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-METHYLPHENOL (o-CRESOL)	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-METHYLTRIDECANE	130	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-NITROANILINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-NITROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	3,3'-DICHLOROBENZIDINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	3-NITROANILINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4,6-DINITRO-2-METHYLPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-BROMOPHENYL PHENYL ETHER	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-CHLORO-3-METHYLPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-CHLOROANILINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-CHLOROPHENYL PHENYL ETHER	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	4-CHLOROTOLUENE	< 2	UG/L	2	ND	U	-

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-METHYLPHENOL (p-CRESOL)	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-NITROANILINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	4-NITROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	7-METHYLTRIDECANE	270	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	ACENAPHTHENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	ACENAPHTHYLENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	ACETONE	< 50	UG/L	50	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	ANILINE (PHENYLAMINE, AMINOBENZENE)	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	ANTHRACENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZO(a)ANTHRACENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZO(a)PYRENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZO(b)FLUORANTHENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZO(g,h,i)PERYLENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZO(k)FLUORANTHENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZOIC ACID	< 47	UG/L	47	ND	UR	3L,4L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZYL ALCOHOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	BENZYL BUTYL PHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	bis(2-CHLOROETHOXY) METHANE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETH	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	bis(2-CHLOROISOPROPYL) ETHER	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	bis(2-ETHYLHEXYL) PHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BROMOBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BROMOCHLOROMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BROMODICHLOROMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BROMOFORM	< 3	UG/L	3	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	BROMOMETHANE	< 2	UG/L	2	ND	U	-

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW6010B	CADMIUM	< 0.0007	MG/L	0.0007	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CARBON DISULFIDE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CARBON TETRACHLORIDE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CHLOROBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CHLOROETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CHLOROFORM	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	CHLOROMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW6010B	CHROMIUM, TOTAL	< 0.005	MG/L	0.005	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	CHRYSENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	cis-1,2-DICHLOROETHYLENE	**3.2**	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	cis-1,3-DICHLOROPROPENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DECAHYDRO-2-METHYL-NAPHTHALENE	**110**	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	DECAHYDRO-2-METHYL-NAPHTHALENE	**180**	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DIBENZ(a,h)ANTHRACENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DIBENZOFURAN	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	DIBROMOCHLOROMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	DIBROMOMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	DICHLORODIFLUOROMETHANE	< 3	UG/L	3	ND	U	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8015B	DIESEL RANGE	**5500**	UG/L	23	=	-	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8015B	DIESEL RANGE	**720**	UG/L	23	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8015B	DIESEL RANGE ORGANICS	**27000**	UG/L	120	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DIETHYL PHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DIMETHYL PHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DI-n-BUTYL PHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	DI-n-OCTYLPHTHALATE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8015B	ETHANOL	< 0.5	MG/L	0.5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	ETHYLBENZENE	**4**	UG/L	2	TR	J	T

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	FLUORANTHENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	FLUORENE	< 24	UG/L	24	ND	UJ	3L
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8015B	Gasoline range organics	750	UG/L	20	=	-	-
B161GB005	B161GR005-D-W01	FD	1/22/2008	6 - 12	SW8015B	Gasoline range organics	< 20	UG/L	20	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8015B	Gasoline range organics	93	UG/L	20	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8015B	GASOLINE RANGE ORGANICS (C	6900	UG/L	200	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	HEPTYLCYCLOHEXANE	190	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	HEXACHLOROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	HEXACHLOROBUTADIENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	HEXACHLOROBUTADIENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	HEXACHLOROCYCLOPENTADIENE	< 24	UG/L	24	ND	UR	3L,4L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	HEXACHLOROETHANE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	INDENO(1,2,3-c,d)PYRENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	IODOMETHANE (METHYL IODIDE)	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	ISOPHORONE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	ISOPROPYL ETHER	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	ISOPROPYLBENZENE (CUMENE)	7.6	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW6010B	LEAD	0.00244	MG/L	0.002	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	M,P-XYLENE (SUM OF ISOMERS)	30	UG/L	5	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8015B	METHANOL	< 0.5	MG/L	0.5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	56	UG/L	50	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	THYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	< 50	UG/L	50	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	METHYLENE CHLORIDE	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	NAPHTHALENE	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	NAPHTHALENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	n-BUTYLBENZENE	14	UG/L	2	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	N-HEXADECANE (C16)	380	UG/L	0	TI	NJ	A

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW6010B	NICKEL	< 0.01	MG/L	0.01	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	NITROBENZENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	N-NITROSODIMETHYLAMINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	N-NITROSODI-n-PROPYLAMINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	N-NITROSODIPHENYLAMINE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	n-PROPYLBENZENE	15	UG/L	2	=	J	4H,5
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	7.1	UG/L	2	TR	J	T
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1016 (AROCHLOR 1016)	< 0.24	UG/L	0.24	ND	U	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1221 (AROCHLOR 1221)	< 0.24	UG/L	0.24	ND	U	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1232 (AROCHLOR 1232)	< 0.24	UG/L	0.24	ND	U	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1242 (AROCHLOR 1242)	< 0.24	UG/L	0.24	ND	U	-

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1248 (AROCHLOR 1248)	< 0.24	UG/L	0.24	ND	U	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1254 (AROCHLOR 1254)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1254 (AROCHLOR 1254)	**5.6**	UG/L	0.48	=	-	-
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.24	UG/L	0.24	ND	U	-
B161GB006	B161GR006-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.24	UG/L	0.24	ND	U	-
B161GB007	B161GR007-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.24	UG/L	0.24	ND	U	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8082	PCB-1260 (AROCHLOR 1260)	< 0.24	UG/L	0.24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8082	PCB-1260 (AROCHLOR 1260)	**1.6**	UG/L	0.24	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	P-CYMENE (p-ISOPROPYLTOLUENE)	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	PENTACHLOROPHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	PHENANTHRENE	< 24	UG/L	24	ND	UJ	3L
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	PHENOL	< 24	UG/L	24	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	PYRENE	< 24	UG/L	24	ND	UJ	3L
B161GB005	B161GR005-A-W01	N	1/22/2008	6 - 12	SW8015B	RESIDUAL RANGE ORGANICS	**4000**	UG/L	30	=	-	-
B161GB008	B161GR008-A-W01	N	1/23/2008	5 - 9	SW8015B	RESIDUAL RANGE ORGANICS	**190**	UG/L	29	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8015B	RESIDUAL RANGE ORGANICS	**18000**	UG/L	150	=	-	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	SEC-BUTYLBENZENE	**8.3**	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	STYRENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	t-BUTYLBENZENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TERT-AMYL METHYL ETHER	< 2	UG/L	2	ND	U	-

Appendix E, continued

Analytical Results for all Constituents in Groundwater

Groundwater Results:

Location	Sample ID	Sample Type	Sample Date	Depth (FT)	Analytical Method	Analyte	Result	Units	Detect Limit	Parvq	QC Flag	Reason Code
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TERT-BUTYL ETHYL ETHER	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	tert-BUTYL METHYL ETHER	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TETRACHLOROETHYLENE(PCE)	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TOLUENE	5	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	trans-1,2-DICHLOROETHENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	trans-1,3-DICHLOROPROPENE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	TRANS-DECAHYDRONAPHTHALENE	120	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TRANS-DECAHYDRONAPHTHALENE	180	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TRICHLOROETHYLENE (TCE)	2.3	UG/L	2	TR	J	T
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	TRICHLOROFLUOROMETHANE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8270C	Undecane, 2,6-Dimethyl-	73	UG/L	0	TI	NJ	A
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	VINYL ACETATE	< 5	UG/L	5	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW8260B	VINYL CHLORIDE	< 2	UG/L	2	ND	U	-
B161GR001	B161GR001-A-W01	N	1/5/2006	5 - 5	SW6010B	ZINC	< 0.0101	MG/L	0.0101	ND	UJ	2

APPENDIX F

Investigative Derived Waste Manifests

F001 RCRA HAZARDOUS WASTE
(Liquid from Building 161 UST and Building 161 Excavation Water)

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: C A C 0 0 2 5 9 8 5 8 9 5 1 4 H 5 6 — Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: 23876706

3. Generator's Name and Mailing Address:
USACE
940 TYLER ST
BENICIA CA 94510

B. State Generator's ID

4. Generator's Phone (916)551-6703

5. Transporter 1 Company Name: ~~[illegible]~~ BOBSTER Inc
6. US EPA ID Number: CAR000116020

C. State Transporter's ID [Reserved.]
D. Transporter's Phone: 209 [illegible]

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID [Reserved.]
F. Transporter's Phone

9. Designated Facility Name and Site Address:
BURLINGTON ENVIRONMENTAL, INC TACOMA
1701 East Alexander Avenue
Tacoma, WA 98421

10. US EPA ID Number: W A D 0 0 0 8 1 2 9 0 9

G. State Facility's ID
H. Facility's Phone: (253) 627-7568

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. X HAZARDOUS WASTE, LIQUID, N.O.S. (METHYLENE CHLORIDE, TRICHLOROETHENE) 9 NA3082 PGIII ERG(171)	001	TT	02200	G	State 221; EPA/Other F001
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above
a) 351265-00 WASTE OIL W/PCE TRICHLOROETHYLENE - [illegible]

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information: Emergency CALL (800) 567-7455

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Martin Fihnung — Signature: On behalf 4-04-00 [signature] — Month/Day/Year: 01 04 0[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Robert Bettencourt — Signature: [signature] — Month/Day/Year: 01 04 0[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Wanda Grondahl — Signature: Wanda Grondahl — Month/Day/Year: 01 09 0[illegible]

DO NOT WRITE BELOW THIS LINE

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR / TRANSPORTER / FACILITY

DTSC 8022A (1/99)

Green: TRANSPORTER RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6. 711060

Department of Toxic Substances Cor
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CAC025985905			

3. Generator's Name and Mailing Address
Site: US ARMY CORPS OF ENGINEERS
1063 JEFFERSON STREET
BENICIA CA 94510
Mailing: US ARMY CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814

A. State Manifest Document Number: 23876776

4. Generator's Phone ( )

B. State Generator's ID

5. Transporter 1 Company Name: PHILLIP TRANSPORTATION & REMEDIATION, INC.

6. US EPA ID Number: CAD063547996

C. State Transporter's ID [Reserved]: 0381

D. Transporter's Phone: (800) 321-1030

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID [Reserved]

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
BURLINGTON ENVIRONMENTAL, INC. KENT
20245 77TH AVENUE SOUTH
KENT, WA 98032

10. US EPA ID Number: WAD991281767

G. State Facility's ID

H. Facility's Phone: (253) 872-8030

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. NON RCRA HAZARDOUS WASTE LIQUID	004	D	00220	G	State: 223 / EPA/Other: N/A
b.					State: / EPA/Other:
c.					State: / EPA/Other:
d.					State: / EPA/Other:

J. Additional Descriptions for Materials Listed Above
a) 352659-00 - HEATING OIL & WATER RESIDUE - WATER WATER WATER (1)

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information: Emergency CALL (800) 567-7455 ##

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Martin Fahning	on behalf of DOD	02	22	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Alfonso G Murillo	Alfonso Murillo	02	22	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

White: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 3000, Sacramento, CA 95812

DTSC 8022A (1/99)
EPA 8700—22

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

23876776

SOIL
(Building 27 and Building 161 Excavations)

Profile Number: _____
Expiration Date: _____

WASTE PROFILE SHEET
TERMS & CONDITIONS

Service Agreement on File? ☐ Yes ☐ No

This form is to be used to comply with the requirements of governmental waste screening criteria.

Profile Addendum Attached? ☐ Yes ☐ No

A. Waste Generator Information

1. Generator/Site Name: US Army Corps of Engineers
2. SIC Code: _____
3. Site Address: 1063 Jefferson St.
4. Site City: Benicia
5. Site State: CA
7. Zip Code: 94510
6. Site County: Solano
8. Generator USEPA/Federal ID#: CAC002598590
9. Site Phone: 916 551-6703 Martin Fahning
10. Customer Name: Philip Transportation & Remediation
11. Customer Phone: 800 321-1030
12. Customer Contact: Denny McElwaine
13. Customer FAX: 408 683-0485

B. Waste Stream and Billing Information

1. Waste Description: Soil From UST Removal
3. Billing Address: P.O. Box 150 San Martin, CA 95046
2. State Waste Code: —
4. Process Generating Waste: Excavation of 250 gal Heating Oil Tank.
5. Transporter/Transfer Station: PTR
6. Shipping Method: Bins
7. Estimated Quantity (Weight & Vol.): 20-30-40 CY, 50-60 Tons. per ☒ Job ☐ Year ☐ Other _____
8. Delivery Date(s): TBD
9. Personal Protective Equipment Requirements: Protective Clothing & Eyewear.
10. Is this a US Dept. of Transportation (USDOT) Hazardous Material? ☐ Yes ☒ No (If no, skip 10, 11 and 12)
11. Reportable Quantity: N/A
12. Hazard Class / I.D. #: N/A
13. Shipping Name: N/A

☒ Check if additional information is attached. Indicate the number of attached pages: 12

C. Generator's Certification (Please check appropriate responses, sign and date reverse side)

	Yes	No	
1. Is the waste represented by this waste profile sheet a "Hazardous Waste" as defined by USEPA, Canadian, Mexican, State, or Provincial regulation?	☐	☒	
2. Does the waste represented by this waste profile sheet contain regulated radioactive material or regulated concentrations of Polychlorinated Biphenyls (PCBs)?	☐	☒	
3. Does this waste profile sheet and all attachments contain true and accurate descriptions of the waste material?	☒	☐	
4. Has all relevant information within the possession of the Generator and Customer regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?	☒	☐	
5. Is the analytical data attached hereto derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules?	☒	☐	☐ N/A
6. Will all changes that occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?	☒	☐	
7. Is this waste from a CERCLA site?	☐	☒	

D. Waste Management's Decision

1. Management Method: _____
2. Designated Facility: _____
3. Hours of acceptance: _____ ☐ N/A
4. Precautions, Special Handling Procedures, or Limitations on Approval: _____

Generic Approval: ☐ Yes ☐ No
Special Waste Decision: ☐ Approved ☐ Disapproved
Sales Person: _____ Date: _____ Technical Manager: _____ Date: _____

GENERATOR AND CUSTOMER MUST READ AND SIGN REVERSE HEREOF INITIAL _____

TERMS AND CONDITIONS

1. ACCEPTABLE WASTE. Customer shall deliver and Company shall accept for disposal or other management purpose only Acceptable Waste. As used herein, "Customer" shall mean both Customer and Generator listed on the reverse hereof. Customer shall deliver the full quantity of Acceptable Waste generated and/or handled by Customer as estimated on the reverse hereof. Acceptable Waste means and includes only such waste as is described on the reverse and which is approved and permitted for management at the Designated Facility listed on the reverse, and shall not include any Nonconforming Waste. As used herein, Nonconforming Waste means waste that: (a) is not in conformance with the description and/or estimated quantity of the waste set forth on the reverse; (b) is or contains any infectious waste, or radioactive, volatile, corrosive, highly flammable, explosive, biomedical, biohazardous, material or hazardous, dangerous, or toxic substances, as defined pursuant to or listed or regulated under applicable federal, state or local law, except as stated on the reverse; or (c) is prohibited from being received, managed or disposed of at the Designated Facility by federal, state or local law, regulation, rule, code, ordinance, order, permit or permit condition;

2. REPRESENTATIONS & WARRANTIES. Customer represents and warrants that: (a) the description of the waste set forth on the reverse hereof is true and correct in all material respects; (b) all waste delivered to the Designated Facility by Customer shall be Acceptable Waste as defined above and shall not be or contain Nonconforming Waste; (c) Customer shall, and shall cause any carrier with which it contracts to, handle and transport the waste in a safe and workmanlike manner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations; and (d) Customer has advised its drivers of Company's prohibition on delivery of Nonconforming Waste, of the definitions and listing of hazardous waste and hazardous substances under applicable federal and state law and regulations and of the definition of Acceptable Waste herein. Company represents and warrants that it shall manage the Acceptable Waste in a safe and workmanlike manner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations.

3. WASTE REJECTION. Company may inspect, analyze or test any waste delivered by Customer and/or may reject, refuse or revoke acceptance of any waste if, in the opinion of Company, the waste or tender of delivery fails to conform to or Customer fails to comply with the terms of this Agreement, including by delivery of Nonconforming Waste. Company may also reject any waste which (a) Company reasonably believes would, as a result of or upon disposal or other management, be a violation of local, state or federal law, regulation, ordinance or permits, including land use restrictions or conditions applicable to the Designated Facility; or (b) in Company's opinion would present a significant risk to human health or the environment, cause a nuisance or otherwise create or expose Company or Customer to potential liability. Company also shall have the right to refuse to accept or to reject any Acceptable Waste in the event of Customer's failure to pay fees owed by Customer hereunder. In the event Company rejects or revokes acceptance of waste hereunder, Customer shall, at its sole cost, immediately remove or arrange to have the rejected waste removed from Company's control or property. Customer shall pay and/or reimburse Company for any and all costs, damages and/or fines incurred as a result of or relating to Customer's tender or delivery of Nonconforming Waste or other failure to comply or conform to this Agreement, including costs of inspection, testing and analysis.

4. SPECIAL HANDLING; TITLE. If Company elects, in its sole discretion, to handle, rather than reject, Nonconforming Waste, Company shall have the right to manage such Nonconforming Waste in the manner deemed most appropriate by Company given the characteristics of the Nonconforming Waste. Company may assess and Customer shall pay additional fees associated with delivery of Nonconforming Waste, including, but not limited to, special handling or disposal charges, and costs associated with different quantities of waste, different delivery dates, modifications in operations, specialized equipment, and other operational, environmental, health, safety or regulatory requirements. Title to and ownership of Acceptable Waste shall transfer to Company upon its final acceptance of Acceptable Waste. Title to, ownership of and liability for Nonconforming Waste shall at all times remain with Customer. Revocation of acceptance by Company shall operate to re-vest all incidents of ownership in Customer.

5. INDEMNITY. Each party hereto (the "Indemnitor") hereby agrees to indemnify, hold harmless and defend the other party, and its owners, officers, directors, employees and agents (collectively, the "Indemnitees"), from and against any and all liabilities, penalties, fines, forfeitures, fees, demands, claims, causes of action, suits, judgments and costs and expenses incidental thereto, including attorneys' fees (collectively, "Damages"), which any or all of the Indemnitees may hereafter suffer, incur, be responsible for or pay out, including for personal injuries, property damage, or contamination of or adverse effects on the environment, to the extent caused by, or arising from or in connection with the breach of any representations or warranties of the Indemnitor set forth in this Agreement, or any negligent actions or omissions or willful misconduct of the Indemnitor, its employees, officers, owners, directors or agents, or the violation of any law, ordinance or regulation, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq., as amended. Such indemnity shall exclude Damages to the extent they arise as a result of any negligent actions or omissions or willful misconduct of the Indemnitees or their employees, officers, owners, directors or agents. The indemnification obligation hereunder shall arise only in excess of any available and collectible insurance proceeds and the Indemnitor shall be liable hereunder to pay only its share of the amount of Damages, if any, that exceeds the total amount that all insurance has paid for the Damages, plus the total of all deductible and self-insured expenses paid under all insurance policies. The obligations in this Section 5 shall survive the performance and termination of this Agreement.

6. UNCONTROLLABLE CIRCUMSTANCES; TERMINATION. Except for the obligation to pay fees hereunder, the performance of this Agreement may be discontinued or temporarily suspended by either party, and neither party shall be deemed to be in breach of this Agreement, in the event performance is prevented by a cause or causes beyond the reasonable control of the affected party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood or sabotage, governmental laws (including embargo), permit conditions, regulations, restrictions (including land use), condition of the waste, intervention or actions or omissions of third party transporters or other contractors, suppliers or vendors. Company may immediately terminate management services hereunder upon written notice to Customer in the event Customer breaches any term, provision or obligation under this Agreement, in which case, Customer shall be liable for and shall pay to Company all costs and losses incurred by Company as a result of or relating to any such termination.

7. MISCELLANEOUS. This Agreement shall be governed by the laws of the state in which the Designated Facility is located. Every provision of this Agreement shall be severable. This Agreement represents the entire understanding and Agreement between the parties relating to the management of waste, except that, if the parties, or their parent companies, are parties to a national service agreement, the terms of such national service agreement shall govern over any inconsistent terms in this Agreement. No representations, statements or Agreements, unless agreed to by the parties in writing, shall modify, change, amend or otherwise affect the obligations undertaken in this Agreement. No waiver by either party of any one or more defaults or breaches by the other in the performance of this Agreement shall operate or be construed as a waiver of any future defaults or breaches. Customer may not assign this Agreement without the prior written consent of Company. This Agreement shall be binding upon and shall inure to the benefit of the parties' successors and assigns.

THIS IS A LEGALLY BINDING CONTRACT. EACH UNDERSIGNED INDIVIDUAL ACKNOWLEDGES THAT HE/SHE HAS READ AND UNDERSTANDS THE TERMS AND CONDITIONS OF THIS AGREEMENT SET FORTH ABOVE AND ON THE REVERSE HEREOF AND THAT HE/SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF CUSTOMER/GENERATOR AND COMPANY. BY SIGNING BELOW, CUSTOMER AND GENERATOR INDICATE A FIRST HAND KNOWLEDGE OF THE WASTE'S CHARACTERISTICS AND CERTIFY THE TRUTH OF THE INFORMATION ON THE REVERSE HEREOF. AGREED TO AS OF THE DATES BELOW.

CUSTOMER:	GENERATOR:	COMPANY: ALTAMONT LANDFILL
(AUTHORIZED SIGNATURE)	(AUTHORIZED SIGNATURE)	(AUTHORIZED SIGNATURE)
Danny McIntire, Dist. Mgr. (NAME, TITLE)	Marilyn Fahrion, Geologist (NAME, TITLE)	(NAME, TITLE)

BRC AND CALDWELL I12/VS01-03

CHAIN OF CUSTODY RECORD

COC No. 1 of 1

BE 000346

☒ 2701 Prospect Park Dr.
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal

PROJECT NUMBER: 123336-012

LABORATORY NAME & ADDRESS: Eurofins Calscience 1835 W. 205th Street, Torrance, CA 90501

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin 2209	1/9/06	12:35	QL	1	2x6 SS sleeve	None	S	Metals (Cd, Cr, Pb, Zn, Ni) 6010 PCBs 8082			Std	G	----	
02	Bin 2209	1/9/06	12:35	QL	3	Encores	None	S	VOCs by 8260B			Std	G	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09									T= 3.6°C					----	
10														----	

COLLECTED & RELEASED BY:		DATE 1/9/06	TIME 15:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:		DATE 1/10/06	TIME 9:45	RELINQUISHED BY:	DATE / /	TIME :	
RECORD RETURNED BY:		DATE / /	TIME :				
COURIER:	FedEx			SHIPPING NUMBER:	9329 9904 4154		

DISTRIBUTION: WHITE-PROJECT FILE • CANARY-LAB RECEIPT • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. 1 of 1

BE 000348

☒ 2701 Prospect Park Dr. / Rancho Cordova, CA 95670 / 916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201 / San Diego, CA 92123 / 858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115 / Walnut Creek, CA 94596 / 925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100 / Irvine, CA 92602 / 714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal

PROJECT NUMBER: 123336-012

LABORATORY NAME & ADDRESS: Enax, 1835 W. 205th St. Torrance CA 90501

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin 2206	1/9/06	12:55	AL	1	2x6 SS sleeve	None	S	Metals (Cd, Cr, Pb, Ni, Zn) 6010 PCBs (3550)			Std	6	----	
02	Bin 2206	1/9/06	12:55	AL	3	Encores	None	S	VOCs by 8260B			Std	6	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09									7-3.6°C					----	
10														----	

COLLECTED & RELEASED BY:	DATE 1/9/06	TIME 19:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE 1/10/06	TIME 9:45	RELINQUISHED BY:	DATE / /	TIME :	
RECEIVED RETURNED BY:	DATE / /	TIME :				
COURIER: Fed Ex			SHIPPING NUMBER: 8329 9904 4154			

DISTRIBUTION: WHITE-PROJECT FILE • CANARY-LAB RECEIPT • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 14:46
Sample ID:	6IN 2209	Date Analyzed:	01/13/06 14:46
Lab Samp ID:	A038-01R	Dilution Factor:	.85
Lab File ID:	RAC248	Matrix	: SOIL
Ext Btch ID:	V067A20	% Moisture	: 19.1
Calib. Ref.:	RAC161	Instrument ID	: T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLOROETHANE	ND	11	2.1
1,1,1-TRICHLOROETHANE	ND	11	2.1
1,1,2,2-TETRACHLOROETHANE	ND	11	2.1
1,1,2-TRICHLOROETHANE	ND	11	2.1
1,1-DICHLOROETHANE	ND	11	2.1
1,1-DICHLOROETHENE	ND	11	2.1
1,1-DICHLOROPROPENE	ND	21	2.1
1,2,3-TRICHLOROBENZENE	ND	11	2.1
1,2,3-TRICHLOROPROPANE	ND	11	2.1
1,2,4-TRICHLOROBENZENE	ND	11	2.1
1,2,4-TRIMETHYLBENZENE	ND	11	2.1
1,2-DIBROMO-3-CHLOROPROPANE	ND	21	2.1
1,2-DIBROMOETHANE	ND	11	2.1
1,2-DICHLOROBENZENE	ND	11	2.1
1,2-DICHLOROETHANE	ND	11	2.1
1,2-DICHLOROPROPANE	ND	11	2.1
1,3,5-TRIMETHYLBENZENE	ND	11	2.1
1,3-DICHLOROBENZENE	ND	11	2.1
1,3-DICHLOROPROPANE	ND	11	2.1
1,4-DICHLOROBENZENE	ND	11	2.1
2,2-DICHLOROPROPANE	ND	11	2.1
2-BUTANONE	ND	110	3.3
2-CHLOROTOLUENE	ND	11	2.1
2-HEXANONE	ND	21	3.3
4-CHLOROTOLUENE	ND	11	2.1
4-METHYL-2-PENTANONE	ND	21	3.3
ACETONE	15J	21	3.3
BENZENE	ND	11	2.1
BROMOBENZENE	ND	11	2.1
BROMOCHLOROMETHANE	ND	11	2.1
BROMODICHLOROMETHANE	ND	11	2.1
BROMOFORM	ND	11	2.1
BROMOMETHANE	ND	21	2.1
CARBON DISULFIDE	4.9J	11	2.1
CARBON TETRACHLORIDE	ND	11	2.1
CHLOROBENZENE	ND	11	2.1
DIBROMOCHLOROMETHANE	ND	11	2.1
CHLOROETHANE	ND	21	2.1
CHLOROFORM	ND	11	2.1
CHLOROMETHANE	ND	21	2.1
CIS-1,2-DICHLOROETHENE	ND	11	2.1
CIS-1,3-DICHLOROPROPENE	ND	11	2.1
DIBROMOMETHANE	ND	11	2.1
DICHLORODIFLUOROMETHANE	ND	11	2.1
DIPE	ND	53	2.1
ETBE	ND	53	2.1
ETHYLBENZENE	ND	11	2.1
HEXACHLOROBUTADIENE	ND	11	2.1
IODOMETHANE	ND	11	2.1
ISOPROPYLBENZENE	ND	11	2.1
METHYLENE CHLORIDE	ND	21	2.1
MTBE	ND	11	2.1
M/P-XYLENES	ND	21	2.1
NAPHTHALENE	ND	53	2.1
N-BUTYLBENZENE	ND	11	2.1
O-XYLENE	ND	11	2.1
P-ISOPROPYLTOLUENE	ND	11	2.1
SEC-BUTYLBENZENE	10J	11	2.1
STYRENE	ND	11	2.1
TAME	ND	53	2.1
TERT-BUTYLBENZENE	ND	11	2.1
TETRACHLOROETHENE	ND	11	2.1
TOLUENE	ND	11	2.1
TRANS-1,2-DICHLOROETHENE	ND	11	2.1
TRANS-1,3-DICHLOROPROPENE	ND	11	2.1
TRICHLOROETHENE	ND	11	2.1
TRICHLOROFLUOROMETHANE	ND	11	2.1
VINYL ACETATE	ND	53	2.1
VINYL CHLORIDE	ND	11	2.1
FREON113	ND	42	2.1
N-PROPYLBENZENE	ND	11	2.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	98	70-130
TOLUENE-D8	103	70-130
BROMOFLUOROBENZENE	165*	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2004

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 14:46
Sample ID:	B1N 2209	Date Analyzed:	01/13/06 14:46
Lab Samp ID:	A038-01R	Dilution Factor:	.85
Lab File ID:	RAC248	Matrix	: SOIL
Ext Btch ID:	V067A20	% Moisture	: 19.1
Calib. Ref.:	RAC161	Instrument ID	: T-067

Number of TIC : 5

PARAMETERS	RESULTS (ug/kg)	RTIME min	Q Value
NAPHTHALENE, DECAHYDRO-, TRANS-	720J	21.92	96
TRANS-DECALIN, 2-METHYL-	430J	23.44	94
NAPHTHALENE, DECAHYDRO-2-METHYL-	480J	24.11	90
DODECANE, 6-METHYL-	420J	24.34	90
CYCLOHEXANE, 2-BUTYL-1,1,3-TRIMETHYL-	280J	26.09	90

2005

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 15:54
Sample ID:	B1N 2206	Date Analyzed:	01/13/06 15:54
b Samp ID:	A038-03R	Dilution Factor:	.89
a File ID:	RAC250	Matrix	: SOIL
xt Btch ID:	VG67A20	% Moisture	: 21.8
Calib. Ref.:	RAC161	Instrument ID	: T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLOROETHANE	ND	11	2.3
1,1,1-TRICHLOROETHANE	ND	11	2.3
1,1,2,2-TETRACHLOROETHANE	ND	11	2.3
1,1,2-TRICHLOROETHANE	ND	11	2.3
1,1-DICHLOROETHANE	ND	11	2.3
1,1-DICHLOROETHENE	ND	11	2.3
1,1-DICHLOROPROPENE	ND	23	2.3
1,2,3-TRICHLOROBENZENE	ND	11	2.3
1,2,3-TRICHLOROPROPANE	ND	11	2.3
1,2,4-TRICHLOROBENZENE	ND	11	2.3
1,2,4-TRIMETHYLBENZENE	97	11	2.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	23	2.3
1,2-DIBROMOETHANE	ND	11	2.3
1,2-DICHLOROBENZENE	ND	11	2.3
1,2-DICHLOROETHANE	ND	11	2.3
1,2-DICHLOROPROPANE	ND	11	2.3
1,3,5-TRIMETHYLBENZENE	15	11	2.3
1,3-DICHLOROBENZENE	ND	11	2.3
1,3-DICHLOROPROPANE	ND	11	2.3
1,4-DICHLOROBENZENE	ND	11	2.3
2,2-DICHLOROPROPANE	ND	11	2.3
2-BUTANONE	ND	110	2.3
2-CHLOROTOLUENE	ND	11	2.3
2-HEXANONE	ND	23	2.3
4-CHLOROTOLUENE	ND	11	2.3
4-METHYL-2-PENTANONE	ND	23	2.3
ACETONE	23	23	2.3
BENZENE	ND	11	2.3
BROMOBENZENE	ND	11	2.3
BROMOCHLOROMETHANE	ND	11	2.3
BROMODICHLOROMETHANE	ND	11	2.3
BROMOFORM	ND	11	2.3
BROMOMETHANE	ND	23	2.3
CARBON DISULFIDE	ND	11	2.3
CARBON TETRACHLORIDE	ND	11	2.3
CHLOROBENZENE	ND	11	2.3
DIBROMOCHLOROMETHANE	ND	11	2.3
CHLOROETHANE	ND	23	2.3
CHLOROFORM	ND	11	2.3
CHLOROMETHANE	ND	23	2.3
CIS-1,2-DICHLOROETHENE	ND	11	2.3
CIS-1,3-DICHLOROPROPENE	ND	11	2.3
DIBROMOMETHANE	ND	11	2.3
DICHLORODIFLUOROMETHANE	ND	11	2.3
DIPE	ND	57	2.3
ETBE	ND	57	2.3
ETHYLBENZENE	3.8J	11	2.3
HEXACHLOROBUTADIENE	ND	11	2.3
IODOMETHANE	ND	11	2.3
ISOPROPYLBENZENE	39	11	2.3
METHYLENE CHLORIDE	ND	23	2.3
MTBE	ND	11	2.3
M/P-XYLENES	29	23	2.3
NAPHTHALENE	11J	23	2.3
N-BUTYLBENZENE	50	11	2.3
O-XYLENE	9.2J	11	2.3
P-ISOPROPYLTOLUENE	13	11	2.3
SEC-BUTYLBENZENE	50	11	2.3
STYRENE	ND	11	2.3
TAME	ND	57	2.3
TERT-BUTYLBENZENE	5.6J	11	2.3
TETRACHLOROETHENE	ND	11	2.3
TOLUENE	ND	11	2.3
TRANS-1,2-DICHLOROETHENE	ND	11	2.3
TRANS-1,3-DICHLOROPROPENE	ND	11	2.3
TRICHLOROETHENE	ND	11	2.3
TRICHLOROFLUOROMETHANE	ND	11	2.3
VINYL ACETATE	ND	57	2.3
VINYL CHLORIDE	ND	11	2.3
FREON113	ND	46	2.3
N-PROPYLBENZENE	80	11	2.3

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	70-130
TOLUENE-D8	103	70-130
BROMOFLUOROBENZENE	194*	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2008

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 15:54
Sample ID:	BIN 2206	Date Analyzed:	01/13/06 15:54
Lab Samp ID:	A038-03R	Dilution Factor:	.89
Lab File ID:	RAC250	Matrix	: SOIL
Ext Btch ID:	V067A20	% Moisture	: 21.8
Calib. Ref.:	RAC161	Instrument ID	: T-067

Number of TIC : 5

PARAMETERS	RESULTS (ug/kg)	RTTIME min	Q Value
CYCLOHEXANE, METHYL-	180J	10.62	96
CYCLOHEXANE, BUTYL-	290J	20.14	90
NAPHTHALENE, DECAHYDRO-, TRANS-	250J	21.91	98
CYCLOHEXANE, PENTYL-	290J	23.28	87
NAPHTHALENE, DECAHYDRO-2-METHYL-	370J	24.11	97

2009

SW3550B/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID:	BIN 2209	Date Analyzed:	01/13/06 21:00
Lab Samp ID:	A038-01	Dilution Factor:	1
Lab File ID:	SA12115A	Matrix :	SOIL
Ext Btch ID:	60A010S	% Moisture :	19.1
Calib. Ref.:	SA12113A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
PCB-1016	(ND) | ND	.25	.025 | .025
PCB-1221	(ND) | ND	.25	.025 | .025
PCB-1232	(ND) | ND	.25	.025 | .025
PCB-1242	(ND) | ND	.25	.025 | .025
PCB-1248	(ND) | ND	.25	.025 | .025
PCB-1254	(ND) | ND	.25	.025 | .025
PCB-1260	(ND) | ND	.25	.025 | .025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(97) | 94	40-140
DECACHLOROBIPHENYL	(93) | 92	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

SW35508/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID:	BIN 2206	Date Analyzed:	01/17/06 14:26
Lab Samp ID:	A038-03	Dilution Factor:	1
Lab File ID:	SA17011A	Matrix :	SOIL
Ext Btch ID:	60A010S	% Moisture :	21.8
Calib. Ref.:	SA17002A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)		PQL (mg/kg)	MDL (mg/kg)	
PCB-1016	(ND)	ND	.26	.026	.026
PCB-1221	(ND)	ND	.26	.026	.026
PCB-1232	(ND)	ND	.26	.026	.026
PCB-1242	(ND)	ND	.26	.026	.026
PCB-1248	(ND)	ND	.26	.026	.026
PCB-1254	(.25J)	.25J	.26	.026	.026
PCB-1260	.075J	(.076J)	.26	.026	.026

SURROGATE PARAMETERS	% RECOVERY		QC LIMIT
TETRACHLORD-M-XYLENE	88	(95)	40-140
DECACHLOROBIPHENYL	(86)	84	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

Calib. Ref. for PCB-1254: SA17003A

SW3050B/6010B
METALS BY ICP

ient	: BROWN & CALDWELL	Date Collected:	01/09/06
oject	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 2209	Date Analyzed:	01/17/06 20:51
Lab Samp ID:	A038-01	Dilution Factor:	1
Lab File ID:	I07A014038	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	19.1
Calib. Ref.:	I07A014034	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	27.5	2.06	.618
Nickel	17.5	2.06	.566
Zinc	110	1.03	.309

7004

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 2209	Date Analyzed:	01/17/06 20:42
Lab Samp ID:	A038-01	Dilution Factor:	1
Lab File ID:	I31A012038	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	19.1
Calib. Ref.:	I31A012034	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.304J	.515	.0379
Lead	19.1	1.03	.179

7005

SW3050B/6010B
METALS BY ICP

ient	: BROWN & CALDWELL	Date Collected:	01/09/06
ject	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 2206	Date Analyzed:	01/17/06 21:00
Lab Samp ID:	A038-03	Dilution Factor:	1
Lab File ID:	I07A014040	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	21.8
Calib. Ref.:	I07A014034	Instrument ID :	ENAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	37.7	2.13	.639
Nickel	34.4	2.13	.586
Zinc	83.9	1.07	.32

7008

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 2206	Date Analyzed:	01/17/06 20:55
Lab Samp ID:	A038-03	Dilution Factor:	1
Lab File ID:	I31A012040	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	21.8
Calib. Ref.:	I31A012034	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.179J	.533	.0393
Lead	13.5	1.07	.185

7009

Profile Number: _____
Expiration Date: _____

WASTE PROFILE SHEET
TERMS & CONDITIONS

Service Agreement on File? ☐ Yes ☐ No

This form is to be used to comply with the requirements of governmental waste screening criteria.

Profile Addendum Attached? ☐ Yes ☐ No

A. Waste Generator Information

1. Generator/Site Name: US Army Corps of Engineers
2. SIC Code: _____
3. Site Address: 940 Tyler St.
4. Site City: Benicia
5. Site State: CA 7. Zip Code: 94510
6. Site County: Solano
8. Generator USEPA/Federal ID#: CAC000598589
9. Site Phone: (916) 551-6703 Martin Fahning - USACE
10. Customer Name: Philip Transportation & Remediation
11. Customer Phone: 800 321-1080
12. Customer Contact: Denny McElvaine
13. Customer FAX: 408 683-0485

B. Waste Stream and Billing Information

1. Waste Description: Soil From UST/Boiler Excavation
3. Billing Address: P.O. Box 150 San Martin CA 95046
2. State Waste Code: _____
4. Process Generating Waste: Excavation of Soil from around a Diesel Tank.
5. Transporter/Transfer Station: PTR
6. Shipping Method: Bins
7. Estimated Quantity (Weight & Vol.): 70-80 c.y. , est. 100 Tons per ☒ Job ☐ Year ☐ Other
8. Delivery Date(s): TBD

Personal Protective Equipment Requirements: Protective Clothing & Eyewear.

10. Is this a US Dept. of Transportation (USDOT) Hazardous Material? ☐ Yes ☒ No (If no, skip 10, 11 and 12)
11. Reportable Quantity: N/A
12. Hazard Class / I.D. #: N/A
13. Shipping Name: N/A

☒ Check if additional information is attached. Indicate the number of attached pages: 24

C. Generator's Certification (Please check appropriate responses, sign and date reverse side)

	Yes	No	
1. Is the waste represented by this waste profile sheet a "Hazardous Waste" as defined by USEPA, Canadian, Mexican, State, or Provincial regulation?	☐	☒	
2. Does the waste represented by this waste profile sheet contain regulated radioactive material or regulated concentrations of Polychlorinated Biphenyls (PCBs)?	☐	☒	
3. Does this waste profile sheet and all attachments contain true and accurate descriptions of the waste material?	☒	☐	
4. Has all relevant information within the possession of the Generator and Customer regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?	☒	☐	
5. Is the analytical data attached hereto derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules?	☒	☐	☐ N/A
6. Will all changes that occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?	☒	☐	
7. Is this waste from a CERCLA site?	☐	☒	

D. WM Management's Decision

1. Management Method: _____
2. Designated Facility: _____
3. Hours of acceptance: _____ ☐ N/A
4. Precautions, Special Handling Procedures, or Limitations on Approval: _____

Generic Approval: ☐ Yes ☐ No Special Waste Decision: ☐ Approved ☐ Disapproved

Sales Person: _____ Date: _____ Technical Manager: _____ Date: _____

GENERATOR AND CUSTOMER MUST READ AND SIGN REVERSE HEREOF INITIAL _____

TERMS AND CONDITIONS

1. **ACCEPTABLE WASTE.** Customer shall deliver and Company shall accept for disposal or other management purpose only Acceptable Waste. As used herein, "Customer" shall mean both Customer and Generator listed on the reverse hereof. Customer shall deliver the full quantity of Acceptable Waste generated and/or handled by Customer as estimated on the reverse hereof. Acceptable Waste means and includes only such waste as is described on the reverse and which is approved and permitted for management at the Designated Facility listed on the reverse, and shall not include any Nonconforming Waste. As used herein, Nonconforming Waste means waste that: (a) is not in conformance with the description and/or estimated quantity of the waste set forth on the reverse; (b) is or contains any infectious waste, or radioactive, volatile, corrosive, highly flammable, explosive, biomedical, biohazardous material or hazardous, dangerous, or toxic substances, as defined pursuant to or listed or regulated under applicable federal, state or local law, except as stated on the reverse; or (c) is prohibited from being received, managed or disposed of at the Designated Facility by federal, state or local law, regulation, rule, code, ordinance, order, permit or permit condition;

2. **REPRESENTATIONS & WARRANTIES.** Customer represents and warrants that: (a) the description of the waste set forth on the reverse hereof is true and correct in all material respects; (b) all waste delivered to the Designated Facility by Customer shall be Acceptable Waste as defined above and shall not be or contain Nonconforming Waste; (c) Customer shall, and shall cause any carrier with which it contracts to, handle and transport the waste in a safe and workmanlike manner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations; and (d) Customer has advised its drivers of Company's prohibition on delivery of Nonconforming Waste, of the definitions and listing of hazardous waste and hazardous substances under applicable federal and state law and regulations and of the definition of Acceptable Waste herein. Company represents and warrants that it shall manage the Acceptable Waste in a safe and workmanlike manner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations.

3. **WASTE REJECTION.** Company may inspect, analyze or test any waste delivered by Customer and/or may reject, return or revoke acceptance of any waste if, in the opinion of Company, the waste or tender of delivery fails to conform to or Customer fails to comply with the terms of this Agreement, including by delivery of Nonconforming Waste. Company may also reject any waste which (a) Company reasonably believes would, as a result of or upon disposal or other management, be a violation of local, state or federal law, regulation, ordinance or permits, including land use restrictions or conditions applicable to the Designated Facility; or (b) in Company's opinion would present a significant risk to human health or the environment, cause a nuisance or otherwise create or expose Company or Customer to potential liability. Company also shall have the right to refuse to accept or to reject any Acceptable Waste in the event of Customer's failure to pay fees owed by Customer hereunder. In the event Company rejects or revokes acceptance of waste hereunder, Customer shall, at its sole cost, immediately remove or arrange to have the rejected waste removed from Company's control or property. Customer shall pay and/or reimburse Company for any and all costs, damages and/or fines incurred as a result of or relating to Customer's tender or delivery of Nonconforming Waste or other failure to comply or conform to this Agreement, including costs of inspection, testing and analysis.

4. **SPECIAL HANDLING; TITLE.** If Company elects, in its sole discretion, to handle, rather than reject, Nonconforming Waste, Company shall have the right to manage such Nonconforming Waste in the manner deemed most appropriate by Company given the characteristics of the Nonconforming Waste. Company may assess and Customer shall pay additional fees associated with delivery of Nonconforming Waste, including, but not limited to, special handling or disposal charges, and costs associated with different quantities of waste, different delivery dates, modifications in operations, specialized equipment, and other operational, environmental, health, safety or regulatory requirements. Title to and ownership of Acceptable Waste shall transfer to Company upon its final acceptance of Acceptable Waste. Title to, ownership of and liability for Nonconforming Waste shall at all times remain with Customer. Revocation of acceptance by Company shall operate to re-vest all incidents of ownership in Customer.

5. **INDEMNITY.** Each party hereto (the "Indemnitor") hereby agrees to indemnify, hold harmless and defend the other party, and its owners, officers, directors, employees and agents (collectively, the "Indemnitees"), from and against any and all liabilities, penalties, fines, forfeitures, fees, demands, claims, causes of action, suits, judgments and costs and expenses incidental thereto, including attorneys' fees (collectively, "Damages"), which any or all of the Indemnitees may hereafter suffer, incur, be responsible for or pay out, including for personal injuries, property damage, or contamination of or adverse effects on the environment, to the extent caused by, or arising from or in connection with the breach of any representations or warranties of the Indemnitor set forth in this Agreement, or any negligent actions or omissions or willful misconduct of the Indemnitor, its employees, officers, owners, directors or agents, or the violation of any law, ordinance or regulation, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq., as amended. Such indemnity shall exclude Damages to the extent they arise as a result of any negligent actions or omissions or willful misconduct of the Indemnitees or their employees, officers, owners, directors or agents. The indemnification obligation hereunder shall arise only in excess of any available and collectible insurance proceeds and the Indemnitor shall be liable hereunder to pay only its share of the amount of Damages, if any, that exceeds the total amount that all insurance has paid for the Damages, plus the total of all deductible and self-insured expenses paid under all insurance policies. The obligations in this Section 5 shall survive the performance and termination of this Agreement.

6. **UNCONTROLLABLE CIRCUMSTANCES; TERMINATION.** Except for the obligation to pay fees hereunder, the performance of this Agreement may be discontinued or temporarily suspended by either party, and neither party shall be deemed to be in breach of this Agreement, in the event performance is prevented by a cause or causes beyond the reasonable control of the affected party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood or sabotage, governmental laws (including nuisance), permit conditions, regulations, restrictions (including land use), condition of the waste, injunction or actions or omissions of third party transporters or other contractors, suppliers or vendors. Company may immediately terminate management services hereunder upon written notice to Customer in the event Customer breaches any term, provision or obligation under this Agreement, in which case, Customer shall be liable for and shall pay to Company all costs and losses incurred by Company as a result of or relating to any such termination.

7. **MISCELLANEOUS.** This Agreement shall be governed by the laws of the state in which the Designated Facility is located. Every provision of this Agreement shall be severable. This Agreement represents the entire understanding and Agreement between the parties relating to the management of waste, except that, if the parties, or their parent companies, are parties to a national service agreement, the terms of such national service agreement shall govern over any inconsistent terms in this Agreement. No representations, statements or Agreements, unless agreed to by the parties in writing, shall modify, change, amend or otherwise affect the obligations undertaken in this Agreement. No waiver by either party of any one or more defaults or breaches by the other in the performance of this Agreement shall operate or be construed as a waiver of any future defaults or breaches. Customer may not assign this Agreement without the prior written consent of Company. This Agreement shall be binding upon and shall inure to the benefit of the parties' successors and assigns.

THIS IS A LEGALLY BINDING CONTRACT. EACH UNDERSIGNED INDIVIDUAL ACKNOWLEDGES THAT HE/SHE HAS READ AND UNDERSTANDS THE TERMS AND CONDITIONS OF THIS AGREEMENT SET FORTH ABOVE AND ON THE REVERSE HEREOF AND THAT HE/SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF CUSTOMER/GENERATOR AND COMPANY. BY SIGNING BELOW, CUSTOMER AND GENERATOR INDICATE A FIRST HAND KNOWLEDGE OF THE WASTE'S CHARACTERISTICS AND CERTIFY THE TRUTH OF THE INFORMATION ON THE REVERSE HEREOF. AGREED TO AS OF THE DATES BELOW.

CUSTOMER:	GENERATOR:	COMPANY: ALTAMONT LANDFILL
[signature]	[signature] on-behalf-of-DoD	
(AUTHORIZED SIGNATURE)	(AUTHORIZED SIGNATURE)	(AUTHORIZED SIGNATURE)
Denny McElhaney Dept. Mgr.	Marjah Eshning Geologist	
(NAME, TITLE)	(NAME, TITLE)	(NAME, TITLE)

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD U6A4U35

COC No. 1 of 1

BE 000357

☒ 2701 Prospect Park Dr.
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal

PROJECT NUMBER: 129336-012

LABORATORY NAME & ADDRESS:
Emax
1835 W. 205th St. Torrance, CA 90501

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin 160	1/9/06	13:25	QT	1	2x6 55 sleeves	None	S	Metals (Cd, Cr, Pb, Ni, Zn) 6010 PCBs (8080)			Std	G	----	
02	Bin 160	1/9/06	13:25	QT	3	Encores	None	S	VOCs by 8260B			Std	G	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08									T=3.6°C					----	
09														----	
10														----	

COLLECTED & RELEASED BY:	DATE 1/9/06	TIME 15:00	COOLER I.D.:			COMMENTS (see note on back):	
RECEIVED BY:	DATE 1/10/06	TIME 9:00	RELINQUISHED BY:	DATE / /	TIME :		
RECORD RETURNED BY:	DATE / /	TIME :					
COURIER: FedEx			SHIPPING NUMBER: 3329 9904 4154				

DISTRIBUTION: WHITE-PROJECT FILE • CANARY-LAB RECEIPT • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS HARD. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL CHAIN OF CUSTODY RECORD 06A038 COC No. 1 of 1
BE 000 350

☒ 2701 Prospect Park Dr. Rancho Cordova, CA 95670 916-444-0123 / FAX 916-635-8805	☐ 9665 Chesapeake Dr. / Suite 201 San Diego, CA 92123 858-514-8822 / FAX 858-514-8833	☐ 201 N. Civic Dr. / Suite 115 Walnut Creek, CA 94596 925-937-9010 / FAX 925-937-9026	☐ 400 Exchange / Suite 100 Irvine, CA 92602 714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal
PROJECT NUMBER: 129336-012

LABORATORY NAME & ADDRESS:
Empax
1835 W. 205th Street, Torrance, CA 90501

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin B9	1/9/06	13:15	JZ	1	2x(5S sleeve	No	S	Metals (Cd, Cr, Pb, Ni, Zn) 6010 PCBs (8080)			std	6	----	
02	Bin B9	1/9/06	13:15	JZ	3	Encore	No	S	VOCs by 8260B			std	6	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09									TRIP BLK					----	
10														----	

COLLECTED & RELEASED BY: J. Zaleski	DATE 1/9/06	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: [signature]	DATE 1/10/06	TIME 9:45	RELINQUISHED BY:	DATE / /	TIME :	
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER: FedEx			SHIPPING NUMBER: 8329 9904 4154			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. 1 of 1

BE 000349

2701 Prospect Park Dr.
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal

PROJECT NUMBER: 123336-012

LABORATORY NAME & ADDRESS:

Eurofins

1835 W. 205th Street, Torrance, CA 90501

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC – REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin CT3	1/9/06	13:05	QL	1	2x6 55 sleeve	None	S	Metals (Cd, Cr, Pb, Ni, Zn) 6010 PCBs (8080)			Std	G	----	
02	Bin CT3	1/9/06	13:05	QL	3	Encore	None	S	VOCs by 8260B			Std	G	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09									T-35C					----	
10														----	

COLLECTED & RELEASED BY:	DATE: 1/9/06	TIME: 19:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE: 1/10/06	TIME: 9:45	RELINQUISHED BY:	DATE: / /	TIME: :	
RECORD RETURNED BY:	DATE: / /	TIME: :				
COURIER: Fed Ex			SHIPPING NUMBER: 8329 9904 4154			

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USE A BALLPOINT PEN, BLACK INK, AND PRESS HARD. INSTRUCTIONS ARE ON THE BACK

BROWN AN CALDWELL CHAIN OF CUSTOL RECORD 040088 COC No. 1 of 1
BE 000347

☒ 2701 Prospect Park Dr. Rancho Cordova, CA 95670 916-444-0123 / FAX 916-635-8805	☐ 9665 Chesapeake Dr. / Suite 201 San Diego, CA 92123 858-514-8822 / FAX 858-514-8833	☐ 201 N. Civic Dr. / Suite 115 Walnut Creek, CA 94596 925-937-9010 / FAX 925-937-9026	☐ 400 Exchange / Suite 100 Irvine, CA 92602 714-730-7600 / FAX 714-734-0940

PROJECT NAME: Benicia Arsenal
PROJECT NUMBER: 129336-012

LABORATORY NAME & ADDRESS:
Eurofins
1835 W. 205th St. Torrance, CA 90501

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC – REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN / END	PID READING (ppm)
01	Bin S232	1/4/06	12:45	QV	1	2x6 SS sleeve	None	S	Metals (Cd, Cu, Pb, Ni, Zn) 6010 PCBs 8080			STD	6	----	
02	Bin S232	1/4/06	12:45	QV	3	Encore	None	S	VOCs by 8260B			STD	6	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09									T-3.6°C					----	
10														----	

COLLECTED & RELEASED BY:	DATE 1/4/06	TIME 1800	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE 01/05/06	TIME 9:45	RELINQUISHED BY:	DATE / /	TIME :	
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER: FED EX			SHIPPING NUMBER: 9329 9904 4154			

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USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 15:20
Sample ID	: BIN S232	Date Analyzed:	01/13/06 15:20
Lab Samp ID	: A038-02R	Dilution Factor:	.83
Lab File ID	: RAC249	Matrix	: SOIL
Ext Btch ID	: V067A20	% Moisture	: 20.7
Calib. Ref.:	RAC161	Instrument ID	: T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLORDETHANE	ND	10	2.1
1,1,1-TRICHLOROETHANE	ND	10	2.1
1,1,2,2-TETRACHLOROETHANE	ND	10	2.1
1,1,2-TRICHLOROETHANE	ND	10	2.1
1,1-DICHLOROETHANE	ND	10	2.1
1,1-DICHLOROETHENE	ND	10	2.1
1,1-DICHLOROPROPENE	ND	21	2.1
1,2,3-TRICHLOROBENZENE	ND	10	2.1
1,2,3-TRICHLOROPROPANE	ND	10	2.1
1,2,4-TRICHLORDBENZENE	ND	10	2.1
1,2,4-TRIMETHYLBENZENE	ND	10	2.1
1,2-DIBROMO-3-CHLOROPROPANE	ND	21	2.1
1,2-DIBROMOETHANE	ND	10	2.1
1,2-DICHLOROBENZENE	ND	10	2.1
1,2-DICHLOROETHANE	ND	10	2.1
1,2-DICHLOROPROPANE	ND	10	2.1
1,3,5-TRIMETHYLBENZENE	ND	10	2.1
1,3-DICHLOROBENZENE	ND	10	2.1
1,3-DICHLOROPROPANE	ND	10	2.1
1,4-DICHLOROBENZENE	ND	10	2.1
2,2-DICHLOROPROPANE	ND	10	2.1
2-BUTANONE	ND	100	5.2
2-CHLOROTOLUENE	ND	10	2.1
2-HEXANONE	ND	21	5.2
4-CHLORDTOLUENE	ND	10	2.1
4-METHYL-2-PENTANONE	ND	21	5.2
ACETONE	15J	21	5.2
BENZENE	ND	10	2.1
BROMOBENZENE	ND	10	2.1
BROMOCHLOROMETHANE	ND	10	2.1
BROMODICHLOROMETHANE	ND	10	2.1
BROMOFORM	ND	10	2.1
BROMOMETHANE	ND	21	2.1
CARBON DISULFIDE	ND	10	2.1
CARBON TETRACHLORIDE	ND	10	2.1
CHLORDBENZENE	ND	10	2.1
DIBROMOCHLOROMETHANE	ND	10	2.1
CHLOROETHANE	ND	21	2.1
CHLOROFORM	ND	10	2.1
CHLOROMETHANE	ND	21	2.1
CIS-1,2-DICHLOROETHENE	ND	10	2.1
CIS-1,3-DICHLOROPROPENE	ND	10	2.1
DIBROMOMETHANE	ND	10	2.1
DICHLORODIFLUOROMETHANE	ND	10	2.1
DIPE	ND	52	2.1
ETBE	ND	52	2.1
ETHYLBENZENE	ND	10	2.1
HEXACHLOROBUTADIENE	ND	10	2.1
IODOMETHANE	ND	10	5.2
ISOPROPYLBENZENE	ND	10	2.1
METHYLENE CHLORIDE	ND	21	2.1
MTBE	ND	10	2.1
M/P-XYLENES	ND	21	2.1
NAPHTHALENE	ND	21	2.1
N-BUTYLBENZENE	5.1J	10	2.1
O-XYLENE	ND	10	2.1
P-ISOPROPYLTOLUENE	ND	10	2.1
SEC-BUTYLBENZENE	ND	10	2.1
STYRENE	ND	10	2.1
TAME	ND	52	2.1
TERT-BUTYLBENZENE	ND	10	2.1
TETRACHLOROETHENE	ND	10	2.1
TOLUENE	ND	10	2.1
TRANS-1,2-DICHLOROETHENE	ND	10	2.1
TRANS-1,3-DICHLOROPROPENE	ND	10	2.1
TRICHLOROETHENE	2.6J	10	2.1
TRICHLOROFLUOROMETHANE	ND	10	2.1
VINYL ACETATE	ND	52	2.1
VINYL CHLORIDE	ND	10	2.1
FREON113	ND	42	2.1
N-PROPYLBENZENE	ND	10	2.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	70-130
TOLUENE-D8	98	70-130
BROMOFLUOROBENZENE	105	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2006

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 15:20
Sample ID:	BIN S232	Date Analyzed:	01/13/06 15:20
Lab Samp ID:	A038-02R	Dilution Factor:	.83
Lab file ID:	RAC249	Matrix :	SOIL
Ext Btch ID:	VO67A20	% Moisture :	20.7
Calib. Ref.:	RAC161	Instrument ID :	T-067

Number of TIC : 3

PARAMETERS	RESULTS (ug/kg)	RTTIME min	Q Value
NAPHTHALENE, DECAHYDRO-, TRANS-	56J	21.91	98
TRANS-DECALIN, 2-METHYL-	35J	23.44	94
1-METHYLDECAHYDRONAPHTHALENE	42J	24.11	98

2007

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: D6A038	Date Extracted:	01/13/06 16:30
Sample ID	: BIN CT3	Date Analyzed:	01/13/06 16:30
Lab Samp ID	: A038-04R	Dilution Factor:	.88
Lab File ID	: RAC251	Matrix	: SOIL
Ext Btch ID	: V067A20	% Moisture	: 17.8
Calib. Ref.	: RAC161	Instrument ID	: T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLOROETHANE	ND	11	2.1
1,1,1-TRICHLORDETHANE	ND	11	2.1
1,1,2,2-TETRACHLOROETHANE	ND	11	2.1
1,1,2-TRICHLORDETHANE	ND	11	2.1
1,1-DICHLORDETHANE	ND	11	2.1
1,1-DICHLORDETHENE	ND	11	2.1
1,1-DICHLOROPROPENE	ND	21	2.1
1,2,3-TRICHLOROBENZENE	ND	11	2.1
1,2,3-TRICHLOROPROPANE	ND	11	2.1
1,2,4-TRICHLOROBENZENE	ND	11	2.1
1,2,4-TRIMETHYLBENZENE	100	11	2.1
1,2-DIBROMO-3-CHLOROPROPANE	ND	21	2.1
1,2-DIBROMOETHANE	ND	11	2.1
1,2-DICHLOROBENZENE	ND	11	2.1
1,2-DICHLORDETHANE	ND	11	2.1
1,2-DICHLOROPROPANE	ND	11	2.1
1,3,5-TRIMETHYLBENZENE	23	11	2.1
1,3-DICHLOROBENZENE	ND	11	2.1
1,3-DICHLOROPROPANE	ND	11	2.1
1,4-DICHLOROBENZENE	ND	11	2.1
2,2-DICHLOROPROPANE	ND	11	2.1
2-BUTANONE	ND	110	2.4
2-CHLOROTOLUENE	ND	11	2.1
2-HEXANONE	ND	21	2.4
4-CHLOROTOLUENE	ND	11	2.1
4-METHYL-2-PENTANONE	ND	21	2.4
ACETONE	27	21	2.4
BENZENE	ND	11	2.1
BROMOBENZENE	ND	11	2.1
BROMOCHLOROMETHANE	ND	11	2.1
BROMODICHLOROMETHANE	ND	11	2.1
BROMOFORM	ND	11	2.1
BROMOMETHANE	ND	21	2.1
CARBON DISULFIDE	2.2J	11	2.1
CARBON TETRACHLORIDE	ND	11	2.1
CHLOROBENZENE	ND	11	2.1
DIBROMOCHLOROMETHANE	ND	11	2.1
CHLORDETHANE	ND	21	2.1
CHLOROFORM	ND	11	2.1
CHLOROMETHANE	ND	21	2.1
CIS-1,2-DICHLORDETHENE	ND	11	2.1
CIS-1,3-DICHLOROPROPENE	ND	11	2.1
DIBROMOMETHANE	ND	11	2.1
DICHLORODIFLUOROMETHANE	ND	11	2.1
DIPE	ND	54	2.1
ETBE	ND	54	2.1
ETHYLBENZENE	4.4J	11	2.1
HEXACHLOROBUTADIENE	ND	11	2.1
IODOMETHANE	ND	11	2.4
ISOPROPYLBENZENE	48	11	2.1
METHYLENE CHLORIDE	ND	21	2.1
MTBE	ND	11	2.1
M/P-XYLENES	28	21	2.1
NAPHTHALENE	25	21	2.1
N-BUTYLBENZENE	91	11	2.1
O-XYLENE	12	11	2.1
P-ISOPROPYLTOLUENE	16	11	2.1
SEC-BUTYLBENZENE	81	11	2.1
STYRENE	ND	11	2.1
TAME	ND	54	2.1
TERT-BUTYLBENZENE	ND	11	2.1
TETRACHLOROETHENE	ND	11	2.1
TOLUENE	2.4J	11	2.1
TRANS-1,2-DICHLOROETHENE	ND	11	2.1
TRANS-1,3-DICHLOROPROPENE	ND	11	2.1
TRICHLOROETHENE	ND	11	2.1
TRICHLOROFLUOROMETHANE	ND	11	2.1
VINYL ACETATE	ND	54	2.1
VINYL CHLORIDE	ND	11	2.1
FREON113	ND	43	2.1
N-PROPYLBENZENE	100	11	2.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	70-130
TOLUENE-D8	105	70-130
BROMOFLUOROBENZENE	320*	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2010

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 16:30
Sample ID:	BIN CT3	Date Analyzed:	01/13/06 16:30
Lab Samp ID:	A038-04R	Dilution Factor:	.88
Lab File ID:	RAC251	Matrix	: SOIL
Ext Btch ID:	VO67A20	% Moisture	: 17.8
Calib. Ref.:	RAC161	Instrument ID	: T-067

Number of TIC : 7

PARAMETERS	RESULTS (ug/kg)	RTTIME min	Q Value
CYCLOPENTANE, METHYL-	58J	8.18	91
CYCLOHEXANE	68J	9.16	90
CYCLOHEXANE, METHYL-	160J	10.62	96
CYCLOHEXANE, 1,3-DIMETHYL-, CIS-	82J	12.05	94
CYCLOHEXANE, 1,1,3-TRIMETHYL-	45J	13.82	97
OCTANE, 3,6-DIMETHYL-	56J	15.97	95
NAPHTHALENE, DECAHYDRO-, TRANS-	54J	21.92	98

2011

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected	: 01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received	: 01/10/06
Batch No.	: D6A038	Date Extracted	: 01/13/06 17:06
Sample ID	: BIN 89	Date Analyzed	: 01/13/06 17:06
Lab Samp ID	: A038-05R	Dilution Factor	: .81
Lab File ID	: RAC252	Matrix	: SOIL
Ext Btch ID	: V067A20	% Moisture	: 15.7
Calib. Ref.	: RAC161	Instrument ID	: T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLOROETHANE	ND	9.6	1.9
1,1,1-TRICHLOROETHANE	ND	9.6	1.9
1,1,2,2-TETRACHLOROETHANE	ND	9.6	1.9
1,1,2-TRICHLOROETHANE	ND	9.6	1.9
1,1-DICHLOROETHANE	ND	9.6	1.9
1,1-DICHLOROETHENE	ND	9.6	1.9
1,1-DICHLOROPROPENE	ND	19	1.9
1,2,3-TRICHLOROBENZENE	ND	9.6	1.9
1,2,3-TRICHLOROPROPANE	ND	9.6	1.9
1,2,4-TRICHLOROBENZENE	ND	9.6	1.9
1,2,4-TRIMETHYLBENZENE	ND	9.6	1.9
1,2-DIBROMO-3-CHLOROPROPANE	ND	19	1.9
1,2-DIBROMOETHANE	ND	9.6	1.9
1,2-DICHLOROBENZENE	ND	9.6	1.9
1,2-DICHLOROETHANE	ND	9.6	1.9
1,2-DICHLOROPROPANE	ND	9.6	1.9
1,3,5-TRIMETHYLBENZENE	ND	9.6	1.9
1,3-DICHLOROBENZENE	ND	9.6	1.9
1,3-DICHLOROPROPANE	ND	9.6	1.9
1,4-DICHLOROBENZENE	ND	9.6	1.9
2,2-DICHLOROPROPANE	ND	9.6	1.9
2-BUTANONE	ND	96	4.8
2-CHLOROTOLUENE	ND	9.6	1.9
2-HEXANONE	ND	19	4.8
4-CHLOROTOLUENE	ND	9.6	1.9
4-METHYL-2-PENTANONE	ND	19	4.8
ACETONE	12J	19	4.8
BENZENE	ND	9.6	1.9
BROMOBENZENE	ND	9.6	1.9
BROMOCHLOROMETHANE	ND	9.6	1.9
BROMODICHLOROMETHANE	ND	9.6	1.9
BROMOFORM	ND	9.6	1.9
BROMOMETHANE	ND	19	1.9
CARBON DISULFIDE	ND	9.6	1.9
CARBON TETRACHLORIDE	ND	9.6	1.9
CHLOROBENZENE	ND	9.6	1.9
DIBROMOCHLOROMETHANE	ND	9.6	1.9
CHLOROETHANE	ND	19	1.9
CHLOROFORM	ND	9.6	1.9
CHLOROMETHANE	ND	19	1.9
CIS-1,2-DICHLOROETHENE	ND	9.6	1.9
CIS-1,3-DICHLOROPROPENE	ND	9.6	1.9
DIBROMOMETHANE	ND	9.6	1.9
DICHLORODIFLUOROMETHANE	ND	9.6	1.9
DIPE	ND	48	1.9
ETBE	ND	48	1.9
ETHYLBENZENE	ND	9.6	1.9
HEXACHLOROBUTADIENE	ND	9.6	1.9
IODOMETHANE	ND	9.6	4.8
ISOPROPYLBENZENE	ND	9.6	1.9
METHYLENE CHLORIDE	ND	19	1.9
MTBE	ND	9.6	1.9
M/P-XYLENES	ND	19	1.9
NAPHTHALENE	4.9J	19	1.9
N-BUTYLBENZENE	5.3J	9.6	1.9
O-XYLENE	ND	9.6	1.9
P-ISOPROPYLTOLUENE	3.1J	9.6	1.9
SEC-BUTYLBENZENE	ND	9.6	1.9
STYRENE	ND	9.6	1.9
TAME	ND	48	1.9
TERT-BUTYLBENZENE	ND	9.6	1.9
TETRACHLOROETHENE	ND	9.6	1.9
TOLUENE	ND	9.6	1.9
TRANS-1,2-DICHLOROETHENE	ND	9.6	1.9
TRANS-1,3-DICHLOROPROPENE	ND	9.6	1.9
TRICHLOROETHENE	ND	9.6	1.9
TRICHLOROFLUOROMETHANE	ND	9.6	1.9
VINYL ACETATE	ND	48	1.9
VINYL CHLORIDE	ND	9.6	1.9
FREON113	ND	38	1.9
N-PROPYLBENZENE	ND	9.6	1.9

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	70-130
TOLUENE-D8	101	70-130
BROMOFLUOROBENZENE	103	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2012

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 17:06
Sample ID:	B1N B9	Date Analyzed:	01/13/06 17:06
Lab Samp ID:	A038-05R	Dilution Factor:	.81
Lab File ID:	RAC252	Matrix	: SOIL
Ext Btch ID:	V067A20	% Moisture	: 15.7
Calib. Ref.:	RAC161	Instrument ID	: T-067

Number of TIC : 4

PARAMETERS	RESULTS (ug/kg)	RTTIME min	Q Value
CYCLOHEXANE, BUTYL-	12J	20.14	90
1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	12J	20.88	90
NAPHTHALENE, DECAHYDRO-, TRANS-	51J	21.91	98
1-METHYLDECAHYDRONAPHTHALENE	27J	24.11	98

2013

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client : BROWN & CALDWELL	Date Collected: 01/09/06
Project : FORMER BENICIA ARSENAL	Date Received: 01/10/06
Batch No. : 06A038	Date Extracted: 01/13/06 17:41
Sample ID: BIN 160	Date Analyzed: 01/13/06 17:41
Lab Samp ID: A038-06R	Dilution Factor: .83
Lab File ID: RAC253	Matrix : SOIL
Ext Btch ID: VO67A20	% Moisture : 21.3
Calib. Ref.: RAC161	Instrument ID : T-067

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)	MDL (ug/kg)
1,1,1,2-TETRACHLOROETHANE	ND	11	2.1
1,1,1-TRICHLOROETHANE	ND	11	2.1
1,1,2,2-TETRACHLOROETHANE	ND	11	2.1
1,1,2-TRICHLOROETHANE	ND	11	2.1
1,1-DICHLOROETHANE	ND	11	2.1
1,1-DICHLOROETHENE	ND	11	2.1
1,1-DICHLOROPROPENE	ND	11	2.1
1,2,3-TRICHLOROBENZENE	ND	21	2.1
1,2,3-TRICHLOROPROPANE	ND	11	2.1
1,2,4-TRICHLOROBENZENE	ND	11	2.1
1,2,4-TRIMETHYLBENZENE	11	11	2.1
1,2-DIBROMO-3-CHLOROPROPANE	ND	53	2.1
1,2-DIBROMOETHANE	ND	11	2.1
1,2-DICHLOROBENZENE	ND	11	2.1
1,2-DICHLOROETHANE	ND	11	2.1
1,2-DICHLOROPROPANE	ND	11	2.1
1,3,5-TRIMETHYLBENZENE	2.3J	11	2.1
1,3-DICHLOROBENZENE	ND	11	2.1
1,3-DICHLOROPROPANE	ND	11	2.1
1,4-DICHLOROBENZENE	ND	11	2.1
2,2-DICHLOROPROPANE	ND	11	2.1
2-BUTANONE	ND	110	53
2-CHLOROTOLUENE	ND	11	2.1
2-HEXANONE	ND	21	11
4-CHLOROTOLUENE	ND	11	2.1
4-METHYL-2-PENTANONE	ND	21	11
ACETONE	26	21	11
BENZENE	ND	11	2.1
BROMOBENZENE	ND	11	2.1
BROMOCHLOROMETHANE	ND	11	2.1
BROMODICHLOROMETHANE	ND	11	2.1
BROMOFORM	ND	11	2.1
BROMOMETHANE	ND	21	11
CARBON DISULFIDE	ND	11	2.1
CARBON TETRACHLORIDE	ND	11	2.1
CHLOROBENZENE	ND	11	2.1
DIBROMOCHLOROMETHANE	ND	11	2.1
CHLOROETHANE	ND	21	11
CHLOROFORM	ND	11	2.1
CHLOROMETHANE	ND	21	11
CIS-1,2-DICHLOROETHENE	ND	11	2.1
CIS-1,3-DICHLOROPROPENE	ND	11	2.1
DIBROMOMETHANE	ND	11	2.1
DICHLORODIFLUOROMETHANE	ND	11	2.1
DIPE	ND	53	2.1
ETBE	ND	53	2.1
ETHYLBENZENE	ND	11	2.1
HEXACHLOROBUTADIENE	ND	11	2.1
IODOMETHANE	ND	11	2.1
ISOPROPYLBENZENE	4.4J	11	2.1
METHYLENE CHLORIDE	ND	21	11
MTBE	ND	11	2.1
M/P-XYLENES	4.1J	21	2.1
NAPHTHALENE	9.1J	53	2.1
N-BUTYLBENZENE	13	21	11
O-XYLENE	ND	11	2.1
P-ISOPROPYLTOLUENE	4.8J	11	2.1
SEC-BUTYLBENZENE	7.7J	11	2.1
STYRENE	ND	11	2.1
TAME	ND	53	2.1
TERT-BUTYLBENZENE	ND	11	2.1
TETRACHLOROETHENE	ND	11	2.1
TOLUENE	ND	11	2.1
TRANS-1,2-DICHLOROETHENE	ND	11	2.1
TRANS-1,3-DICHLOROPROPENE	ND	11	2.1
TRICHLOROETHENE	ND	11	2.1
TRICHLOROFLUOROMETHANE	ND	11	2.1
VINYL ACETATE	ND	53	2.1
VINYL CHLORIDE	ND	11	2.1
FREON113	ND	42	2.1
N-PROPYLBENZENE	9.5J	11	2.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	70-130
TOLUENE-D8	101	70-130
BROMOFLUOROBENZENE	121	70-130

PQL: Practical Quantitation Limit
Preservation Date: 01/10/06 16:00

2014

SW5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/13/06 17:41
Sample ID:	BIN 160	Date Analyzed:	01/13/06 17:41
Lab Samp ID:	A038-06R	Dilution Factor:	.83
Lab File ID:	RAC253	Matrix	: SOIL
Ext Btch ID:	VO67A20	% Moisture	: 21.3
Calib. Ref.:	RAC161	Instrument ID	: T-067

Number of TIC : 6 PARAMETERS	RESULTS (ug/kg)	RTTIME min	Q Value
NAPHTHALENE, DECAHYDRO-, TRANS-	420J	21.91	98
CYCLOHEXANE, PENTYL-	250J	23.28	87
TRANS-DECALIN, 2-METHYL-	280J	23.45	86
NAPHTHALENE, DECAHYDRO-2-METHYL-	350J	24.12	98
UNDECANE, 2,6-DIMETHYL-	290J	24.34	95
DODECANE, 2,6,10-TRIMETHYL-	230J	28.75	91

2015

SW3550B/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID:	BIN S232	Date Analyzed:	01/17/06 14:01
Lab Samp ID:	A038-02	Dilution Factor:	1
Lab File ID:	SA17010A	Matrix :	SOIL
Ext Btch ID:	60A010S	% Moisture :	20.7
Calib. Ref.:	SA17002A	Instrument ID :	GCT00B

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
PCB-1016	(ND) | ND	.25	.025 | .025
PCB-1221	(ND) | ND	.25	.025 | .025
PCB-1232	(ND) | ND	.25	.025 | .025
PCB-1242	(ND) | ND	.25	.025 | .025
PCB-1248	(ND) | ND	.25	.025 | .025
PCB-1254	(ND) | ND	.25	.025 | .025
PCB-1260	(ND) | ND	.25	.025 | .025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	88 | (89)	40-140
DECACHLOROBIPHENYL	(91) | 85	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

SW3550B/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID:	BIN CT3	Date Analyzed:	01/17/06 14:51
Lab Samp ID:	A038-04	Dilution Factor:	1
Lab File ID:	SA17012A	Matrix :	SOIL
Ext Btch ID:	60A010S	% Moisture :	17.8
Calib. Ref.:	SA17002A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
PCB-1016	(ND) | ND	.24	.024 | .024
PCB-1221	(ND) | ND	.24	.024 | .024
PCB-1232	(ND) | ND	.24	.024 | .024
PCB-1242	(ND) | ND	.24	.024 | .024
PCB-1248	(ND) | ND	.24	.024 | .024
PCB-1254	(.33) | .33	.24	.024 | .024
PCB-1260	(.11J) | .11J	.24	.024 | .024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	94 | (105)	40-140
DECACHLOROBIPHENYL	(89) | 88	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

Calib. Ref. for PCB-1254: SA17003A

SW3550B/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID:	BIN 89DL	Date Analyzed:	01/17/06 19:31
Lab Samp ID:	A03B-05T	Dilution Factor:	2
Lab File ID:	SA17023A	Matrix	: SOIL
Ext Btch ID:	60A010S	% Moisture	: 15.7
Calib. Ref.:	SA17015A	Instrument ID	: GCT008

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
PCB-1016	(ND) | ND	.47	.047 | .047
PCB-1221	(ND) | ND	.47	.047 | .047
PCB-1232	(ND) | ND	.47	.047 | .047
PCB-1242	(ND) | ND	.47	.047 | .047
PCB-1248	(ND) | ND	.47	.047 | .047
PCB-1254	(.66) | .66	.47	.047 | .047
PCB-1260	(.26J) | .25J	.47	.047 | .047

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	50 | (51)	40-140
DECACHLOROBIPHENYL	(54) | 53	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

Calib. Ref. for PCB-1254: SA17016A

SW3550B/8082
PCBs

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038	Date Extracted:	01/11/06 13:30
Sample ID	: BIN 160DL	Date Analyzed:	01/17/06 19:56
Lab Samp ID	: A038-06T	Dilution Factor:	2
Lab File ID	: SA17024A	Matrix :	SOIL
Ext Btch ID	: 60A010S	% Moisture :	21.3
Calib. Ref.	: SA17015A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
PCB-1016	(ND) | ND	.51	.051 | .051
PCB-1221	(ND) | ND	.51	.051 | .051
PCB-1232	(ND) | ND	.51	.051 | .051
PCB-1242	(ND) | ND	.51	.051 | .051
PCB-1248	(ND) | ND	.51	.051 | .051
PCB-1254	(.59) | .58	.51	.051 | .051
PCB-1260	.19J | (.2J)	.51	.051 | .051

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	46 | (53)	40-140
DECACHLOROBIPHENYL	(46) | 46	40-140

PQL: Practical Quantitation Limit
Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

Calib. Ref. for PCB-1254: SA17016A

SW3050B/6010B
METALS BY ICP

ient	: BROWN & CALDWELL	Date Collected:	01/09/06
oject	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN S232	Date Analyzed:	01/17/06 20:55
Lab Samp ID:	A038-02	Dilution Factor:	1
Lab File ID:	I07A014039	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	20.7
Calib. Ref.:	I07A014034	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	42.4	2.1	.631
Nickel	24.2	2.1	.578
Zinc	96.3	1.05	.315

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN S232	Date Analyzed:	01/17/06 20:49
Lab Samp ID:	A038-02	Dilution Factor:	1
Lab File ID:	I31A012039	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	20.7
Calib. Ref.:	I31A012034	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.19J	.526	.0387
Lead	19.7	1.05	.183

7007

SW3050B/6010B
METALS BY ICP

Client : BROWN & CALDWELL	Date Collected: 01/09/06
Project : FORMER BENICIA ARSENAL	Date Received: 01/10/06
G NO. : 06A038	Date Extracted: 01/10/06 13:40
Sample ID: BIN CT3	Date Analyzed: 01/17/06 21:05
Lab Samp ID: A038-04	Dilution Factor: 1
Lab File ID: I07A014041	Matrix : SOIL
Ext Btch ID: IPA0178	% Moisture : 17.8
Calib. Ref.: I07A014034	Instrument ID : EMAXT107

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	48	2.03	.608
Nickel	35	2.03	.557
Zinc	88.8	1.01	.304

7010

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN CT3	Date Analyzed:	01/17/06 21:02
Lab Samp ID:	A038-04	Dilution Factor:	1
Lab File ID:	131A012041	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	17.8
Calib. Ref.:	131A012034	Instrument ID :	EMAXT131

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.29J	.507	.0373
Lead	19.2	1.01	.176

7011

SW3050B/6010B
METALS BY ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
JG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN B9	Date Analyzed:	01/17/06 21:10
Lab Samp ID:	A038-05	Dilution Factor:	1
Lab File ID:	I07A014042	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	15.7
Calib. Ref.:	I07A014034	Instrument ID :	EMAXI107

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	46.3	1.98	.593
Nickel	46.5	1.98	.543
Zinc	119	.988	.297

7012

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN B9	Date Analyzed:	01/17/06 21:08
Lab Samp ID:	A038-05	Dilution Factor:	1
Lab File ID:	I31A012042	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	15.7
Calib. Ref.:	I31A012034	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.4J	.495	.0364
Lead	29	.988	.172

SW3050B/6010B
METALS BY ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
G NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 160	Date Analyzed:	01/17/06 21:14
Lab Samp ID:	A038-06	Dilution Factor:	1
Lab File ID:	I07A014043	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	21.3
Calib. Ref.:	I07A014034	Instrument ID :	ENAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Chromium	47.8	2.12	.635
Nickel	36.6	2.12	.582
Zinc	110	1.06	.318

7014

SW3050B/6010B
METALS BY TRACE ICP

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
SDG NO.	: 06A038	Date Extracted:	01/10/06 13:40
Sample ID:	BIN 160	Date Analyzed:	01/17/06 21:14
Lab Samp ID:	A038-06	Dilution Factor:	1
Lab File ID:	I31A012043	Matrix :	SOIL
Ext Btch ID:	IPA017S	% Moisture :	21.3
Calib. Ref.:	I31A012034	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Cadmium	.365J	.53	.039
Lead	23.4	1.06	.184

7015

940 Tyler Site
Bin 1 of 5

METHOD SW3550B/3630C/8015B
DIESEL RANGE ORGANICS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038A	Date Extracted:	02/03/06 10:45
Sample ID	: BIN S232	Date Analyzed:	02/03/06 13:45
Lab Samp ID	: A038-02	Dilution Factor:	1
Lab File ID	: TB02038A	Matrix	: SOIL
Ext Btch ID	: DSB008S	% Moisture	: 20.7
Calib. Ref.	: TB02035A	Instrument ID	: GCT050

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
DIESEL RANGE ORGANICS	190	10	3
RESIDUAL RANGE ORGANICS	49	21	2.9

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	94	50-150
HEXACOSANE	114	50-150

PQL: Practical Quantitation Limit

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C20-C34

940 Tyler Site
Bin 2 of 5

METHOD SW3550B/3630C/8015B
DIESEL RANGE ORGANICS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038A	Date Extracted:	02/03/06 10:45
Sample ID:	BIN CT3	Date Analyzed:	02/03/06 16:34
Lab Samp ID:	A038-04T	Dilution Factor:	5
Lab File ID:	TB02042A	Matrix	: SOIL
Ext Btch ID:	DSB0088	% Moisture	: 17.8
Calib. Ref.:	TB02035A	Instrument ID	: GCT050

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
DIESEL RANGE ORGANICS	3700	50	14
RESIDUAL RANGE ORGANICS	920	100	14

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	143	50-150
HEXACOSANE	216*	50-150

PQL: Practical Quantitation Limit

Parameter	N-C Range
Diesel	C10-C24
Motor Oil	C20-C34

* : Out of QC limit due to matrix interference

940 Tyler St
Bin 3 of 5

METHOD SW3550B/3630C/8015B
DIESEL RANGE ORGANICS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 06A038A	Date Extracted:	02/03/06 10:45
Sample ID:	BIN B9	Date Analyzed:	02/03/06 15:52
Lab Samp ID:	A038-05T	Dilution Factor:	2
Lab File ID:	TB02041A	Matrix :	SOIL
Ext Btch ID:	DSB008S	% Moisture :	15.7
Calib. Ref.:	TB02035A	Instrument ID :	GCT050

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
DIESEL RANGE ORGANICS	450	20	5.6
RESIDUAL RANGE ORGANICS	470	40	5.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	90	50-150
HEXACOSANE	164*	50-150

PQL: Practical Quantitation Limit

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C20-C34

* : Out of QC limit due to matrix interference

940 Tyler St
Bin 4 of 5

METHOD SW3550B/3630C/8015B
DIESEL RANGE ORGANICS

Client	: BROWN & CALDWELL	Date Collected:	01/09/06
Project	: FORMER BENICIA ARSENAL	Date Received:	01/10/06
Batch No.	: 05A038A	Date Extracted:	02/03/06 10:45
Sample ID:	BIN 160	Date Analyzed:	02/03/06 17:16
Lab Samp ID:	A038-06T	Dilution Factor:	5
Lab File ID:	TB02043A	Matrix :	SOIL
Ext Btch ID:	DSB008S	% Moisture :	21.3
Calib. Ref.:	TB02035A	Instrument ID :	GCT050

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
DIESEL RANGE ORGANICS	1200	53	15
RESIDUAL RANGE ORGANICS	940	110	14

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	103	50-150
HEXACOSANE	164*	50-150

PQL: Practical Quantitation Limit

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C20-C34

* : Out of QC limit due to matrix interference

940 Tyler St.
Bin 5 of 5

METHOD SW3550B/3630C/8015B
DIESEL RANGE ORGANICS

Client	: BROWN & CALDWELL	Date Collected:	NA
Project	: FORMER BENICIA ARSENAL	Date Received:	02/03/06
Batch No.	: 06A038A	Date Extracted:	02/03/06 10:45
Sample ID:	MBLK1S	Date Analyzed:	02/03/06 13:04
Lab Samp ID:	DSB008SB	Dilution Factor:	1
Lab File ID:	TB02037A	Matrix :	SOIL
Ext Btch ID:	DSB008S	% Moisture :	NA
Calib. Ref.:	TB02035A	Instrument ID :	GCT050

PARAMETERS	RESULTS (mg/kg)	PQL (mg/kg)	MDL (mg/kg)
DIESEL RANGE ORGANICS	ND	8.3	2.4
RESIDUAL RANGE ORGANICS	ND	17	2.3

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	88	50-150
HEXACOSANE	102	50-150

PQL: Practical Quantitation Limit

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C20-C34

WATER
(Building 27 Drums and Decontamination Water)

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

711060

Department of Toxic Substances C
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CAC025985905	8885		

3. Generator's Name and Mailing Address
Site: US ARMY CORPS OF ENGINEERS
1063 JEFFERSON STREET
BENICIA CA 94510
Mailing: US ARMY CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814

4. Generator's Phone ( )

A. State Manifest Document Number: 2387677

B. State Generator's ID

5. Transporter 1 Company Name: PHILIP TRANSPORTATION & REMEDIATION, INC.

6. US EPA ID Number: CAD063547996

C. State Transporter's ID: 0381

D. Transporter's Phone: (800)321-1030

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
BURLINGTON ENVIRONMENTAL, INC. KENT
20245 77TH AVENUE SOUTH
KENT, WA 98032

10. US EPA ID Number: WAD991281767

G. State Facility's ID

H. Facility's Phone: (253) 872-8030

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. NON RCRA HAZARDOUS WASTE LIQUID	004	D	00220	G	State: 2220 EPA/Other:
b.					State: EPA/Other:
c.					State: EPA/Other:
d.					State: EPA/Other:

J. Additional Descriptions for Materials Listed Above
a) 352653-01 - HAZARDOUS WASTE LIQUID, N.O.S. (WATER, WATER)

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Emergency #: CHEMTREC (800) 424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Ye
Martin Fahning	On behalf of DOD	02	22	0

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Ye
Alfonso G Murillo	Alfonso G Murillo	02	22	0

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Ye

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Ye

DO NOT WRITE BELOW THIS LINE.

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

2387677G

DTSC 8022A (1/99)
SPA 8700-22

White: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

APPENDIX G

Tank Manifests and Tank Destruction Certificates

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAC002598590
Manifest Document No.: 92017
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: U.S. Army Corp of Engineers, 1325 J St, Sacramento, Ca. 95814
4. Generator's Phone (916) 557-6700

A. State Manifest Document Number: 24792017
B. State Generator's ID

5. Transporter 1 Company Name: Ecology Control Industries
6. US EPA ID Number: CAD982030173
C. State Transporter's ID [Reserved]
D. Transporter's Phone: 510 235-1393

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID [Reserved]
F. Transporter's Phone

9. Designated Facility Name and Site Address: Ecology Control Industries, 255 Parr Boulevard, Richmond CA 94801
10. US EPA ID Number: CAD009466392
G. State Facility's ID
H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-RCRA Hazardous Waste, Solid (EMPTY STORAGE TANK(S))	001	TP	03000	P
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information
Wear appropriate protective equipment while handling. Weights or volumes are approximate.
24 Hour emergency telephone number (800) 321-5479 (ECI Dispatcher). DOT ERG# 11x)
SITE ADDRESS: 1063 Jefferson St, Benecia, Ca. 94510

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Martin Fahning
Signature: [signature] on-behalf-of-000
Month 01 Day 05 Year 06

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: James L Butler
Signature: [signature]
Month 01 Day 05 Year 06

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: James Wilcox
Signature: [signature]
Month 01 Day 05 Year 06

DO NOT WRITE BELOW THIS LINE.

GENERATOR — TRANSPORTER — FACILITY

IN CASE OF EMERGENCY OR SPILL, CONTACT THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1	Information in the shaded areas is not required by Federal law.
CAC012519859	99201 16	1 of 1	

3. Generator's Name and Mailing Address: U.S. Army Corp of Engineers, 1325 J St, Sacramento, Ca 95814
4. Generator's Phone: 916 557-6700
A. State Manifest Document Number: 24792016
B. State Generator's ID:
5. Transporter 1 Company Name: Ecology Control Industries
6. US EPA ID Number: CAD982030173
C. State Transporter's ID:
D. Transporter's Phone: 510 235-1393
7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:
9. Designated Facility Name and Site Address: Ecology Control Industries, 255 Parr Boulevard, Richmond CA 94801
10. US EPA ID Number: CAD009466392
G. State Facility's ID:
H. Facility's Phone:

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-RCRA Hazardous Waste, Solid (EMPTY STORAGE TANK(S))	001	TP	13500	P
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Wear appropriate protective equipment while handling. Weights or volumes are approximate.
24 Hour emergency telephone number (800) 321-5479 (ECI Dispatcher). DOT ERG# 11a)
SITE ADDRESS: 940 Tyler St, Benecia, Ca 94510

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
Martin Fahnins	On-behalf-of-DOD	01	05	06

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
James L Butler	James L Butler	01	05	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
James Wilcox	James Wilcox	01	05	06

DO NOT WRITE BELOW THIS LINE.

White - YOU SHOULD THIS COPY TO DTSC WITHIN 30 DAYS.

IN CASE OF EMERGENCY OR SPILL, CALL THE HAZARDOUS RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

TRANSPORTER

FACILITY

DAY OR NIGHT

TELEPHONE

(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

285 Parr Boulevard - Richmond, California 94801

CUSTOMER
GEOCON
JOB. NO 5XT2059

1063 Jefferson St
Benecia, Ca

FOR: ECOLOGY CONTROL INC TANK NO: 32893

LOCATION: RICHMOND DATE: 1/6/06 TIME: 3:45pm

TEST METHOD: VISUAL GASTECH/1314 SMPN LAST PRODUCT FUEL OIL

This is to certify that I have personally determined that this is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE: 250 GALLON CONDITION: SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ECOLOGY CONTROL INDUSTRIES HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY. ECOLOGY CONTROL INDUSTRIES HAS THE APPROPRIATE PERMITS FOR AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations and (c) In the judgment of the inspector's certificate

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks have been treated as deemed necessary by the inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued

REPRESENTATIVE TITLE James Wilson INSPECTOR

DAY SHIFT

CERTIFICATE

TELEPHONE

(510) 236-1393

CERTIFIED SERVICES COMPANY

255 Parr Boulevard · Richmond, California 94801

CUSTOMER
GEOCON
JOB. NO 5212088

940 Tyler Street
Benecia, Ca

FOR: ECOLOGY CONTROL INC

TANK NO : 32894

LOCATION: RICHMOND

DATE: 1/6/08 TIME: 3:45pm

TEST METHOD: VISUAL GASTECH/1314 SMPN

LAST PRODUCT FUEL OIL

This is to certify that I have personally determined that this is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE : 3,000 GALLON

CONDITION: SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ECOLOGY CONTROL INDUSTRIES HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY. ECOLOGY CONTROL INDUSTRIES HAS THE APPROPRIATE PERMITS FOR AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned This permit is valid for 24 hours if no physical or atmospheric changes occur

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire. are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued

REPRESENTATIVE | TITLE | INSPECTOR James Wilcox

Comment Response Table
Draft Fuel Storage Tank Removal Action Addendum Report (May 2006)
Benicia Arsenal, Benicia, CA

Comment No.	Page/ Section	Agency Comments	Response to Comments
Agnes Farres—San Francisco Bay Regional Water Quality Control Board			
1.	General	Over the last several years, the Water Board has discouraged the use of the acronym "RWQCB". At the first mention of our organization in the report, we should be called the San Francisco Bay Regional Water Quality Control Board (Water Board). Thereafter, we can be referred to simply as the Water Board. The References section (Section 6.0) should be corrected to the following: San Francisco Bay Regional Water Quality Control Board (Water Board). 2005. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final. February. Citations within the report should also be corrected. For example: (Water Board 2005).	The change will be made as requested for this report and all future reports.

Comment Response Table
Draft Fuel Storage Tank Removal Action Addendum Report (May 2006)
Benicia Arsenal, Benicia, CA

Comment No.	Page/ Section	Agency Comments	Response to Comments
1.	Specific Comments: Section 1.3	Former Heavy Equipment Yard (Buildings 50 and 111): Explain how it was determined that residual concentrations of gasoline reported in the groundwater were the result of post-Army release.	The last sentence in paragraph 3 on Page 1-10 states: "Residual concentrations of gasoline were reported in the groundwater and are the result of the post Army release." The use of "gasoline" was meant in terms of its constituents. There was no gasoline reported in the groundwater samples at former Building 50 and 111. Xylenes and methyl tertiary-butyl ether was reported in the samples. Because of the confusion, the sentence will be changed to state: "Residual concentrations of xylenes and methyl tertiary-butyl ether (MtBE) were reported in the groundwater and are the result of the post Army release." Because of the investigation of a post Army 10,000-gallon gasoline UST (and a 3,000-gallon kerosene UST), it is presumed that constituents remaining in the groundwater are from this release, especially the presence of MtBE. Additionally, there was no evidence of any oils in the petroleum hydrocarbon range to indicate any release from the alleged Army 500-gallon stove oil tank and two 5,500-gallon road oil tanks.
2.	Specific Comments: Section 3.1.4	Building 27: Soil sampled at 11 feet bgs was shown to have diesel fuel at a concentration of 450 mg/kg, exceeding the Water Board's ESL of 100 mg/kg. However, the report states that "Visual observations indicated that the remaining hydrocarbons were found within the fractures of the sandstone", suggesting the presence of free	*Provide more information on the soil sampling methodology* – Samples were collected per Solano County requirements but also adaptive to field conditions. A total of 2 samples were collected. Both samples were collected in the areas of greatest impact based on visual observations (i.e. staining and odor). One soil sample was collected beneath the 250-gallon tank (per Solano County's requirement for a tank less than 1,000 gallons

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		product and potentially concentrations of diesel fuel much higher than 450 mg/kg. Only one soil sample was taken at 11 feet bgs. Considering that the substrate consists of fractured sandstone resulting in fracture flow of the residual hydrocarbons,.a single soil sample would not adequately characterize the potential residual contamination at this site. Provide more information on the soil sampling methodology and the rationale for taking only one soil sample in the fractured sandstone. Explain the inconsistency between the data and the visual observations. In addition, the report states that no groundwater was encountered at this site. USACE concluded that there is no potential impact from the residual hydrocarbons from fractured sandstone to reach groundwater and recommends no further action. Provide more evidence to support the conclusion that there is no groundwater at this site to demonstrate no threat to groundwater.	in size and one sample was collected beneath the UST at the bottom of the over-excavation in the fractured sandstone. The surrounding soil and sandstone was removed as a remedial measure because of visual observations of staining and odor. Excavation continued until the excavator could not dig any more once it encountered competent bedrock (total depth of the excavation was 11 feet). The sample was collected in a sandstone fracture because it was the area expected to show maximum impact. *Provide the rationale for taking one soil sample in the fractured sandstone* – Because of the small excavation, approximately 10 feet by 5 feet, only one sample was collected. Additionally, field observations indicated that greatest impact was observed in the filled fracture where you would expect the highest concentrations of any residual contamination. It was expected that this sample would be representative of these conditions. *Explain the inconsistency between the data and the visual observations* – Based on the data and field observations, there are no inconsistencies. The highest amount of residual hydrocarbons was identified at 450 mg/kg diesel range hydrocarbons (quantified as C10 to C24) in discontinuous sandstone filled fractures where the maximum concentration would be expected and at the limits that the excavator could dig (a depth of 11 feet) due to the competency of the sandstone. Note: Heating oil (typically C15 to C22) was stored in the UST.

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			Provide more evidence to support the conclusion that there is no groundwater at this site to demonstrate no threat to groundwater. – There have been numerous studies, especially by the Army, in the search of groundwater all over the Arsenal. The compilation of this information is provided in the Conceptual Hydrogeologic Model for the Benicia Arsenal (Brown and Caldwell, 2005). In summary, shallow groundwater can be found in the foothills of the Arsenal, similar setting as the location of Building 27, where alluvial material (generally < 50 feet thick) is present. However, groundwater is found in the isolated alluvial valleys in the foothills. The largest example is Sulfur Springs Creek. Building 27 is not located in one of these valleys. Drilling for groundwater has been conducted in the foothills for deeper groundwater and was encountered at depths of hundreds of feet. Because of the depth to groundwater in areas like Building 27 is hundreds of feet deep, there is no threat to groundwater based on the minimal concentrations found in the fractured sandstone.
3.	Specific Comments: Section 3.1.4	Building 161: Grab groundwater sample results detected TCE and PCBs, with concentrations of PCBs exceeding the Water Board's ESLs. The report states that because PCB has a low solubility and was not reported in the soil around the UST, USACE concluded that there is little to no chance that PCBs will be in groundwater and recommends no further action. The data does not support this conclusion. PCBs are not very soluble	PCBs are more soluble in the presence of pure TCE then in water. When there is a co-solvency situation then PCBs can co-elute with TCE. The concentration of TCE for this to happen would require a pure product of solvent and not at the concentrations reported in the groundwater sample collected from the tank excavation (2.3 µg/L). Additionally, previous investigation all around this area for the Expanded SI did not find TCE at concentrations needed for this situation to occur.

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		in water but are much more soluble in TCE, which would explain the presence of both in the grab groundwater sample. Since the PCBs have become soluble in the TCE and is present in the grab groundwater sample but not the soil sample, it is possible that it has migrated to the UST site. This site needs to be characterized further to determine the extent and source of contamination with PCBs.	The reason why there is 5.6 µg/L of Arochlor 1260 found in the grab groundwater sample, which is greater than its solubility of 2.7 µg/L , is due to the presence of suspended particles with adsorbed PCBs in the sample. The grab water sample collected from the tank excavation was turbid and it was not filtered to remove these suspended solids. Therefore, the amount of PCBs in the water sample is biased high and not what would be expected from the PCB´s water solubility. Based on this information, it is likely that PCBs are in soil around the tank but the concentrations would not exceed the Water Board's ESL of 0.74 mg/kg. PCBs were not reported above EPA Method 8082 method detection limits of 0.025 mg/kg (or 25 µg/kg) in any of the six soil samples collected; two in the sidewalls of the excavation and four samples at the same depth surrounding the excavation (up to 40 feet away). Therefore, if there is PCBs in soil they were not detected above the ESL. Do to the hydrophobic nature of PCBs; it is very likely that the source of the PCBs was the tank. Based on historical use of the area as a motor cleaning building, which contained a service pit, it is possible that hydraulic fluids containing-PCBs could have been placed into the tank. Based on further conversations with the RWQCB, USACE agreed to conduct additional soil and groundwater sampling closer to the former UST. Four borings will be drilled around

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			the former UST. Soil samples will be collected at discrete depths (4.5 to 5.5 feet bgs and 8 to 9 feet bgs [capillary fringe]) for PCBs to determine the lateral and vertical extent of PCBs. A grab groundwater sample will be collected in each boring for PCBs to determine any impact to groundwater The objective of this sampling is to determine if PCBs present in the product sample collected from the UST and in a grab groundwater sample collected from the UST excavation has impacted soil and groundwater surrounding the UST. RWQCB agreed to the plan on 2/13/07. The data and findings from this sampling effort will be documented in the Updated Draft Final version of this report.