



TETRA TECH EM INC.

March 14, 2008

Lynn Nakashima
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700 Heinz Avenue
Berkeley, CA 94710

Subject: Implementation Summary Report for a Time-Critical Removal Action at the Former Forest Products Laboratory Wood Treatment Laboratory University of California, Berkeley, Richmond Field Station, Richmond, California

Dear Ms Nakashima:

This report has been prepared on behalf of the Regents of the University of California in accordance with the California Environmental Protection Agency, Department of Toxic Substance Control (DTSC), Site Investigation and Remediation Order, Docket No. ISE-RAO 06/07-004, dated September 15, 2006. This report describes the time-critical removal action (TCRA), which occurred between October 2 and 12, 2007, and November 16 and 19, 2007, at the former Forest Products Laboratory (FPL) Wood Treatment Laboratory site, at the University of California, Berkeley (UC Berkeley), Richmond Field Station (RFS), Richmond, California.

This summary report presents: (1) the RFS site history and background of the former FPL Wood Treatment Laboratory, (2) regulatory history and reasons for performing the TCRA, and (3) actions taken during the TCRA and the results. This summary report presents: (1) the RFS site history and background of the former FPL Wood Treatment Laboratory, (2) regulatory history and reasons for performing the TCRA, and (3) actions taken during the TCRA and the results.

All excavation activities successfully met the project-specific remediation goal of 16 milligrams per kilogram of arsenic in the final confirmation soil samples. All wastes generated during excavation activities were profiled as non-hazardous waste and were manifested and transported off site for disposal at the Keller Canyon Class II landfill in Pittsburg, CA.

If you have any questions or comments regarding this submittal, please call me at (415) 222-8283.

Sincerely,

Jason Brodersen, P.G.
Project Manager

Enclosure: FPL Wood Treatment Laboratory TCRA Implementation Report

cc: Greg Haet, UC Berkeley
Karl Hans, UC Berkeley

Implementation Summary Report for a Time-Critical Removal Action at the Former Forest Products Laboratory Wood Treatment Laboratory

University of California, Berkeley
Richmond Field Station, Richmond, California

Prepared for
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March 14, 2008

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ACRONYMS AND ABBREVIATIONS

§	Section
40 CFR	Title 40 <i>Code of Federal Regulations</i>
ACA	Ammoniacal copper arsenate
Ca-HSC	<i>California Health and Safety Code</i>
CCA	Chromated copper arsenate
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DTSC	Department of Toxic Substances Control
FPL	Forest Products Laboratory
H-SSTL	Human health site-specific target level
IHI	IHI Environmental
LPG	Liquefied petroleum gas
mg/kg	Milligrams per kilogram
mg/m ³	Milligrams per cubic meter
mph	Miles per hour
MSRI	Math Sciences Research Institute
PAH	Polyaromatic hydrocarbons
PCP	Pentachlorophenol
PDR	Personal Data RAM TM
PSC	PSC Environmental
RFS	Richmond Field Station
TCRA	Time-critical removal action
Tetra Tech	Tetra Tech EM Inc.
TWA	Time-weighted average
UC Berkeley	University of California, Berkeley
UHC	Underlying hazardous constituents
UTS	Universal treatment standard
yd ³	Cubic yard

1.0 INTRODUCTION

This report has been prepared on behalf of the Regents of the University of California in accordance with the California Environmental Protection Agency, Department of Toxic Substance Control (DTSC), Site Investigation and Remediation Order, Docket No. ISE-RAO 06/07-004, dated September 15, 2006. This report describes the time-critical removal action (TCRA), which occurred between October 2 and 12, 2007, and November 16 and 19, 2007, at the former Forest Products Laboratory (FPL) Wood Treatment Laboratory site, at the University of California, Berkeley (UC Berkeley), Richmond Field Station (RFS), Richmond, California.

This summary report presents: (1) the RFS site history and background of the former FPL Wood Treatment Laboratory, (2) regulatory history and reasons for performing the TCRA, and (3) actions taken during the TCRA and the results. The report appendices provide background information, field documentation, and data for the TCRA, including the DTSC Approval for the Confirmation Sampling and Perimeter Air Monitoring Plan (Appendix A), DTSC approval of backfill soil (Appendix B), daily field notes (Appendix C), photo documentation (Appendix D), all sampling results (Appendices E, F, G, and J), perimeter air monitoring results (Appendix H), the remediation worker exposure monitoring report (Appendix I), waste characterization documents (Appendices J and K), and final non-hazardous disposal manifests (Appendix L).

2.0 SITE BACKGROUND

This section discusses the site history, background, and regulatory framework for the TCRA.

The RFS property is owned by the Regents of the University of California (UC) and is located at 1301 South 46th Street in Richmond, California, in western Contra Costa County (see Figure 1). RFS is bordered by Meade Street off Interstate 580 to the north, by South 46th Street to the east, by the East Bay Regional District Bay Trail to the south, and by Meeker Slough and Regatta Boulevard to the west. Residences, public areas, and commercial facilities are within a one-mile radius of RFS. Prior to UC's purchase of the RFS property, the California Cap Company used the property for manufacturing of explosives from the late 1800s until 1948. In 1950, UC purchased the property primarily for research facilities for the UC Berkeley College of Engineering and later other campus departments used portions of RFS.

The RFS property is 152 acres, consisting of 100 acres of uplands, with the remainder of the property consisting of tidal marsh or bay lands (offshore areas). The upland portion of the RFS property contains areas developed for academic teaching and research. The former FPL Wood Treatment Laboratory is in the northeastern portion of RFS.

The former FPL Wood Treatment Laboratory was constructed in 1965 and operated by the College of Natural Resources as an academic research facility. The laboratory was located to the south of FPL Building 478, between Buildings 472 and 476 in the northeast portion of the RFS. Research studies relating to wood treatment with pentachlorophenol (PCP) in liquefied petroleum gas (LPG) and isopropyl ether cosolvents were conducted at the laboratory until 1970 or 1971 (Jonas & Associates 1990). The facility then converted to treating wood with water-based chromated copper arsenate (CCA) and ammoniacal copper arsenate (ACA) compounds. The chemicals were stored in an aboveground tank at the site and plumbed to a treatment chamber used to conduct experiments. Beginning sometime in the 1980s, the facility was also used for fire retardant studies with nonhazardous ammonium phosphate solutions. These wood treatment and flame retardant experiments continued into the early 1990s.

During the early 1990s, planning for the expansion of Building 472 led to an investigation of possible releases of the treatment compounds onto the surrounding asphalt and soils. LPG with dissolved PCP reportedly was released through a vent pipe at the back of the wood treatment chamber onto the soils of the wooded area to the east of Building 472 (Jonas & Associates 1990). Additionally, CCA and ACA compounds reportedly leaked onto the asphalt surface around the treatment equipment (Jonas & Associates 1990). This material was then reportedly hosed onto the soil to the east, and into the grassy swale to the south of Building 472. Ammoniated water used to rinse the surface of ACA-treated lumber was also reportedly discharged, primarily to the grassy swale.

In 2006, on behalf of UC Berkeley, Tetra Tech EM Inc. (Tetra Tech) evaluated risk to human health posed by soil contamination at the former FLP Wood Treatment Laboratory area. Arsenic concentrations in soil samples collected in 2006 and 2007 were compared with the construction worker human health site-specific target levels (H-SSTL) for arsenic, established for several exposure scenarios in the Human Health and Ecological Tiered Risk Evaluation (URS Corporation 2001). Comparison results demonstrated that the pre-removal action conditions at the former FLP Wood Treatment Laboratory presented a potential threat to future construction workers conducting vegetation removal, excavation, and grading activities in the area (Tetra Tech 2007a). On October 26, 2006, UC Berkeley representatives met with DTSC staff to discuss the arsenic concentrations detected in soil samples from the FLP wood treatment laboratory area. DTSC agreed that a TCRA was necessary and should be undertaken promptly to address arsenic in soil at the former FLP Wood Treatment Laboratory and that the TCRA would be conducted under the authority of the DTSC Site Investigation and Remediation Order, Docket No. ISE-RAO 06/07-004, dated September 15, 2006. UC Berkeley restricted access to the area planned for excavation with temporary fencing until the removal action could be completed.

This removal action was designed to be consistent with *California Health and Safety Code* (Ca-HSC) Section (§) 25356.1 and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 104(a). The potential threats to public health or welfare and the environment are discussed in the TCRA Action Memorandum (Tetra Tech 2007b).

3.0 REMOVAL ACTION ACTIVITIES AND RESULTS

This section describes the actions performed during the TCRA activities. UC Berkeley contracted with PSC Environmental (PSC) to perform all excavation activities. 4LEAF, Inc. (4LEAF) performed daily oversight, construction management, dust monitoring during the excavation activities, and assisted Tetra Tech with collecting soil confirmation samples from the excavation. Daily field reports are provided in Appendix C. 4LEAF contracted with Muir Consulting, Inc. to perform an as-built survey of the final excavation area and soil confirmation sample locations (see Figures 2 and 3).

3.1 SITE PREPARATION

The following activities were performed prior to excavation activities:

- UC Berkeley installed a chain-link fence around the perimeter of the TCRA excavation area to restrict access to the area prior to and during site activities.
- PSC subcontracted with Subtronics to identify and mark underground utilities in the vicinity of the proposed excavation area. Existing site utility maps were also utilized to mark known utilities. Underground Service Alert was not contacted because RFS is private property.
- 4LEAF staff laid out the proposed excavation area limits as identified in the final TCRA Memorandum.
- PSC mobilized equipment to the site including a backhoe, numerous soil bins, and miscellaneous equipment including a decontamination station for the exclusion zone.

At the request of UC Berkeley, PSC implemented a work exclusion zone, consisting of caution tape, within the project's perimeter fencing and around the immediate area surrounding the excavation. PSC's staff wore Level D personal protective equipment (PPE) during the excavation activities and were required to wash their work boots in the boot wash station and remove all PPE before exiting the exclusion zone.

3.2 SOIL EXCAVATION

Excavation activities for the TCRA took place from October 2 through 5 and a small area was over-excavated on October 12, 2007, following receipt of the initial confirmation sample results. The proposed excavation limits and depths were determined by comparing analytical results for samples collected in May and June 2007, with the project-specific remediation goal of 16 mg/kg (Tetra Tech 2007b). Two excavation areas, Excavation Area I and Excavation Area II were identified in the DTSC-approved TCRA memorandum (see Figure 3). The footprint of Excavation Area I was located

within the footprint of Excavation Area II and measured approximately 381 square feet and extended to a depth of approximately 3 ½ feet below ground surface (bgs). Excavation Area II measured approximately 968 square feet and extended to a depth of approximately 2 feet bgs.

Excavation activities consisted of using a backhoe and hand tools to excavate the proposed area of arsenic-contaminated soil at the former FPL Wood Treatment Laboratory. Prior to work each day, PSC and 4LEAF staff conducted a tailgate safety meeting to go over PSC's Health and Safety Plan and to remind on-site workers about potential physical and chemical hazards, dust suppression requirements, and air monitoring activities. Most of the excavation process was completed using a backhoe; however, some hand excavation with shovels was used to locate and protect the numerous underground utilities, including live electrical lines, fiber optics conduit, a natural gas line, and abandoned electrical and water lines that were encountered during the excavation activities.

The existing surface concrete pad and portions of the surrounding asphalt were saw cut to facilitate their removal prior to soil excavation. The surface asphalt and concrete, and four underground concrete footings were removed and segregated from the excavated soil and placed directly into separate covered roll-off bins placed adjacent to the excavation. The soil excavated between the ground surface and approximately 2 feet bgs was predominately loamy soil and the soil excavated between approximately 2 feet and 3 ½ feet bgs was hard silty clays. Dust emissions were minimized during the excavation activities by spraying water from a hose as the materials were excavated and placed into the roll-off bins. PSC transported the covered, filled soil bins to the fenced area behind Building 102 for temporary storage until the bin contents were sampled and characterized for off-site disposal.

DTSC staff performed site visits on October 2 and 3, 2007, to observe site activities including soil excavation, dust suppression techniques, airborne dust and wind speed monitoring, and implementation of site controls. DTSC staff did not express any concerns about site activities and did not receive any complaints from RFS staff or the surrounding community.

Excavation of soil, concrete, and asphalt from excavation areas I and II identified in the TCRA Memorandum was completed on October 5, 2007. Confirmation samples were collected as outlined below in Section 3.3 and submitted to the analytical laboratory for expedited analyses. Following receipt and review of the soil confirmation results, UC Berkeley notified DTSC that the arsenic concentration in one of the side-wall confirmation samples exceeded the project-specific remediation goal of 16 mg/kg. Soil confirmation sample RFS-WTL-RA-019, collected along the excavation sidewall in the southeastern corner of Excavation Area II, had a reported arsenic concentration of 170 mg/kg. All other confirmation samples collected from the excavation bottom and sidewalls had reported arsenic concentrations less than the project-specific remediation goal.

UC Berkeley received approval from DTSC to perform an over-excavation measuring approximately 7 feet by 14 feet by 2 feet deep in the southeastern corner of Excavation Area II to remove the soil associated with sample RFS-WTL-RA-019. The over-excavation, denoted as Area III, was performed by PSC on October 12, 2007, using the same methods outlined above. Two confirmation samples (one sidewall and one excavation bottom) were collected from Area III as discussed in Section 3.3 and submitted to the analytical laboratory for expedited analyses (see Figure 3). The arsenic concentrations reported for the soil confirmation samples collected in Area III were less than the project-specific remediation goal of 16 mg/kg. A UC Berkeley representative contacted DTSC regarding the soil confirmation results for Area III and received verbal and written acknowledgment that the cleanup goals for the TCRA had been met and that excavation was completed.

A calculated in-situ volume of approximately 140 cubic yards of soil was removed from excavation Areas I, II, and III (based on the as-built survey performed). A total of 12 bins containing soil, one bin containing concrete/asphalt, and one bin containing asphalt were generated during excavation activities. The bin contents were sampled and profiled for waste characterization as discussed in Section 3.6.

3.3 CONFIRMATION SAMPLING

Completion of the excavation activities and TCRA objectives was based on removing soil with concentrations of arsenic greater than the project-specific remediation goal of 16 mg/kg. Tetra Tech and 4LEAF staff collected 21 confirmation soil samples at the sidewalls and bottoms of the excavation areas (see Figure 3). These soil samples were delivered to a state-certified laboratory for analysis of metals and semi-volatile organic compounds (SVOC) to measure the arsenic content; therefore verifying that the remedial objectives for the excavation area were met. Thirteen sidewall samples and six excavation bottom samples (sample numbers RFS-WTL-RA-001 through 019) were collected from the original excavation Areas I and II, and one sidewall and one excavation bottom sample (RFS-WTL-RA-020 and 021) were collected from the over-excavation Area III. The soil confirmation sample results are summarized in Table 1 and the complete laboratory analytical results, including Data Validation reports, are provided in Appendices E, F, and G.

Confirmation samples were collected from the sidewalls and bottom of the excavation by scraping a few centimeters of soil away from the surface at each soil sample location prior to collecting the samples. The underlying soil was then scraped with a decontaminated spoon and placed into a clean 125-mL wide-mouth glass jar provided by the analytical laboratory. All sample locations were demarcated by placing a survey flag marked with each sample number. The soil confirmation sample locations were later surveyed by a licensed land surveyor from Muir Consulting, Inc. to document the exact sample locations (see Figure 3).

Table 1
Arsenic Confirmation Sampling Results

Sample Id	Sample Location	Sample Result (mg/kg)
RFS-WTL-RA-001	Western sidewall	15
RFS-WTL-RA-002	Northwest sidewall	5.2
RFS-WTL-RA-003	Southern sidewall	4.3
RFS-WTL-RA-004	Western sidewall	5.0
RFS-WTL-RA-005	Western bottom	7.3
RFS-WTL-RA-006	Western bottom	4.2
RFS-WTL-RA-007	Central bottom	9.2
RFS-WTL-RA-008	Southern sidewall	9.4
RFS-WTL-RA-009	Interior sidewall	4.2
RFS-WTL-RA-010	Interior sidewall	7.0
RFS-WTL-RA-011	Interior sidewall	8.8
RFS-WTL-RA-012	Interior sidewall	4.1
RFS-WTL-RA-013	Southern bottom	8.1
RFS-WTL-RA-014	Central bottom	9.1
RFS-WTL-RA-015	Western sidewall	6.2
RFS-WTL-RA-016	Northern bottom	6.9
RFS-WTL-RA-017	Northern sidewall	7.6
RFS-WTL-RA-018	Eastern sidewall	6.5
RFS-WTL-RA-019	Eastern sidewall	170
RFS-WTL-RA-020	Central bottom	4.9
RFS-WTL-RA-021	Eastern sidewall	6.9

3.4 AIR MONITORING

Two types of air monitoring were performed during the TCRA excavation: (1) perimeter air monitoring to verify that dust control measures were adequate to protect RFS staff and the off-site community, and (2) occupational exposure monitoring of PSC workers' potential exposure to airborne arsenic during the field activities.

The perimeter air-monitoring program was implemented to ensure that airborne dust created during the excavation activities remained below the action level calculated for the perimeter fence line around the excavation area. The program was in compliance with the Health and Safety addendum for RFS (Tetra Tech 2006). UC Berkeley calculated a dust concentration action level of 0.025 milligrams per cubic meters (mg/m^3), recorded as an average of a 5-minute interval, and measured by real-time aerosol monitors [MIE Personal Data Rams (PDR)]. The action level was approved by DTSC and deemed protective of sensitive receptors (see Appendix A). Action level criteria are included in the Confirmation Sampling and Perimeter Air Monitoring Plan (UC Berkeley 2007).

Airborne dust concentrations were monitored at perimeter fence locations using real-time aerosol monitors (MIE PDRs) with data loggers. Three PDRs were positioned in down-wind locations most likely in the path of off-site dust migration and one PDR was positioned in an up-wind location to measure ambient dust concentrations. The PDRs were initially calibrated on October 2 and 3 by placing the units into a clean zip-lock bag provided by the manufacturer. During the remaining site activities, the PDRs were calibrated in ambient air, upwind of the excavation area. The ambient dust levels, as measured upwind of the excavation area, were recorded in the perimeter air monitoring results in Appendix H.

Taking the ambient dust concentrations into account, the PDR measurements momentarily exceeded the action level of $0.025 \text{ mg}/\text{m}^3$ in nine of the total 1,706 measurements recorded by the four on-site PDRs.

On October 2, the dust concentrations measurements at 0922, 0932, and 1113, hrs exceeded the action level and were recorded at concentrations of 0.048, 0.041, and $0.061 \text{ mg}/\text{m}^3$, respectively. Two of these readings were recorded in the PDR located in the up-wind (ambient concentration) direction (PDR #1) when the contractor was saw cutting asphalt and concrete. The action level was exceeded at 1113 hrs in the PDR located directly down wind of the activities (PDR #2) while the contractor's crew was using the jackhammer attachment on the backhoe to break up a concrete pad. The contractor was diligently spraying water from a hose for dust suppression during these activities in the vicinity of the PDR and presence of water aerosols may have contributed to the three short-term exceedences of the action levels. All remaining PDR measurements on October 2, 2007, were within acceptable levels.

The action level for airborne dust was exceeded three times on October 3 between 0938 and 0953 hrs in PDR #3 that was located directly adjacent to and down gradient of an

area where the contractor was using a hand shovel to remove eucalyptus tree leaves on the ground surface. The on-site 4LEAF representative observed visible dust being generated from this activity and immediately notified the contractor to increase dust suppression. The on-site 4LEAF representative noted there were visible aerosols being generated from the water hose as water was being applied for dust suppression. These aerosols likely contributed to the exceedances recorded at 0948 and 0953 hrs in PDR #3. All remaining PDR measurements on October 3, 2007, were within acceptable levels.

The action level for airborne dust was exceeded two times on October 4 between 0807 hrs (PDR #1) and 0818 hrs (PDR #3). The reading recorded in PDR #1 at 0807 hrs can be attributed to the contractor moving one of the soil bins immediately adjacent to the location of the PDR. The cause for the exceedance at 0818 hrs in PDR #3 is unknown as a review of the daily field notes indicate that no intrusive activities were being performed at that time. All remaining PDR measurements on October 4, 2007, were within acceptable levels.

The action level for airborne dust was exceeded one time on October 5, 2007, at 1415 hrs in PDR #1 that was located directly adjacent to the soil bin where the contractor was spraying down and decontaminating the backhoe bucket following completion of excavation activities. This exceedance was likely caused by air-borne water aerosols being generated during the equipment decontamination activities. All remaining PDR measurements on October 5, 2007, were within acceptable levels.

As part of the perimeter air monitoring efforts, wind speeds were routinely monitored by the on-site 4LEAF representative using a hand-held anemometer and recorded in the daily field reports (Appendix C). Wind speed and direction were also continuously monitored using a portable calibrated wind sock placed along the perimeter fence. This measurement system was used to ensure that the wind speed did not exceed 15 miles per hour (mph), sustained for more than 15 minutes. No instantaneous or sustained wind speeds exceeded the 15-mph project requirement during the TCRA activities.

At the request of PSC, IHI Environmental (IHI) conducted occupational exposure monitoring during the TCRA excavation. IHI was responsible for monitoring and documenting PSC employees' exposure to airborne arsenic during the excavation process.

Employee exposure monitoring included the collection of 13 personal air samples to determine 8-hour time-weighted average (TWA) exposures. The personal air samples were collected in the breathing zones of the employees.

The personal air monitoring samples were collected by drawing air through 37-millimeter cassettes fitted with 0.8-micrometer MCE filters attached to battery-operated low-flow air pumps and analyzed for arsenic content. The sampling trains were calibrated prior to and after every sampling period. The air monitoring was conducted for each day during all site activities over the course of the full work shift, which ranged from just under 8 hours

to approximately 9.5 hours. Work practices and atmospheric conditions were documented during the survey. The samples were capped and delivered to the analytical laboratory, Micro Analytical Laboratories, Inc., for arsenic analysis. Arsenic concentrations in the personal air monitoring samples were not detected at concentrations exceeding the method detection limit (<0.001 to <0.0043 milligrams per cubic meter) for any of the air samples collected. The results of the personal air monitoring are included in Appendix I.

3.5 BACKFILLING

Excavation Areas I, II, and III were backfilled using clean materials obtained from grading activities conducted during the construction of the new Math Sciences Research Institute (MSRI) on the UC Berkeley Central Campus. The MSRI soil stockpile was sampled in June 2006 using the guidelines set forth in the DTSC fact sheet "Information Advisory, Clean Imported Fill Material," (California Environmental Protection Agency 2001). An additional composite soil sample was collected by Tetra Tech from the MSRI stockpile on October 4, 2007, for analysis of polyaromatic hydrocarbons (PAH) by EPA 8270C SIM Method to obtain lower detection limits than the June 2006 sample. DTSC reviewed the stockpile soil sample results and approved the use of the MSRI stockpile as clean backfill for the TCRA excavation (see Appendix B).

The excavation area was backfilled with the MSRI soil by RFS staff between January 14 and January 18, 2008. A photograph of the completed backfill is included in Appendix B.

3.6 WASTE CHARACTERIZATION AND DISPOSAL

The materials excavated during the TCRA activities were separated into covered roll-off bins containing soil, concrete/asphalt, and asphalt. Upon completion of excavation activities, three composite samples for waste characterization were collected by Tetra Tech staff; one sample of each waste type. The excavated soil was characterized using soil samples collected prior to the TCRA activities and from a 12-point composite sample collected from the excavated soil stored in the bins. The excavated concrete and asphalt were characterized by collecting two four-point composite samples from the bins. The samples were submitted to Curtis & Tompkins, a state-certified laboratory, for analysis of metals, SVOCs, polychlorinated biphenyls, and total petroleum hydrocarbons.

According to Title 40 *Code of Federal Regulations* (40 CFR) § 268.48, characteristic hazardous waste must meet Land Disposal Restrictions treatment standards before being eligible for land disposal. Underlying hazardous constituents (UHC) must also be treated to meet contaminant specific levels. These levels are referred to as the universal treatment standards (UTS) and are listed in 40 CFR § 268.48. In accordance with these regulations, the materials excavated during the TCRA were sampled and the analytical results for the potential UHCs were compared to their respective UTSs to determine if treatment of the excavated materials was necessary prior to land disposal.

The sample analysis results were compared with hazardous and non-hazardous waste disposal criteria. In addition to the waste characterization samples collected by Tetra Tech, Allied Waste performed its own sampling and characterization. Upon completion of this, the waste was labeled Class II non-hazardous waste and hauled to Keller Canyon Sanitary Landfill.

3.7 WASTE DISPOSAL

On October 31, 2007, Allied Waste approved the profile for the excavated TCRA materials. The 14 covered bins containing soil, concrete, and asphalt were manifested under the approved waste profile and transported off site by PSC to the Keller Canyon Class II landfill between November 16 and 19, 2007. Appendices K and L provide the Allied Waste approved waste profile and copies of non-hazardous waste manifests, respectively.

4.0 SUMMARY

The TCRA was successfully completed under the DTSC Site Investigation and Remediation Order, Docket No. ISE-RAO 06/07-004, dated September 15, 2006. This removal action was consistent with Ca-HSC § 25356.1 and CERCLA § 104(a). All excavation activities were completed in a timely fashion and successfully met the project-specific remediation goal of 16 mg/kg of arsenic in the final confirmation soil samples. All wastes generated during excavation activities were profiled as non-hazardous waste and were manifested and transported off site for disposal at the Keller Canyon Class II landfill in Pittsburg, CA.

On January 14 through 18, 2008, RFS maintenance staff backfilled the TCRA excavated area using the clean, DTSC-approved MSRI soil that was stockpiled on site.

5.0 REFERENCES

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FIGURES



UC BERKELEY
RICHMOND FIELD STATION



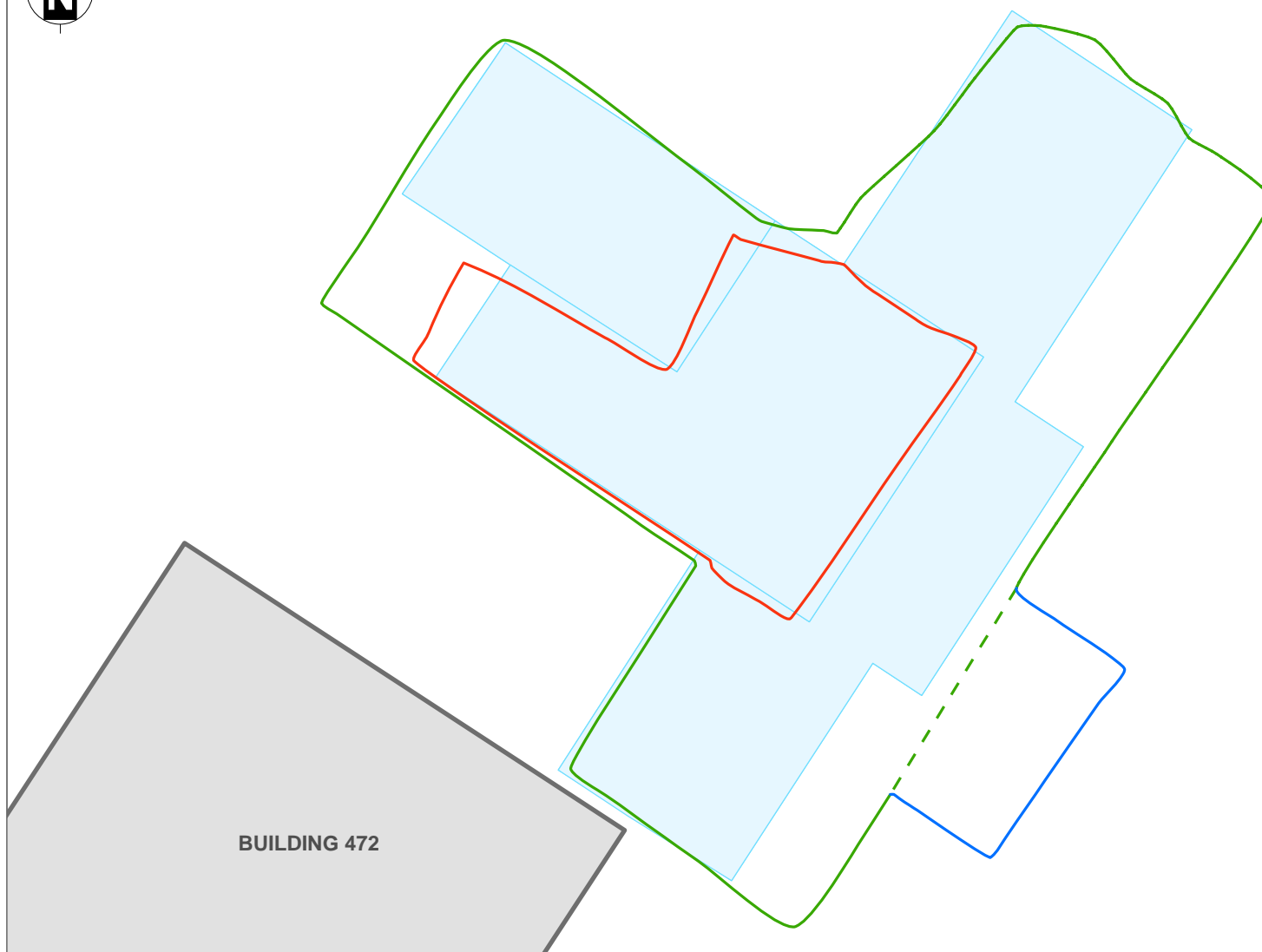
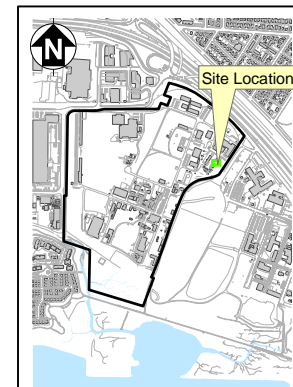
Richmond Field Station
University of California, Berkeley

FIGURE 1

SITE LOCATION MAP

Time Critical Removal Action





- Excavation Area I (approximately 3.5 feet bgs)
- Excavation Area II (approximately 2 feet bgs)
- Excavation Area III (approximately 2 feet bgs)
- Proposed Excavation Boundaries
- Building Footprint



Note:
Area surveyed by Muir Consulting Inc.
on October 18, 2007.

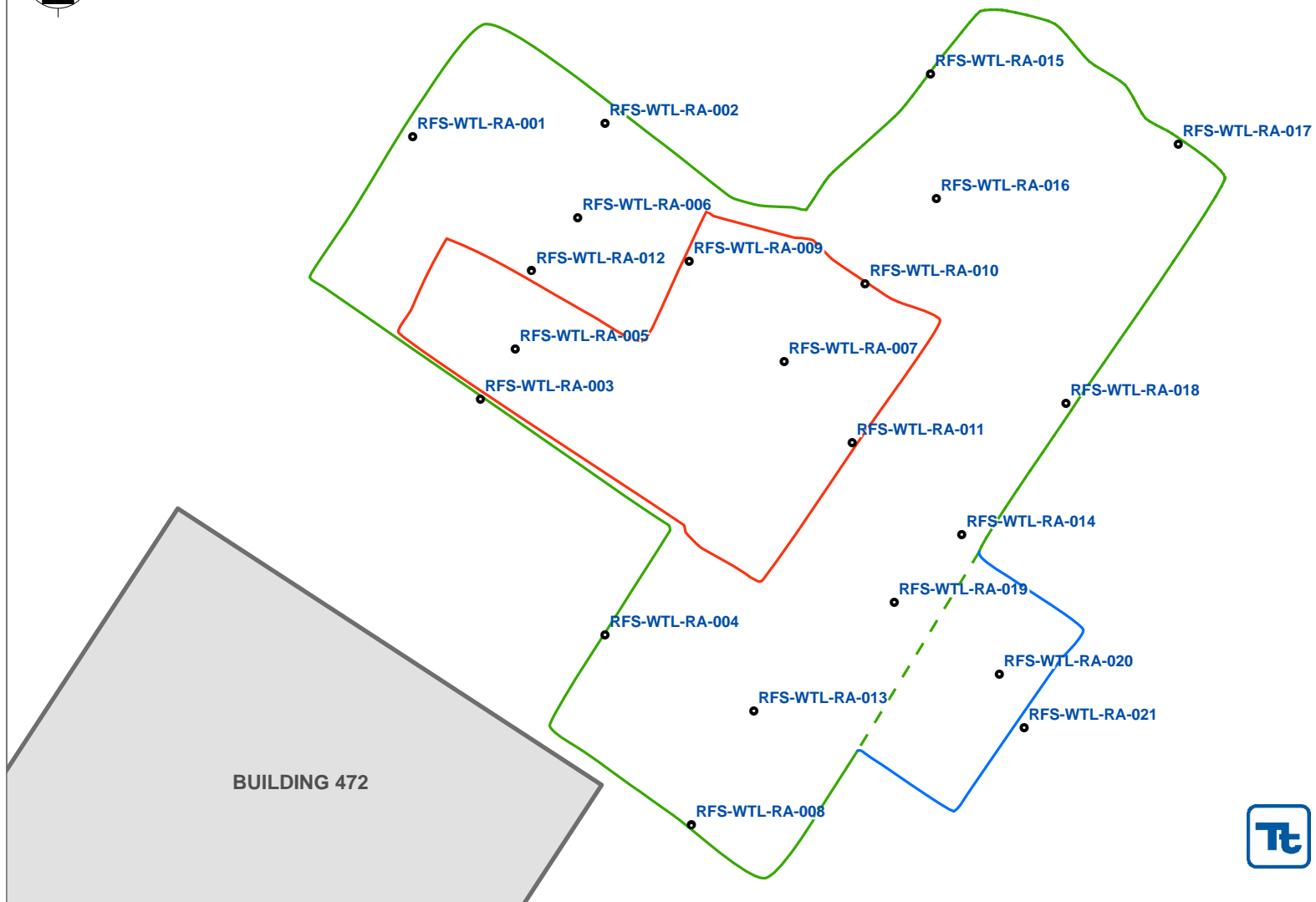
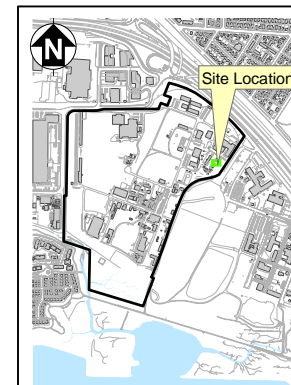


**Richmond Field Station
University of California, Berkeley**

FIGURE 2

**PROPOSED AND ACTUAL
EXCAVATION BOUNDARIES**

Time Critical Removal Action



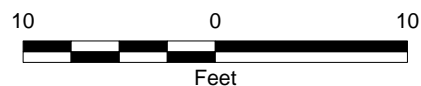
Richmond Field Station
University of California, Berkeley

FIGURE 3

**TCRA EXCAVATION AND
CONFIRMATION SAMPLE LOCATIONS**

Time Critical Removal Action

- Confirmation Sampling Location
- Excavation Area I (Approximately 3.5 feet bgs)
- Excavation Area II (Approximately 2 feet bgs)
- Excavation Area III (Approximately 2 feet bgs)
- Building Footprint



APPENDIX A

**DTSC APPROVAL FOR THE SOIL CONFIRMATION
AND PERIMETER AIR MONITORING PLAN**



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721



Arnold Schwarzenegger
Governor

September 21, 2007

RECEIVED

SEP 24 2007

Environment, Health
and Safety - UCB

Mr. Greg Haet
Associate Director, Environmental Protection
Office of Environment, Health & Safety
University of California, Berkeley
317 University Hall #1150
Berkeley, California 94720-1150

Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) has received the Soil Confirmation and Perimeter Air Monitoring Plan (Plan) to be implemented as part of the Final Memorandum for a Time-Critical Removal Action (TCRA) at the Former Forest Products Laboratory Wood Treatment Laboratory for the University of California, Berkeley, Richmond Field Station, located in Richmond, California. The Plan, dated September 17, 2007, describes the soil confirmation sampling and air monitoring protocols that will be followed during the excavation of soils containing elevated levels of arsenic. Based upon our review, we find the document acceptable and the Plan is approved.

If you have any questions please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California - Coastal Cleanup
Operations Branch

APPENDIX B

DTSC APPROVAL FOR MSRI STOCKPILE



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721



Arnold Schwarzenegger
Governor

October 23, 2007

RECEIVED

OCT 23 2007

Environmental Health
and Safety

Mr. Greg Haet
Associate Director, Environmental Protection
Office of Environment, Health & Safety
University of California, Berkeley
317 University Hall #1150
Berkeley, California 94720-1150

Dear Mr. Haet,

The Department of Toxic Substances Control (DTSC) received via electronic mail on October 22, 2007 tables indicating the analytical results of the Mathematical Sciences Research Institute (MSRI) soil stockpile. The University of California has requested that this stockpile be allowed for backfilling the excavation associated with the former Forest Products Laboratory Wood Treatment Laboratory area Time Critical Removal Action. The MSRI soil stockpile was obtained from the main University of California Berkeley campus as part of a building construction project. DTSC has reviewed the tables and finds that the MSRI soil is acceptable as backfill material in the excavated area.

If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California – Coastal Cleanup
Operations Branch



APPENDIX C

TCRA EXCAVATION FIELD NOTES



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: <u> 1 </u> of <u> 1 </u>
Date: 10/01/07	Client: UC Berkeley	Location: RFS	Time Arrived: 1045
Daily Field Report Number: Oct-01	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1445
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

1045 hrs Gene Barry w/ 4LEAF on site. PSC has two trucks on site and off loading roll off bins inside of fenced area. Dave Mathews (job superintendent) on site. Four bins currently on site. Weather is partly cloudy.

1050 hrs Gene begins laying out excavation boundaries on ground surface. Karl Hans stops by site.

1100 hrs Dave Mathews will be bringing four additional roll off bins sometime today. PSC also has a John Deere 310C backhoe (Hertz Rental) on site.

1150 hrs Dave Sato w/ PSC stops by site.

1220 hrs Gene off site to get some field supplies (flags to mark excavation boundaries in unpaved areas and some paint for paved areas). Lock site fence.

1330 hrs Gene back on site. Dave Mathews arrives w/ another two bins. Two additional bins are to be brought on site later this afternoon.

1445 hrs No activity on site. Gene verifies fence is locked and leaves site. Two additional bins will be stored outside of fence once they arrive.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 1 of 4
Date: 10/02/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-02	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry / Tony Belcher	Time Departed: 1645
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

0715 hrs Gene Barry on site. Dave Mathews w/ PSC waiting by gate.

0725 hrs Two laborers (Izzy and Donald) w/ PSC arrive at site. Gene to start setting up PDRs and will have daily safety meeting w/ PSC staff. Dave prepared a short HASP as addendum to TtEMI & URS's HASP's. Dave goes over chemical and physical hazards at site. PSC staff will be wearing Level D PPE (Tyvek and neoprene gloves) and will be wearing personal air monitors provided by PSC's subcontractor IHI. Go over exclusion zone policies.

0750 hrs Karl Hans on site. Dave goes over PSC's Job Safety Analysis for safety tailgate meeting. Goes over planned activities.

0805 hrs Scott Shackelton on site. Will have PSC saw cut along larger area of pavement (as defined by yellow-dashed line that was laid out by John and Scott) if there is time at end of the project and enough bin space. PSC setting up decon area along west side of Bldg. 476.

0900 hrs Weather is clear/sunny and slight off-shore breeze (approx. 1.5 mph as measured with wind meter). Temp. – 65 degrees. Gene sets up wind sock and 4 PDRs (see figure for locations).

0900 hrs Tony Belcher with 4LEAF on site. He will provide oversight while Gene in the PMT meeting.

0915 hrs Observed approximate ambient concentrations on PDR #4 (along perimeter fence line along South 46th Street and upwind of excavation area) is approximately 0.011 mg/m³. PSC begins saw cutting asphalt/concrete. They are using a wet-vac to capture the water during cutting.

0930 hrs Gene off site to attend PMT meeting. Tony performing oversight duties. Wind speed is 0.8 mph in a north-eastern direction. Temperature at 74 degrees.

0945 hrs Make occasional visual observance of PDRs. All within acceptable range.

1000 hrs Check PDRs. All within acceptable range. Wind speed is increasing slightly to 1.5 mph (to the northeast).

1020 hrs Saw cutting is complete. Crew preparing to remove asphalt.

1030 hrs Crew takes break.

1050 hrs Crew resumes work – doing removal of asphalt. One of the crew members is having problems with his personal air monitor. I suggest that he check the battery. He resumes working in exclusion zone.

1100 hrs Check PDRs. All within acceptable range. Wind has increased to 2.9 mph (to the northwest). Crew effectively using water hose for dust suppression while the backhoe with a jackhammer attachment is breaking concrete pad up. Temperature is approx. 80 degrees.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 2 of 4
Date: 10/02/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-02	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry / Tony Belcher	Time Departed: 1645
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

1120 hrs Crew takes off jackhammer attachment off the backhoe and puts bucket back on to load out concrete.

1130 hrs Crew breaks for lunch.

1132 hrs Winds have picked up with sustained speeds at approx. 5 mph.

1200 hrs Crew returns to work. Soil bin number R27781PL is loaded onto PSC's truck and being moved into place near excavation. Winds are at sustained speeds of 4.3 mph (towards the northwest). Personal Data RAMs (PDRs) all within acceptable limits.

1215 hrs Gene returns to the site

1230 hrs Backhoe begins loading asphalt into dumpsters. Contractor is spraying water from hose for dust suppression.

1240 hrs Tony off site.

1250 hrs Winds blowing in on-shore direction at speeds of 3.5 to 5 mph.

1310 hrs 1st bin (R27981PL) for asphalt/concrete is almost full. PSC will park this bin inside of fenced area next to excavation. There are several concrete footings that need to be dug out under the former concrete pad and will be placed into this bin before it is stored inside fenced area behind Bldg. 102.

1345 hrs Winds gusting up to 8 mph. PSC starting to excavate in bare soil near NE corner of Bldg. 472. There are several utilities in area so PSC using hand shovels when any hard obstacles are encountered. I check PDR #1 (reading at 0.000 mg/m³). I take unit off fence to verify it is working properly. Display momentarily spikes up to 0.056 mg/m³. Place back on fence – reading at 0.011 mg/m³.

1355 hrs Lynn Nakashima and Eric B. w/ DTSC on site. Lynn and Eric both have hand-held anemometers and I confirm the readings on my hand-held are accurate. Wind speeds are gusting up to 8 – 9 mph and lower. PSC is doing a good job at dust suppression.

1445 hrs Scott Shackelton and John Felling stop by site. Lynn requests that we inform Bill at Stratocor about storing the bins by Bldg. 102. John said that he has already spoke with him.

1455 hrs Karl Hans on site.

1505 hrs Scott and John leave site. Bin #R18013ML is full.

1515 hrs PSC transports bin #R18013ML to fenced area behind Bldg. 102. DTSC and Karl off site.

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Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 3 of 4
Date: 10/02/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-02	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry / Tony Belcher	Time Departed: 1645
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

1520 hrs PSC is pulling up section of asphalt immediately north of Bldg. 472 and digging soil near NE corner of building.

1605 hrs Crew is having to perform a lot of hand digging around utilities near NE corner of building.

1630 hrs Crew done digging for the day. Cleaning up and putting away equipment (will store inside Bldg. 476). I take down PDRs.

1645 hrs Site secured. PSC and I leave site.

___ Continued on next page



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 1 of 3
Date: 10/03/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-03	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1635
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

0715 hrs Gene Barry on site. Dave Mathews w/ PSC on site but is outside fenced area. No other PSC staff on site yet. Slight breeze & partly cloudy (marine layer). Temp approx. 60 degrees Fahrenheit. I calibrate the 4 PDRs using clear air bags provided by manufacturer.

0720 hrs PSC crew (Donald and Izzy) arrives and begins setting up equipment.

0730 hrs Dave holds tailgate safety meeting. Goes over safety checklist.

0740 hrs IHI (PSC's air monitoring subcontractor) on site to set up personal air monitors on crew.

0745 hrs PDRs and wind sock placed at various locations around work area (see attached figure for locations). John Felling stops by site. Domenico will come by to open door to Bldg. 472 for crew to use restrooms during project. Winds are 2 to 4 mph and have been alternating between off-shore & east to west directions.

0800 hrs Crew starts excavating around NE corner of Bldg. 472. They are having to do a lot of hand digging because of utilities. The tops of a gas line and fiber optics line are exposed and are right at the 2-ft depth (depth of bottom of excavation in this area). The bottom of the excavation should stay right at the top of the lines as long as the lines don't get any shallower. There is also an unidentified cast iron pipe that is traversing the excavation in an east-west direction. It may be an old fuel line. Crew hand digging around.

0830 hrs PSE excavating soil w/ John Deere 310C backhoe and loading into bin #R27957PL. They are doing a good job of wetting down the soil during digging and when placing into soil bin. Winds are currently blowing in an on-shore direction at speeds of 3 to 5 mph.

0855 hrs All of the PDRs are reading about 0.030 mg/m³ (upwind and downwind) for the ambient dust levels.

0930 hrs Bin # R27957PL is full.

0938 hrs Izzy w/ PSC was using hand shovel to move around some of the fallen tree leaves and was creating visible dust that went past PDR #3. Check display reading (at 0.043 mg/m³). I immediately ask him to stop and wet down the area thoroughly with water and let him know they must use dust suppression even when hand digging.

0940 hrs Dave transports bin #R27957PL to fenced area behind Bldg. 102. PSC uses hose to wash down the bin's rollers & bottom before transporting out of exclusion zone.

1030 hrs Lynn w/ DTSC on site. Wind speeds ranging between 3 and 7 mph in on-shore direction. Karl on site.

1120 hrs Lynn and Karl both leave the site. Lynn seems happy with site operations.

1125 hrs Dave transports bin R27961PL to fenced area behind Bldg. 102.

1140 hrs Crew breaks for lunch.

1210 hrs Crew resumes work. Move bin #R1955ML into exclusion zone.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 2 of 3
Date: 10/03/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-03	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1635
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

- 1230 hrs I change out the batteries in all 4 PDRs. I zero out all 4 PDRs in area upwind of excavation so that ambient air dust concentrations are not added into the instrument readings. All previous calibrations were done by placing the instruments inside of clean air bag and zeroing the instruments out.
- 1310 hrs Dave transports bin #R1955ML to fenced area behind Bldg. 102.
- 1325 hrs PSC moves bin #R25962PL into the exclusion zone. Weather is clear, 65 degrees F, and winds between 3 and 6 mph (on-shore direction).
- 1345 hrs I do a back of the envelope calculation on the volume of soil to be excavated because we currently only have 3 bins remaining and have about 2/3rds of the excavation left to dig. It appears that TtEMI's volume estimate did not account for a fluff factor as the soil is excavated and was an in-situ volume. I estimate the volume of soil to be excavated will be about 160 cyds and at 16 cyds /bin, we will need 10 bins for soil. I call Karl to let him know and that I will talk w/ Dave Mathews.
- 1430 hrs I talk w/ Dave and he puts in an order for 4 more bins to be delivered tomorrow morning. Dave transports bin #R25962PL to fenced area behind Bldg. 102.
- 1440 hrs Dave Sato w/ PSC on site.
- 1520 hrs PSC moves bin #R18223VL into exclusion zone and begin excavating. Dave Sato says that they can only get three open-top bins delivered tomorrow. They will use tarps to cover.
- 1540 hrs Winds have subsided to approx. 1 mph (on-shore direction).
- 1625 hrs PSC stops excavating for the day. They are deconning their boots and picking up equipment. I take down PDRs. I drive down to Bldg. 102 to verify that the gate is locked. PSC locks gate on fence to TCRA area.
- 1635 hrs I leave site.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 1 of 4
Date: 10/04/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-04	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1655
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

0715 hrs I arrive on site and open lock on gate. Dave Mathews on site.

0720 hrs Izzy and Donald (PSC crew) arrive at site and begin setting up equipment. Dave holds tailgate safety meeting. Gene notes that the crew needs to make sure & not shovel/sweep potentially contaminated soil back into the completed portions of the excavations as we will be collecting confirmation samples.

0730 hrs I set up PDRs (see attached figure for locations). Zero out instruments in ambient air upwind of excavation by Bldg. 472. Put up wind sock.

0745 hrs PSC is loading the three large concrete footings that were excavated from beneath former concrete pad area. Weather is sunny and calm (winds about 1/2 mph). Temp. is approx. 60 degrees.

0815 hrs Dave loads out and transports bin #R18223VL to fenced area by Bldg. 102. I call Karl and ask if he could have some signs made up that read "TCRA Area Excavated Soil – Analyses Pending. Contact EH&S With Questions".

0820 hrs IHI (PSC's sub) on site and gives personal air monitoring equipment to PSC staff.

0825 hrs PSC resumes loading concrete and portions of asphalt into bin #R27981PC.

0840 hrs Resume excavating soil in excavation.

0845 hrs Some visible dust being generated. I ask Izzy to use more water (he complies). The reading on PDR #3 (immediately adjacent to excavation) has reading of 0.064 mg/m³. Additional water is now effectively reducing visible dust.

0855 hrs I leave the TCRA site area to show Kevin w/ TtEMI where to collect samples from the MSRI soil stockpiles.

0915 hrs I arrive back at TCRA area. I have asked Doug w/ RFS Facilities and Lionel (RFS electrician) to meet with me to see if the electrical conduit into Bldg. 472 is live – it is. PSC to dig around the conduit. Dave Mathews thought the conduit may be empty and wanted to verify.

0935 hrs Two open-top bins arrive on site (bins # R18155 & R18183).

1045 hrs Winds are starting to pick up (on-shore direction at 3 1/2 mph). PSC is loading excavated soil into bin. Using hose to wet it as it is placed in bin. Donald w/ PSC is generating a small amount of dust while sweeping up soil on top of asphalt surface around excavation perimeter. I ask that he stop or get some water on it – he complies by stopping sweeping.

1115 hrs Bin #R18213ML is full and is transported to fenced area behind Bldg. 102.

1130 hrs Bin #R18155 placed in exclusion zone.

1135 hrs Occupants from Bldg. 473 are loading some equipment out of the east doors of the building. They are on



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 2 of 4
Date: 10/04/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-04	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1635
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

outside of project fencing. Winds are starting to blow up to 7 mph gusts (short duration) and then back to sustained speeds of 2 to 4 mph.

1140 hrs Donald w/ PSC off site for lunch. PSC is planning on taking staggered lunch breaks.

1205 hrs Wind gusts are up to 10 mph. Sustained speeds between 3 and 5 mph. 65 degrees. 3rd soil bin delivered to site (bin #R18134).

1220 hrs I am closely monitoring the wind speeds with the hand held anemometer. Sustained wind speeds are now 5 to 8 mph w/ intermittent gusts up to 11 mph (still in on-shore direction).

1235 hrs Bin #R18155 is full and is transported to fenced area behind Bldg. 102. I talk with Dave Mathews – I estimate that we have about 1/2 of a bin of soil left in the 2-ft cut and will have about 45 cyds in the 3 1/2-ft cut. Assuming 18 cyds / bin, we will need one additional bin. Baker could only supply PSC with 3 of the 4 bins that they requested yesterday.

1310 hrs PSC is trying to locate another soil bin.

1325 hrs PSC resumes loading soil from last portion of 2-ft cut into bin.

1340 hrs I check all PDRs. All within acceptable range (all readings < 0.01 mg/m³). There is some mist from the dust suppression that is landing on PDR #3 and may be increasing the readings as aerosol. Karl stops by site for update.

1345 hrs Karl off site.

1400 hrs Batteries on PDRs need to be changed out. Will wait until PSC finishes up the 2-ft cut.

1405 hrs Finishing up the 2-ft cut. Crew takes a break. Dave lets me know they will be able to get an additional soil bin.

1415 hrs Dave and I layout the boundaries of the 3 1/2-ft deep cut. It appears we will need one more bin (in addition to the one we currently have on order). Dave to put in request.

1440 hrs Greg Haet w/ EH&S on site.

1445 hrs Karl back on site.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 3 of 4
Date: 10/04/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0715
Daily Field Report Number: Oct-04	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1635
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

- 1450 hrs Crew resumes excavating. Doing the 3 1/2- ft cut area.
- 1455 hrs Dave asks if they can drive the backhoe into the excavation so that they can better dig portion of the 3 1/2-ft cut. The backhoe is having a hard time digging into the hard soil with the way the electrical conduit traverses the excavation. I approve. I ask that they use extra water as they drive the backhoe around to access the excavation – we are getting dust as the backhoe drives over dry Eucalyptus leaves on ground surface. I am standing next to PDR #3 and getting some instantaneous spikes up to 0.3 mg/m³ but the readings are quickly dropping to less than 0.01 mg/m³. I request additional water be sprayed before continuing.
- 1505 hrs PSC is placing visquene down on portion of 2-ft cut they will be driving over to get into position. Begin cutting along each side of the conduit. Greg and Karl off site.
- 1525 hrs The electrical conduit that leads into Bldg. 472 is collapsing and breaking (it has several cracks in it) as the underlying soil is removed. I call John Felling to ask that they turn off power in the line.
- 1540 hrs Doug w/ RFS Facilities on site and cuts off power at the panel located north of Bldg. 473. I verify that power is off in line (lights and electrical outlets in Bldg. 472 are dead).
- 1555 hrs Backhoe out of excavation and sets up on asphalt and begins loading soil into bin. Sustained wind speeds between 6 and 10 mph in on-shore direction.
- 1620 hrs Bin #R18134 is full. PSC places the plastic that was laid down under backhoe as it entered excavation into the soil bin. They secure the top of the bin with a canvas tarp. I take down PDRs and wind sock.
- 1640 hrs Dave transports bin #R18134 to fenced area behind Bldg. 102. Two additional bins arrive at the site and are placed on outside of fence north of Bldg. 476.
- 1655 hrs Site secured. PSC and I leave site.

X Continued on next page



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 1 of 4
Date: 10/05/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0710
Daily Field Report Number: Oct-05	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1730
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

0710 hrs Gene Barry arrives at site. Dave Mathews also on site.

0725 hrs Donald and Izzy with PSC arrive at site.

0730 hrs Dave holds tailgate safety meeting. I calibrate PDRs in ambient air.

0740 hrs Set up PDRs and wind sock (see attached figure for locations). PSC setting up equipment.

0800 hrs PSC transports bin #R27981PL to fenced area behind Bldg. 102. This bin contains asphalt and concrete. Karl is working on getting the non-haz. profile and manifest set up so that we can have Bldg. 445 soil taken off site (soil stockpile is inside fenced area north of asphalt pad). We have asked PSC to load out the soil.

0805 hrs Temperature is 63 degrees. Winds are mostly calm (slight intermittent off-shore breeze < 1 mph).

0810 hrs IHI staff member arrives at the site to put personal air monitors on PSC crew.

0815 hrs Move bin #R18183 into the exclusion zone. Move bin #025 into fenced area and will load asphalt into it later.

0825 hrs Begin excavating in 3 ½-ft cut. I check PDR #1 and it is right next to bin #025 and there was an instantaneous reading of 0.111 mg/m³ as the plastic liner was placed in the bin. Current reading on PDR is 0.001 mg/m³.

0840 hrs Karl stops by the site. Dave Sato w/ PSC will be bringing the manifest and waste profile approval for the Bldg. 445 soil in about ½ hour.

0845 hrs Starting to get a slight breeze (1 to 2 mph) from east to west direction. I will move PDR #1 so that it is down wind of the excavation (see figure).

0920 hrs PSC needs to re excavate the bottom of the excavation in the area along the electrical conduit. I noticed they were only going down to 3 feet bgs but need to go to 3 ½-ft bgs.

0925 hrs Donald with PSC will go over to Bldg. 445 soil stockpile to provide dust suppression while loading soil into trucks. I have asked John Felling if he can have Mike w/ Facilities load the first truck that will transport the soil to the Richmond Landfill. I leave TCRA area to get Bldg. 445 work started.

0945 hrs Mike is loading Bldg. 445 soil into truck. Donald using water hose from Bldg. 149 for dust suppression. Karl observing that work.

0955 hrs I arrive back at TCRA area. The soil below depths of 2 feet is lighter in color (light brown) than soil between 0 and 2 feet depths. Soil type appears to be much tighter silts & clays and is much harder to dig in. Wind direction is still in off-shore direction (0.5 to 3 mph).

1010 hrs I move PDR #1 to location near the NW corner of Bldg. 472.

1025 hrs Donald w/ PSC arrives back at TCRA area. There are now some wind gusts up to 8 mph. Sustained winds are in the 2 to 5 mph range. Temperature is 58 degrees.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 2 of 4
Date: 10/05/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0710
Daily Field Report Number: Oct-05	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1730
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):
Observations/Remarks:			
1030 hrs	I talk w/ Jason at TtEMI about confirmation sample schedule. Right now, I estimate that PSC won't be done w/ excavation until 1 or 2 pm (depending on the number of times Dave needs to go over to load Bldg. 445 soil).		
1110 hrs	Soil being excavated is very tight (light brown clays/silts) and is hard to excavate with the flat blade edge that is on the backhoe's bucket.		
1115 hrs	Bin #R18183 is full. Crew takes a break for lunch. Donald leaves site to get lunch for crew.		
1200 hrs	Crew breaks for lunch.		
1215 hrs	Crew puts tarp over bin #R18183. Will transport to fenced area behind Bldg. 102.		
1255 hrs	Crew moving the fence line near Bldg. 472 so that they can excavate last portion of 3 1/2-ft cut. Winds are now in on-shore direction. I move PDRs 1 & 3 (see figure). PSC moves bin #021 into excavation. They use backhoe to push bin #025 on pavement right next to where PDR #1 is located. Get an instantaneous reading of 0.071 mg/m ³ .		
1305 hrs	PSC begins excavating last portion of 3 1/2 -ft cut. Winds are in on-shore direction at sustained speeds of 4 to 6 mph and gusts up to 8 1/2 mph. I confirmed earlier this morning that Karl placed signs on outside of bins that are inside fence by Bldg. 102.		
1325 hrs	Jason & Kevin w/ TtEMI on site to collect confirmation samples once PSC is finished.		
1330 hrs	Karl on site. We discuss confirmation sample locations and sample IDs.		
1400 hrs	PSC doing some final shoveling of small soil piles & placing in backhoe bucket and then into soil bin.		
1410 hrs	PSC deconning their backhoe bucket (placing over soil bin & knocking off soil with shovels and then will wash off w/ water).		
1420 hrs	I will assist Kevin with collecting soil confirmation samples from excavation. A total of 13 sidewall samples and 6 bottom samples will be collected.		
1510 hrs	PSC pulling up clean asphalt between southern end of excavation and north wall of Bldg. 472. I ask that they provide some additional water while working.		
1520 hrs	Kevin and I begin collecting confirmation samples. Kevin and Jason to collect waste profile samples from soil bins. Will submit samples for SVOCs, metals, PCBs, & TPH (based on a conversation between Karl and me).		
		X Continued on next page	



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? <input type="checkbox"/> Yes <input type="checkbox"/> No	Page: 3 of 4
Date: 10/05/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0710
Daily Field Report Number: Oct-05	Source of Fill: <input type="checkbox"/> Native <input type="checkbox"/> Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1730
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

1610 hrs PSC finished pulling up asphalt and placing in bin #025. Dave is going over to area north of asphalt pad to load Bldg. 445 soil into truck.

1630 hrs I leave a message with Jack Smith at Muir Consulting to let him know that we may need him to be on site Monday or Tuesday to perform as-built survey after confirmation samples are reviewed.

1655 hrs PSC is loading up bin #021 (containing soil) and will transport to fenced area behind Bldg. 102. TtEMI has completed performing bin sampling and will transport to C&T.

1700 hrs I take down the PDRs and wind sock.

1720 hrs PSC transports bin #025 (containing asphalt) to fenced area behind Bldg. 102. I lock the gate to area.

1730 hrs PSC finished up loading up equipment. Gate around TCRA excavation is locked. Site secured. I leave site.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? ___ Yes ___ No	Page: 1 of 3
Date: 10/12/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0700
Daily Field Report Number: Oct-06	Source of Fill: ___ Native ___ Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1130
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

0700 hrs Gene Barry arrives at site. I lay out boundaries of where over excavation will be performed in southeastern portion of TCRA excavation. There was one of the 10/05/07 confirmation samples that had an arsenic concentration exceeding the project cleanup criteria. There are intermittent rain showers. No wind.

0730 hrs Izzy with PSC on site. Waiting for Dave Mathews to arrive.

0740 hrs IHI representative on site to provide personal air monitors for PSC staff.

0745 hrs I speak with Dave Mathews. He is running late and won't be on site until around 9 am. Izzy and I move the eastern fence further to the east so that PSC will have more access for soil bin & backhoe. I ask Izzy to get some sandbags so that we can put along the concrete-lined swale along the western side of Buildings 472 & 476. This swale drains to grassy swale near Bldg. 475.

0800 hrs Karl stops by site to get an update.

0840 hrs Dave Mathews on site. We discuss area where over excavation will need to be performed.

0855 hrs I put out wind sock and PDRs. PDR #3 is adjacent to the soil bin (see attached figure).

0915 hrs I notice an instantaneous reading of 0.024 mg/m³ on PDR #3 as PSC moves the bin into the work zone. All other PDRs are within acceptable limits. It has started raining more steadily now so this may be adding to readings on PDRs.

0925 hrs PSC begins excavating.

0935 hrs Encounter a pinkish colored soil (grainy soil) at interface between loamy soil and underlying hard clay. Definitely not cinders.

0940 hrs It appears the pinkish colored soil is confined the zone around some utilities that run in north-south direction through open excavation. I call Karl & we discuss on whether to sample the material.

0945 hrs Upon further inspection, there are two PVC conduits under where the pinkish soil has been encountered. Markings on outside of conduits identify the date of 09/02/02. Doug with Facilities and Karl on site. Karl says the material looks like decomposed granite. Will have contractor continue excavating down to 2 feet depth (at clay interface). Rain temporarily stops. Doug to look at facility drawings.

1000 hrs Doug confirms with plans that the two lines are 2, 2-in. fiber optics lines.

1040 hrs I talk with Karl. He spoke with Scott Shackelton about the material and Scott said the pinkish soil is indicator soil for the fiber optics lines.

1110 hrs PSC done with over excavation. I will collect confirmation samples so that TtEMI doesn't have to come out to site. I take down PDRs & wind sock. PSC re-establishes fence line.



Project Number: J0192	Project Name: RFS FPL TCRA	Client received copy of this report? <input type="checkbox"/> Yes <input type="checkbox"/> No	Page: 2 of 3
Date: 10/12/07	Client: UC Berkeley	Location: RFS	Time Arrived: 0700
Daily Field Report Number: Oct-06	Source of Fill: <input type="checkbox"/> Native <input type="checkbox"/> Import	4LEAF Engineer/Inspector: Gene Barry	Time Departed: 1130
Reviewed By:		Contractor: PSC	Travel Time (hours):
Date Reviewed:	General Location: Bldg. 476	Weather: See entries below	Total Time (hours):

Observations/Remarks:

Bin # R1827 will be stored inside fenced area.

1130 hrs I leave TCRA area and go to Bldg. 112 to talk with Karl. We had left an e-mail earlier with Lynn Nakashima on whether the confirmation sample can only be submitted for CAM 17 metals. We haven't heard back from her so Karl and I decide the sample will only be submitted for metals analysis. I leave site to transport sample to C & T laboratory.

APPENDIX D

TCRA EXCAVATION PHOTO LOG



PSC's decon station set up adjacent to Building 476.



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PSC's decon station set up adjacent to Building 476.



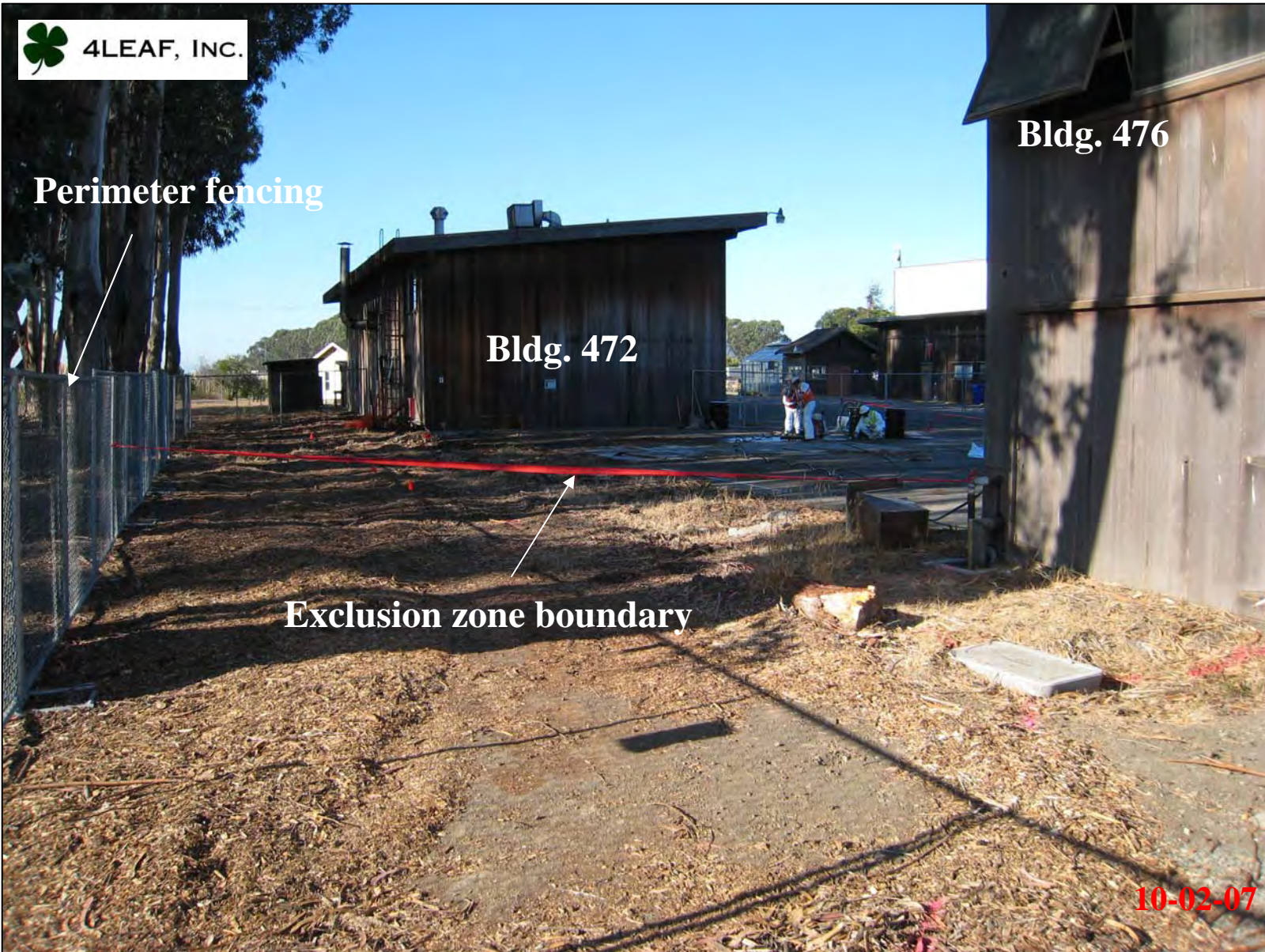
PSC's decon station set up adjacent to Building 476.



View of exclusion zone boundary.



Saw cutting concrete pad and asphalt over excavation area.



View of exclusion zone tape on south side of Bldg. 476 (looking south).

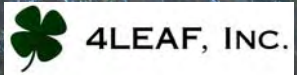


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PDR monitor location



PDR location along perimeter fencing.



10-02-07

Placing soil bin inside exclusion zone.



View of excavation after concrete slab removed.



View of excavation after concrete slab removed.



Using dust suppression as excavation begins along northeast corner of Bldg. 472.



4LEAF, INC.



Black cast-iron pipe

10-02-07

View of excavation along northeastern corner of Bldg. 472.



View of excavation along northeastern corner of Bldg. 472.



Location of bin storage inside fenced area near Bldg. 102.



View of excavation along northeastern corner of Bldg. 472.



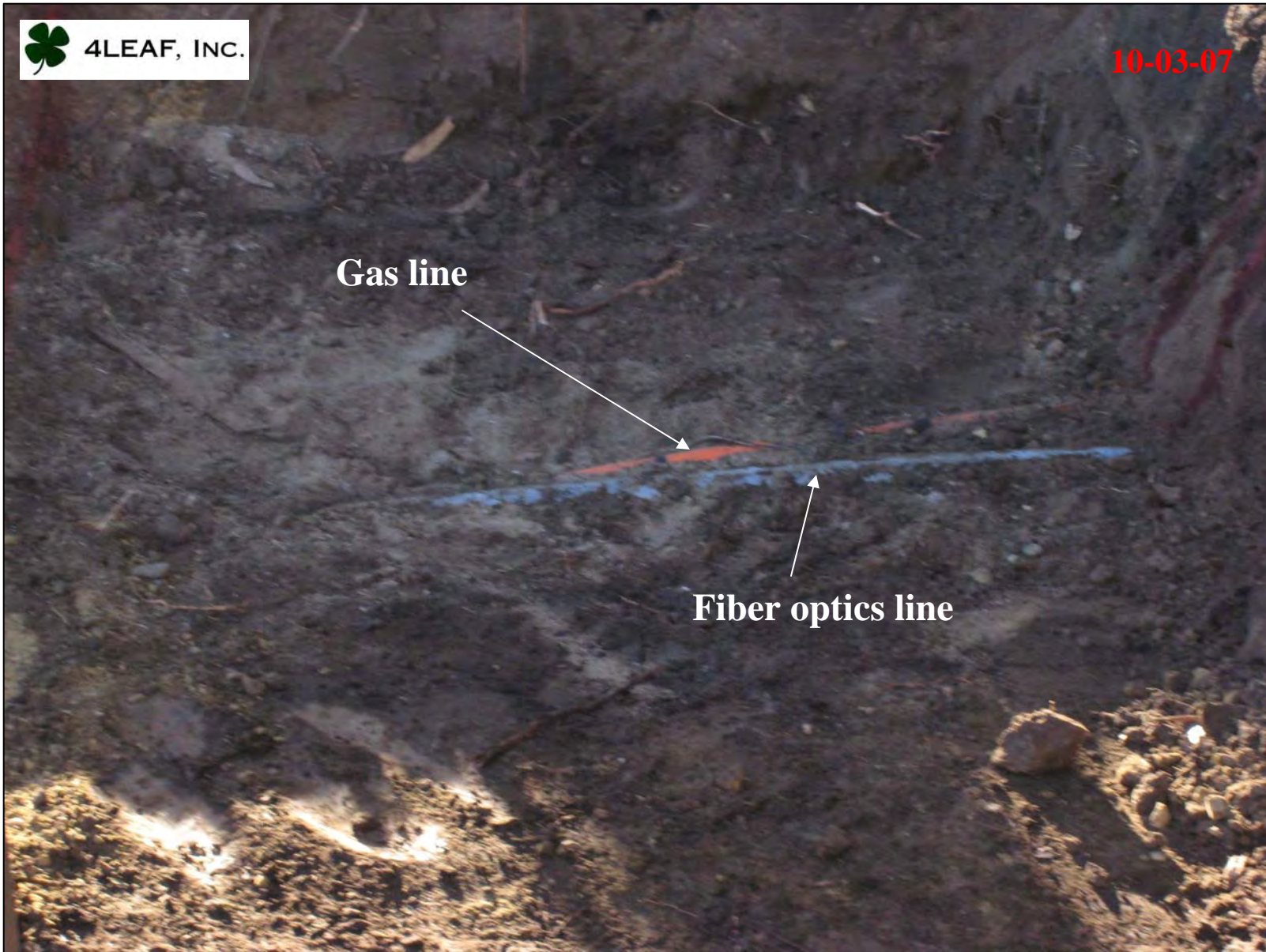
4LEAF, INC.

10-03-07

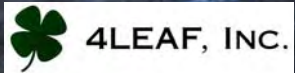
Gas line



Fiber optics line



View of fiber optics and gas line running in N-S direction of excavation.



10-03-07

View of multiple utilities coming out of northeast corner of Building 472 in excavation area.



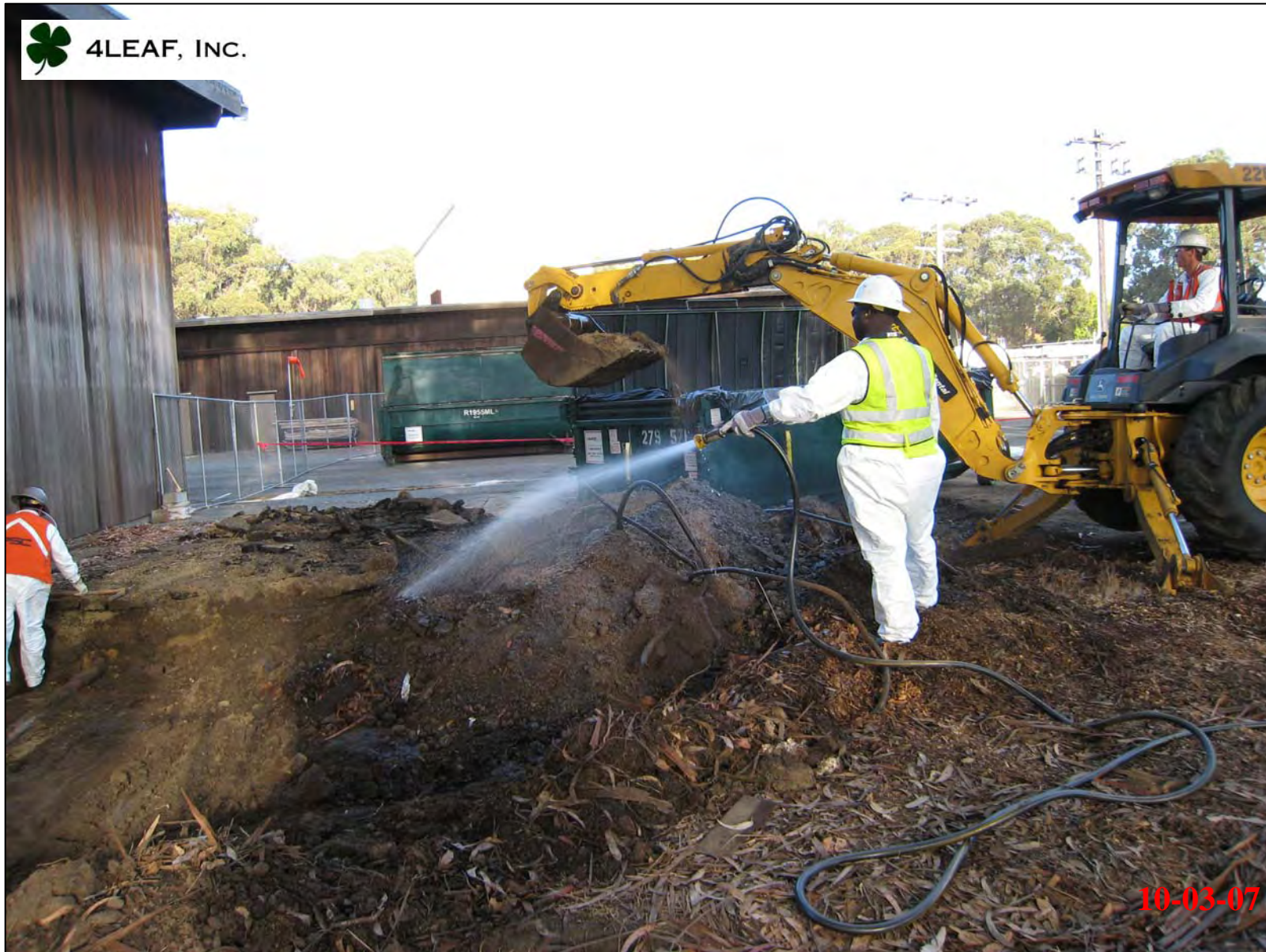
View of multiple utilities coming out of northeast corner of Building 472 in excavation area.



View of cast-iron pipe running in East-West direction in bottom of excavation at depth of 2 ft.




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Applying dust suppression during excavation activities.



 4LEAF, INC.

Applying dust suppression during excavation activities.



View of multiple utilities coming out of northeast corner of Building 472 in excavation area.



4LEAF, INC.



Cast-iron pipe

10-03-07

View of completed portion of 2-ft cut of excavation (southeast corner). View looking east.




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View of excavation (looking north towards Bldg. 476).



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View of excavation (looking north towards Bldg. 476).



View of excavation (looking north towards Bldg. 476).



Soil bin storage area in fenced area near Bldg. 102.




View of excavation area (2-ft cut).



10-03-07

View of excavation activities. View looking south towards Bldg. 472.



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Concrete footing

10-03-07

Removing concrete footings.



Concrete footings being removed from beneath former concrete pad.



4LEAF, INC.



Concrete footings

10-03-07

Concrete footings removed from beneath former concrete pad.



View of excavation looking south towards Bldg. 472.



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View of excavation looking west towards Bldg. 473.



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10-04-07

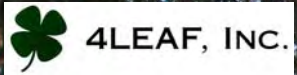


Fiber optics line

Electrical conduit line

Gas line

View of excavation looking northwest towards Bldg. 476.



10-04-07

Loading out soil bin for transport to fenced area by Bldg. 102.



View of concrete and asphalt in soil bin.



Using dust suppression while loading soil into bin.



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Bldg. 476



View of excavation. View looking northeast.




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View of excavation. View looking northeast.



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Placing canvas tarp over soil bins that didn't have plastic lids.



View of excavation in area of 2-ft cut.



View of excavation in area of 2-ft cut.



**Plastic layed down
under backhoe
to enter excavation**

Backhoe in excavation to excavate for 3 ½-ft cut along location of utilities.



Excavating for 3 ½-ft cut along along site utilities.



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Conduit for electrical line
into Building 472

10-04-07

Excavating for 3 ½-ft cut along along site utilities.



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Light brown-colored
silts / clays encountered
at depths of 2 feet

Transite pipe started breaking
as underlying supporting
soil was excavated

10-04-07

View of broken conduit for electrical line into Building 472.



4LEAF, INC.




Transite pipe started breaking
as underlying supporting
soil was excavated →

Light brown-colored
silts / clays encountered
at depths of 2 feet ←

10-04-07

View of broken conduit for electrical line into Building 472.



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Electrical conduit was supported using blocks after underlying soil was hand excavated.



Miscellaneous utilities encountered in excavation. View looking west



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View of area of 3 ½-ft cut in excavation.



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10-05-07

View of location of wind sock.



View of excavation activities. View looking south towards Bldg. 472.



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View of area of 3 ½-ft cut in excavation.



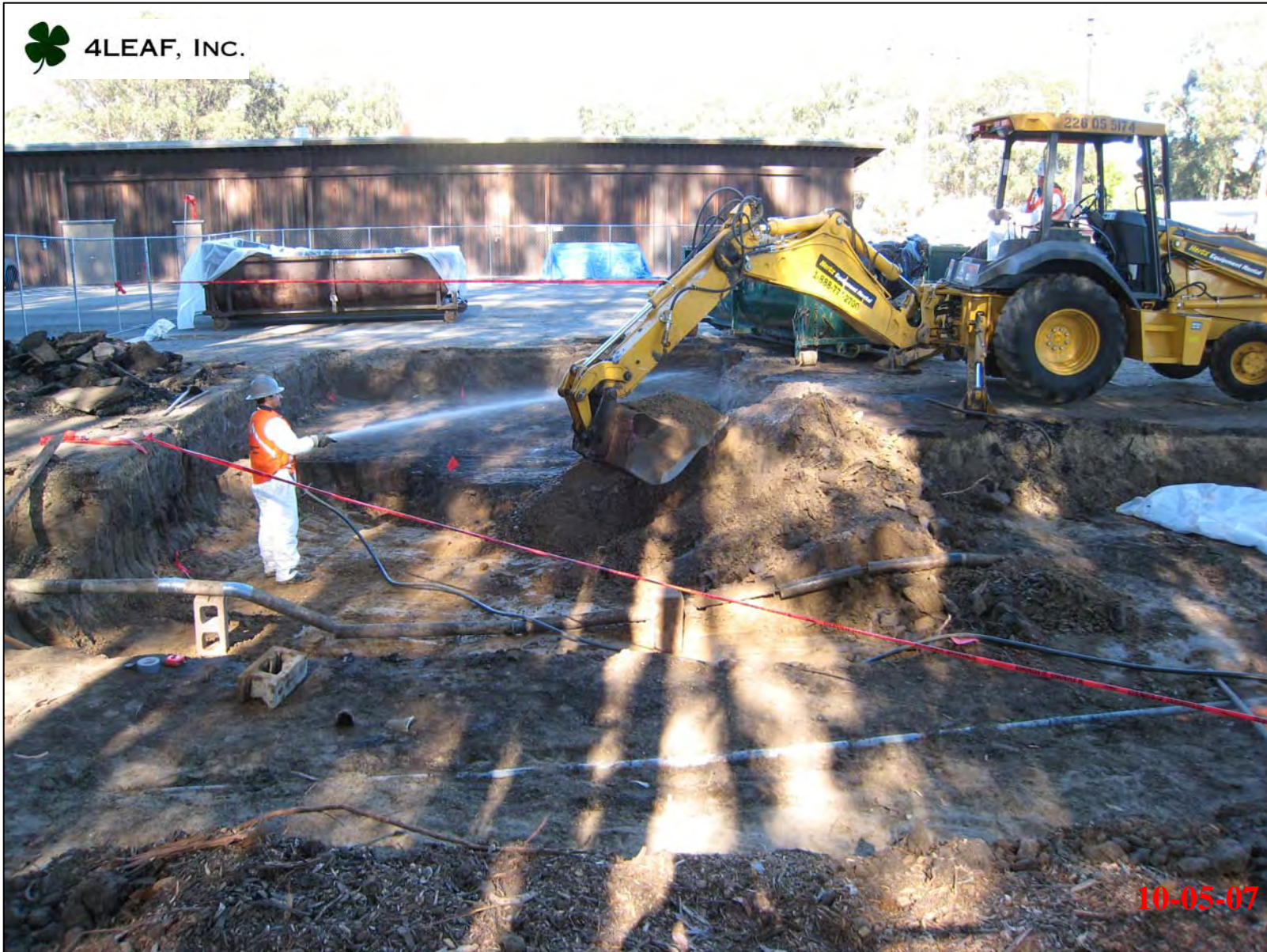
View of area of 3 ½-ft cut in excavation.



View of area of 3 ½-ft cut in excavation.



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View of area of 3 ½-ft cut in excavation.



Depth of excavation
of 2 feet

Depth of excavation
of 3 ½ feet

10-05-07

View of area of 3 ½-ft cut in excavation.




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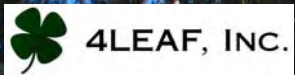


Using shovels to clean up final amounts of loose soil from excavation.



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Using shovels to clean up final amounts of loose soil from excavation.



Deconning backhoe bucket using shovels to knock off loose soils into soil bin.



Pulling up areas of clean asphalt between north end of Building 472 and south of excavation.



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Confirmation sample locations
identified by orange flags

10-05-07

View of excavation after confirmation samples collected.



**Locations of confirmation
samples indicated by
orange flags**

10-05-07

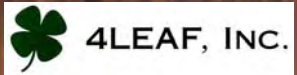
View of excavation after confirmation samples collected.



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View of excavation after soil confirmation samples. View looking towards Bldg. 472.



10-05-07

View of excavation after soil confirmation samples collected.



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View of excavation after soil confirmation samples collected.



Performing over excavation in southeast portion of TCRA area after the arsenic concentrations in one of the 10/05/07 confirmation samples exceeded the project cleanup criteria.



Performing over excavation in southeast portion of TCRA area after the arsenic concentrations in one of the 10/05/07 confirmation samples exceeded the project cleanup criteria.

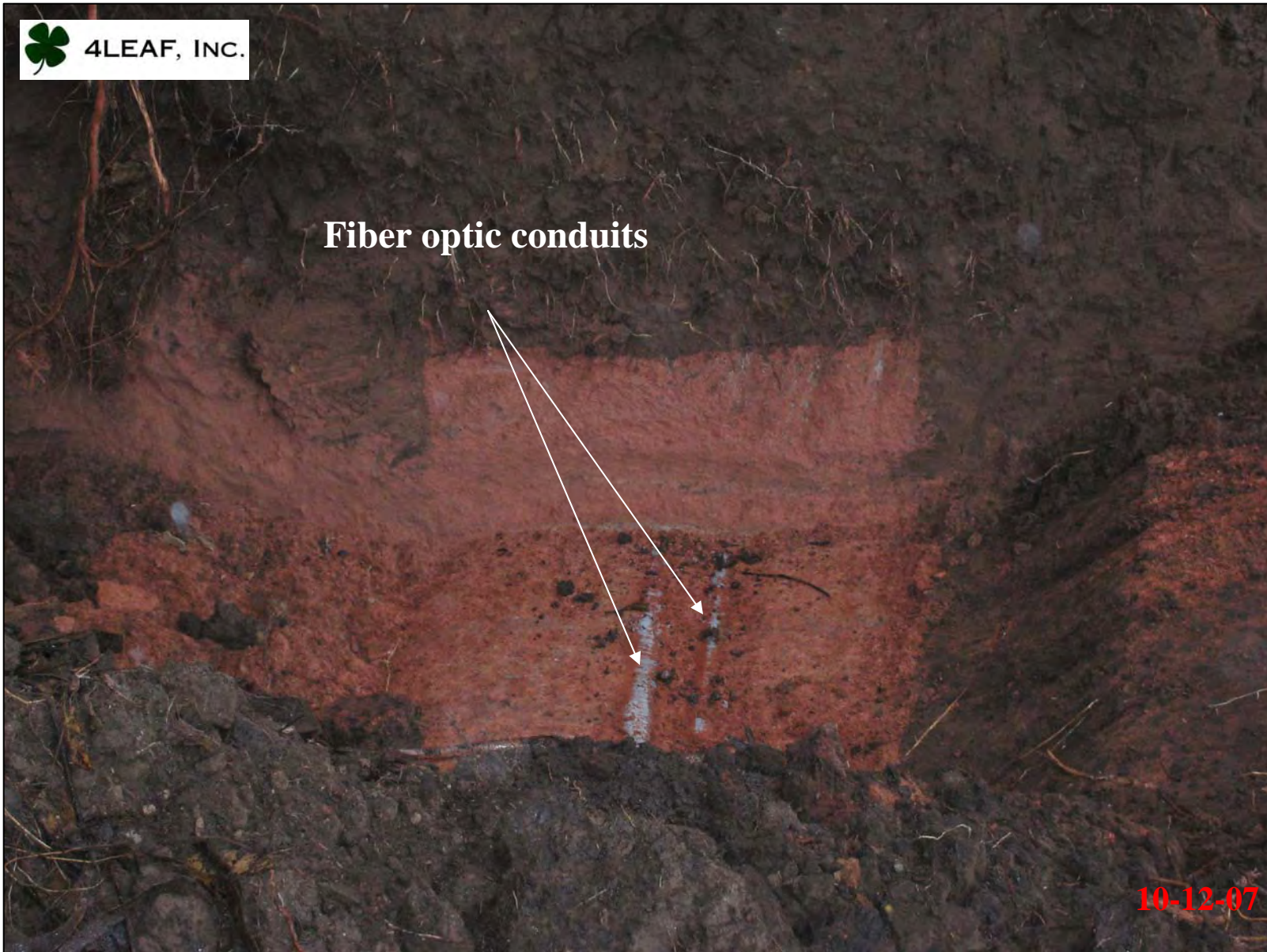


Pinkish-colored soil encountered during over excavation activities. Soil was identified as “indicator soil” for the fiber optics lines that transverse the excavation area.



Pinkish-colored soil encountered during over excavation activities. Soil was identified as “indicator soil” for the fiber optics lines that transverse the excavation area.

Fiber optic conduits



10-12-07

Pinkish-colored soil encountered during over excavation activities. Soil was identified as “indicator soil” for the fiber optics lines that transverse the excavation area.



Performing over excavation activities.



View of completed over-excavation area.



View of completed over-excavation area.



View of 2 additional soil confirmation samples collected from area of over excavation

View of completed over-excavation area.

APPENDIX E

**CONFIRMATION SAMPLING RESULTS, EXCAVATION
AREAS I & II**

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA001	Basis:	dry
Lab ID:	198151-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	7,800	54	10.00	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Antimony	1.4	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	15	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	190	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.34	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	1,800	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	29	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	13	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	16	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	11,000	54	10.00	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Lead	7.7	0.25	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	1,900	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	880	2.7	10.00	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.24	0.022	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	25	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	690	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.31 J	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	100	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	28	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	35	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA002	Basis:	dry
Lab ID:	198151-002	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 10%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	8,700	53	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.57	0.56	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	5.2	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	200	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.40	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,900	28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	32	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	10	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	17	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	11,000	53	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.7	0.24	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,100	28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	690	2.6	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.026	0.022	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.25 J	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	32	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	760	28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.47 J	0.56	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	83	28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.56	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	32	0.28	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	36	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA003	Basis:	dry
Lab ID:	198151-003	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	9,900	51	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	4.3	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	210	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.39	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,600	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	30	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	12	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	15	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	13,000	51	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.3	0.23	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,100	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	750	2.5	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.012 J	0.023	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	31	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	700	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.30 J	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	76	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	31	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	30	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA004	Basis:	dry
Lab ID:	198151-004	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	54	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	5.0	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	270	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.40	0.11	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,600	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	32	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	17	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	15,000	54	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	6.7	0.25	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,400	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	780	2.7	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.29	0.022	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	30	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	880	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.52 J	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	170	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	33	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	55	1.1	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA005	Basis:	dry
Lab ID:	198151-005	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 9%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	18,000	54	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.55	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	7.3	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	180	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.53	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,100	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	57	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	7.6	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	12	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	23,000	54	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.1	0.25	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	4,400	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	360	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.087	0.022	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	43	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	670	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.55	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	120	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.55	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	50	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	35	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA006	Basis:	dry
Lab ID:	198151-006	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	9,500	50	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	4.2	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	150	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.37	0.11	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,400	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	30	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	14	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	13,000	50	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.7	0.23	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,200	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	730	2.5	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.022	0.022	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	28	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	710	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	110	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	31	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	29	1.1	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA007	Basis:	dry
Lab ID:	198151-007	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 15%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	23,000	55	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.59	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	9.2	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	230	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.44	0.12	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,100	29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	61	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	16	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	27,000	55	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	10	0.25	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	5,000	29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	340	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.11	0.024	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.16 J	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	44	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	700	29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.59	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	510	29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.59	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	52	0.29	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	38	1.2	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA008	Basis:	dry
Lab ID:	198151-008	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 8%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	12,000	53	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.44 J	0.54	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	9.4	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	180	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.44	0.11	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	0.38	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	3,200	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	37	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	40	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	16,000	53	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	34	0.24	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,600	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	880	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	1.7	0.045	2.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.27	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	33	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	960	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.36 J	0.54	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	99	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	34	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	98	1.1	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA009	Basis:	dry
Lab ID:	198151-009	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	51	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	4.2	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	170	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.41	0.11	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,100	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	32	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	15	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	14,000	51	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.6	0.23	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,200	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	720	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.023	0.022	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	32	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	670	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	110	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	32	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	36	1.1	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA010	Basis:	dry
Lab ID:	198151-010	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	10,000	54	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	7.0	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	130	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.69	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	910	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	39	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	33	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	11	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	21,000	54	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	9.4	0.25	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,300	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	1,600	2.7	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.017 J	0.022	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.17 J	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	38	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	510	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.49 J	0.54	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	130	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	45	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	23	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA011	Basis:	dry
Lab ID:	198151-011	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 17%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	29,000	57	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.60	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	8.8	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	260	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.58	0.12	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,600	30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	64	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	5.6	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	27	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	34,000	57	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	7.6	0.26	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	5,600	30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	160	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.19	0.024	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	48	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	770	30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.60	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	220	30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.60	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	49	0.30	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	40	1.2	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA012	Basis:	dry
Lab ID:	198151-012	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	9,700	52	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	4.1	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	180	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.39	0.11	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,200	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	31	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	9.4	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	14	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	13,000	52	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	5.4	0.24	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,300	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	630	2.6	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.027	0.024	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	29	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	640	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	210	27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	31	0.27	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	29	1.1	1.000	130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA013	Basis:	dry
Lab ID:	198151-013	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 6%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	10,000	52	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.28 J	0.53	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Arsenic	8.1	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Barium	190	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.39	0.11	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cadmium	0.16 J	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Calcium	1,700	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Chromium	31	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Copper	22	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Iron	13,000	52	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	8.6	0.24	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Magnesium	2,000	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Manganese	700	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	4.9	0.31	20.00		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Nickel	31	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Potassium	840	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.41 J	0.53	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Sodium	100	27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.53	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	32	0.27	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B
Zinc	100	1.1	1.000		130260	10/05/07	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA014	Basis:	dry
Lab ID:	198151-014	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 11%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	15,000	56	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.39 J	0.56	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	9.1	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	160	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.52	0.11	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,200	28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	43	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	13	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	22	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	19,000	56	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	10	0.26	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	3,300	28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	670	2.8	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	1.6	0.037	2.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	38	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	830	28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	ND	0.56	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	170	28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.56	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	41	0.28	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	44	1.1	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA015	Basis:	dry
Lab ID:	198151-015	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	9,600	49	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.73	0.54	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	6.2	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	200	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.38	0.11	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	0.18 J	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,600	27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	33	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	32	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	13,000	49	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	22	0.22	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	1,900	27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	750	2.4	10.00	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.80	0.022	1.000	130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.16 J	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	28	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	660	27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	0.52 J	0.54	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	88	27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	31	0.27	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	64	1.1	1.000	130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA016	Basis:	dry
Lab ID:	198151-016	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 6%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	50	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	ND	0.53	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	6.9	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	180	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.42	0.11	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,100	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	32	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	14	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	21	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	15,000	50	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	9.5	0.23	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	2,200	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	970	2.5	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	0.17	0.021	1.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	31	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	710	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	0.75	0.53	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	120	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.53	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	35	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	43	1.1	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA017	Basis:	dry
Lab ID:	198151-017	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	51	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.46 J	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	7.6	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	160	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.48	0.11	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	0.26 J	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,200	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	36	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	13	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	36	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	17,000	51	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	28	0.23	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	2,300	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	860	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	1.2	0.038	2.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.25 J	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	31	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	800	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	0.35 J	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	120	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	37	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	62	1.1	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA018	Basis:	dry
Lab ID:	198151-018	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 8%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	53	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	0.53 J	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	6.5	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	230	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.43	0.11	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	0.25 J	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,200	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	34	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	15	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	31	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	15,000	53	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	18	0.24	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	2,000	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	970	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	1.3	0.043	2.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.21 J	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	33	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	810	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	140	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	34	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	80	1.1	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198151	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRA019	Basis:	dry
Lab ID:	198151-019	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg		

Moisture: 7%

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	11,000	52	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Antimony	1.7	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Arsenic	170	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Barium	200	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Beryllium	0.38	0.11	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cadmium	0.71	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Calcium	2,500	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Chromium	34	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Cobalt	11	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Copper	400	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Iron	16,000	52	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Lead	53	0.24	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Magnesium	2,000	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Manganese	690	2.6	10.00		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Mercury	2.0	0.10	5.000		130302	10/08/07	10/08/07	METHOD	EPA 7471A
Molybdenum	0.55	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Nickel	30	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Potassium	1,200	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Sodium	120	27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000		130260	10/05/07	10/08/07	EPA 3050B	EPA 6010B
Vanadium	36	0.27	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B
Zinc	110	1.1	1.000		130260	10/05/07	10/06/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Type:	BLANK	Basis:	as received
Lab ID:	QC409383	Diln Fac:	1.000
Matrix:	Soil	Batch#:	130260
Units:	mg/Kg	Prepared:	10/05/07

Analyte	Result	RL	Analyzed
Aluminum	ND	5.0	10/05/07
Antimony	ND	0.50	10/05/07
Arsenic	ND	0.25	10/05/07
Barium	ND	0.25	10/05/07
Beryllium	ND	0.10	10/05/07
Cadmium	ND	0.25	10/05/07
Calcium	ND	25	10/05/07
Chromium	ND	0.25	10/05/07
Cobalt	ND	0.25	10/05/07
Copper	ND	0.25	10/05/07
Iron	ND	5.0	10/05/07
Lead	ND	0.25	10/05/07
Magnesium	ND	25	10/05/07
Manganese	ND	0.25	10/05/07
Molybdenum	ND	0.25	10/05/07
Nickel	ND	0.25	10/05/07
Potassium	ND	25	10/05/07
Selenium	ND	0.50	10/05/07
Silver	ND	0.25	10/05/07
Sodium	ND	25	10/05/07
Thallium	ND	0.50	10/08/07
Vanadium	ND	0.25	10/05/07
Zinc	ND	1.0	10/05/07

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	130260
Basis:	as received	Prepared:	10/05/07

Type: BS Lab ID: QC409384

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	1,000	961.2	96	80-120	10/05/07
Antimony	100.0	95.91	96	80-120	10/05/07
Arsenic	50.00	48.42	97	80-120	10/05/07
Barium	100.0	92.94	93	80-120	10/05/07
Beryllium	2.500	2.400	96	80-120	10/05/07
Cadmium	10.00	9.684	97	80-120	10/05/07
Calcium	1,000	958.8	96	80-120	10/05/07
Chromium	100.0	90.03	90	80-120	10/05/07
Cobalt	25.00	22.14	89	80-120	10/05/07
Copper	12.50	11.40	91	80-120	10/05/07
Iron	1,000	945.9	95	80-120	10/05/07
Lead	100.0	90.21	90	80-120	10/05/07
Magnesium	1,000	917.5	92	80-120	10/05/07
Manganese	25.00	23.14	93	80-120	10/05/07
Molybdenum	20.00	18.62	93	80-120	10/05/07
Nickel	25.00	22.77	91	80-120	10/05/07
Potassium	500.0	448.2	90	80-120	10/05/07
Selenium	50.00	45.69	91	80-120	10/05/07
Silver	10.00	8.713	87	80-120	10/05/07
Sodium	1,000	925.2	93	80-120	10/05/07
Thallium	50.00	45.67	91	80-120	10/08/07
Vanadium	25.00	22.94	92	80-120	10/05/07
Zinc	25.00	24.17	97	80-120	10/05/07

Type: BSD Lab ID: QC409385

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	1,000	898.2	90	80-120	7	20	10/05/07
Antimony	100.0	95.71	96	80-120	0	20	10/05/07
Arsenic	50.00	47.31	95	80-120	2	20	10/05/07
Barium	100.0	91.17	91	80-120	2	20	10/05/07
Beryllium	2.500	2.344	94	80-120	2	20	10/05/07
Cadmium	10.00	9.502	95	80-120	2	20	10/05/07
Calcium	1,000	896.9	90	80-120	7	20	10/05/07
Chromium	100.0	88.38	88	80-120	2	20	10/05/07
Cobalt	25.00	21.71	87	80-120	2	20	10/05/07
Copper	12.50	11.15	89	80-120	2	20	10/05/07
Iron	1,000	887.3	89	80-120	6	20	10/05/07
Lead	100.0	88.09	88	80-120	2	20	10/05/07
Magnesium	1,000	865.3	87	80-120	6	20	10/05/07
Manganese	25.00	22.69	91	80-120	2	20	10/05/07
Molybdenum	20.00	18.28	91	80-120	2	20	10/05/07
Nickel	25.00	22.26	89	80-120	2	20	10/05/07
Potassium	500.0	417.9	84	80-120	7	20	10/05/07
Selenium	50.00	44.85	90	80-120	2	20	10/05/07
Silver	10.00	8.595	86	80-120	1	20	10/05/07
Sodium	1,000	867.9	87	80-120	6	20	10/05/07
Thallium	50.00	46.10	92	80-120	1	20	10/08/07
Vanadium	25.00	22.45	90	80-120	2	20	10/05/07
Zinc	25.00	23.71	95	80-120	2	20	10/05/07

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Field ID:	RFSWTLRA001	Units:	mg/Kg
Type:	Serial Dilution	Basis:	dry
MSS Lab ID:	198151-001	Batch#:	130260
Lab ID:	QC409388	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07

Moisture: 7%

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	7,771	53.76	8,100	268.8	4	10	50.00		10/05/07
Antimony	1.373	0.5376	1.679	1.344	NC	10	5.000		10/05/07
Arsenic	15.06	0.2688	15.72	1.344	4	10	5.000		10/05/07
Barium	193.5	0.2688	206.5	1.344	7	10	5.000		10/05/07
Beryllium	0.3372	0.1075	0.3614 J	0.5376	7	10	5.000		10/05/07
Cadmium	0.03229	0.2688	0.02419 J	1.344	NC	10	5.000		10/05/07
Calcium	1,846	26.88	1,886	53.76	2	10	5.000		10/05/07
Chromium	28.51	0.2688	30.22	1.344	6	10	5.000		10/05/07
Cobalt	12.81	0.2688	14.07	1.344	10	10	5.000		10/05/07
Copper	15.80	0.2688	16.25	1.344	3	10	5.000		10/05/07
Iron	11,290	53.76	11,880	268.8	5	10	50.00		10/05/07
Lead	7.707	0.2688	9.316	1.233	21 *	10	5.000		10/05/07
Magnesium	1,852	26.88	1,880	53.76	2	10	5.000		10/05/07
Manganese	877.5	2.688	907.0	13.44	3	10	50.00		10/05/07
Molybdenum	0.06736	0.2688	0.1618 J	1.344	NC	10	5.000		10/05/07
Nickel	24.93	0.2688	27.15	1.344	9	10	5.000		10/05/07
Potassium	685.0	26.88	647.1	134.4	6	10	5.000		10/05/07
Selenium	0.3064	0.5376	ND	1.344	NC	10	5.000		10/05/07
Silver	ND	0.2688	0.1149 J	1.344	NC	10	5.000		10/05/07
Sodium	100.8	26.88	105.2 J	134.4	4	10	5.000		10/05/07
Thallium	ND	0.5376	ND	1.344	NC	10	5.000		10/08/07
Vanadium	28.32	0.2688	29.01	1.344	2	10	5.000		10/05/07
Zinc	34.78	1.075	37.16	5.376	7	10	5.000		10/05/07

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC409536	Batch#:	130302
Matrix:	Soil	Prepared:	10/08/07
Units:	mg/Kg	Analyzed:	10/08/07

Result	RL
ND	0.020

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	130302
Units:	mg/Kg	Prepared:	10/08/07
Basis:	as received	Analyzed:	10/08/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC409537	0.5000	0.5500	110	80-120		
BSD	QC409538	0.5000	0.5680	114	80-120	3	20

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	dry
Field ID:	RFSWTLRA001	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	130302
MSS Lab ID:	198151-001	Sampled:	10/05/07
Lab ID:	QC409539	Received:	10/05/07
Matrix:	Soil	Analyzed:	10/08/07
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
0.2386	0.02240	0.2576	0.1120	7%	NC	10

NC= Not Calculated
 RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198151	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	RFSWTLRA001	Batch#:	130302
MSS Lab ID:	198151-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Prepared:	10/08/07
Basis:	dry	Analyzed:	10/08/07


Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC409540	0.2386	0.5720	0.8396	105	70-143	7%		
MSD	QC409541		0.5600	0.8311	106	70-143	7%	0	22

RPD= Relative Percent Difference

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Lab PO#: _____ Lab: **CURTIS & TOMPKINS**

Project name: **RFS** TtEMI technical contact: **SARAH WOOLEY**
~~JASON BRODERSON~~ Field samplers: **KEVIN ERNST**

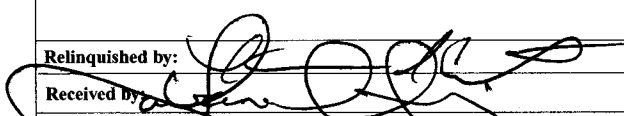
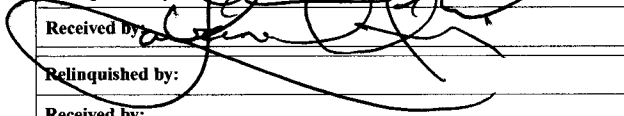
Project (CTO) number: **S1518.61φ.φ1.φ1** TtEMI project manager: **JASON BRODERSON** Field samplers' signatures: 

No./Container Types

Preservative Added									

Analysis Required

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	No./Container Types					Analysis Required						
						40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	
1 RFSWTLRA φφ1		10/5/07	1428	SOIL						1	X	X					
2 RFSWTLRA φφ2			1435							1	X	X					
3 RFSWTLRA φφ3			1432							1	X	X					
4 RFSWTLRA φφ4			1435							1	X	X					
5 RFSWTLRA φφ5			1438							1	X	X					
6 RFSWTLRA φφ6			1442							1	X	X					
7 RFSWTLRA φφ7			1445							1	X	X					
8 RFSWTLRA φφ8			1445							1	X	X					
9 RFSWTLRA φφ9			1450							1	X	X					
10 RFSWTLRA φφ10			1450							1	X	X					

Relinquished by:	Name (print)	Company Name	Date	Time
	KEVIN ERNST	TETRA TECH EM INC	10/5/07	5:25
	Lavanna Curtis	Curtis & Tompkins	10/5/07	5:25
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				


Turnaround time/remarks:
Mercury 7000 Series; All others 6010; 24-HR Turn Around
PEC is Metant ambient

Fed Ex #:

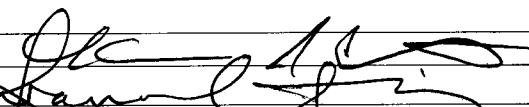
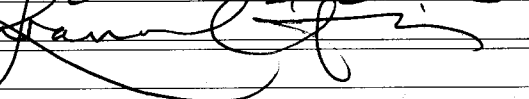
135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480


Lab PO#: _____ Lab: **CURTIS & TAMPKINS**

Project name: **RFS** TtEMI technical contact: **SARAH WOOLEY**
~~JASON BRODERSON~~ Field samplers: **KEVIN ERNST**

Project (CTO) number: **S1578.010.01.01** TtEMI project manager: **JASON BRODERSON** Field samplers' signatures: 

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	No./Container Types					Analysis Required						
						40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	VOA	SVOA	Pes/PCBs	Metals	TPH Purgeables	TPH Extractables	
11 RFSWTLRA 011		10/5/07	1459	SOIL						1	X	X					
12 RFSWTLRA 012			1454							1	X	X					
13 RFSWTLRA 013			1459							1	X	X					
14 RFSWTLRA 014			1502							1	X	X					
15 RFSWTLRA 015			1509							1	X	X					
16 RFSWTLRA 016			1506							1	X	X					
17 RFSWTLRA 017			1516							1	X	X					
18 RFSWTLRA 018			1517							1	X	X					
19 RFSWTLRA 019			1519							1	X	X					

Relinquished by:	Name (print)	Company Name	Date	Time
	KEVIN ERNST	TETRA TECH EM INC	10/5/07	5:25
	LORRAINE CURIS	CJT	10/5/07	5:27
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
Mercury 7000 series; All others 6010; 24-HR Turn Around


Fed Ex #:

APPENDIX F
OVER-EXCAVATION AND CONFIRMATION
SAMPLING RESULTS

California Title 26 Metals

Lab #:	198315	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTL-RA020	Basis:	dry
Lab ID:	198315-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	10/12/07
Units:	mg/Kg	Received:	10/12/07

Moisture: 7%

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.54	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Arsenic	4.9	0.28	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Barium	200	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Beryllium	0.39	0.11	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Chromium	32	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Cobalt	10	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Copper	17	0.28	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Lead	5.1	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Mercury	0.061	0.022	130532	10/15/07	10/15/07	METHOD	EPA 7471A
Molybdenum	0.22 J	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Nickel	31	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Selenium	ND	0.54	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Vanadium	32	0.27	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Zinc	33	1.1	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

California Title 26 Metals

Lab #:	198315	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTL-RA021	Basis:	dry
Lab ID:	198315-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	10/12/07
Units:	mg/Kg	Received:	10/12/07

Moisture: 3%

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.54	0.52	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Arsenic	6.9	0.28	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Barium	190	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Beryllium	0.34	0.10	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Cadmium	0.40	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Chromium	30	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Cobalt	11	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Copper	24	0.28	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Lead	20	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Mercury	0.35	0.021	130532	10/15/07	10/15/07	METHOD	EPA 7471A
Molybdenum	0.32	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Nickel	25	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Selenium	ND	0.52	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Silver	ND	0.26	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Thallium	ND	0.52	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B
Vanadium	29	0.26	130501	10/12/07	10/13/07	EPA 3050B	EPA 6010B
Zinc	86	1.0	130501	10/12/07	10/15/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Type:	BLANK	Basis:	as received
Lab ID:	QC410358	Diln Fac:	1.000
Matrix:	Soil	Batch#:	130501
Units:	mg/Kg	Prepared:	10/12/07

Analyte	Result	RL	Analyzed
Antimony	ND	0.50	10/13/07
Arsenic	ND	0.29	10/13/07
Barium	ND	0.25	10/13/07
Beryllium	ND	0.10	10/13/07
Cadmium	ND	0.25	10/13/07
Chromium	ND	0.25	10/13/07
Cobalt	ND	0.25	10/13/07
Copper	ND	0.29	10/13/07
Lead	ND	0.25	10/13/07
Molybdenum	ND	0.25	10/13/07
Nickel	ND	0.25	10/13/07
Selenium	ND	0.50	10/15/07
Silver	ND	0.25	10/15/07
Thallium	ND	0.50	10/15/07
Vanadium	ND	0.25	10/13/07
Zinc	ND	1.0	10/15/07

ND= Not Detected

RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	130501
Basis:	as received	Prepared:	10/12/07

Type: BS Lab ID: QC410359

Analyte	Spiked	Result	%REC	Limits	Analyzed
Antimony	100.0	83.89	84	80-120	10/13/07
Arsenic	50.00	43.58	87	80-120	10/13/07
Barium	100.0	88.75	89	80-120	10/13/07
Beryllium	2.500	2.317	93	80-120	10/13/07
Cadmium	10.00	8.864	89	80-120	10/13/07
Chromium	100.0	87.59	88	80-120	10/13/07
Cobalt	25.00	21.27	85	80-120	10/13/07
Copper	12.50	11.05	88	80-120	10/13/07
Lead	100.0	85.61	86	80-120	10/13/07
Molybdenum	20.00	17.95	90	80-120	10/13/07
Nickel	25.00	21.26	85	80-120	10/13/07
Selenium	50.00	46.03	92	80-120	10/15/07
Silver	10.00	9.327	93	80-120	10/15/07
Thallium	50.00	46.27	93	80-120	10/15/07
Vanadium	25.00	22.24	89	80-120	10/13/07
Zinc	25.00	24.40	98	80-120	10/15/07

Type: BSD Lab ID: QC410360

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	100.0	85.02	85	80-120	1	20	10/13/07
Arsenic	50.00	43.48	87	80-120	0	20	10/13/07
Barium	100.0	90.54	91	80-120	2	20	10/13/07
Beryllium	2.500	2.352	94	80-120	1	20	10/13/07
Cadmium	10.00	8.783	88	80-120	1	20	10/13/07
Chromium	100.0	89.02	89	80-120	2	20	10/13/07
Cobalt	25.00	21.29	85	80-120	0	20	10/13/07
Copper	12.50	11.21	90	80-120	1	20	10/13/07
Lead	100.0	85.99	86	80-120	0	20	10/13/07
Molybdenum	20.00	18.05	90	80-120	1	20	10/13/07
Nickel	25.00	21.28	85	80-120	0	20	10/13/07
Selenium	50.00	48.34	97	80-120	5	20	10/15/07
Silver	10.00	9.404	94	80-120	1	20	10/15/07
Thallium	50.00	46.01	92	80-120	1	20	10/15/07
Vanadium	25.00	22.61	90	80-120	2	20	10/13/07
Zinc	25.00	24.68	99	80-120	1	20	10/15/07

RPD= Relative Percent Difference

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Field ID:	RFSWTL-RA020	Basis:	dry
Type:	Serial Dilution	Diln Fac:	5.000
MSS Lab ID:	198315-001	Batch#:	130501
Lab ID:	QC410363	Sampled:	10/12/07
Matrix:	Soil	Received:	10/12/07
Units:	mg/Kg		

Moisture: 7%

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Antimony	0.1754	0.5376	ND	1.290	NC	10	10/15/07
Arsenic	4.923	0.2841	4.786	1.420	3	10	10/13/07
Barium	204.5	0.2688	210.6	1.233	3	10	10/13/07
Beryllium	0.3914	0.1075	0.3519 J	0.4932	10	10	10/13/07
Cadmium	0.1146	0.2688	ND	1.233	NC	10	10/13/07
Chromium	32.00	0.2688	32.82	1.233	3	10	10/13/07
Cobalt	9.988	0.2688	10.39	1.233	4	10	10/13/07
Copper	16.73	0.2842	16.46	1.421	2	10	10/13/07
Lead	5.098	0.2688	5.575	0.9152	9	10	10/13/07
Molybdenum	0.2176	0.2688	0.4884 J	1.233	NC	10	10/13/07
Nickel	31.07	0.2688	32.06	1.233	3	10	10/13/07
Selenium	0.2519	0.5376	ND	1.233	NC	10	10/15/07
Silver	ND	0.2688	ND	1.233	NC	10	10/15/07
Thallium	0.1245	0.5376	ND	1.267	NC	10	10/15/07
Vanadium	32.35	0.2688	32.75	1.233	1	10	10/13/07
Zinc	32.88	1.075	33.39	4.932	2	10	10/15/07

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC410486	Batch#:	130532
Matrix:	Soil	Prepared:	10/15/07
Units:	mg/Kg	Analyzed:	10/15/07

Result	RL
ND	0.020

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	130532
Units:	mg/Kg	Prepared:	10/15/07
Basis:	as received	Analyzed:	10/15/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC410487	0.5000	0.5090	102	80-120		
BSD	QC410488	0.5000	0.5090	102	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	dry
Field ID:	RFSWTL-RA020	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	130532
MSS Lab ID:	198315-001	Sampled:	10/12/07
Lab ID:	QC410489	Received:	10/12/07
Matrix:	Soil	Analyzed:	10/15/07
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
0.06088	0.02151	ND	0.08271	7%	NC	10

NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	RFSWTL-RA020	Batch#:	130532
MSS Lab ID:	198315-001	Sampled:	10/12/07
Matrix:	Soil	Received:	10/12/07
Units:	mg/Kg	Prepared:	10/15/07
Basis:	dry	Analyzed:	10/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC410490	0.06088	0.4556	0.5440	106	70-143	7%		
MSD	QC410491		0.4012	0.4622	100	70-143	7%	5	22

RPD= Relative Percent Difference

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	130532
MSS Lab ID:	198322-002	Sampled:	10/11/07
Lab ID:	QC410492	Received:	10/12/07
Matrix:	Soil	Analyzed:	10/15/07
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
0.8948	0.02941	0.7410	0.1131	32%	17 *	10

*= Value outside of QC limits; see narrative

RL= Reporting Limit

Batch QC Report

California Title 26 Metals			
Lab #:	198315	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	2.000
Field ID:	ZZZZZZZZZZ	Batch#:	130532
MSS Lab ID:	198322-002	Sampled:	10/11/07
Matrix:	Soil	Received:	10/12/07
Units:	mg/Kg	Prepared:	10/15/07
Basis:	dry	Analyzed:	10/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC410493	0.8948	0.7353	1.529	86	70-143	32%		
MSD	QC410494		0.6127	1.483	96	70-143	32%	5	22

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

CHAIN OF CUSTODY

C&T LOGIN # 198315

Sampler: Gene Barry (4LEAF)

Project No: S1518- ϕ 1 ϕ - ϕ 1- ϕ 1

Report To: Jason Broderson

Project Name: RFS TCRA

Company: Tetra Tech

Project P.O.: _____

Telephone: 415-222-8283

Turnaround Time: 1-day

Fax: _____

Analysis

Analysis																
SCM 17 metals																

Lab No.	Sample ID.	Sampling Date & Time	Matrix			# of Containers	Preservative				
			Soil	Water	Waste		HCL	H2SO4	HNO3	ICE	None
-1	RFSWTL-RA ϕ 2 ϕ	10/12/07 1100	✓			1-125ml					✓
-2	RFSWTL-RA ϕ 21	10/12/07 1105	✓			1-125ml					✓
SAF 10/12/07											

Notes:

SAMPLE RECEIPT
 Intact Cold
 On Ice Ambient
Preservative Correct?
 Yes No N/A

RELINQUISHED BY:
Gene A. Barry 10/12/07 1210 DATE/TIME

RECEIVED BY:
Robert D. Duke 10-12-07 1210 DATE/TIME

DATE/TIME DATE/TIME

APPENDIX G

CONFIRMATION SAMPLING DATA VALIDATION REPORTS

DATA VALIDATION REPORT

Site: Richmond Field Station

Contract Task Order (CTO) No.: 51518.010.01

Laboratory: Curtis & Tompkins, LTD.

Data Reviewer: Richard Amano, Erlinda Rauto, Stella Cuenco, Felomina Tanguilig, and Ming Hwang. *just
2/21/08*

Firm/Proj. No: Laboratory Data Consultants, Inc./17866A

Review Date: November 24 through November 26, 2007

Sample Delivery Group (SDG) No.: 198150

Sample Nos.: RFSWTLRAP001 RFSWTLRAP003 RFSWTLRAP001MSD
RFSWTLRAP002 RFSWTLRAP001MS

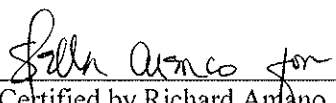
* Full Validation Sample

Matrix: Soil, Asphalt, and Concrete

Collection Date(s): October 5, 2007

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999) and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (October 2004). In addition, the Tetra Tech EMI, Inc. documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for CLP Inorganic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses" (February 2005), and the document entitled "Comprehensive Long-term Environmental Action Navy Clean II Statement of Work" (January 2002) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.


Certified by Richard Amano
Principal Chemist

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. Cursory validation parameters are indicated by an asterisk (*).

CLP Organic Parameters

- * Holding times
- GC/MS instrument performance check
- * Initial and continuing calibrations
- * Blanks
- * Surrogate recovery
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Internal standard performance
- Target compound identification
- Tentatively identified compounds
- Compound quantitation
- Reported detection limits
- System performance
- * Overall assessment of data for the SDG

CLP Inorganic Parameters

- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike
- * Laboratory control sample or blank spike
- spike
- * Field duplicates
- * Matrix duplicates
- ICP interference check sample
- GFAA quality control
- * ICP serial dilution
- Sample result verification
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

- * Method compliance
- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- * Surrogate recovery
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

- UJ** Estimated nondetected result
- J** Estimated detected result
- R** Rejected result
- NJ** Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

- a** Surrogate recovery exceedance
- b** Laboratory method blank and common blank contamination
- c** Calibration exceedance
- d** Duplicate precision exceedance
- e** Matrix spike/laboratory control sample (LCS) recovery exceedance
- f** Field blank contamination
- g** Quantification below reporting limit
- h** Holding time exceedance
- i** Internal standard exceedance
- j** Other qualifications

**TABLE 1
CURSORY DATA VALIDATION SUMMARY**

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
SVOA	pg. 6	pg. 6	pg. 6	N/A	√	√	pg. 7	√	N/A	pg. 7
Metals	√	√	pg. 8	pg. 8	√	pg. 8	√	N/A	N/A	pg. 9

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample(s) None*

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
SVOA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample(s) None*

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
SVOA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

SEMIVOLATILE ORGANIC ANALYSIS (by EPA SW 846 Method 8270C)

I. Holding Times

- A. Cooler temperatures for the samples in this SDG were reported at ambient temperature upon receipt by the laboratory. Samples were received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.
- B. All other criteria were met.

II. Surrogate Recovery

- A. Due to surrogate recovery problems, the following nondetected results are rejected (Ra).

- All acid compounds in sample RFSWTLRAP003

The surrogates outside of QC limits are listed below.

<u>Sample ID</u>	<u>Surrogate</u>	<u>% R</u>	<u>QC Limits</u>
RFSWTLRAP003	2-Fluorophenol	7	33-120%
RFSWTLRAP003	Phenol-d5	34	35-120%
RFSWTLRAP003	2,4,6-Tribromophenol	6	25-120%

Surrogate recoveries <10% show a severe analytical deficiency. Detected results may be biased low and false nondetects may have been reported.

III. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

- A. The MS/MSD analysis was not performed for this SDG.

IV. Blank Spike or Laboratory Control Sample (LCS)

- A. All criteria were met.

V. Blank Contamination

- A. All criteria were met.

VI. Calibrations

A. Due to continuing calibration problems, the following nondetected results are qualified as estimated (UJc).

- Benzoic acid and Hexachlorocyclopentadiene in samples RFSWTLRAP001 RFSWTLRAP003
RFSWTLRAP002

The following continuing calibrations had percent differences (%D) of >25%.

<u>Calibration Date</u>	<u>Compound</u>	<u>%D</u>
10/10/07	Benzoic acid	28
10/10/07	Hexachlorocyclopentadiene	31

VII. Internal Standards

A. All criteria were met.

VIII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All SVOA detected results reported below the RL

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

METALS ANALYSIS (by EPA SW 846 Method 6010B and 7471A)

I. Holding Times

A. All criteria were met.

II. Calibrations

A. All criteria were met.

III. Blank Contamination

A. Due to calibration and method blank contamination, the following results are considered nondetected (UJb).

- Molybdenum in samples RFSWTLRAP001 RFSWTLRAP003

The following metal was detected in the associated calibration blanks at the concentration noted below.

<u>Analyte</u>	<u>Blank ID</u>	<u>Concentration</u>
Molybdenum	ICB/CCB	1.887 ug/L

Detected results less than 5x the maximum blank contamination were qualified.

IV. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A. Due to accuracy problems in the MS/MSD analysis, the following detected and nondetected results are qualified as estimated (Je/UJe).

- Mercury in samples RFSWTLRAP001 RFSWTLRAP002 RFSWTLRAP003

The recoveries that did not meet the QC limits are listed below.

<u>Sample ID</u>	<u>Analyte</u>	<u>MS %R</u>	<u>MSD %R</u>	<u>QC Limits</u>	<u>RPD</u>	<u>QC Limits</u>
RFSWTLRAP001	Mercury	66	-	75-125%	-	-

Spike recoveries between 30-74% indicate that detects may be biased low and false nondetects may have been reported.

V. Matrix Duplicate (DUP)

A. The DUP analysis was not performed for this SDG.

VI. Laboratory Control Sample (LCS)

A. All criteria were met.

VII. ICP Serial Dilution

A. All criteria were met.

VIII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All metals results above the MDL but below the RL

Results above the MDL but below the RL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

- A. All analyses were conducted within all specifications of the requested methods with the exceptions listed below.
- For the semivolatile analysis, the MS/MSD analysis was not performed for this SDG.
 - For the metals analysis, the DUP analysis was not performed for this SDG.

II. Usability

SW 846 Semivolatile Organic Analysis

- A. Due to severe problems in the surrogate in the semivolatile analysis, selected sample results were rejected. The findings were as follows:
- Due to surrogate recovery problems, Phenol, 2-Chlorophenol, 2-Methylphenol, 2-Nitrophenol, 2,4-Dimethylphenol, 2,4-Dichlorophenol, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol, Pentachlorophenol, 4-Methylphenol, and Benzoic acid nondetected results were rejected in sample RFSWTLRAP003.
- B. Due to instrument calibration problems in the semivolatile analysis, several samples were qualified as estimated. The findings were as follows:
- Due to continuing calibration %D problems, Benzoic acid and Hexachlorocyclopentadiene nondetected results were qualified as estimated in three samples.
 - All detected results reported below the RL were qualified as estimated.
- C. No samples were reextracted or reanalyzed for semivolatile analysis in this SDG.

SW 846 Metals Analysis

- A. No results for metals analysis were rejected in this SDG.
- B. Due to calibration blank contamination and MS/MSD problems in the metals analysis, several samples were qualified as estimated. The findings were as follows:
- Due to calibration blank contamination problems, Molybdenum was qualified nondetect in two samples.
 - Due to MS/MSD recovery problems, Mercury results were qualified as estimated in three samples.
 - All detected results reported above the MDL but below the RL were qualified as estimated.
- C. No samples were reextracted or reanalyzed for metals analysis in this SDG.

III. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Sample results that were found to be rejected (R) are unusable for all purposes. Based upon the cursory data validation all other results are considered valid and usable for all purposes.

DATA VALIDATION REPORT

Site: Richmond Field Station
Contract Task Order (CTO) No.: 51518.010.01
Laboratory: Curtis & Tompkins, LTD.
Data Reviewer: Richard Amano, Erlinda Rauto, Stella Cuenco,
Felomina Tanguilig, and Ming Hwang.
Firm/Proj. No: Laboratory Data Consultants, Inc./17866B
Review Date: November 24 through November 26, 2007
Sample Delivery Group (SDG) No.: 198151

*Law
2/2/08*

Sample Nos.:	RFSWTLRA001	RFSWTLRA007	RFSWTLRA013	RFSWTLRA019
	RFSWTLRA002	RFSWTLRA008	RFSWTLRA014	RFSWTLRA001MS
	RFSWTLRA003	RFSWTLRA009	RFSWTLRA015	RFSWTLRA001MSD
	RFSWTLRA004	RFSWTLRA010	RFSWTLRA016	RFSWTLRA009MS
	RFSWTLRA005	RFSWTLRA011	RFSWTLRA017	RFSWTLRA009MSD
	RFSWTLRA006	RFSWTLRA012	RFSWTLRA018	

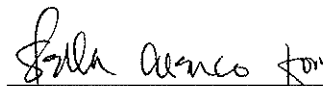
* Full Validation Sample

Matrix: Soil

Collection Date(s): October 5, 2007

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999) and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (October 2004). In addition, the Tetra Tech EMI, Inc. documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for CLP Inorganic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses" (February 2005), and the document entitled "Comprehensive Long-term Environmental Action Navy Clean II Statement of Work" (January 2002) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.



Certified by Richard Amano
Principal Chemist

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. Cursory validation parameters are indicated by an asterisk (*).

CLP Organic Parameters

- * Holding times
- GC/MS instrument performance check
- * Initial and continuing calibrations
- * Blanks
- * Surrogate recovery
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Internal standard performance
- Target compound identification
- Tentatively identified compounds
- Compound quantitation
- Reported detection limits
- System performance
- * Overall assessment of data for the SDG

CLP Inorganic Parameters

- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- ICP interference check sample
- GFAA quality control
- * ICP serial dilution
- Sample result verification
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

- * Method compliance
- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- * Surrogate recovery
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

- UJ** Estimated nondetected result
- J** Estimated detected result
- R** Rejected result
- NJ** Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

- a** Surrogate recovery exceedance
- b** Laboratory method blank and common blank contamination
- c** Calibration exceedance
- d** Duplicate precision exceedance
- e** Matrix spike/laboratory control sample (LCS) recovery exceedance
- f** Field blank contamination
- g** Quantification below reporting limit
- h** Holding time exceedance
- i** Internal standard exceedance
- j** Other qualifications

**TABLE 1
CURSORY DATA VALIDATION SUMMARY**

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
SVOA	pg. 6	√	√	N/A	√	√	pg. 6-7	pg. 7	N/A	pg. 7
Metals	√	√	pg. 8-9	pg. 9	√	pg. 8	√	N/A	N/A	pg. 9

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

TABLE 2
FULL DATA VALIDATION SUMMARY
 Sample(s) None*

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
SVOA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

SEMIVOLATILE ORGANIC ANALYSIS (by EPA SW 846 Method 8270C)

I. Holding Times

- A. Cooler temperatures for the samples in this SDG were reported at ambient temperature upon receipt by the laboratory. Samples were received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.
- B. All other criteria were met.

II. Surrogate Recovery

- A. All criteria were met.

III. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

- A. All criteria were met.

IV. Blank Spike or Laboratory Control Sample (LCS)

- A. All criteria were met.

V. Blank Contamination

- A. All criteria were met.

VI. Calibrations

- A. Due to continuing calibration problems, the following nondetected results are qualified as estimated (UJc).

• Benzoic acid in samples	RFSWTLRA002	RFSWTLRA008	
	RFSWTLRA004	RFSWTLRA019	
• N-Nitrosodimethylamine, Benzyl alcohol, Benzoic acid, 3-Nitroaniline, and 4-Nitroaniline in samples		RFSWTLRA015	
		RFSWTLRA017	
• Benzoic acid, Hexachlorocyclopentadiene, and 2,4-Dinitrophenol in samples	RFSWTLRA001	RFSWTLRA007	RFSWTLRA012
	RFSWTLRA003	RFSWTLRA009	RFSWTLRA013
	RFSWTLRA005	RFSWTLRA010	RFSWTLRA014
	RFSWTLRA006	RFSWTLRA011	

The following continuing calibrations had percent differences (%D) of >25%.

<u>Calibration Date</u>	<u>Compound</u>	<u>%D</u>
10/8/07 (14:54)	Benzoic acid	45
10/9/07	N-Nitrosodimethylamine	34
10/9/07	Benzyl alcohol	26
10/9/07	Benzoic acid	39
10/9/07	3-Nitroaniline	30
10/9/07	4-Nitroaniline	41
10/8/07 (10:17)	Benzoic acid	36
10/8/07 (10:17)	Hexachlorocyclopentadiene	31
10/8/07 (10:17)	2,4-Dinitrophenol	43

VII. Internal Standards

A. Due to internal standard problems, the following nondetected results are qualified as estimated (UJi).

- Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene, Dibenz(a,h)anthracene in sample

RFSWTLRA010

The internal standard area count in the sample listed above was less than one half of the reference standard and are listed below.

<u>Sample ID</u>	<u>Internal Standard</u>	<u>Area</u>	<u>QC Limits</u>
RFSWTLRA010	Perylene-d12	1535661	1887132-7548528

Internal standard area counts of less than 50% of the standard area count may indicate a loss of instrument sensitivity.

VIII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All SVOA detected results reported below the RL

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

METALS ANALYSIS (by EPA SW 846 Method 6010B and 7471A)

I. Holding Times

A. All criteria were met.

II. Calibrations

A. All criteria were met.

III. Blank Contamination

A. Due to calibration and method blank contamination, the following results are considered nondetected (UJb).

• Molybdenum in samples	RFSWTLRA002	RFSWTLRA010	RFSWTLRA017
	RFSWTLRA007	RFSWTLRA015	RFSWTLRA018
	RFSWTLRA008		
• Antimony in samples	RFSWTLRA008	RFSWTLRA014	RFSWTLRA017
	RFSWTLRA013		

The following metal was detected in the associated calibration blanks at the concentration noted below.

<u>Analyte</u>	<u>Blank ID</u>	<u>Concentration</u>
Molybdenum	ICB/CCB	2.001 ug/L
Antimony	ICB/CCB	1.884 ug/L

Detected results less than 5x the maximum blank contamination were qualified.

IV. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A. Due to accuracy problems in the MS/MSD analysis, the following detected and nondetected results are qualified as estimated (Je/UJe).

• Antimony and Zinc in samples	RFSWTLRA001	RFSWTLRA008	RFSWTLRA014
	RFSWTLRA002	RFSWTLRA009	RFSWTLRA015
	RFSWTLRA003	RFSWTLRA010	RFSWTLRA016
	RFSWTLRA004	RFSWTLRA011	RFSWTLRA017
	RFSWTLRA005	RFSWTLRA012	RFSWTLRA018
	RFSWTLRA006	RFSWTLRA013	RFSWTLRA019
	RFSWTLRA007		

The recoveries and RPD that did not meet the QC limits are listed below.

<u>Sample ID</u>	<u>Analyte</u>	<u>MS %R</u>	<u>MSD %R</u>	<u>QC Limits</u>	<u>RPD</u>	<u>QC Limits</u>
RFSWTLRA001	Antimony	38	39	75-125%	-	-
RFSWTLRA001	Zinc	393	-	75-125%	75	≤35

Spike recoveries between 30-74% indicate that detects may be biased low and false nondetects may have been reported.

V. Matrix Duplicate (DUP)

A. The DUP analysis was not performed for this SDG.

VI. Laboratory Control Sample (LCS)

A. All criteria were met.

VII. ICP Serial Dilution

A. Due to ICP serial dilution problems, the following detected results are qualified as estimated (Jj).

• Lead in samples	RFSWTLRA001	RFSWTLRA006	RFSWTLRA011	RFSWTLRA016
	RFSWTLRA002	RFSWTLRA007	RFSWTLRA012	RFSWTLRA017
	RFSWTLRA003	RFSWTLRA008	RFSWTLRA013	RFSWTLRA018
	RFSWTLRA004	RFSWTLRA009	RFSWTLRA014	RFSWTLRA019
	RFSWTLRA005	RFSWTLRA010	RFSWTLRA015	

The percent difference between the original sample result and the serial dilution result was outside the QC limits of 10% for analyte concentrations greater than 50x the MDL as shown below.

<u>Sample ID</u>	<u>Analyte</u>	<u>Original Concentration, mg/Kg</u>	<u>50x MDL, mg/Kg</u>	<u>%D</u>
RFSWTLRA001	Lead	7.707	3.091	21

VIII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All metals results above the MDL but below the RL

Results above the MDL but below the RL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

- A. All analyses were conducted within all specifications of the requested methods with the exceptions listed below.
- For the metals analysis, the DUP analysis was not performed for this SDG.

II. Usability

SW 846 Semivolatile Organic Analysis

- A. No results for semivolatile analysis were rejected in this SDG.
- B. Due to instrument calibration and internal standard problems in the semivolatile analysis, several samples were qualified as estimated. The findings were as follows:
- Due to continuing calibration %D problems, Benzoic acid nondetected results were qualified as estimated in seventeen samples, N-Nitrosodimethylamine, Benzyl alcohol, 3-Nitroaniline, and 4-Nitroaniline nondetected results were qualified as estimated in two samples, and Hexachlorocyclopentadiene, and 2,4-Dinitrophenol nondetected results were qualified as estimated in eleven samples.
 - Due to internal standard area count problems, Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene nondetected results were qualified as estimated in one sample.
 - All detected results reported below the RL were qualified as estimated.
- C. No samples were reextracted or reanalyzed for semivolatile analysis in this SDG.

SW 846 Metals Analysis

- A. No results for metals analysis were rejected in this SDG.
- B. Due to calibration blank contamination, MS/MSD, and ICP serial dilution problems in the metals analysis, several samples were qualified as estimated. The findings were as follows:
- Due to calibration blank contamination problems, Molybdenum was qualified nondetect in seven samples and Antimony was qualified nondetect in four samples.
 - Due to MS/MSD recovery and RPD problems, Antimony and Zinc results were qualified as estimated in nineteen samples.
 - Due to ICP serial dilution %D problems, Lead detected results were qualified as estimated in nineteen samples.
 - All detected results reported above the MDL but below the RL were qualified as estimated.

C. No samples were reextracted or reanalyzed for metals analysis in this SDG.

III. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory data validation all other results are considered valid and usable for all purposes.

DATA VALIDATION REPORT

Site: Richmond Field Station

Contract Task Order (CTO) No.: 51518.010.01

Laboratory: Curtis & Tompkins, LTD.

Data Reviewer: Richard Amano, Erlinda Rauto, Stella Cuenco,
and Ming Hwang. *SAW 2/24/08*

Firm/Proj. No: Laboratory Data Consultants, Inc./17866C

Review Date: November 24, 2007

Sample Delivery Group (SDG) No.: 198315

Sample Nos.: RFSWTL-RA020 RFSWTL-RA021 RFSWTL-RA020MS RFSWTL-RA020MSD

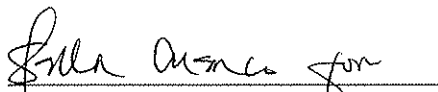
* Full Validation Sample

Matrix: Soil

Collection Date(s): October 12, 2007

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (October 2004). In addition, the Tetra Tech EMI, Inc. documents "Data Validation Guidelines for CLP Inorganic Analyses" (February 2005), and the document entitled "Comprehensive Long-term Environmental Action Navy Clean II Statement of Work" (January 2002) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.


Certified by Richard Amano
Principal Chemist

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. Cursory validation parameters are indicated by an asterisk (*).

CLP Organic Parameters

- * Holding times
- GC/MS instrument performance check
- * Initial and continuing calibrations
- * Blanks
- * Surrogate recovery
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Internal standard performance
- Target compound identification
- Tentatively identified compounds
- Compound quantitation
- Reported detection limits
- System performance
- * Overall assessment of data for the SDG

CLP Inorganic Parameters

- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- ICP interference check sample
- GFAA quality control
- * ICP serial dilution
- Sample result verification
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

- * Method compliance
- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- * Surrogate recovery
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

- UJ** Estimated nondetected result
- J** Estimated detected result
- R** Rejected result
- NJ** Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

- a** Surrogate recovery exceedance
- b** Laboratory method blank and common blank contamination
- c** Calibration exceedance
- d** Duplicate precision exceedance
- e** Matrix spike/laboratory control sample (LCS) recovery exceedance
- f** Field blank contamination
- g** Quantification below reporting limit
- h** Holding time exceedance
- i** Internal standard exceedance
- j** Other qualifications

**TABLE 1
CURSORY DATA VALIDATION SUMMARY**

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
Metals	√	√	pg. 6-7	pg. 7	√	pg. 6	√	N/A	N/A	pg. 7

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample(s) None*

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
Metals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

Spike recoveries between 30-74% indicate that detects may be biased low and false nondetects may have been reported.

B. Due to accuracy problems in the MS/MSD analysis, the following detected results are qualified as estimated (Je).

- Nickel in samples RFSWTL-RA020 RFSWTL-RA021

The recoveries that did not meet the QC limits are listed below.

<u>Sample ID</u>	<u>Analyte</u>	<u>MS %R</u>	<u>MSD %R</u>	<u>QC Limits</u>	<u>RPD</u>	<u>QC Limits</u>
RFSWTL-RA020	Nickel	161	-	75-125%	-	-

Spike recoveries above 125% indicate that detected results may be biased high.

V. Matrix Duplicate (DUP)

A. The DUP analysis was not performed for this SDG.

VI. Laboratory Control Sample (LCS)

A. All criteria were met.

VII. ICP Serial Dilution

A. All criteria were met.

VIII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All metals results above the MDL but below the RL

Results above the MDL but below the RL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

- A. All analyses were conducted within all specifications of the requested methods with the exceptions listed below.
- For the metals analysis, the DUP analysis was not performed for this SDG.

II. Usability

SW 846 Metals Analysis

- A. No results for metals analysis were rejected in this SDG.
- B. Due to calibration blank contamination and MS/MSD problems in the metals analysis, several samples were qualified as estimated. The findings were as follows:
- Due to calibration blank contamination problems, Molybdenum was qualified nondetect in two samples and Antimony was qualified nondetect in one samples.
 - Due to MS/MSD recovery and RPD problems, Antimony results and Barium, Cobalt, and Nickel detected results were qualified as estimated in two samples.
 - All detected results reported above the MDL but below the RL were qualified as estimated.
- C. No samples were reextracted or reanalyzed for metals analysis in this SDG.
- III. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory data validation all other results are considered valid and usable for all purposes.

DATA VALIDATION REPORT

Site: Richmond Field Station

Contract Task Order (CTO) No.: 51518.010.01

Laboratory: Curtis & Tompkins, LTD.

Data Reviewer: Richard Amano, Erlinda Rauto, Stella Cuenca,
and Felomina Tanguilig.

Firm/Proj. No: Laboratory Data Consultants, Inc./17866D

Review Date: November 24 through November 26, 2007

Sample Delivery Group (SDG) No.: 198330

Sample Nos.: RFSWTLRAP001 RFSWTLRAP002 RFSWTLRAP003

5/25/08

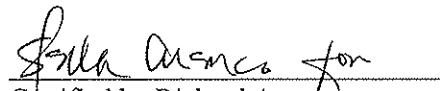
* Full Validation Sample

Matrix: Soil, Asphalt, and Concrete

Collection Date(s): October 5, 2007

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999). In addition, the Tetra Tech EMI, Inc. documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses" (February 2005), and the document entitled "Comprehensive Long-term Environmental Action Navy Clean II Statement of Work" (January 2002) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.


Certified by Richard Amano
Principal Chemist

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. Cursory validation parameters are indicated by an asterisk (*).

CLP Organic Parameters

- * Holding times
- GC/MS instrument performance check
- * Initial and continuing calibrations
- * Blanks
- * Surrogate recovery
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Internal standard performance
- Target compound identification
- Tentatively identified compounds
- Compound quantitation
- Reported detection limits
- System performance
- * Overall assessment of data for the SDG

CLP Inorganic Parameters

- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- ICP interference check sample
- GFAA quality control
- * ICP serial dilution
- Sample result verification
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

- * Method compliance
- * Holding times
- * Initial and continuing calibrations
- * Blanks
- * Matrix spike/matrix spike duplicate
- * Laboratory control sample or blank spike
- * Field duplicates
- * Matrix duplicates
- * Surrogate recovery
- Analyte quantitation
- Reported detection limits
- * Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

- UJ** Estimated nondetected result
- J** Estimated detected result
- R** Rejected result
- NJ** Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

- a** Surrogate recovery exceedance
- b** Laboratory method blank and common blank contamination
- c** Calibration exceedance
- d** Duplicate precision exceedance
- e** Matrix spike/laboratory control sample (LCS) recovery exceedance
- f** Field blank contamination
- g** Quantification below reporting limit
- h** Holding time exceedance
- i** Internal standard exceedance
- j** Other qualifications

**TABLE 1
CURSORY DATA VALIDATION SUMMARY**

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
PCBs	pg. 6	pg. 6	√	N/A	√	√	√	N/A	N/A	pg. 7
TPHE	pg. 8	√	pg. 8	N/A	√	√	√	N/A	N/A	pg. 8-9

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample(s) None*

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
PCBs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPHE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

POLYCHLORINATED BIPHENYLS (PCB) ANALYSIS (by EPA SW 846 Method 8082)

I. Holding Times

- A. Cooler temperatures for the samples in this SDG were reported at ambient temperature upon receipt by the laboratory. Samples were received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.
- B. All other criteria were met.

II. Surrogate Recovery

- A. Due to surrogate recovery problems, the following nondetected results are qualified as estimated (UJa).

- All PCB compounds in sample RFSWTLRAP002

The surrogates outside of QC limits are listed below.

<u>Sample ID</u>	<u>Surrogate</u>	<u>Col.1 % R</u>	<u>Col.2 % R</u>	<u>QC Limits</u>
RFSWTLRAP002	Tetrachloro-m-xylene	14	-	30-150%
RFSWTLRAP002	Decachlorobiphenyl	12	-	30-150%

Low recoveries indicate that detected and nondetected results may be biased low.

III. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

- A. The MS/MSD analysis was not performed for this SDG.

IV. Blank Spike or Laboratory Control Sample (LCS)

- A. All criteria were met.

V. Blank Contamination

- A. All criteria were met.

VI. Calibrations

- A. All criteria were met.

VII. Field Duplicate

A. No field duplicate samples were identified in this SDG.

VIII. Compound Identification

A. All criteria were met.

IX. Other Qualifications

A. The following results are qualified as estimated (Jg).

- All PCB detected results reported below the RL.

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

TPH EXTRACTABLE (TPHE) ANALYSIS

I. Holding Times

I. Holding Times

- A. Cooler temperatures for the samples in this SDG were reported at ambient temperature upon receipt by the laboratory. Samples were received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.
- B. All other criteria were met.

II. Surrogate Recovery

- A. All criteria were met.

III. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

- A. The MS/MSD analysis was not performed for this SDG.

IV. Blank Spike or Laboratory Control Sample (LCS)

- A. All criteria were met.

V. Blank Contamination

- A. All criteria were met.

VI. Calibrations

- A. All criteria were met.

VII. Field Duplicate

- A. No field duplicate samples were identified in this SDG.

VIII. Other Qualifications

- A. The following results are qualified as estimated (Jg).
 - All TPHE detected results reported below the RL.

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

B. The following results are qualified as estimated (Z).

- All TPHE detected results flagged with a "Y" by the laboratory.

Detected results flagged Y by the laboratory indicate that the fuel pattern does not resemble TPH.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

- A. All analyses were conducted within all specifications of the requested methods with the exceptions listed below.
- For the PCB and TPH extractable analyses, the MS/MSD analysis was not performed for this SDG.

II. Usability

SW 846 PCB Analysis

- A. No results for PCB analysis were rejected in this SDG.
- B. Due to surrogate problems in the PCB analysis, several samples were qualified as estimated. The findings were as follows:
- Due to surrogate recovery problems, all PCB nondetected results were qualified as estimated in one sample.
 - All detected results reported below the RL were qualified as estimated.
- C. No samples were reextracted or reanalyzed for PCB analysis in this SDG.

TPH Extractable Analysis

- A. No results for TPH extractable analysis were rejected in this SDG.
- B. Due to problems in the TPH extractable analysis, several samples were qualified as estimated. The findings were as follows:
- All detected results reported below the RL were qualified as estimated.
 - All detected results flagged with a "Y" by the laboratory were qualified as estimated.
- C. No samples were reextracted or reanalyzed for TPH extractable analysis in this SDG.

- III. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory data validation all other results are considered valid and usable for all purposes.

APPENDIX H

PERIMETER AIR MONITORING RESULTS



Air Monitoring Data - TCRA Activities October 2, 2007

Note:

PDRs calibrated (zero'd out) in clean zip-lock bag provided by manufacturer. Ambient dust level measured upwind of excavation ranged between 0.011 and 0.015 mg/m³.

PDR #1	PDR #2	PDR #3	PDR #4																																																																																																																																																																																																																																																																
<p>pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 3 Start time and date: 19:06:02 01-Oct Elapsed time: 00:15:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.081 mg/m³ Time at maximum: 19:16:15 Oct 01 Max STEL Concentration: 0.009 mg/m³ Time at max STEL: 19:21:02 Oct 01 Overall Avg Conc: 0.009 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>1-Oct</td><td>19:11:02</td><td>0.008</td></tr> <tr><td>2</td><td>1-Oct</td><td>19:16:02</td><td>0.008</td></tr> <tr><td>3</td><td>1-Oct</td><td>19:21:02</td><td>0.01</td></tr> </tbody> </table> <p>00073230300006070606)</p>	Point	Date	Time	Avg. (mg/m ³)	1	1-Oct	19:11:02	0.008	2	1-Oct	19:16:02	0.008	3	1-Oct	19:21:02	0.01	<p>pDR-1000 S/N: 06770 Tag Number: 01 Number of logged points: 54 Start time and date: 08:58:25 02-Oct Elapsed time: 04:30:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.445 mg/m³ Time at maximum: 11:12:59 Oct 02 Max STEL Concentration: 0.027 mg/m³ Time at max STEL: 11:25:56 Oct 02 Overall Avg Conc: 0.004 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. 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9	2-Oct	09:45:25	0.02																																																																																																																																																																																																																																																																
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11	2-Oct	09:55:25	0.019																																																																																																																																																																																																																																																																
12	2-Oct	10:00:25	0.014																																																																																																																																																																																																																																																																
13	2-Oct	10:05:25	0.007																																																																																																																																																																																																																																																																
14	2-Oct	10:10:25	0.005																																																																																																																																																																																																																																																																
15	2-Oct	10:15:25	0.009																																																																																																																																																																																																																																																																
16	2-Oct	10:20:25	0.01																																																																																																																																																																																																																																																																
17	2-Oct	10:25:25	0.01																																																																																																																																																																																																																																																																
18	2-Oct	10:30:25	0.009																																																																																																																																																																																																																																																																
19	2-Oct	10:35:25	0.011																																																																																																																																																																																																																																																																
Point	Date	Time	Avg. (mg/m ³)																																																																																																																																																																																																																																																																
1	2-Oct	09:00:43	0.009																																																																																																																																																																																																																																																																
2	2-Oct	09:05:43	0.008																																																																																																																																																																																																																																																																
3	2-Oct	09:10:43	0.006																																																																																																																																																																																																																																																																
4	2-Oct	09:15:43	0.009																																																																																																																																																																																																																																																																
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6	2-Oct	09:25:43	0.011																																																																																																																																																																																																																																																																
7	2-Oct	09:30:43	0.01																																																																																																																																																																																																																																																																
8	2-Oct	09:35:43	0.01																																																																																																																																																																																																																																																																
9	2-Oct	09:40:43	0.009																																																																																																																																																																																																																																																																
10	2-Oct	09:45:43	0.007																																																																																																																																																																																																																																																																
11	2-Oct	09:50:43	0.006																																																																																																																																																																																																																																																																
12	2-Oct	09:55:43	0.006																																																																																																																																																																																																																																																																
13	2-Oct	10:00:43	0.005																																																																																																																																																																																																																																																																
14	2-Oct	10:05:43	0.001																																																																																																																																																																																																																																																																
15	2-Oct	10:10:43	0.001																																																																																																																																																																																																																																																																
16	2-Oct	10:15:43	0.001																																																																																																																																																																																																																																																																
17	2-Oct	10:20:43	0.001																																																																																																																																																																																																																																																																
18	2-Oct	10:25:43	0.005																																																																																																																																																																																																																																																																
19	2-Oct	10:30:43	0.005																																																																																																																																																																																																																																																																
<p>pDR-1000 S/N: 06766 Tag Number: 02 Number of logged points: 94 Start time and date: 08:37:33 02-Oct Elapsed time: 07:50:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.492 mg/m³ Time at maximum: 09:22:32 Oct 02 Max STEL Concentration: 0.046 mg/m³ Time at max STEL: 09:35:33 Oct 02 Overall Avg Conc: 0.006 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>2-Oct</td><td>09:03:25</td><td>0.009</td></tr> <tr><td>2</td><td>2-Oct</td><td>09:08:25</td><td>0.015</td></tr> <tr><td>3</td><td>2-Oct</td><td>09:13:25</td><td>0.005</td></tr> <tr><td>4</td><td>2-Oct</td><td>09:18:25</td><td>0.006</td></tr> <tr><td>5</td><td>2-Oct</td><td>09:23:25</td><td>0.007</td></tr> <tr><td>6</td><td>2-Oct</td><td>09:28:25</td><td>0.008</td></tr> <tr><td>7</td><td>2-Oct</td><td>09:33:25</td><td>0.008</td></tr> <tr><td>8</td><td>2-Oct</td><td>09:38:25</td><td>0.01</td></tr> <tr><td>9</td><td>2-Oct</td><td>09:43:25</td><td>0.022</td></tr> <tr><td>10</td><td>2-Oct</td><td>09:48:25</td><td>0.009</td></tr> <tr><td>11</td><td>2-Oct</td><td>09:53:25</td><td>0.01</td></tr> <tr><td>12</td><td>2-Oct</td><td>09:58:25</td><td>0.006</td></tr> <tr><td>13</td><td>2-Oct</td><td>10:03:25</td><td>0.001</td></tr> <tr><td>14</td><td>2-Oct</td><td>10:08:25</td><td>0.001</td></tr> <tr><td>15</td><td>2-Oct</td><td>10:13:25</td><td>0</td></tr> <tr><td>16</td><td>2-Oct</td><td>10:18:25</td><td>0.001</td></tr> <tr><td>17</td><td>2-Oct</td><td>10:23:25</td><td>0.001</td></tr> <tr><td>18</td><td>2-Oct</td><td>10:28:25</td><td>0.001</td></tr> <tr><td>19</td><td>2-Oct</td><td>10:33:25</td><td>0.001</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	2-Oct	09:03:25	0.009	2	2-Oct	09:08:25	0.015	3	2-Oct	09:13:25	0.005	4	2-Oct	09:18:25	0.006	5	2-Oct	09:23:25	0.007	6	2-Oct	09:28:25	0.008	7	2-Oct	09:33:25	0.008	8	2-Oct	09:38:25	0.01	9	2-Oct	09:43:25	0.022	10	2-Oct	09:48:25	0.009	11	2-Oct	09:53:25	0.01	12	2-Oct	09:58:25	0.006	13	2-Oct	10:03:25	0.001	14	2-Oct	10:08:25	0.001	15	2-Oct	10:13:25	0	16	2-Oct	10:18:25	0.001	17	2-Oct	10:23:25	0.001	18	2-Oct	10:28:25	0.001	19	2-Oct	10:33:25	0.001																																																																																																																																																																																			
Point	Date	Time	Avg. (mg/m ³)																																																																																																																																																																																																																																																																
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14	2-Oct	10:08:25	0.001																																																																																																																																																																																																																																																																
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16	2-Oct	10:18:25	0.001																																																																																																																																																																																																																																																																
17	2-Oct	10:23:25	0.001																																																																																																																																																																																																																																																																
18	2-Oct	10:28:25	0.001																																																																																																																																																																																																																																																																
19	2-Oct	10:33:25	0.001																																																																																																																																																																																																																																																																



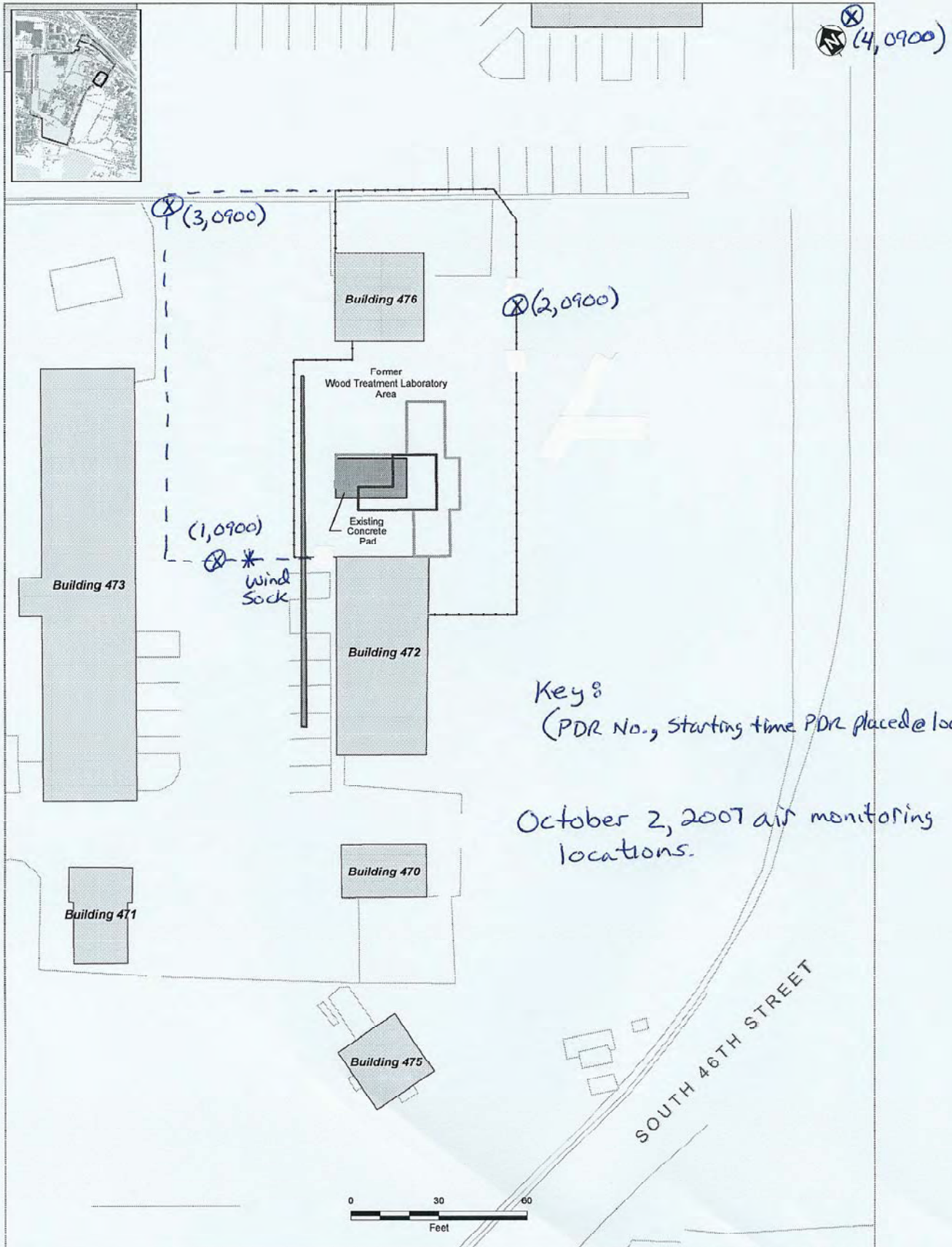
Air Monitoring Data - TCRA Activities October 2, 2007

PDR #1			PDR #2			PDR #3			PDR #4		
1	2-Oct 08:42:33	0.022	20	2-Oct 10:38:25	0.002	20	2-Oct 10:40:25	0.009	20	2-Oct 10:35:43	0.006
2	2-Oct 08:47:33	0.012	21	2-Oct 10:43:25	0	21	2-Oct 10:45:25	0.007	21	2-Oct 10:40:43	0.004
3	2-Oct 08:52:33	0.007	22	2-Oct 10:48:25	0	22	2-Oct 10:50:25	0.006	22	2-Oct 10:45:43	0.003
4	2-Oct 08:57:33	0.005	23	2-Oct 10:53:25	0.003	23	2-Oct 10:55:25	0.007	23	2-Oct 10:50:43	0.001
5	2-Oct 09:02:33	0.006	24	2-Oct 10:58:25	0.011	24	2-Oct 11:00:25	0.007	24	2-Oct 10:55:43	0
6	2-Oct 09:07:33	0.007	25	2-Oct 11:03:25	0.001	25	2-Oct 11:05:25	0.007	25	2-Oct 11:00:43	0.002
7	2-Oct 09:12:33	0.002	26	2-Oct 11:08:25	0.002	26	2-Oct 11:10:25	0.007	26	2-Oct 11:05:43	0.002
8	2-Oct 09:17:33	0.003	27	2-Oct 11:13:25	0.061	27	2-Oct 11:15:25	0.008	27	2-Oct 11:10:43	0
9	2-Oct 09:22:33	0.048	28	2-Oct 11:18:25	0.028	28	2-Oct 11:20:25	0.01	28	2-Oct 11:15:43	0.015
10	2-Oct 09:27:33	0.038	29	2-Oct 11:23:25	0	29	2-Oct 11:25:25	0.015	29	2-Oct 11:20:43	0.001
11	2-Oct 09:32:33	0.041	30	2-Oct 11:28:25	0.006	30	2-Oct 11:30:25	0.023	30	2-Oct 11:25:43	0.007
12	2-Oct 09:37:33	0.013	31	2-Oct 11:33:25	0.006	31	2-Oct 11:35:25	0.02	31	2-Oct 11:30:43	0.005
13	2-Oct 09:42:33	0.004	32	2-Oct 11:38:25	0.002	32	2-Oct 11:40:25	0.019	32	2-Oct 11:35:43	0.006
14	2-Oct 09:47:33	0.019	33	2-Oct 11:43:25	0.004	33	2-Oct 11:45:25	0.022	33	2-Oct 11:40:43	0.005
15	2-Oct 09:52:33	0.011	34	2-Oct 11:48:25	0.005	34	2-Oct 11:50:25	0.019	34	2-Oct 11:45:43	0.006
16	2-Oct 09:57:33	0.001	35	2-Oct 11:53:25	0.004	35	2-Oct 11:55:25	0.018	35	2-Oct 11:50:43	0.004
17	2-Oct 10:02:33	0	36	2-Oct 11:58:25	0.005	36	2-Oct 12:00:25	0.019	36	2-Oct 11:55:43	0.005
18	2-Oct 10:07:33	0	37	2-Oct 12:03:25	0.002	37	2-Oct 12:05:25	0.021	37	2-Oct 12:00:43	0.005
19	2-Oct 10:12:33	0	38	2-Oct 12:08:25	0.006	38	2-Oct 12:10:25	0.022	38	2-Oct 12:05:43	0.003
20	2-Oct 10:17:33	0	39	2-Oct 12:13:25	0.006	39	2-Oct 12:15:25	0.021	39	2-Oct 12:10:43	0.004
21	2-Oct 10:22:33	0.001	40	2-Oct 12:18:25	0.008	40	2-Oct 12:20:25	0.021	40	2-Oct 12:15:43	0.006
22	2-Oct 10:27:33	0	41	2-Oct 12:23:25	0.017	41	2-Oct 12:25:25	0.035	41	2-Oct 12:20:43	0.008
23	2-Oct 10:32:33	0	42	2-Oct 12:28:25	0.022	42	2-Oct 12:30:25	0.023	42	2-Oct 12:25:43	0.005
24	2-Oct 10:37:33	0	43	2-Oct 12:33:25	0.025	43	2-Oct 12:35:25	0.015	43	2-Oct 12:30:43	0.004
25	2-Oct 10:42:33	0	44	2-Oct 12:38:25	0.015	44	2-Oct 12:40:25	0.011	44	2-Oct 12:35:43	0.003
26	2-Oct 10:47:33	0	45	2-Oct 12:43:25	0.003	45	2-Oct 12:45:25	0.011	45	2-Oct 12:40:43	0.001
27	2-Oct 10:52:33	0.01	46	2-Oct 12:48:25	0.003	46	2-Oct 12:50:25	0.006	46	2-Oct 12:45:43	0.001
28	2-Oct 10:57:33	0	47	2-Oct 12:53:25	0.001	47	2-Oct 12:55:25	0.004	47	2-Oct 12:50:43	0
29	2-Oct 11:02:33	0.025	48	2-Oct 12:58:25	0	48	2-Oct 13:00:25	0.002	48	2-Oct 12:55:43	0
30	2-Oct 11:07:33	0.001	49	2-Oct 13:03:25	0	49	2-Oct 13:05:25	0.008	49	2-Oct 13:00:43	0
31	2-Oct 11:12:33	0	50	2-Oct 13:08:25	0.004	50	2-Oct 13:10:25	0.012	50	2-Oct 13:05:43	0
32	2-Oct 11:17:33	0	51	2-Oct 13:13:25	0.002	51	2-Oct 13:15:25	0.015	51	2-Oct 13:10:43	0
33	2-Oct 11:22:33	0	52	2-Oct 13:18:25	0.001	52	2-Oct 13:20:25	0.017	52	2-Oct 13:15:43	0
34	2-Oct 11:27:33	0.002	53	2-Oct 13:23:25	0.003	53	2-Oct 13:25:25	0.007	53	2-Oct 13:20:43	0
35	2-Oct 11:32:33	0.001	54	2-Oct 13:28:25	0	54	2-Oct 13:30:25	0.003	54	2-Oct 13:25:43	0
36	2-Oct 11:37:33	0	00073230300006070700}			55	2-Oct 13:35:25	0.004	55	2-Oct 13:30:43	0
37	2-Oct 11:42:33	0.001			56	2-Oct 13:40:25	0.005	56	2-Oct 13:35:43	0	
38	2-Oct 11:47:33	0.001			57	2-Oct 13:45:25	0.007	57	2-Oct 13:40:43	0	
39	2-Oct 11:52:33	0.002	pDR-1000 S/N: 06770			58	2-Oct 13:50:25	0.006	58	2-Oct 13:45:43	0
40	2-Oct 11:57:33	0.002	Tag Number: 02			59	2-Oct 13:55:25	0.005	59	2-Oct 13:50:43	0



Air Monitoring Data - TCRA Activities October 2, 2007

PDR #1				PDR #2				PDR #3				PDR #4			
41	2-Oct	12:02:33	0.001	Number of logged points: 36				60	2-Oct	14:00:25	0.008	60	2-Oct	13:55:43	0
42	2-Oct	12:07:33	0.001	Start time and date: 13:32:04 02-Oct				61	2-Oct	14:05:25	0.007	61	2-Oct	14:00:43	0
43	2-Oct	12:12:33	0.003	Elapsed time: 03:00:00				62	2-Oct	14:10:25	0.007	62	2-Oct	14:05:43	0
44	2-Oct	12:17:33	0.003	Logging period (sec): 300				63	2-Oct	14:15:25	0.007	63	2-Oct	14:10:43	0
45	2-Oct	12:22:33	0.004	Calibration Factor (%): 100				64	2-Oct	14:20:25	0.007	64	2-Oct	14:15:43	0
46	2-Oct	12:27:33	0.004	Max Display Concentration: 0.213 mg/m ³				65	2-Oct	14:25:25	0.009	65	2-Oct	14:20:43	0
47	2-Oct	12:32:33	0.005	Time at maximum: 14:34:09 Oct 02				66	2-Oct	14:30:25	0.011	66	2-Oct	14:25:43	0
48	2-Oct	12:37:33	0.004	Max STEL Concentration: 0.025 mg/m ³				67	2-Oct	14:35:25	0.011	67	2-Oct	14:30:43	0
49	2-Oct	12:42:33	0.001	Time at max STEL: 16:02:34 Oct 02				68	2-Oct	14:40:25	0.01	68	2-Oct	14:35:43	0.001
50	2-Oct	12:47:33	0.003	Overall Avg Conc: 0.017 mg/m ³				69	2-Oct	14:45:25	0.014	69	2-Oct	14:40:43	0.001
51	2-Oct	12:52:33	0.002	Logged Data:				70	2-Oct	14:50:25	0.005	70	2-Oct	14:45:43	0
							Avg.								
52	2-Oct	12:57:33	0	Point	Date	Time	(mg/m ³)	71	2-Oct	14:55:25	0.006	71	2-Oct	14:50:43	0
53	2-Oct	13:02:33	0		1	2-Oct 13:37:04	0.001	72	2-Oct	15:00:25	0.008	72	2-Oct	14:55:43	0
54	2-Oct	13:07:33	0		2	2-Oct 13:42:04	0.016	73	2-Oct	15:05:25	0.009	00073230300006070606}			
55	2-Oct	13:12:33	0		3	2-Oct 13:47:04	0.01	74	2-Oct	15:10:25	0.014				
56	2-Oct	13:17:33	0		4	2-Oct 13:52:04	0.006	75	2-Oct	15:15:25	0.021				
57	2-Oct	13:22:33	0.004		5	2-Oct 13:57:04	0.013	76	2-Oct	15:20:25	0.024	pDR-1000 S/N: 06766			
58	2-Oct	13:27:33	0		6	2-Oct 14:02:04	0.009	77	2-Oct	15:25:25	0.02	Tag Number: 02			
59	2-Oct	13:32:33	0		7	2-Oct 14:07:04	0.006	78	2-Oct	15:30:25	0.021	Number of logged points: 17			
60	2-Oct	13:37:33	0		8	2-Oct 14:12:04	0.01	79	2-Oct	15:35:25	0.023	Start time and date: 15:01:48 02-Oct			
61	2-Oct	13:42:33	0.014		9	2-Oct 14:17:04	0.024	80	2-Oct	15:40:25	0.023	Elapsed time: 01:25:00			
62	2-Oct	13:47:33	0.011		10	2-Oct 14:22:04	0.013	81	2-Oct	15:45:25	0.031	Logging period (sec): 300			
63	2-Oct	13:52:33	0.01		11	2-Oct 14:27:04	0.023	82	2-Oct	15:50:25	0.027	Calibration Factor (%): 100			
64	2-Oct	13:57:33	0.01		12	2-Oct 14:32:04	0.017	83	2-Oct	15:55:25	0.029	Max Display Concentration: 0.080 mg/m ³			
65	2-Oct	14:02:33	0.01		13	2-Oct 14:37:04	0.024	84	2-Oct	16:00:25	0.034	Time at maximum: 15:37:57 Oct 02			
66	2-Oct	14:07:33	0.01		14	2-Oct 14:42:04	0.013	85	2-Oct	16:05:25	0.03	Max STEL Concentration: 0.025 mg/m ³			
67	2-Oct	14:12:33	0.01		15	2-Oct 14:47:04	0.007	86	2-Oct	16:10:25	0.028	Time at max STEL: 16:04:48 Oct 02			
68	2-Oct	14:17:33	0.011		16	2-Oct 14:52:04	0.033	87	2-Oct	16:15:25	0.028	Overall Avg Conc: 0.018 mg/m ³			
69	2-Oct	14:22:33	0.01		17	2-Oct 14:57:04	0.016	88	2-Oct	16:20:25	0.025	Logged Data:			
															Avg.
70	2-Oct	14:27:33	0.01		18	2-Oct 15:02:04	0.021	89	2-Oct	16:25:25	0.023	Point	Date	Time	(mg/m ³)
71	2-Oct	14:32:33	0.008		19	2-Oct 15:07:04	0.015	00073230300006070606}			1	2-Oct	15:06:48	0.006	
72	2-Oct	14:37:33	0.007		20	2-Oct 15:12:04	0.016					2	2-Oct	15:11:48	0.011
73	2-Oct	14:42:33	0.004		21	2-Oct 15:17:04	0.015					3	2-Oct	15:16:48	0.012
74	2-Oct	14:47:33	0.004		22	2-Oct 15:22:04	0.019					4	2-Oct	15:21:48	0.018
75	2-Oct	14:52:33	0.001		23	2-Oct 15:27:04	0.02					5	2-Oct	15:26:48	0.021
76	2-Oct	14:57:33	0.002		24	2-Oct 15:32:04	0.021					6	2-Oct	15:31:48	0.023
77	2-Oct	15:02:33	0.004		25	2-Oct 15:37:04	0.024					7	2-Oct	15:36:48	0.018
78	2-Oct	15:07:33	0.008		26	2-Oct 15:42:04	0.019					8	2-Oct	15:41:48	0.022



- Buildings
- Construction Fence Lines
- Site Features
- Proposed Excavation Areas
- Area I (Excavation depth 3.5 feet)
- Area II Excavation depth 2.0 feet)

Richmond Field Station
 University of California at Berkeley

FIGURE 1
VICINITY MAP SHOWING
TCRA BOUNDARIES AND
CONSTRUCTION FENCE LINES



Air Monitoring Data - TCRA Activities October 3, 2007

Note:

PDRs calibrated (zero'd out) in the morning using clean zip-lock bag provided by manufacturer. Ambient dust level measured upwind of excavation ranged between 0.030 and 0.035 mg/m3.

PDR #1					PDR #2					PDR #3					PDR #4				
pDR-1000 S/N: 06766					pDR-1000 S/N: 06770					pDR-1000 S/N: 06766					pDR-1000 S/N: 06766				
Tag Number: 01					Tag Number: 01					Tag Number: 01					Tag Number: 01				
Number of logged points: 57					Number of logged points: 58					Number of logged points: 55					Number of logged points: 55				
Start time and date: 07:46:58 03-Oct					Start time and date: 07:44:44 03-Oct					Start time and date: 07:48:39 03-Oct					Start time and date: 07:43:21 03-Oct				
Elapsed time: 04:45:00					Elapsed time: 04:50:00					Elapsed time: 04:35:00					Elapsed time: 04:35:00				
Logging period (sec): 300					Logging period (sec): 300					Logging period (sec): 300					Logging period (sec): 300				
Calibration Factor (%): 100					Calibration Factor (%): 100					Calibration Factor (%): 100					Calibration Factor (%): 100				
Max Display Concentration: 0.053 mg/m ³					Max Display Concentration: 0.075 mg/m ³					Max Display Concentration: 0.475 mg/m ³					Max Display Concentration: 0.057 mg/m ³				
Time at maximum: 08:15:51 Oct 03					Time at maximum: 08:04:52 Oct 03					Time at maximum: 09:51:30 Oct 03					Time at maximum: 08:22:28 Oct 03				
Max STEL Concentration: 0.030 mg/m ³					Max STEL Concentration: 0.045 mg/m ³					Max STEL Concentration: 0.067 mg/m ³					Max STEL Concentration: 0.035 mg/m ³				
Time at max STEL: 08:22:28 Oct 03					Time at max STEL: 07:59:44 Oct 03					Time at max STEL: 09:50:09 Oct 03					Time at max STEL: 08:00:21 Oct 03				
Overall Avg Conc: 0.006 mg/m ³					Overall Avg Conc: 0.024 mg/m ³					Overall Avg Conc: 0.041 mg/m ³					Overall Avg Conc: 0.016 mg/m ³				
Logged Data:					Logged Data:					Logged Data:					Logged Data:				
Point	Date	Time	Avg. (mg/m ³)		Point	Date	Time	Avg. (mg/m ³)		Point	Date	Time	Avg. (mg/m ³)		Point	Date	Time	Avg. (mg/m ³)	
1	3-Oct	07:51:58	0.03		1	3-Oct	07:49:44	0.045		1	3-Oct	07:53:39	0.047		1	3-Oct	07:48:21	0.036	
2	3-Oct	07:56:58	0.026		2	3-Oct	07:54:44	0.043		2	3-Oct	07:58:39	0.042		2	3-Oct	07:53:21	0.034	
3	3-Oct	08:01:58	0.02		3	3-Oct	07:59:44	0.046		3	3-Oct	08:03:39	0.047		3	3-Oct	07:58:21	0.033	
4	3-Oct	08:06:58	0.019		4	3-Oct	08:04:44	0.045		4	3-Oct	08:08:39	0.043		4	3-Oct	08:03:21	0.035	
5	3-Oct	08:11:58	0.021		5	3-Oct	08:09:44	0.033		5	3-Oct	08:13:39	0.044		5	3-Oct	08:08:21	0.032	
6	3-Oct	08:16:58	0.029		6	3-Oct	08:14:44	0.028		6	3-Oct	08:18:39	0.047		6	3-Oct	08:13:21	0.027	
7	3-Oct	08:21:58	0.038		7	3-Oct	08:19:44	0.031		7	3-Oct	08:23:39	0.045		7	3-Oct	08:18:21	0.027	
8	3-Oct	08:26:58	0.018		8	3-Oct	08:24:44	0.028		8	3-Oct	08:28:39	0.037		8	3-Oct	08:23:21	0.028	
9	3-Oct	08:31:58	0.01		9	3-Oct	08:29:44	0.02		9	3-Oct	08:33:39	0.033		9	3-Oct	08:28:21	0.018	
10	3-Oct	08:36:58	0.005		10	3-Oct	08:34:44	0.018		10	3-Oct	08:38:39	0.032		10	3-Oct	08:33:21	0.013	
11	3-Oct	08:41:58	0.004		11	3-Oct	08:39:44	0.017		11	3-Oct	08:43:39	0.035		11	3-Oct	08:38:21	0.011	
12	3-Oct	08:46:58	0.008		12	3-Oct	08:44:44	0.022		12	3-Oct	08:48:39	0.037		12	3-Oct	08:43:21	0.013	
13	3-Oct	08:51:58	0.01		13	3-Oct	08:49:44	0.02		13	3-Oct	08:53:39	0.038		13	3-Oct	08:48:21	0.014	
14	3-Oct	08:56:58	0.012		14	3-Oct	08:54:44	0.018		14	3-Oct	08:58:39	0.039		14	3-Oct	08:53:21	0.016	
15	3-Oct	09:01:58	0.011		15	3-Oct	08:59:44	0.02		15	3-Oct	09:03:39	0.038		15	3-Oct	08:58:21	0.016	
16	3-Oct	09:06:58	0.008		16	3-Oct	09:04:44	0.019		16	3-Oct	09:08:39	0.038		16	3-Oct	09:03:21	0.015	
17	3-Oct	09:11:58	0.009		17	3-Oct	09:09:44	0.02		17	3-Oct	09:13:39	0.042		17	3-Oct	09:08:21	0.016	
18	3-Oct	09:16:58	0.012		18	3-Oct	09:14:44	0.025		18	3-Oct	09:18:39	0.043		18	3-Oct	09:13:21	0.019	
19	3-Oct	09:21:58	0.011		19	3-Oct	09:19:44	0.024		19	3-Oct	09:23:39	0.043		19	3-Oct	09:18:21	0.023	
20	3-Oct	09:26:58	0.016		20	3-Oct	09:24:44	0.026		20	3-Oct	09:28:39	0.045		20	3-Oct	09:23:21	0.02	



Air Monitoring Data - TCRA Activities October 3, 2007

21	3-Oct 09:31:58	0.017	21	3-Oct 09:29:44	0.027	21	3-Oct 09:33:39	0.048	21	3-Oct 09:28:21	0.022
22	3-Oct 09:36:58	0.02	22	3-Oct 09:34:44	0.028	22	3-Oct 09:38:39	0.075	22	3-Oct 09:33:21	0.025
23	3-Oct 09:41:58	0.014	23	3-Oct 09:39:44	0.027	23	3-Oct 09:43:39	0.051	23	3-Oct 09:38:21	0.023
24	3-Oct 09:46:58	0.007	24	3-Oct 09:44:44	0.023	24	3-Oct 09:48:39	0.061	24	3-Oct 09:43:21	0.019
25	3-Oct 09:51:58	0.004	25	3-Oct 09:49:44	0.021	25	3-Oct 09:53:39	0.078	25	3-Oct 09:48:21	0.014
26	3-Oct 09:56:58	0.003	26	3-Oct 09:54:44	0.022	26	3-Oct 09:58:39	0.032	26	3-Oct 09:53:21	0.013
27	3-Oct 10:01:58	0.002	27	3-Oct 09:59:44	0.023	27	3-Oct 10:03:39	0.034	27	3-Oct 09:58:21	0.011
28	3-Oct 10:06:58	0.002	28	3-Oct 10:04:44	0.023	28	3-Oct 10:08:39	0.031	28	3-Oct 10:03:21	0.012
29	3-Oct 10:11:58	0.001	29	3-Oct 10:09:44	0.019	29	3-Oct 10:13:39	0.046	29	3-Oct 10:08:21	0.011
30	3-Oct 10:16:58	0.001	30	3-Oct 10:14:44	0.022	30	3-Oct 10:18:39	0.033	30	3-Oct 10:13:21	0.01
31	3-Oct 10:21:58	0.001	31	3-Oct 10:19:44	0.024	31	3-Oct 10:23:39	0.029	31	3-Oct 10:18:21	0.012
32	3-Oct 10:26:58	0.001	32	3-Oct 10:24:44	0.025	32	3-Oct 10:28:39	0.031	32	3-Oct 10:23:21	0.012
33	3-Oct 10:31:58	0.002	33	3-Oct 10:29:44	0.025	33	3-Oct 10:33:39	0.033	33	3-Oct 10:28:21	0.013
34	3-Oct 10:36:58	0.002	34	3-Oct 10:34:44	0.026	34	3-Oct 10:38:39	0.053	34	3-Oct 10:33:21	0.013
35	3-Oct 10:41:58	0.001	35	3-Oct 10:39:44	0.026	35	3-Oct 10:43:39	0.044	35	3-Oct 10:38:21	0.013
36	3-Oct 10:46:58	0.001	36	3-Oct 10:44:44	0.025	36	3-Oct 10:48:39	0.058	36	3-Oct 10:43:21	0.01
37	3-Oct 10:51:58	0.001	37	3-Oct 10:49:44	0.025	37	3-Oct 10:53:39	0.033	37	3-Oct 10:48:21	0.011
38	3-Oct 10:56:58	0.001	38	3-Oct 10:54:44	0.027	38	3-Oct 10:58:39	0.036	38	3-Oct 10:53:21	0.01
39	3-Oct 11:01:58	0.002	39	3-Oct 10:59:44	0.026	39	3-Oct 11:03:39	0.033	39	3-Oct 10:58:21	0.011
40	3-Oct 11:06:58	0.002	40	3-Oct 11:04:44	0.027	40	3-Oct 11:08:39	0.035	40	3-Oct 11:03:21	0.011
41	3-Oct 11:11:58	0.001	41	3-Oct 11:09:44	0.028	41	3-Oct 11:13:39	0.034	41	3-Oct 11:08:21	0.013
42	3-Oct 11:16:58	0.001	42	3-Oct 11:14:44	0.027	42	3-Oct 11:18:39	0.034	42	3-Oct 11:13:21	0.012
43	3-Oct 11:21:58	0.001	43	3-Oct 11:19:44	0.025	43	3-Oct 11:23:39	0.037	43	3-Oct 11:18:21	0.012
44	3-Oct 11:26:58	0.001	44	3-Oct 11:24:44	0.025	44	3-Oct 11:28:39	0.034	44	3-Oct 11:23:21	0.011
45	3-Oct 11:31:58	0.001	45	3-Oct 11:29:44	0.024	45	3-Oct 11:33:39	0.036	45	3-Oct 11:28:21	0.012
46	3-Oct 11:36:58	0.002	46	3-Oct 11:34:44	0.024	46	3-Oct 11:38:39	0.037	46	3-Oct 11:33:21	0.014
47	3-Oct 11:41:58	0.002	47	3-Oct 11:39:44	0.024	47	3-Oct 11:43:39	0.037	47	3-Oct 11:38:21	0.013
48	3-Oct 11:46:58	0.002	48	3-Oct 11:44:44	0.029	48	3-Oct 11:48:39	0.036	48	3-Oct 11:43:21	0.014
49	3-Oct 11:51:58	0.001	49	3-Oct 11:49:44	0.024	49	3-Oct 11:53:39	0.036	49	3-Oct 11:48:21	0.012
50	3-Oct 11:56:58	0	50	3-Oct 11:54:44	0.02	50	3-Oct 11:58:39	0.033	50	3-Oct 11:53:21	0.01
51	3-Oct 12:01:58	0	51	3-Oct 11:59:44	0.017	51	3-Oct 12:03:39	0.034	51	3-Oct 11:58:21	0.009
52	3-Oct 12:06:58	0	52	3-Oct 12:04:44	0.018	52	3-Oct 12:08:39	0.034	52	3-Oct 12:03:21	0.009
53	3-Oct 12:11:58	0	53	3-Oct 12:09:44	0.018	53	3-Oct 12:13:39	0.034	53	3-Oct 12:08:21	0.009
54	3-Oct 12:16:58	0	54	3-Oct 12:14:44	0.021	54	3-Oct 12:18:39	0.045	54	3-Oct 12:13:21	0.008
55	3-Oct 12:21:58	0	55	3-Oct 12:19:44	0.019	55	3-Oct 12:23:39	0.053	55	3-Oct 12:18:21	0.008
56	3-Oct 12:26:58	0	56	3-Oct 12:24:44	0.016	00073230300006070606}		00073230300006070606}			
57	3-Oct 12:31:58	0	57	3-Oct 12:29:44	0.015						
00073230300006070606}			58	3-Oct 12:34:44	0.022						
			00073230300006070700}								



Air Monitoring Data - TCRA Activities October 3, 2007

Note:

PDRs calibrated (zero'ed out) in the afternoon using ambient air in area upwind of excavation.

PDR #1	PDR #2	PDR #3	PDR #4																																																																																																																																																																																																																																																																																																																																																																
<p>pDR-1000 S/N: 06766 Tag Number: 02 Number of logged points: 45 Start time and date: 12:36:43 03-Oct Elapsed time: 03:45:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.016 mg/m³ Time at maximum: 16:04:24 Oct 03 Max STEL Concentration: 0.000 mg/m³ Time at max STEL: 12:36:43 Oct 03 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>3-Oct</td><td>12:41:43</td><td>0</td></tr> <tr><td>2</td><td>3-Oct</td><td>12:46:43</td><td>0</td></tr> <tr><td>3</td><td>3-Oct</td><td>12:51:43</td><td>0</td></tr> <tr><td>4</td><td>3-Oct</td><td>12:56:43</td><td>0</td></tr> <tr><td>5</td><td>3-Oct</td><td>13:01:43</td><td>0</td></tr> <tr><td>6</td><td>3-Oct</td><td>13:06:43</td><td>0</td></tr> <tr><td>7</td><td>3-Oct</td><td>13:11:43</td><td>0</td></tr> <tr><td>8</td><td>3-Oct</td><td>13:16:43</td><td>0</td></tr> <tr><td>9</td><td>3-Oct</td><td>13:21:43</td><td>0</td></tr> <tr><td>10</td><td>3-Oct</td><td>13:26:43</td><td>0</td></tr> <tr><td>11</td><td>3-Oct</td><td>13:31:43</td><td>0</td></tr> <tr><td>12</td><td>3-Oct</td><td>13:36:43</td><td>0</td></tr> <tr><td>13</td><td>3-Oct</td><td>13:41:43</td><td>0</td></tr> <tr><td>14</td><td>3-Oct</td><td>13:46:43</td><td>0</td></tr> <tr><td>15</td><td>3-Oct</td><td>13:51:43</td><td>0</td></tr> <tr><td>16</td><td>3-Oct</td><td>13:56:43</td><td>0</td></tr> <tr><td>17</td><td>3-Oct</td><td>14:01:43</td><td>0</td></tr> <tr><td>18</td><td>3-Oct</td><td>14:06:43</td><td>0</td></tr> <tr><td>19</td><td>3-Oct</td><td>14:11:43</td><td>0</td></tr> <tr><td>20</td><td>3-Oct</td><td>14:16:43</td><td>0</td></tr> <tr><td>21</td><td>3-Oct</td><td>14:21:43</td><td>0</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	3-Oct	12:41:43	0	2	3-Oct	12:46:43	0	3	3-Oct	12:51:43	0	4	3-Oct	12:56:43	0	5	3-Oct	13:01:43	0	6	3-Oct	13:06:43	0	7	3-Oct	13:11:43	0	8	3-Oct	13:16:43	0	9	3-Oct	13:21:43	0	10	3-Oct	13:26:43	0	11	3-Oct	13:31:43	0	12	3-Oct	13:36:43	0	13	3-Oct	13:41:43	0	14	3-Oct	13:46:43	0	15	3-Oct	13:51:43	0	16	3-Oct	13:56:43	0	17	3-Oct	14:01:43	0	18	3-Oct	14:06:43	0	19	3-Oct	14:11:43	0	20	3-Oct	14:16:43	0	21	3-Oct	14:21:43	0	<p>pDR-1000 S/N: 06770 Tag Number: 02 Number of logged points: 45 Start time and date: 12:39:37 03-Oct Elapsed time: 03:45:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.113 mg/m³ Time at maximum: 15:18:36 Oct 03 Max STEL Concentration: 0.008 mg/m³ Time at max STEL: 13:06:07 Oct 03 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>3-Oct</td><td>12:44:37</td><td>0.007</td></tr> <tr><td>2</td><td>3-Oct</td><td>12:49:37</td><td>0.009</td></tr> <tr><td>3</td><td>3-Oct</td><td>12:54:37</td><td>0.009</td></tr> <tr><td>4</td><td>3-Oct</td><td>12:59:37</td><td>0.012</td></tr> <tr><td>5</td><td>3-Oct</td><td>13:04:37</td><td>0.015</td></tr> <tr><td>6</td><td>3-Oct</td><td>13:09:37</td><td>0.005</td></tr> <tr><td>7</td><td>3-Oct</td><td>13:14:37</td><td>0.011</td></tr> <tr><td>8</td><td>3-Oct</td><td>13:19:37</td><td>0.01</td></tr> <tr><td>9</td><td>3-Oct</td><td>13:24:37</td><td>0.013</td></tr> <tr><td>10</td><td>3-Oct</td><td>13:29:37</td><td>0.009</td></tr> <tr><td>11</td><td>3-Oct</td><td>13:34:37</td><td>0.011</td></tr> <tr><td>12</td><td>3-Oct</td><td>13:39:37</td><td>0.002</td></tr> <tr><td>13</td><td>3-Oct</td><td>13:44:37</td><td>0.001</td></tr> <tr><td>14</td><td>3-Oct</td><td>13:49:37</td><td>0.006</td></tr> <tr><td>15</td><td>3-Oct</td><td>13:54:37</td><td>0</td></tr> <tr><td>16</td><td>3-Oct</td><td>13:59:37</td><td>0</td></tr> <tr><td>17</td><td>3-Oct</td><td>14:04:37</td><td>0.001</td></tr> <tr><td>18</td><td>3-Oct</td><td>14:09:37</td><td>0.005</td></tr> <tr><td>19</td><td>3-Oct</td><td>14:14:37</td><td>0.001</td></tr> <tr><td>20</td><td>3-Oct</td><td>14:19:37</td><td>0.002</td></tr> <tr><td>21</td><td>3-Oct</td><td>14:24:37</td><td>0.001</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	3-Oct	12:44:37	0.007	2	3-Oct	12:49:37	0.009	3	3-Oct	12:54:37	0.009	4	3-Oct	12:59:37	0.012	5	3-Oct	13:04:37	0.015	6	3-Oct	13:09:37	0.005	7	3-Oct	13:14:37	0.011	8	3-Oct	13:19:37	0.01	9	3-Oct	13:24:37	0.013	10	3-Oct	13:29:37	0.009	11	3-Oct	13:34:37	0.011	12	3-Oct	13:39:37	0.002	13	3-Oct	13:44:37	0.001	14	3-Oct	13:49:37	0.006	15	3-Oct	13:54:37	0	16	3-Oct	13:59:37	0	17	3-Oct	14:04:37	0.001	18	3-Oct	14:09:37	0.005	19	3-Oct	14:14:37	0.001	20	3-Oct	14:19:37	0.002	21	3-Oct	14:24:37	0.001	<p>pDR-1000 S/N: 06766 Tag Number: 02 Number of logged points: 46 Start time and date: 12:30:30 03-Oct Elapsed time: 03:50:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.008 mg/m³ Time at maximum: 12:36:00 Oct 03 Max STEL Concentration: 0.000 mg/m³ Time at max STEL: 12:30:30 Oct 03 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. 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9	3-Oct	13:10:56	0																																																																																																																																																																																																																																																																																																																																																																
10	3-Oct	13:15:56	0																																																																																																																																																																																																																																																																																																																																																																
11	3-Oct	13:20:56	0																																																																																																																																																																																																																																																																																																																																																																
12	3-Oct	13:25:56	0																																																																																																																																																																																																																																																																																																																																																																
13	3-Oct	13:30:56	0																																																																																																																																																																																																																																																																																																																																																																
14	3-Oct	13:35:56	0																																																																																																																																																																																																																																																																																																																																																																
15	3-Oct	13:40:56	0																																																																																																																																																																																																																																																																																																																																																																
16	3-Oct	13:45:56	0																																																																																																																																																																																																																																																																																																																																																																
17	3-Oct	13:50:56	0																																																																																																																																																																																																																																																																																																																																																																
18	3-Oct	13:55:56	0																																																																																																																																																																																																																																																																																																																																																																
19	3-Oct	14:00:56	0																																																																																																																																																																																																																																																																																																																																																																
20	3-Oct	14:05:56	0																																																																																																																																																																																																																																																																																																																																																																
21	3-Oct	14:10:56	0																																																																																																																																																																																																																																																																																																																																																																



Air Monitoring Data - TCRA Activities October 3, 2007

22	3-Oct 14:26:43	0	22	3-Oct 14:29:37	0	22	3-Oct 14:20:30	0	22	3-Oct 14:15:56	0
23	3-Oct 14:31:43	0	23	3-Oct 14:34:37	0.001	23	3-Oct 14:25:30	0	23	3-Oct 14:20:56	0
24	3-Oct 14:36:43	0	24	3-Oct 14:39:37	0.005	24	3-Oct 14:30:30	0	24	3-Oct 14:25:56	0
25	3-Oct 14:41:43	0	25	3-Oct 14:44:37	0.001	25	3-Oct 14:35:30	0	25	3-Oct 14:30:56	0
26	3-Oct 14:46:43	0	26	3-Oct 14:49:37	0	26	3-Oct 14:40:30	0	26	3-Oct 14:35:56	0
27	3-Oct 14:51:43	0	27	3-Oct 14:54:37	0.001	27	3-Oct 14:45:30	0	27	3-Oct 14:40:56	0
28	3-Oct 14:56:43	0	28	3-Oct 14:59:37	0	28	3-Oct 14:50:30	0	28	3-Oct 14:45:56	0
29	3-Oct 15:01:43	0	29	3-Oct 15:04:37	0	29	3-Oct 14:55:30	0	29	3-Oct 14:50:56	0
30	3-Oct 15:06:43	0	30	3-Oct 15:09:37	0	30	3-Oct 15:00:30	0	30	3-Oct 14:55:56	0
31	3-Oct 15:11:43	0	31	3-Oct 15:14:37	0	31	3-Oct 15:05:30	0	31	3-Oct 15:00:56	0
32	3-Oct 15:16:43	0	32	3-Oct 15:19:37	0.004	32	3-Oct 15:10:30	0	32	3-Oct 15:05:56	0
33	3-Oct 15:21:43	0	33	3-Oct 15:24:37	0.001	33	3-Oct 15:15:30	0	33	3-Oct 15:10:56	0
34	3-Oct 15:26:43	0	34	3-Oct 15:29:37	0	34	3-Oct 15:20:30	0	34	3-Oct 15:15:56	0
35	3-Oct 15:31:43	0	35	3-Oct 15:34:37	0	35	3-Oct 15:25:30	0	35	3-Oct 15:20:56	0
36	3-Oct 15:36:43	0	36	3-Oct 15:39:37	0	36	3-Oct 15:30:30	0	36	3-Oct 15:25:56	0
37	3-Oct 15:41:43	0	37	3-Oct 15:44:37	0	37	3-Oct 15:35:30	0	37	3-Oct 15:30:56	0
38	3-Oct 15:46:43	0	38	3-Oct 15:49:37	0	38	3-Oct 15:40:30	0	38	3-Oct 15:35:56	0
39	3-Oct 15:51:43	0	39	3-Oct 15:54:37	0	39	3-Oct 15:45:30	0	39	3-Oct 15:40:56	0
40	3-Oct 15:56:43	0	40	3-Oct 15:59:37	0	40	3-Oct 15:50:30	0	40	3-Oct 15:45:56	0
41	3-Oct 16:01:43	0	41	3-Oct 16:04:37	0	41	3-Oct 15:55:30	0	41	3-Oct 15:50:56	0
42	3-Oct 16:06:43	0.002	42	3-Oct 16:09:37	0.001	42	3-Oct 16:00:30	0	42	3-Oct 15:55:56	0
43	3-Oct 16:11:43	0	43	3-Oct 16:14:37	0	43	3-Oct 16:05:30	0	43	3-Oct 16:00:56	0
44	3-Oct 16:16:43	0	44	3-Oct 16:19:37	0	44	3-Oct 16:10:30	0	44	3-Oct 16:05:56	0
45	3-Oct 16:21:43	0	45	3-Oct 16:24:37	0.001	45	3-Oct 16:15:30	0	45	3-Oct 16:10:56	0
00073230300006070606}			00073230300006070700}			46	3-Oct 16:20:30	0	46	3-Oct 16:15:56	0
						00073230300006070606}			47	3-Oct 16:20:56	0
									48	3-Oct 16:25:56	0
									00073230300006070606}		



(4,0745)

(2,0745)

(3,0745)

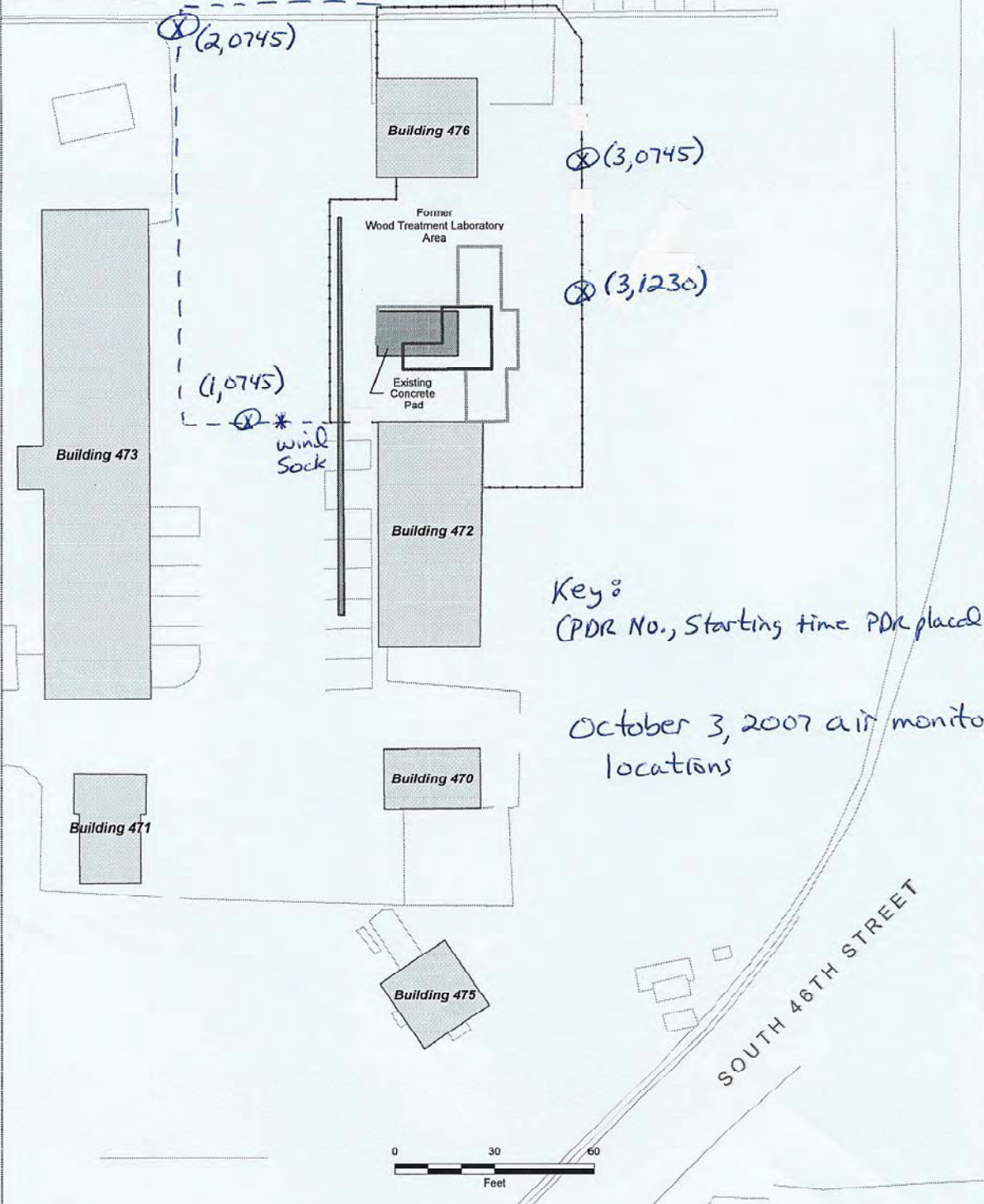
(3,1230)

(1,0745)

wind sock

Key:
(PDR No., Starting time PDR placed @ location)

October 3, 2007 air monitoring locations



- Buildings
- Construction Fence Lines
- Site Features
- Proposed Excavation Areas
- Area I (Excavation depth 3.5 feet)
- Area II Excavation depth 2.0 feet)

Richmond Field Station
University of California at Berkeley

FIGURE 1
VICINITY MAP SHOWING
TCRA BOUNDARIES AND
CONSTRUCTION FENCE LINES



Air Monitoring Data - TCRA Activities October 4, 2007

Note:
PDRs calibrated (zero'ed out) using ambient air
in area upwind of excavation.

PDR #1	PDR #2	PDR #3	PDR #4
pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 79 Start time and date: 07:37:37 04-Oct Elapsed time: 06:35:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.041 mg/m ³ Time at maximum: 09:02:02 Oct 04 Max STEL Concentration: 0.023 mg/m ³ Time at max STEL: 08:08:07 Oct 04 Overall Avg Conc: 0.000 mg/m ³ Logged Data:	pDR-1000 S/N: 06770 Tag Number: 01 Number of logged points: 76 Start time and date: 07:42:33 04-Oct Elapsed time: 06:20:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.035 mg/m ³ Time at maximum: 11:34:01 Oct 04 Max STEL Concentration: 0.007 mg/m ³ Time at max STEL: 08:20:33 Oct 04 Overall Avg Conc: 0.000 mg/m ³ Logged Data:	pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 75 Start time and date: 07:48:19 04-Oct Elapsed time: 06:15:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.064 mg/m ³ Time at maximum: 08:58:49 Oct 04 Max STEL Concentration: 0.040 mg/m ³ Time at max STEL: 09:00:50 Oct 04 Overall Avg Conc: 0.006 mg/m ³ Logged Data:	pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 74 Start time and date: 07:45:36 04-Oct Elapsed time: 06:10:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.055 mg/m ³ Time at maximum: 08:26:18 Oct 04 Max STEL Concentration: 0.009 mg/m ³ Time at max STEL: 08:21:06 Oct 04 Overall Avg Conc: 0.000 mg/m ³ Logged Data:
Avg. (mg/m ³)	Avg. (mg/m ³)	Avg. (mg/m ³)	Avg. (mg/m ³)
Point Date Time Avg. (mg/m ³)	Point Date Time Avg. (mg/m ³)	Point Date Time Avg. (mg/m ³)	Point Date Time Avg. (mg/m ³)
1 4-Oct 07:42:37 0.002	1 4-Oct 07:47:33 0	1 4-Oct 07:53:19 0.007	1 4-Oct 07:50:36 0.006
2 4-Oct 07:47:37 0.019	2 4-Oct 07:52:33 0.001	2 4-Oct 07:58:19 0.015	2 4-Oct 07:55:36 0.004
3 4-Oct 07:52:37 0.008	3 4-Oct 07:57:33 0	3 4-Oct 08:03:19 0.01	3 4-Oct 08:00:36 0.006
4 4-Oct 07:57:37 0.015	4 4-Oct 08:02:33 0.002	4 4-Oct 08:08:19 0.011	4 4-Oct 08:05:36 0.004
5 4-Oct 08:02:37 0.014	5 4-Oct 08:07:33 0.007	5 4-Oct 08:13:19 0.014	5 4-Oct 08:10:36 0.007
6 4-Oct 08:07:37 0.038	6 4-Oct 08:12:33 0.009	6 4-Oct 08:18:19 0.03	6 4-Oct 08:15:36 0.007
7 4-Oct 08:12:37 0.018	7 4-Oct 08:17:33 0.015	7 4-Oct 08:23:19 0.014	7 4-Oct 08:20:36 0.012
8 4-Oct 08:17:37 0.007	8 4-Oct 08:22:33 0.013	8 4-Oct 08:28:19 0.014	8 4-Oct 08:25:36 0.009
9 4-Oct 08:22:37 0.019	9 4-Oct 08:27:33 0.004	9 4-Oct 08:33:19 0.021	9 4-Oct 08:30:36 0.007
10 4-Oct 08:27:37 0.02	10 4-Oct 08:32:33 0.003	10 4-Oct 08:38:19 0.024	10 4-Oct 08:35:36 0.003
11 4-Oct 08:32:37 0.015	11 4-Oct 08:37:33 0	11 4-Oct 08:43:19 0.01	11 4-Oct 08:40:36 0.003
12 4-Oct 08:37:37 0.018	12 4-Oct 08:42:33 0.003	12 4-Oct 08:48:19 0.021	12 4-Oct 08:45:36 0
13 4-Oct 08:42:37 0.004	13 4-Oct 08:47:33 0.001	13 4-Oct 08:53:19 0.016	13 4-Oct 08:50:36 0.001
14 4-Oct 08:47:37 0.003	14 4-Oct 08:52:33 0	14 4-Oct 08:58:19 0.024	14 4-Oct 08:55:36 0.001
15 4-Oct 08:52:37 0.001	15 4-Oct 08:57:33 0	15 4-Oct 09:03:19 0.023	15 4-Oct 09:00:36 0
16 4-Oct 08:57:37 0	16 4-Oct 09:02:33 0	16 4-Oct 09:08:19 0.005	16 4-Oct 09:05:36 0
17 4-Oct 09:02:37 0.02	17 4-Oct 09:07:33 0	17 4-Oct 09:13:19 0.005	17 4-Oct 09:10:36 0
18 4-Oct 09:07:37 0.004	18 4-Oct 09:12:33 0.001	18 4-Oct 09:18:19 0.005	18 4-Oct 09:15:36 0
19 4-Oct 09:12:37 0.006	19 4-Oct 09:17:33 0	19 4-Oct 09:23:19 0.008	19 4-Oct 09:20:36 0
20 4-Oct 09:17:37 0.001	20 4-Oct 09:22:33 0	20 4-Oct 09:28:19 0.003	20 4-Oct 09:25:36 0.001
21 4-Oct 09:22:37 0.002	21 4-Oct 09:27:33 0	21 4-Oct 09:33:19 0.003	21 4-Oct 09:30:36 0.002



Air Monitoring Data - TCRA Activities October 4, 2007

22	4-Oct	09:27:37	0	22	4-Oct	09:32:33	0	22	4-Oct	09:38:19	0.002	22	4-Oct	09:35:36	0
23	4-Oct	09:32:37	0	23	4-Oct	09:37:33	0	23	4-Oct	09:43:19	0.003	23	4-Oct	09:40:36	0
24	4-Oct	09:37:37	0.001	24	4-Oct	09:42:33	0	24	4-Oct	09:48:19	0.003	24	4-Oct	09:45:36	0
25	4-Oct	09:42:37	0	25	4-Oct	09:47:33	0	25	4-Oct	09:53:19	0.003	25	4-Oct	09:50:36	0
26	4-Oct	09:47:37	0.004	26	4-Oct	09:52:33	0.001	26	4-Oct	09:58:19	0.001	26	4-Oct	09:55:36	0.001
27	4-Oct	09:52:37	0	27	4-Oct	09:57:33	0	27	4-Oct	10:03:19	0.001	27	4-Oct	10:00:36	0
28	4-Oct	09:57:37	0.001	28	4-Oct	10:02:33	0	28	4-Oct	10:08:19	0.003	28	4-Oct	10:05:36	0
29	4-Oct	10:02:37	0	29	4-Oct	10:07:33	0	29	4-Oct	10:13:19	0.001	29	4-Oct	10:10:36	0
30	4-Oct	10:07:37	0	30	4-Oct	10:12:33	0	30	4-Oct	10:18:19	0.003	30	4-Oct	10:15:36	0
31	4-Oct	10:12:37	0	31	4-Oct	10:17:33	0	31	4-Oct	10:23:19	0.003	31	4-Oct	10:20:36	0
32	4-Oct	10:17:37	0	32	4-Oct	10:22:33	0	32	4-Oct	10:28:19	0.002	32	4-Oct	10:25:36	0
33	4-Oct	10:22:37	0.001	33	4-Oct	10:27:33	0.001	33	4-Oct	10:33:19	0.004	33	4-Oct	10:30:36	0
34	4-Oct	10:27:37	0	34	4-Oct	10:32:33	0	34	4-Oct	10:38:19	0.006	34	4-Oct	10:35:36	0
35	4-Oct	10:32:37	0	35	4-Oct	10:37:33	0	35	4-Oct	10:43:19	0	35	4-Oct	10:40:36	0
36	4-Oct	10:37:37	0	36	4-Oct	10:42:33	0.005	36	4-Oct	10:48:19	0.01	36	4-Oct	10:45:36	0
37	4-Oct	10:42:37	0	37	4-Oct	10:47:33	0	37	4-Oct	10:53:19	0.017	37	4-Oct	10:50:36	0.001
38	4-Oct	10:47:37	0	38	4-Oct	10:52:33	0	38	4-Oct	10:58:19	0	38	4-Oct	10:55:36	0.001
39	4-Oct	10:52:37	0.001	39	4-Oct	10:57:33	0.003	39	4-Oct	11:03:19	0.003	39	4-Oct	11:00:36	0
40	4-Oct	10:57:37	0	40	4-Oct	11:02:33	0.001	40	4-Oct	11:08:19	0.004	40	4-Oct	11:05:36	0
41	4-Oct	11:02:37	0	41	4-Oct	11:07:33	0	41	4-Oct	11:13:19	0.002	41	4-Oct	11:10:36	0
42	4-Oct	11:07:37	0	42	4-Oct	11:12:33	0	42	4-Oct	11:18:19	0.008	42	4-Oct	11:15:36	0
43	4-Oct	11:12:37	0	43	4-Oct	11:17:33	0	43	4-Oct	11:23:19	0	43	4-Oct	11:20:36	0.001
44	4-Oct	11:17:37	0	44	4-Oct	11:22:33	0.002	44	4-Oct	11:28:19	0.009	44	4-Oct	11:25:36	0
45	4-Oct	11:22:37	0	45	4-Oct	11:27:33	0	45	4-Oct	11:33:19	0.005	45	4-Oct	11:30:36	0.001
46	4-Oct	11:27:37	0	46	4-Oct	11:32:33	0.001	46	4-Oct	11:38:19	0.005	46	4-Oct	11:35:36	0
47	4-Oct	11:32:37	0.01	47	4-Oct	11:37:33	0.012	47	4-Oct	11:43:19	0.004	47	4-Oct	11:40:36	0
48	4-Oct	11:37:37	0	48	4-Oct	11:42:33	0.001	48	4-Oct	11:48:19	0.005	48	4-Oct	11:45:36	0
49	4-Oct	11:42:37	0	49	4-Oct	11:47:33	0.008	49	4-Oct	11:53:19	0.001	49	4-Oct	11:50:36	0
50	4-Oct	11:47:37	0	50	4-Oct	11:52:33	0	50	4-Oct	11:58:19	0.002	50	4-Oct	11:55:36	0
51	4-Oct	11:52:37	0	51	4-Oct	11:57:33	0.007	51	4-Oct	12:03:19	0.001	51	4-Oct	12:00:36	0
52	4-Oct	11:57:37	0	52	4-Oct	12:02:33	0.001	52	4-Oct	12:08:19	0.004	52	4-Oct	12:05:36	0
53	4-Oct	12:02:37	0	53	4-Oct	12:07:33	0.001	53	4-Oct	12:13:19	0.002	53	4-Oct	12:10:36	0
54	4-Oct	12:07:37	0	54	4-Oct	12:12:33	0.002	54	4-Oct	12:18:19	0.004	54	4-Oct	12:15:36	0
55	4-Oct	12:12:37	0	55	4-Oct	12:17:33	0.001	55	4-Oct	12:23:19	0.003	55	4-Oct	12:20:36	0
56	4-Oct	12:17:37	0	56	4-Oct	12:22:33	0.003	56	4-Oct	12:28:19	0.004	56	4-Oct	12:25:36	0
57	4-Oct	12:22:37	0	57	4-Oct	12:27:33	0.004	57	4-Oct	12:33:19	0.006	57	4-Oct	12:30:36	0
58	4-Oct	12:27:37	0	58	4-Oct	12:32:33	0.003	58	4-Oct	12:38:19	0.004	58	4-Oct	12:35:36	0
59	4-Oct	12:32:37	0	59	4-Oct	12:37:33	0	59	4-Oct	12:43:19	0.004	59	4-Oct	12:40:36	0
60	4-Oct	12:37:37	0	60	4-Oct	12:42:33	0.004	60	4-Oct	12:48:19	0.005	60	4-Oct	12:45:36	0
61	4-Oct	12:42:37	0	61	4-Oct	12:47:33	0.011	61	4-Oct	12:53:19	0.005	61	4-Oct	12:50:36	0
62	4-Oct	12:47:37	0.001	62	4-Oct	12:52:33	0.007	62	4-Oct	12:58:19	0.003	62	4-Oct	12:55:36	0
63	4-Oct	12:52:37	0	63	4-Oct	12:57:33	0.003	63	4-Oct	13:03:19	0.004	63	4-Oct	13:00:36	0



Air Monitoring Data - TCRA Activities October 4, 2007

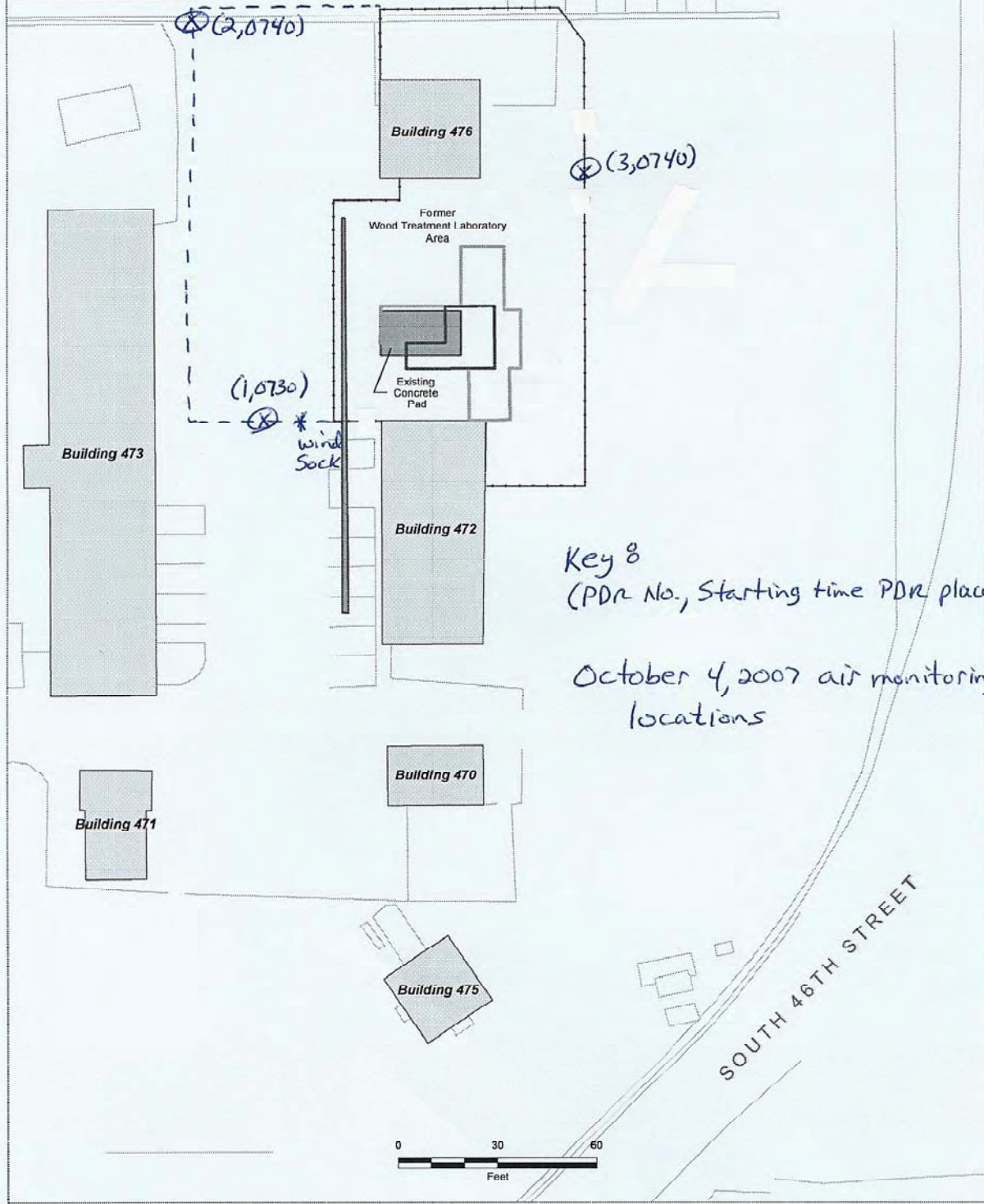
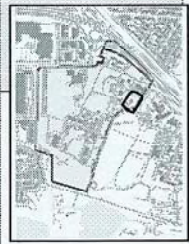
Point	Date	Time	Avg. (mg/m³)	Point	Date	Time	Avg. (mg/m³)	Point	Date	Time	Avg. (mg/m³)	Point	Date	Time	Avg. (mg/m³)
64	4-Oct	12:57:37	0	64	4-Oct	13:02:33	0.013	64	4-Oct	13:08:19	0.005	64	4-Oct	13:05:36	0
65	4-Oct	13:02:37	0.002	65	4-Oct	13:07:33	0.001	65	4-Oct	13:13:19	0.004	65	4-Oct	13:10:36	0
66	4-Oct	13:07:37	0	66	4-Oct	13:12:33	0.007	66	4-Oct	13:18:19	0.006	66	4-Oct	13:15:36	0
67	4-Oct	13:12:37	0	67	4-Oct	13:17:33	0.004	67	4-Oct	13:23:19	0.003	67	4-Oct	13:20:36	0
68	4-Oct	13:17:37	0	68	4-Oct	13:22:33	0	68	4-Oct	13:28:19	0.007	68	4-Oct	13:25:36	0
69	4-Oct	13:22:37	0	69	4-Oct	13:27:33	0.003	69	4-Oct	13:33:19	0.005	69	4-Oct	13:30:36	0
70	4-Oct	13:27:37	0	70	4-Oct	13:32:33	0.006	70	4-Oct	13:38:19	0.005	70	4-Oct	13:35:36	0
71	4-Oct	13:32:37	0	71	4-Oct	13:37:33	0.01	71	4-Oct	13:43:19	0.007	71	4-Oct	13:40:36	0
72	4-Oct	13:37:37	0	72	4-Oct	13:42:33	0.002	72	4-Oct	13:48:19	0.008	72	4-Oct	13:45:36	0
73	4-Oct	13:42:37	0	73	4-Oct	13:47:33	0	73	4-Oct	13:53:19	0.013	73	4-Oct	13:50:36	0
74	4-Oct	13:47:37	0	74	4-Oct	13:52:33	0.007	74	4-Oct	13:58:19	0.009	74	4-Oct	13:55:36	0
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76	4-Oct	13:57:37	0.001	76	4-Oct	14:02:33	0.001	00073230300006070606}			pDR-1000 S/N: 06766				
77	4-Oct	14:02:37	0	00073230300006070700}			pDR-1000 S/N: 06766			Tag Number: 01					
78	4-Oct	14:07:37	0	pDR-1000 S/N: 06770			Tag Number: 02			Number of logged points: 27					
79	4-Oct	14:12:37	0	Tag Number: 01			Number of logged points: 26			Start time and date: 14:03:06 04-Oct					
00073230300006070606}				Start time and date: 14:07:14 04-Oct			Start time and date: 14:12:07 04-Oct			Elapsed time: 02:15:00					
pDR-1000 S/N: 06766				Elapsed time: 02:15:00			Elapsed time: 02:10:00			Logging period (sec): 300					
Tag Number: 01				Logging period (sec): 300			Logging period (sec): 300			Calibration Factor (%): 100					
Number of logged points: 25				Calibration Factor (%): 100			Calibration Factor (%): 100			Max Display Concentration: 0.016 mg/m³					
Start time and date: 14:15:49 04-Oct				Max Display Concentration: 0.068 mg/m³			Max Display Concentration: 0.058 mg/m³			Time at maximum: 14:59:35 Oct 04					
Elapsed time: 02:05:00				Time at maximum: 15:36:57 Oct 04			Time at maximum: 14:53:11 Oct 04			Max STEL Concentration: 0.000 mg/m³					
Logging period (sec): 300				Max STEL Concentration: 0.000 mg/m³			Max STEL Concentration: 0.003 mg/m³			Time at max STEL: 14:03:06 Oct 04					
Calibration Factor (%): 100				Time at max STEL: 14:07:14 Oct 04			Time at max STEL: 15:03:07 Oct 04			Overall Avg Conc: 0.000 mg/m³					
Max Display Concentration: 0.030 mg/m³				Overall Avg Conc: 0.000 mg/m³			Overall Avg Conc: 0.000 mg/m³			Logged Data:					
Time at maximum: 15:04:04 Oct 04				Logged Data:			Logged Data:			Point					
Max STEL Concentration: 0.000 mg/m³				Point			Point			Date					
Time at max STEL: 14:15:49 Oct 04				Date			Date			Time					
Overall Avg Conc: 0.000 mg/m³				Time			Time			Avg. (mg/m³)					
Logged Data:				Avg. (mg/m³)			Avg. (mg/m³)			Point					
Point				Point			Point			Date					
Date				Date			Date			Time					
Time				Time			Time			Avg. (mg/m³)					
Avg. (mg/m³)				Avg. (mg/m³)			Avg. (mg/m³)			Point					
1				1			1			4-Oct					
4-Oct				4-Oct			4-Oct			14:08:06					
14:20:49				4-Oct			4-Oct			14:13:06					
14:20:49				14:12:14			14:17:07			14:18:06					
14:25:49				14:17:14			14:22:07			14:23:06					
14:25:49				14:22:14			14:27:07			14:28:06					
14:30:49				14:27:14			14:32:07			14:33:06					
14:30:49				14:32:14			14:37:07			14:38:06					
14:35:49				14:37:14			14:42:07			14:43:06					
14:35:49				14:42:14			14:47:07			14:48:06					
14:40:49				14:47:14			14:52:07			14:48:06					
14:40:49				14:47:14			14:57:07			14:53:06					
14:40:49				14:47:14			14:57:07			14:53:06					



Air Monitoring Data - TCRA Activities October 4, 2007

6	4-Oct 14:45:49	0	9	4-Oct 14:52:14	0.005	10	4-Oct 15:02:07	0.024	11	4-Oct 14:58:06	0
7	4-Oct 14:50:49	0	10	4-Oct 14:57:14	0.001	11	4-Oct 15:07:07	0.003	12	4-Oct 15:03:06	0
8	4-Oct 14:55:49	0	11	4-Oct 15:02:14	0	12	4-Oct 15:12:07	0	13	4-Oct 15:08:06	0
9	4-Oct 15:00:49	0	12	4-Oct 15:07:14	0	13	4-Oct 15:17:07	0	14	4-Oct 15:13:06	0
10	4-Oct 15:05:49	0.001	13	4-Oct 15:12:14	0	14	4-Oct 15:22:07	0.002	15	4-Oct 15:18:06	0
11	4-Oct 15:10:49	0	14	4-Oct 15:17:14	0	15	4-Oct 15:27:07	0.001	16	4-Oct 15:23:06	0
12	4-Oct 15:15:49	0	15	4-Oct 15:22:14	0	16	4-Oct 15:32:07	0	17	4-Oct 15:28:06	0
13	4-Oct 15:20:49	0	16	4-Oct 15:27:14	0	17	4-Oct 15:37:07	0.005	18	4-Oct 15:33:06	0
14	4-Oct 15:25:49	0	17	4-Oct 15:32:14	0	18	4-Oct 15:42:07	0.005	19	4-Oct 15:38:06	0
15	4-Oct 15:30:49	0	18	4-Oct 15:37:14	0.009	19	4-Oct 15:47:07	0	20	4-Oct 15:43:06	0
16	4-Oct 15:35:49	0	19	4-Oct 15:42:14	0.006	20	4-Oct 15:52:07	0.001	21	4-Oct 15:48:06	0
17	4-Oct 15:40:49	0	20	4-Oct 15:47:14	0	21	4-Oct 15:57:07	0.002	22	4-Oct 15:53:06	0
18	4-Oct 15:45:49	0	21	4-Oct 15:52:14	0	22	4-Oct 16:02:07	0.002	23	4-Oct 15:58:06	0
19	4-Oct 15:50:49	0	22	4-Oct 15:57:14	0	23	4-Oct 16:07:07	0.002	24	4-Oct 16:03:06	0
20	4-Oct 15:55:49	0	23	4-Oct 16:02:14	0	24	4-Oct 16:12:07	0.009	25	4-Oct 16:08:06	0
21	4-Oct 16:00:49	0	24	4-Oct 16:07:14	0.002	25	4-Oct 16:17:07	0	26	4-Oct 16:13:06	0
22	4-Oct 16:05:49	0	25	4-Oct 16:12:14	0	26	4-Oct 16:22:07	0.002	27	4-Oct 16:18:06	0
23	4-Oct 16:10:49	0	26	4-Oct 16:17:14	0	00073230300006070606}		00073230300006070606}			
24	4-Oct 16:15:49	0	27	4-Oct 16:22:14	0						
25	4-Oct 16:20:49	0	00073230300006070700}								
00073230300006070606}											

(4,0735)



Key 8
(PDR No., Starting time PDR placed @ location)

October 4, 2007 air monitoring locations

SOUTH 46TH STREET

- Buildings
- Construction Fence Lines
- Site Features
- Proposed Excavation Areas
 - Area I (Excavation depth 3.5 feet)
 - Area II (Excavation depth 2.0 feet)

Richmond Field Station
University of California at Berkeley

FIGURE 1
VICINITY MAP SHOWING
TCRA BOUNDARIES AND
CONSTRUCTION FENCE LINES



Air Monitoring Data - TCRA Activities October 5, 2007

Note:
PDRs calibrated (zero'ed out) using ambient air
in area upwind of excavation.

PDR #1	PDR #2	PDR #3	PDR #4																																																																																																																																																																																																																																																																																																																								
<p>pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 11 Start time and date: 07:49:25 05-Oct Elapsed time: 00:55:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.114 mg/m³ Time at maximum: 08:06:31 Oct 05 Max STEL Concentration: 0.016 mg/m³ Time at max STEL: 08:10:55 Oct 05 Overall Avg Conc: 0.007 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>5-Oct</td><td>07:54:25</td><td>0.01</td></tr> <tr><td>2</td><td>5-Oct</td><td>07:59:25</td><td>0.016</td></tr> <tr><td>3</td><td>5-Oct</td><td>08:04:25</td><td>0.014</td></tr> <tr><td>4</td><td>5-Oct</td><td>08:09:25</td><td>0.014</td></tr> <tr><td>5</td><td>5-Oct</td><td>08:14:25</td><td>0.012</td></tr> <tr><td>6</td><td>5-Oct</td><td>08:19:25</td><td>0.005</td></tr> <tr><td>7</td><td>5-Oct</td><td>08:24:25</td><td>0.004</td></tr> <tr><td>8</td><td>5-Oct</td><td>08:29:25</td><td>0.005</td></tr> <tr><td>9</td><td>5-Oct</td><td>08:34:25</td><td>0.001</td></tr> <tr><td>10</td><td>5-Oct</td><td>08:39:25</td><td>0.001</td></tr> <tr><td>11</td><td>5-Oct</td><td>08:44:25</td><td>0.003</td></tr> </tbody> </table> <p>00073230300006070606}</p> <p>pDR-1000 S/N: 06766 Tag Number: 02 Number of logged points: 16 Start time and date: 08:45:51 05-Oct Elapsed time: 01:20:00 Logging period (sec): 300 Calibration Factor (%): 100</p>	Point	Date	Time	Avg. (mg/m ³)	1	5-Oct	07:54:25	0.01	2	5-Oct	07:59:25	0.016	3	5-Oct	08:04:25	0.014	4	5-Oct	08:09:25	0.014	5	5-Oct	08:14:25	0.012	6	5-Oct	08:19:25	0.005	7	5-Oct	08:24:25	0.004	8	5-Oct	08:29:25	0.005	9	5-Oct	08:34:25	0.001	10	5-Oct	08:39:25	0.001	11	5-Oct	08:44:25	0.003	<p>pDR-1000 S/N: 06770 Tag Number: 01 Number of logged points: 110 Start time and date: 07:50:24 05-Oct Elapsed time: 09:10:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.127 mg/m³ Time at maximum: 15:10:26 Oct 05 Max STEL Concentration: 0.000 mg/m³ Time at max STEL: 07:50:24 Oct 05 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>5-Oct</td><td>07:55:24</td><td>0.001</td></tr> <tr><td>2</td><td>5-Oct</td><td>08:00:24</td><td>0.011</td></tr> <tr><td>3</td><td>5-Oct</td><td>08:05:24</td><td>0.001</td></tr> <tr><td>4</td><td>5-Oct</td><td>08:10:24</td><td>0</td></tr> <tr><td>5</td><td>5-Oct</td><td>08:15:24</td><td>0.006</td></tr> <tr><td>6</td><td>5-Oct</td><td>08:20:24</td><td>0</td></tr> <tr><td>7</td><td>5-Oct</td><td>08:25:24</td><td>0</td></tr> <tr><td>8</td><td>5-Oct</td><td>08:30:24</td><td>0</td></tr> <tr><td>9</td><td>5-Oct</td><td>08:35:24</td><td>0</td></tr> <tr><td>10</td><td>5-Oct</td><td>08:40:24</td><td>0</td></tr> <tr><td>11</td><td>5-Oct</td><td>08:45:24</td><td>0</td></tr> <tr><td>12</td><td>5-Oct</td><td>08:50:24</td><td>0</td></tr> <tr><td>13</td><td>5-Oct</td><td>08:55:24</td><td>0</td></tr> <tr><td>14</td><td>5-Oct</td><td>09:00:24</td><td>0</td></tr> <tr><td>15</td><td>5-Oct</td><td>09:05:24</td><td>0</td></tr> <tr><td>16</td><td>5-Oct</td><td>09:10:24</td><td>0.001</td></tr> <tr><td>17</td><td>5-Oct</td><td>09:15:24</td><td>0</td></tr> <tr><td>18</td><td>5-Oct</td><td>09:20:24</td><td>0</td></tr> <tr><td>19</td><td>5-Oct</td><td>09:25:24</td><td>0</td></tr> <tr><td>20</td><td>5-Oct</td><td>09:30:24</td><td>0</td></tr> <tr><td>21</td><td>5-Oct</td><td>09:35:24</td><td>0.004</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	5-Oct	07:55:24	0.001	2	5-Oct	08:00:24	0.011	3	5-Oct	08:05:24	0.001	4	5-Oct	08:10:24	0	5	5-Oct	08:15:24	0.006	6	5-Oct	08:20:24	0	7	5-Oct	08:25:24	0	8	5-Oct	08:30:24	0	9	5-Oct	08:35:24	0	10	5-Oct	08:40:24	0	11	5-Oct	08:45:24	0	12	5-Oct	08:50:24	0	13	5-Oct	08:55:24	0	14	5-Oct	09:00:24	0	15	5-Oct	09:05:24	0	16	5-Oct	09:10:24	0.001	17	5-Oct	09:15:24	0	18	5-Oct	09:20:24	0	19	5-Oct	09:25:24	0	20	5-Oct	09:30:24	0	21	5-Oct	09:35:24	0.004	<p>pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 28 Start time and date: 07:51:17 05-Oct Elapsed time: 02:20:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.156 mg/m³ Time at maximum: 09:58:57 Oct 05 Max STEL Concentration: 0.009 mg/m³ Time at max STEL: 08:05:17 Oct 05 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>5-Oct</td><td>07:56:17</td><td>0.013</td></tr> <tr><td>2</td><td>5-Oct</td><td>08:01:17</td><td>0.007</td></tr> <tr><td>3</td><td>5-Oct</td><td>08:06:17</td><td>0.006</td></tr> <tr><td>4</td><td>5-Oct</td><td>08:11:17</td><td>0.005</td></tr> <tr><td>5</td><td>5-Oct</td><td>08:16:17</td><td>0.003</td></tr> <tr><td>6</td><td>5-Oct</td><td>08:21:17</td><td>0</td></tr> <tr><td>7</td><td>5-Oct</td><td>08:26:17</td><td>0.001</td></tr> <tr><td>8</td><td>5-Oct</td><td>08:31:17</td><td>0.001</td></tr> <tr><td>9</td><td>5-Oct</td><td>08:36:17</td><td>0.001</td></tr> <tr><td>10</td><td>5-Oct</td><td>08:41:17</td><td>0.001</td></tr> <tr><td>11</td><td>5-Oct</td><td>08:46:17</td><td>0.001</td></tr> <tr><td>12</td><td>5-Oct</td><td>08:51:17</td><td>0.001</td></tr> <tr><td>13</td><td>5-Oct</td><td>08:56:17</td><td>0.001</td></tr> <tr><td>14</td><td>5-Oct</td><td>09:01:17</td><td>0.002</td></tr> <tr><td>15</td><td>5-Oct</td><td>09:06:17</td><td>0.004</td></tr> <tr><td>16</td><td>5-Oct</td><td>09:11:17</td><td>0.001</td></tr> <tr><td>17</td><td>5-Oct</td><td>09:16:17</td><td>0</td></tr> <tr><td>18</td><td>5-Oct</td><td>09:21:17</td><td>0.003</td></tr> <tr><td>19</td><td>5-Oct</td><td>09:26:17</td><td>0.005</td></tr> <tr><td>20</td><td>5-Oct</td><td>09:31:17</td><td>0</td></tr> <tr><td>21</td><td>5-Oct</td><td>09:36:17</td><td>0.001</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	5-Oct	07:56:17	0.013	2	5-Oct	08:01:17	0.007	3	5-Oct	08:06:17	0.006	4	5-Oct	08:11:17	0.005	5	5-Oct	08:16:17	0.003	6	5-Oct	08:21:17	0	7	5-Oct	08:26:17	0.001	8	5-Oct	08:31:17	0.001	9	5-Oct	08:36:17	0.001	10	5-Oct	08:41:17	0.001	11	5-Oct	08:46:17	0.001	12	5-Oct	08:51:17	0.001	13	5-Oct	08:56:17	0.001	14	5-Oct	09:01:17	0.002	15	5-Oct	09:06:17	0.004	16	5-Oct	09:11:17	0.001	17	5-Oct	09:16:17	0	18	5-Oct	09:21:17	0.003	19	5-Oct	09:26:17	0.005	20	5-Oct	09:31:17	0	21	5-Oct	09:36:17	0.001	<p>pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 110 Start time and date: 07:52:37 05-Oct Elapsed time: 09:10:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.022 mg/m³ Time at maximum: 15:54:45 Oct 05 Max STEL Concentration: 0.004 mg/m³ Time at max STEL: 11:48:08 Oct 05 Overall Avg Conc: 0.000 mg/m³ Logged Data:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>5-Oct</td><td>07:57:37</td><td>0.003</td></tr> <tr><td>2</td><td>5-Oct</td><td>08:02:37</td><td>0.001</td></tr> <tr><td>3</td><td>5-Oct</td><td>08:07:37</td><td>0.001</td></tr> <tr><td>4</td><td>5-Oct</td><td>08:12:37</td><td>0.001</td></tr> <tr><td>5</td><td>5-Oct</td><td>08:17:37</td><td>0</td></tr> <tr><td>6</td><td>5-Oct</td><td>08:22:37</td><td>0</td></tr> <tr><td>7</td><td>5-Oct</td><td>08:27:37</td><td>0</td></tr> <tr><td>8</td><td>5-Oct</td><td>08:32:37</td><td>0</td></tr> <tr><td>9</td><td>5-Oct</td><td>08:37:37</td><td>0</td></tr> <tr><td>10</td><td>5-Oct</td><td>08:42:37</td><td>0</td></tr> <tr><td>11</td><td>5-Oct</td><td>08:47:37</td><td>0</td></tr> <tr><td>12</td><td>5-Oct</td><td>08:52:37</td><td>0</td></tr> <tr><td>13</td><td>5-Oct</td><td>08:57:37</td><td>0</td></tr> <tr><td>14</td><td>5-Oct</td><td>09:02:37</td><td>0</td></tr> <tr><td>15</td><td>5-Oct</td><td>09:07:37</td><td>0</td></tr> <tr><td>16</td><td>5-Oct</td><td>09:12:37</td><td>0</td></tr> <tr><td>17</td><td>5-Oct</td><td>09:17:37</td><td>0</td></tr> <tr><td>18</td><td>5-Oct</td><td>09:22:37</td><td>0</td></tr> <tr><td>19</td><td>5-Oct</td><td>09:27:37</td><td>0</td></tr> <tr><td>20</td><td>5-Oct</td><td>09:32:37</td><td>0</td></tr> <tr><td>21</td><td>5-Oct</td><td>09:37:37</td><td>0</td></tr> </tbody> </table>	Point	Date	Time	Avg. 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8	5-Oct	08:29:25	0.005																																																																																																																																																																																																																																																																																																																								
9	5-Oct	08:34:25	0.001																																																																																																																																																																																																																																																																																																																								
10	5-Oct	08:39:25	0.001																																																																																																																																																																																																																																																																																																																								
11	5-Oct	08:44:25	0.003																																																																																																																																																																																																																																																																																																																								
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7	5-Oct	08:25:24	0																																																																																																																																																																																																																																																																																																																								
8	5-Oct	08:30:24	0																																																																																																																																																																																																																																																																																																																								
9	5-Oct	08:35:24	0																																																																																																																																																																																																																																																																																																																								
10	5-Oct	08:40:24	0																																																																																																																																																																																																																																																																																																																								
11	5-Oct	08:45:24	0																																																																																																																																																																																																																																																																																																																								
12	5-Oct	08:50:24	0																																																																																																																																																																																																																																																																																																																								
13	5-Oct	08:55:24	0																																																																																																																																																																																																																																																																																																																								
14	5-Oct	09:00:24	0																																																																																																																																																																																																																																																																																																																								
15	5-Oct	09:05:24	0																																																																																																																																																																																																																																																																																																																								
16	5-Oct	09:10:24	0.001																																																																																																																																																																																																																																																																																																																								
17	5-Oct	09:15:24	0																																																																																																																																																																																																																																																																																																																								
18	5-Oct	09:20:24	0																																																																																																																																																																																																																																																																																																																								
19	5-Oct	09:25:24	0																																																																																																																																																																																																																																																																																																																								
20	5-Oct	09:30:24	0																																																																																																																																																																																																																																																																																																																								
21	5-Oct	09:35:24	0.004																																																																																																																																																																																																																																																																																																																								
Point	Date	Time	Avg. (mg/m ³)																																																																																																																																																																																																																																																																																																																								
1	5-Oct	07:56:17	0.013																																																																																																																																																																																																																																																																																																																								
2	5-Oct	08:01:17	0.007																																																																																																																																																																																																																																																																																																																								
3	5-Oct	08:06:17	0.006																																																																																																																																																																																																																																																																																																																								
4	5-Oct	08:11:17	0.005																																																																																																																																																																																																																																																																																																																								
5	5-Oct	08:16:17	0.003																																																																																																																																																																																																																																																																																																																								
6	5-Oct	08:21:17	0																																																																																																																																																																																																																																																																																																																								
7	5-Oct	08:26:17	0.001																																																																																																																																																																																																																																																																																																																								
8	5-Oct	08:31:17	0.001																																																																																																																																																																																																																																																																																																																								
9	5-Oct	08:36:17	0.001																																																																																																																																																																																																																																																																																																																								
10	5-Oct	08:41:17	0.001																																																																																																																																																																																																																																																																																																																								
11	5-Oct	08:46:17	0.001																																																																																																																																																																																																																																																																																																																								
12	5-Oct	08:51:17	0.001																																																																																																																																																																																																																																																																																																																								
13	5-Oct	08:56:17	0.001																																																																																																																																																																																																																																																																																																																								
14	5-Oct	09:01:17	0.002																																																																																																																																																																																																																																																																																																																								
15	5-Oct	09:06:17	0.004																																																																																																																																																																																																																																																																																																																								
16	5-Oct	09:11:17	0.001																																																																																																																																																																																																																																																																																																																								
17	5-Oct	09:16:17	0																																																																																																																																																																																																																																																																																																																								
18	5-Oct	09:21:17	0.003																																																																																																																																																																																																																																																																																																																								
19	5-Oct	09:26:17	0.005																																																																																																																																																																																																																																																																																																																								
20	5-Oct	09:31:17	0																																																																																																																																																																																																																																																																																																																								
21	5-Oct	09:36:17	0.001																																																																																																																																																																																																																																																																																																																								
Point	Date	Time	Avg. (mg/m ³)																																																																																																																																																																																																																																																																																																																								
1	5-Oct	07:57:37	0.003																																																																																																																																																																																																																																																																																																																								
2	5-Oct	08:02:37	0.001																																																																																																																																																																																																																																																																																																																								
3	5-Oct	08:07:37	0.001																																																																																																																																																																																																																																																																																																																								
4	5-Oct	08:12:37	0.001																																																																																																																																																																																																																																																																																																																								
5	5-Oct	08:17:37	0																																																																																																																																																																																																																																																																																																																								
6	5-Oct	08:22:37	0																																																																																																																																																																																																																																																																																																																								
7	5-Oct	08:27:37	0																																																																																																																																																																																																																																																																																																																								
8	5-Oct	08:32:37	0																																																																																																																																																																																																																																																																																																																								
9	5-Oct	08:37:37	0																																																																																																																																																																																																																																																																																																																								
10	5-Oct	08:42:37	0																																																																																																																																																																																																																																																																																																																								
11	5-Oct	08:47:37	0																																																																																																																																																																																																																																																																																																																								
12	5-Oct	08:52:37	0																																																																																																																																																																																																																																																																																																																								
13	5-Oct	08:57:37	0																																																																																																																																																																																																																																																																																																																								
14	5-Oct	09:02:37	0																																																																																																																																																																																																																																																																																																																								
15	5-Oct	09:07:37	0																																																																																																																																																																																																																																																																																																																								
16	5-Oct	09:12:37	0																																																																																																																																																																																																																																																																																																																								
17	5-Oct	09:17:37	0																																																																																																																																																																																																																																																																																																																								
18	5-Oct	09:22:37	0																																																																																																																																																																																																																																																																																																																								
19	5-Oct	09:27:37	0																																																																																																																																																																																																																																																																																																																								
20	5-Oct	09:32:37	0																																																																																																																																																																																																																																																																																																																								
21	5-Oct	09:37:37	0																																																																																																																																																																																																																																																																																																																								



Air Monitoring Data - TCRA Activities October 5, 2007

Point	Date	Time	Avg. (mg/m ³)	Point	Date	Time	Avg. (mg/m ³)	Point	Date	Time	Avg. (mg/m ³)				
Max Display Concentration: 0.065 mg/m ³				22	5-Oct	09:40:24	0	22	5-Oct	09:41:17	0.004	22	5-Oct	09:42:37	0
Time at maximum: 08:53:35 Oct 05				23	5-Oct	09:45:24	0	23	5-Oct	09:46:17	0.001	23	5-Oct	09:47:37	0
Max STEL Concentration: 0.005 mg/m ³				24	5-Oct	09:50:24	0	24	5-Oct	09:51:17	0.002	24	5-Oct	09:52:37	0
Time at max STEL: 09:34:21 Oct 05				25	5-Oct	09:55:24	0	25	5-Oct	09:56:17	0.001	25	5-Oct	09:57:37	0
Overall Avg Conc: 0.003 mg/m ³				26	5-Oct	10:00:24	0	26	5-Oct	10:01:17	0.008	26	5-Oct	10:02:37	0
Logged Data:				27	5-Oct	10:05:24	0.001	27	5-Oct	10:06:17	0.003	27	5-Oct	10:07:37	0
00073230300006070606}				28	5-Oct	10:10:24	0.001	28	5-Oct	10:11:17	0	28	5-Oct	10:12:37	0
pDR-1000 S/N: 06766				29	5-Oct	10:15:24	0	00073230300006070606}				29	5-Oct	10:17:37	0
Tag Number: 02				30	5-Oct	10:20:24	0	pDR-1000 S/N: 06766				30	5-Oct	10:22:37	0
Number of logged points: 33				31	5-Oct	10:25:24	0	Tag Number: 02				31	5-Oct	10:27:37	0
Start time and date: 10:14:42 05-Oct				32	5-Oct	10:30:24	0	Number of logged points: 33				32	5-Oct	10:32:37	0
Elapsed time: 02:45:00				33	5-Oct	10:35:24	0	Start time and date: 10:14:42 05-Oct				33	5-Oct	10:37:37	0
Logging period (sec): 300				34	5-Oct	10:40:24	0	Elapsed time: 02:45:00				34	5-Oct	10:42:37	0.001
Calibration Factor (%): 100				35	5-Oct	10:45:24	0	Logging period (sec): 300				35	5-Oct	10:47:37	0
Max Display Concentration: 0.034 mg/m ³				36	5-Oct	10:50:24	0	Calibration Factor (%): 100				36	5-Oct	10:52:37	0
Time at maximum: 10:36:29 Oct 05				37	5-Oct	10:55:24	0	Max Display Concentration: 0.034 mg/m ³				37	5-Oct	10:57:37	0
Max STEL Concentration: 0.003 mg/m ³				38	5-Oct	11:00:24	0	Time at maximum: 10:36:29 Oct 05				38	5-Oct	11:02:37	0
Time at max STEL: 11:15:42 Oct 05				39	5-Oct	11:05:24	0	Max STEL Concentration: 0.003 mg/m ³				39	5-Oct	11:07:37	0.001
Overall Avg Conc: 0.001 mg/m ³				40	5-Oct	11:10:24	0	Time at max STEL: 11:15:42 Oct 05				40	5-Oct	11:12:37	0.001
Logged Data:				41	5-Oct	11:15:24	0	Overall Avg Conc: 0.001 mg/m ³				41	5-Oct	11:17:37	0
00073230300006070606}				42	5-Oct	11:20:24	0	Logged Data:				42	5-Oct	11:22:37	0
pDR-1000 S/N: 06766				43	5-Oct	11:25:24	0	Point				43	5-Oct	11:27:37	0
Tag Number: 03				44	5-Oct	11:30:24	0	Date				44	5-Oct	11:32:37	0
Number of logged points: 33				45	5-Oct	11:35:24	0	Time				45	5-Oct	11:37:37	0.003
Start time and date: 10:10:23 05-Oct				46	5-Oct	11:40:24	0	Avg. (mg/m ³)				46	5-Oct	11:42:37	0.004
Elapsed time: 02:45:00				47	5-Oct	11:45:24	0	1				47	5-Oct	11:47:37	0.004
Logging period (sec): 300				48	5-Oct	11:50:24	0	2				48	5-Oct	11:52:37	0.003
Calibration Factor (%): 100				49	5-Oct	11:55:24	0	3				49	5-Oct	11:57:37	0.001
Max Display Concentration: 0.076 mg/m ³				50	5-Oct	12:00:24	0	4				50	5-Oct	12:02:37	0
Time at maximum: 12:15:35 Oct 05				51	5-Oct	12:05:24	0	5				51	5-Oct	12:07:37	0.001
Max STEL Concentration: 0.009 mg/m ³				52	5-Oct	12:10:24	0	6				52	5-Oct	12:12:37	0
Time at max STEL: 10:24:23 Oct 05				53	5-Oct	12:15:24	0	7				53	5-Oct	12:17:37	0
Overall Avg Conc: 0.006 mg/m ³				54	5-Oct	12:20:24	0	8				54	5-Oct	12:22:37	0
Logged Data:				55	5-Oct	12:25:24	0	9				55	5-Oct	12:27:37	0
00073230300006070606}				56	5-Oct	12:30:24	0	10				56	5-Oct	12:32:37	0
pDR-1000 S/N: 06766				57	5-Oct	12:35:24	0.002	11				57	5-Oct	12:37:37	0
Tag Number: 03				58	5-Oct	12:40:24	0.001	12				58	5-Oct	12:42:37	0
Number of logged points: 33				59	5-Oct	12:45:24	0	13				59	5-Oct	12:47:37	0
Start time and date: 10:10:23 05-Oct				60	5-Oct	12:50:24	0	14				60	5-Oct	12:52:37	0
Elapsed time: 02:45:00								15							
Logging period (sec): 300								15							
Calibration Factor (%): 100								15							
Max Display Concentration: 0.076 mg/m ³								15							
Time at maximum: 12:15:35 Oct 05								15							
Max STEL Concentration: 0.009 mg/m ³								15							
Time at max STEL: 10:24:23 Oct 05								15							
Overall Avg Conc: 0.006 mg/m ³								15							
Logged Data:								15							



Air Monitoring Data - TCRA Activities October 5, 2007

Point	Date	Time	Avg. (mg/m ³)
1	5-Oct	10:15:23	0.011
2	5-Oct	10:20:23	0.007
3	5-Oct	10:25:23	0.008
4	5-Oct	10:30:23	0.008
5	5-Oct	10:35:23	0.008
6	5-Oct	10:40:23	0.011
7	5-Oct	10:45:23	0.008
8	5-Oct	10:50:23	0.009
9	5-Oct	10:55:23	0.006
10	5-Oct	11:00:23	0.007
11	5-Oct	11:05:23	0.008
12	5-Oct	11:10:23	0.005
13	5-Oct	11:15:23	0.006
14	5-Oct	11:20:23	0.005
15	5-Oct	11:25:23	0.004
16	5-Oct	11:30:23	0.006
17	5-Oct	11:35:23	0.005
18	5-Oct	11:40:23	0.005
19	5-Oct	11:45:23	0.004
20	5-Oct	11:50:23	0.006
21	5-Oct	11:55:23	0.006
22	5-Oct	12:00:23	0.007
23	5-Oct	12:05:23	0.006
24	5-Oct	12:10:23	0.004
25	5-Oct	12:15:23	0.004
26	5-Oct	12:20:23	0.008
27	5-Oct	12:25:23	0.005
28	5-Oct	12:30:23	0.005
29	5-Oct	12:35:23	0.003
30	5-Oct	12:40:23	0.003
31	5-Oct	12:45:23	0.002
32	5-Oct	12:50:23	0.001
33	5-Oct	12:55:23	0.001
00073230300006070606}			
pDR-1000 S/N: 06766			
Tag Number: 04			
Number of logged points: 35			
61	5-Oct	12:55:24	0.001
62	5-Oct	13:00:24	0.002
63	5-Oct	13:05:24	0
64	5-Oct	13:10:24	0
65	5-Oct	13:15:24	0
66	5-Oct	13:20:24	0
67	5-Oct	13:25:24	0
68	5-Oct	13:30:24	0
69	5-Oct	13:35:24	0
70	5-Oct	13:40:24	0
71	5-Oct	13:45:24	0.001
72	5-Oct	13:50:24	0
73	5-Oct	13:55:24	0
74	5-Oct	14:00:24	0.001
75	5-Oct	14:05:24	0
76	5-Oct	14:10:24	0.004
77	5-Oct	14:15:24	0.001
78	5-Oct	14:20:24	0.002
79	5-Oct	14:25:24	0
80	5-Oct	14:30:24	0
81	5-Oct	14:35:24	0
82	5-Oct	14:40:24	0
83	5-Oct	14:45:24	0
84	5-Oct	14:50:24	0.001
85	5-Oct	14:55:24	0
86	5-Oct	15:00:24	0
87	5-Oct	15:05:24	0
88	5-Oct	15:10:24	0.008
89	5-Oct	15:15:24	0.008
90	5-Oct	15:20:24	0
91	5-Oct	15:25:24	0
92	5-Oct	15:30:24	0
93	5-Oct	15:35:24	0.004
94	5-Oct	15:40:24	0.003
00073230300006070606}			
95	5-Oct	15:45:24	0
96	5-Oct	15:50:24	0
97	5-Oct	15:55:24	0.001
98	5-Oct	16:00:24	0.003
99	5-Oct	16:05:24	0
100	5-Oct	16:10:24	0
pDR-1000 S/N: 06766			
Tag Number: 04			
Number of logged points: 35			
16	5-Oct	11:34:42	0.001
17	5-Oct	11:39:42	0.002
18	5-Oct	11:44:42	0.002
19	5-Oct	11:49:42	0.002
20	5-Oct	11:54:42	0.002
21	5-Oct	11:59:42	0.002
22	5-Oct	12:04:42	0.001
23	5-Oct	12:09:42	0.001
24	5-Oct	12:14:42	0.002
25	5-Oct	12:19:42	0.001
26	5-Oct	12:24:42	0.001
27	5-Oct	12:29:42	0.001
28	5-Oct	12:34:42	0.001
29	5-Oct	12:39:42	0.001
30	5-Oct	12:44:42	0.001
31	5-Oct	12:49:42	0.001
32	5-Oct	12:54:42	0.001
33	5-Oct	12:59:42	0.001
00073230300006070606}			
pDR-1000 S/N: 06766			
Tag Number: 03			
Number of logged points: 48			
Start time and date: 13:03:24 05-Oct			
Elapsed time: 04:00:00			
Logging period (sec): 300			
Calibration Factor (%): 100			
Max Display Concentration: 0.076 mg/m ³			
Time at maximum: 13:56:40 Oct 05			
Max STEL Concentration: 0.007 mg/m ³			
Time at max STEL: 16:08:25 Oct 05			
Overall Avg Conc: 0.001 mg/m ³			
Logged Data:			
Point	Date	Time	Avg. (mg/m ³)
1	5-Oct	13:08:24	0
2	5-Oct	13:13:24	0.002
3	5-Oct	13:18:24	0.001
4	5-Oct	13:23:24	0.001
5	5-Oct	13:28:24	0.001
61	5-Oct	12:57:37	0
62	5-Oct	13:02:37	0
63	5-Oct	13:07:37	0
64	5-Oct	13:12:37	0
65	5-Oct	13:17:37	0
66	5-Oct	13:22:37	0
67	5-Oct	13:27:37	0
68	5-Oct	13:32:37	0
69	5-Oct	13:37:37	0
70	5-Oct	13:42:37	0
71	5-Oct	13:47:37	0
72	5-Oct	13:52:37	0
73	5-Oct	13:57:37	0
74	5-Oct	14:02:37	0
75	5-Oct	14:07:37	0
76	5-Oct	14:12:37	0
77	5-Oct	14:17:37	0
78	5-Oct	14:22:37	0
79	5-Oct	14:27:37	0
80	5-Oct	14:32:37	0
81	5-Oct	14:37:37	0
82	5-Oct	14:42:37	0
83	5-Oct	14:47:37	0
84	5-Oct	14:52:37	0
85	5-Oct	14:57:37	0
86	5-Oct	15:02:37	0
87	5-Oct	15:07:37	0
88	5-Oct	15:12:37	0
89	5-Oct	15:17:37	0
90	5-Oct	15:22:37	0
91	5-Oct	15:27:37	0
92	5-Oct	15:32:37	0
93	5-Oct	15:37:37	0
94	5-Oct	15:42:37	0
95	5-Oct	15:47:37	0
96	5-Oct	15:52:37	0
97	5-Oct	15:57:37	0.001
98	5-Oct	16:02:37	0
99	5-Oct	16:07:37	0
100	5-Oct	16:12:37	0



Air Monitoring Data - TCRA Activities October 5, 2007

Start time and date: 13:05:09 05-Oct
 Elapsed time: 02:55:00
 Logging period (sec): 300
 Calibration Factor (%): 100
 Max Display Concentration: 0.041 mg/m³
 Time at maximum: 13:05:10 Oct 05
 Max STEL Concentration: 0.030 mg/m³
 Time at max STEL: 14:44:09 Oct 05
 Overall Avg Conc: 0.023 mg/m³
 Logged Data:

Point	Date	Time	Avg. (mg/m ³)
1	5-Oct	13:10:09	0.013
2	5-Oct	13:15:09	0.005
3	5-Oct	13:20:09	0.003
4	5-Oct	13:25:09	0.004
5	5-Oct	13:30:09	0.004
6	5-Oct	13:35:09	0.003
7	5-Oct	13:40:09	0.009
8	5-Oct	13:45:09	0.025
9	5-Oct	13:50:09	0.022
10	5-Oct	13:55:09	0.022
11	5-Oct	14:00:09	0.024
12	5-Oct	14:05:09	0.021
13	5-Oct	14:10:09	0.023
14	5-Oct	14:15:09	0.03
15	5-Oct	14:20:09	0.025
16	5-Oct	14:25:09	0.023
17	5-Oct	14:30:09	0.02
18	5-Oct	14:35:09	0.022
19	5-Oct	14:40:09	0.021
20	5-Oct	14:45:09	0.021
21	5-Oct	14:50:09	0.022
22	5-Oct	14:55:09	0.019
23	5-Oct	15:00:09	0.018
24	5-Oct	15:05:09	0.018
25	5-Oct	15:10:09	0.019
26	5-Oct	15:15:09	0.018
27	5-Oct	15:20:09	0.017
28	5-Oct	15:25:09	0.017
29	5-Oct	15:30:09	0.018
30	5-Oct	15:35:09	0.019

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102	5-Oct	16:20:24	0
103	5-Oct	16:25:24	0
104	5-Oct	16:30:24	0
105	5-Oct	16:35:24	0.001
106	5-Oct	16:40:24	0
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9	5-Oct	13:48:24	0
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11	5-Oct	13:58:24	0.009
12	5-Oct	14:03:24	0.004
13	5-Oct	14:08:24	0.001
14	5-Oct	14:13:24	0.003
15	5-Oct	14:18:24	0.003

16	5-Oct	14:23:24	0
17	5-Oct	14:28:24	0
18	5-Oct	14:33:24	0
19	5-Oct	14:38:24	0.001
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22	5-Oct	14:53:24	0
23	5-Oct	14:58:24	0
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25	5-Oct	15:08:24	0
26	5-Oct	15:13:24	0.002
27	5-Oct	15:18:24	0
28	5-Oct	15:23:24	0
29	5-Oct	15:28:24	0
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31	5-Oct	15:38:24	0.003
32	5-Oct	15:43:24	0.002
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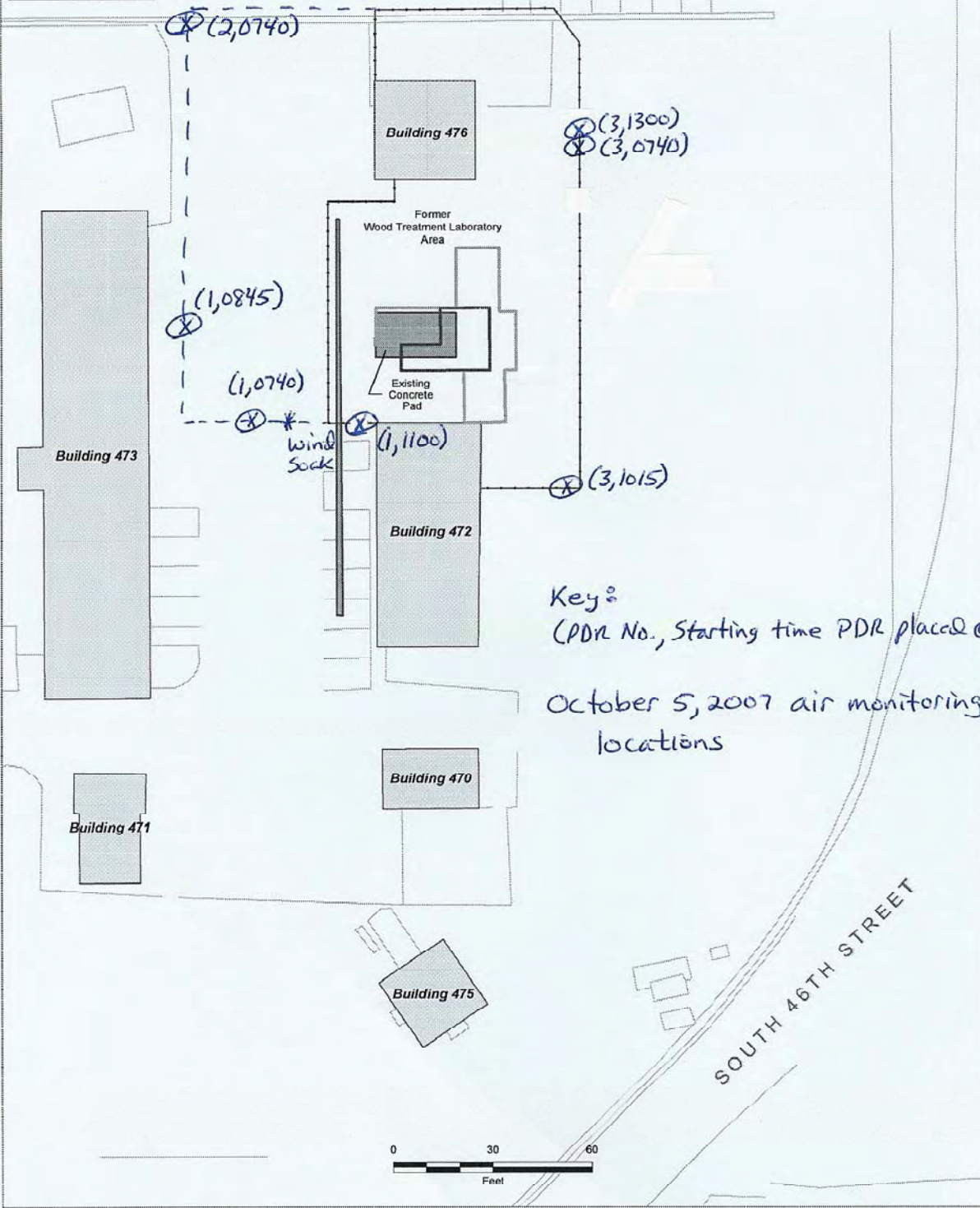
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107	5-Oct	16:47:37	0
108	5-Oct	16:52:37	0
109	5-Oct	16:57:37	0
110	5-Oct	17:02:37	0



Air Monitoring Data - TCRA Activities
October 5, 2007

31	5-Oct 15:40:09	0.019	47	5-Oct 16:58:24	0.003
32	5-Oct 15:45:09	0.018	48	5-Oct 17:03:24	0.003
33	5-Oct 15:50:09	0.018	00073230300006070606}		
34	5-Oct 15:55:09	0.02			
35	5-Oct 16:00:09	0.019			
00073230300006070606}					

(4,0740)



Key:
 (PDR No., Starting time PDR placed @ location)

October 5, 2007 air monitoring locations

SOUTH 46TH STREET

- Buildings
- Construction Fence Lines
- Site Features
- Proposed Excavation Areas
 - Area I (Excavation depth 3.5 feet)
 - Area II Excavation depth 2.0 feet)

Richmond Field Station
 University of California at Berkeley

FIGURE 1
 VICINITY MAP SHOWING
 TCRA BOUNDARIES AND
 CONSTRUCTION FENCE LINES



Air Monitoring Data - TCRA Activities October 12, 2007

Note:
PDRs calibrated (zero'ed out) using ambient air
in area upwind of excavation.

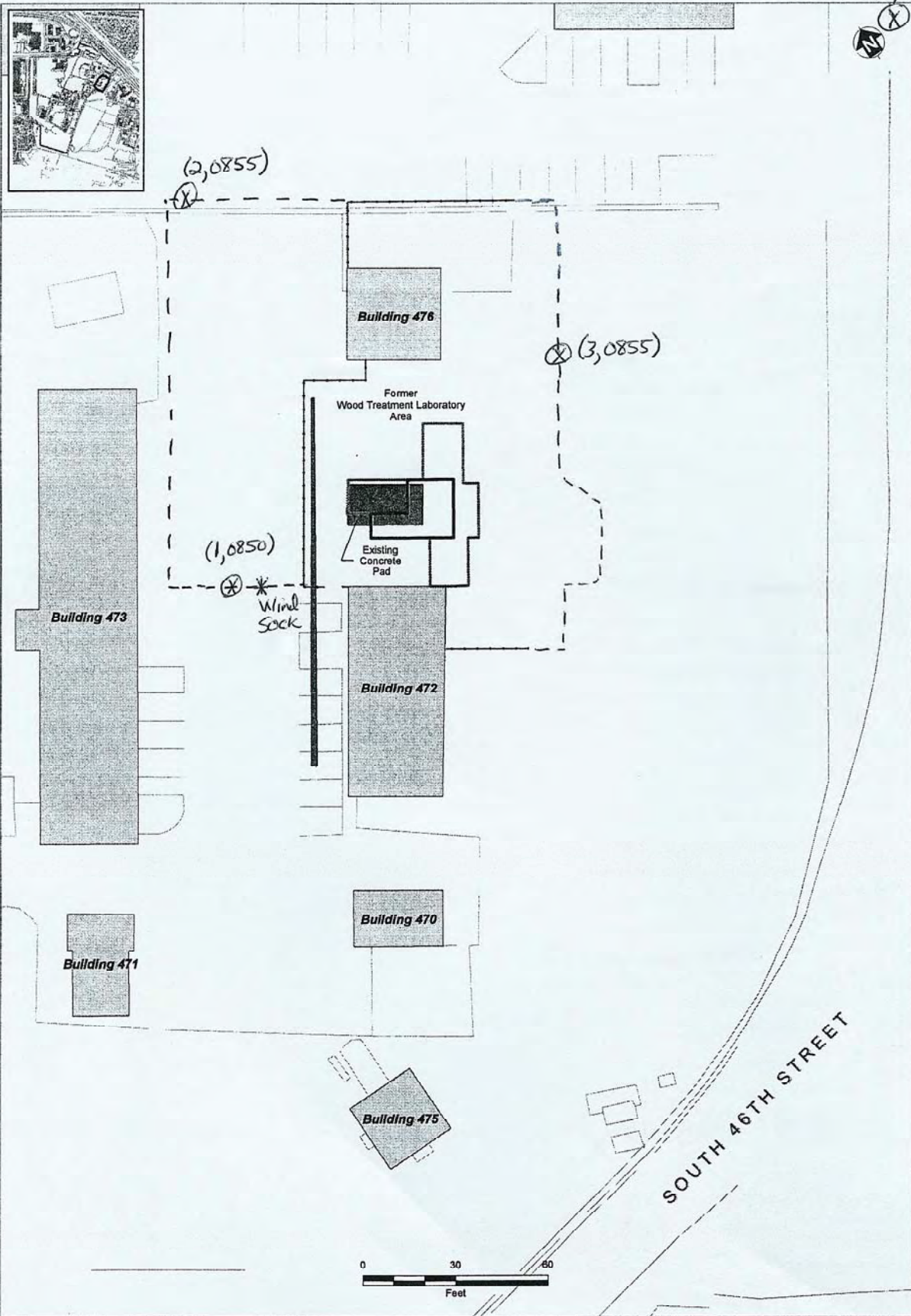
PDR #1	PDR #2	PDR #3	PDR #4																																																																																																																																																																																																																																																																																																																																																																
pDR-1000 S/N: 06766 Tag Number: 02 Number of logged points: 26 Start time and date: 08:53:44 12-Oct Elapsed time: 02:10:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.030 mg/m ³ Time at maximum: 09:39:14 Oct 12 Max STEL Concentration: 0.003 mg/m ³ Time at max STEL: 09:19:14 Oct 12 Overall Avg Conc: 0.000 mg/m ³ Logged Data:	pDR-1000 S/N: 06770 Tag Number: 02 Number of logged points: 26 Start time and date: 08:56:36 12-Oct Elapsed time: 02:10:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.047 mg/m ³ Time at maximum: 10:07:24 Oct 12 Max STEL Concentration: 0.000 mg/m ³ Time at max STEL: 08:56:36 Oct 12 Overall Avg Conc: 0.000 mg/m ³ Logged Data:	pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 25 Start time and date: 08:58:42 12-Oct Elapsed time: 02:05:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.039 mg/m ³ Time at maximum: 09:04:08 Oct 12 Max STEL Concentration: 0.024 mg/m ³ Time at max STEL: 09:48:12 Oct 12 Overall Avg Conc: 0.017 mg/m ³ Logged Data:	pDR-1000 S/N: 06766 Tag Number: 01 Number of logged points: 25 Start time and date: 09:02:49 12-Oct Elapsed time: 02:05:00 Logging period (sec): 300 Calibration Factor (%): 100 Max Display Concentration: 0.036 mg/m ³ Time at maximum: 10:42:00 Oct 12 Max STEL Concentration: 0.013 mg/m ³ Time at max STEL: 09:44:49 Oct 12 Overall Avg Conc: 0.009 mg/m ³ Logged Data:																																																																																																																																																																																																																																																																																																																																																																
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>12-Oct</td><td>08:58:44</td><td>0</td></tr> <tr><td>2</td><td>12-Oct</td><td>09:03:44</td><td>0</td></tr> <tr><td>3</td><td>12-Oct</td><td>09:08:44</td><td>0.001</td></tr> <tr><td>4</td><td>12-Oct</td><td>09:13:44</td><td>0.003</td></tr> <tr><td>5</td><td>12-Oct</td><td>09:18:44</td><td>0.005</td></tr> <tr><td>6</td><td>12-Oct</td><td>09:23:44</td><td>0.002</td></tr> <tr><td>7</td><td>12-Oct</td><td>09:28:44</td><td>0</td></tr> <tr><td>8</td><td>12-Oct</td><td>09:33:44</td><td>0.003</td></tr> <tr><td>9</td><td>12-Oct</td><td>09:38:44</td><td>0.003</td></tr> <tr><td>10</td><td>12-Oct</td><td>09:43:44</td><td>0.004</td></tr> <tr><td>11</td><td>12-Oct</td><td>09:48:44</td><td>0.004</td></tr> <tr><td>12</td><td>12-Oct</td><td>09:53:44</td><td>0.004</td></tr> <tr><td>13</td><td>12-Oct</td><td>09:58:44</td><td>0</td></tr> <tr><td>14</td><td>12-Oct</td><td>10:03:44</td><td>0</td></tr> <tr><td>15</td><td>12-Oct</td><td>10:08:44</td><td>0</td></tr> <tr><td>16</td><td>12-Oct</td><td>10:13:44</td><td>0.001</td></tr> <tr><td>17</td><td>12-Oct</td><td>10:18:44</td><td>0.001</td></tr> <tr><td>18</td><td>12-Oct</td><td>10:23:44</td><td>0.003</td></tr> <tr><td>19</td><td>12-Oct</td><td>10:28:44</td><td>0.001</td></tr> <tr><td>20</td><td>12-Oct</td><td>10:33:44</td><td>0</td></tr> <tr><td>21</td><td>12-Oct</td><td>10:38:44</td><td>0</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	12-Oct	08:58:44	0	2	12-Oct	09:03:44	0	3	12-Oct	09:08:44	0.001	4	12-Oct	09:13:44	0.003	5	12-Oct	09:18:44	0.005	6	12-Oct	09:23:44	0.002	7	12-Oct	09:28:44	0	8	12-Oct	09:33:44	0.003	9	12-Oct	09:38:44	0.003	10	12-Oct	09:43:44	0.004	11	12-Oct	09:48:44	0.004	12	12-Oct	09:53:44	0.004	13	12-Oct	09:58:44	0	14	12-Oct	10:03:44	0	15	12-Oct	10:08:44	0	16	12-Oct	10:13:44	0.001	17	12-Oct	10:18:44	0.001	18	12-Oct	10:23:44	0.003	19	12-Oct	10:28:44	0.001	20	12-Oct	10:33:44	0	21	12-Oct	10:38:44	0	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. (mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>12-Oct</td><td>09:01:36</td><td>0.001</td></tr> <tr><td>2</td><td>12-Oct</td><td>09:06:36</td><td>0.001</td></tr> <tr><td>3</td><td>12-Oct</td><td>09:11:36</td><td>0.002</td></tr> <tr><td>4</td><td>12-Oct</td><td>09:16:36</td><td>0.001</td></tr> <tr><td>5</td><td>12-Oct</td><td>09:21:36</td><td>0.003</td></tr> <tr><td>6</td><td>12-Oct</td><td>09:26:36</td><td>0.002</td></tr> <tr><td>7</td><td>12-Oct</td><td>09:31:36</td><td>0.002</td></tr> <tr><td>8</td><td>12-Oct</td><td>09:36:36</td><td>0.001</td></tr> <tr><td>9</td><td>12-Oct</td><td>09:41:36</td><td>0</td></tr> <tr><td>10</td><td>12-Oct</td><td>09:46:36</td><td>0</td></tr> <tr><td>11</td><td>12-Oct</td><td>09:51:36</td><td>0.001</td></tr> <tr><td>12</td><td>12-Oct</td><td>09:56:36</td><td>0.001</td></tr> <tr><td>13</td><td>12-Oct</td><td>10:01:36</td><td>0</td></tr> <tr><td>14</td><td>12-Oct</td><td>10:06:36</td><td>0</td></tr> <tr><td>15</td><td>12-Oct</td><td>10:11:36</td><td>0.001</td></tr> <tr><td>16</td><td>12-Oct</td><td>10:16:36</td><td>0</td></tr> <tr><td>17</td><td>12-Oct</td><td>10:21:36</td><td>0</td></tr> <tr><td>18</td><td>12-Oct</td><td>10:26:36</td><td>0</td></tr> <tr><td>19</td><td>12-Oct</td><td>10:31:36</td><td>0</td></tr> <tr><td>20</td><td>12-Oct</td><td>10:36:36</td><td>0</td></tr> <tr><td>21</td><td>12-Oct</td><td>10:41:36</td><td>0</td></tr> </tbody> </table>	Point	Date	Time	Avg. 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(mg/m³)</th> </tr> </thead> <tbody> <tr><td>1</td><td>12-Oct</td><td>09:03:42</td><td>0.008</td></tr> <tr><td>2</td><td>12-Oct</td><td>09:08:42</td><td>0.012</td></tr> <tr><td>3</td><td>12-Oct</td><td>09:13:42</td><td>0.018</td></tr> <tr><td>4</td><td>12-Oct</td><td>09:18:42</td><td>0.019</td></tr> <tr><td>5</td><td>12-Oct</td><td>09:23:42</td><td>0.02</td></tr> <tr><td>6</td><td>12-Oct</td><td>09:28:42</td><td>0.019</td></tr> <tr><td>7</td><td>12-Oct</td><td>09:33:42</td><td>0.021</td></tr> <tr><td>8</td><td>12-Oct</td><td>09:38:42</td><td>0.023</td></tr> <tr><td>9</td><td>12-Oct</td><td>09:43:42</td><td>0.022</td></tr> <tr><td>10</td><td>12-Oct</td><td>09:48:42</td><td>0.025</td></tr> <tr><td>11</td><td>12-Oct</td><td>09:53:42</td><td>0.024</td></tr> <tr><td>12</td><td>12-Oct</td><td>09:58:42</td><td>0.022</td></tr> <tr><td>13</td><td>12-Oct</td><td>10:03:42</td><td>0.021</td></tr> <tr><td>14</td><td>12-Oct</td><td>10:08:42</td><td>0.02</td></tr> <tr><td>15</td><td>12-Oct</td><td>10:13:42</td><td>0.021</td></tr> <tr><td>16</td><td>12-Oct</td><td>10:18:42</td><td>0.021</td></tr> <tr><td>17</td><td>12-Oct</td><td>10:23:42</td><td>0.021</td></tr> <tr><td>18</td><td>12-Oct</td><td>10:28:42</td><td>0.019</td></tr> <tr><td>19</td><td>12-Oct</td><td>10:33:42</td><td>0.015</td></tr> <tr><td>20</td><td>12-Oct</td><td>10:38:42</td><td>0.014</td></tr> <tr><td>21</td><td>12-Oct</td><td>10:43:42</td><td>0.015</td></tr> </tbody> </table>	Point	Date	Time	Avg. (mg/m ³)	1	12-Oct	09:03:42	0.008	2	12-Oct	09:08:42	0.012	3	12-Oct	09:13:42	0.018	4	12-Oct	09:18:42	0.019	5	12-Oct	09:23:42	0.02	6	12-Oct	09:28:42	0.019	7	12-Oct	09:33:42	0.021	8	12-Oct	09:38:42	0.023	9	12-Oct	09:43:42	0.022	10	12-Oct	09:48:42	0.025	11	12-Oct	09:53:42	0.024	12	12-Oct	09:58:42	0.022	13	12-Oct	10:03:42	0.021	14	12-Oct	10:08:42	0.02	15	12-Oct	10:13:42	0.021	16	12-Oct	10:18:42	0.021	17	12-Oct	10:23:42	0.021	18	12-Oct	10:28:42	0.019	19	12-Oct	10:33:42	0.015	20	12-Oct	10:38:42	0.014	21	12-Oct	10:43:42	0.015	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Date</th> <th>Time</th> <th>Avg. 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Air Monitoring Data - TCRA Activities
October 12, 2007

22	12-Oct	10:43:44	0	22	12-Oct	10:46:36	0	22	12-Oct	10:48:42	0.008	22	12-Oct	10:52:49	0.003
23	12-Oct	10:48:44	0	23	12-Oct	10:51:36	0	23	12-Oct	10:53:42	0.007	23	12-Oct	10:57:49	0.002
24	12-Oct	10:53:44	0	24	12-Oct	10:56:36	0	24	12-Oct	10:58:42	0.005	24	12-Oct	11:02:49	0.003
25	12-Oct	10:58:44	0	25	12-Oct	11:01:36	0	25	12-Oct	11:03:42	0.008	25	12-Oct	11:07:49	0.003
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(4,0900)



- Buildings
- Construction Fence Lines
- Site Features
- Proposed Excavation Areas
 - Area I (Excavation depth 3.5 feet)
 - Area II (Excavation depth 2.0 feet)

- Perimeter air monitoring location.
Actual monitor locations will be based on the wind direction. Two monitors will be sited downwind of the excavation and one monitor sited upwind of the excavation

Richmond Field Station
University of California at Berkeley

FIGURE 5
VICINITY MAP SHOWING
TCRA BOUNDARIES AND
CONSTRUCTION FENCE LINES

APPENDIX I

**IHI OCCUPATIONAL EXPOSURE MONITORING
REPORT**



OCCUPATIONAL EXPOSURE MONITORING REPORT

**SOIL EXCAVATION
UC BERKELEY RICHMOND FIELD STATION
RICHMOND, CALIFORNIA**

November 16, 2007

Submitted to:

Mr. David Sato, Project Manager
PSC Environmental Services Division
535 Getty Court, Suite H
Benicia, California 94510

Prepared by:

Kurt Ettinger
Senior Project Manager

Reviewed by:

Peggy F. Kivel, CIH, REA
Regional Manager

OCCUPATIONAL EXPOSURE MONITORING REPORT

Soil Excavation UC Berkeley Richmond Field Station Richmond, California

EXECUTIVE SUMMARY

At the request of PSC Environmental Services Division (PSC), IHI Environmental (IHI) of Emeryville, California, conducted occupational exposure monitoring on October 2-5 and 12, 2007, at the UC Berkeley Richmond Field Station in Richmond, California. IHI's scope of work was limited to conducting exposure monitoring for arsenic and interpreting the results. The purpose of the monitoring was to document PSC workers' personal exposure to airborne arsenic during the excavation of arsenic-contaminated soil.

Personal air samples were collected for arsenic on PSC workers conducting the excavation activities. The monitored workers' activities included operating a backhoe and manual digging with a shovel. The basic excavation process involved digging up soil using the backhoe and transferring it into a polyethylene-lined dumpster. PSC workers minimized the potential for visual dust emissions by constantly spraying water on the soil throughout the excavation process. Three PSC workers were monitored during the excavation: Donald Clay, Israel Chavez, and David Matthews. Fifteen air samples were collected and analyzed over the five days of monitoring (including two field blanks).

Laboratory analyses did not detect any concentrations of arsenic (<1.0 to <4.3 $\mu\text{g}/\text{m}^3$) above the method detection limit for any of the personal air samples collected. The corresponding 8-hour time-weighted average (TWA) personal exposures were well below the respective State of California's Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

The monitoring was representative of the conditions on the days of the survey only.

Recommendations

- (1) In accordance with T8 CCR §3204, whenever an employee or designated representative requests access to an exposure record, access must be provided within 15 days to any employee requesting the information. Exposure records should include the information listed in the regulations and maintained for a minimum of 30 years. IHI recommends that all employees working with the arsenic-contaminated soils be notified of the arsenic exposure monitoring results reported in this survey.
- (2) With the exception of continuing to follow good work practices, such as dust suppression, IHI has no further recommendations regarding the reduction of airborne arsenic exposures at the Richmond Field Station project, as no arsenic was detected above the method detection limit in any of the samples.

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Appendix A: Personal Air Monitoring Results

Appendix B: Laboratory Analytical Reports

Appendix C: Definitions of Common Terms

OCCUPATIONAL EXPOSURE MONITORING REPORT

Soil Excavation UC Berkeley Richmond Field Station Richmond, California

1.0 INTRODUCTION AND BACKGROUND

At the request of PSC Environmental Services Division (PSC), IHI Environmental (IHI) of Emeryville, California, conducted occupational exposure monitoring on October 2-5 and 12, 2007, at the UC Berkeley Richmond Field Station in Richmond, California. The purpose of the monitoring was to document employee exposure to airborne arsenic during the excavation of arsenic-contaminated soil. The monitoring was conducted at the request of David Sato, PSC Environmental Services Group Project Manager. Jeff Wong and Ian Dirk, IHI Industrial Hygiene Technicians, conducted the evaluation.

2.0 DESCRIPTION OF ACTIVITIES

PSC Environmental activities consisted of using a mechanical backhoe and shovels to excavate a specified area of arsenic-contaminated soil located between Buildings #472 and #476, just south of the main entrance at the UC Berkeley Richmond Field Station in Richmond, California. The PSC employees involved in this process were David Clay, Israel Chavez, and David Matthews. Mr. Matthews was the backhoe operator, using the machine to dig up soil and transfer it into a polyethylene-lined dumpster. Mr. Clay and Mr. Chavez stood adjacent to the digging location and assisted Mr. Matthews with shovels, constantly monitoring for unknown underground utilities and pipes and spraying water onto the soil to keep airborne dust emissions as low as possible.

3.0 METHODS

3.1 Survey Strategy

The survey included personal exposure monitoring for three employees involved in the soil excavation activities. Work practices and atmospheric conditions were documented during the survey. All samples were collected for a full work shift. Work shifts ranged from just under 8 hours to approximately 9 ½ hours for the first week of October. Due to weather and logistics, the October 12th excavation work lasted for less than two hours. .

Personal air samples on PSC workers were collected for arsenic during excavation activities. The workers' activities included operating a backhoe and digging manually with a shovel. The basic excavation process involved digging up soil using the backhoe and transferring it into a polyethylene-lined dumpster. PSC workers minimized the potential for visual dust emissions by constantly spraying water on the soil throughout the excavation process. Three PSC workers were monitored during the excavation: Donald Clay, Israel Chavez, and David Matthews. Fifteen air samples were collected and analyzed over the five days of monitoring (including two field blanks). Table 1 below summarizes the air sampling performed.

TABLE 1
Summary of Occupational Exposure Monitoring
UC Berkeley Richmond Field Station, Richmond, California
October 2-5 and October 12, 2007

Employee	Compound to be Evaluated	Operation	Type of Sample
Donald Clay	Arsenic	Shoveling, assisting Backhoe Operator	Personal
Israel Chavez	Arsenic	Shoveling, assisting Backhoe Operator	Personal
David Matthews	Arsenic	Operating Backhoe, digging	Personal

3.2 Sampling Methods

Employee exposure monitoring included the collection of thirteen personal air samples to determine 8-hour time-weighted average (TWA) exposures. The personal air samples were collected in the breathing zones of the employees.

Air samples were collected for analysis of arsenic content. Air samples were collected by drawing air through 37mm cassettes fitted with 0.8 µm MCE filters attached to battery-operated low-flow air pumps. The sampling trains were calibrated prior to and after the sampling period against a Brooks precision rotometer, which is calibrated at least every six months against a DryCal dry cell flow calibrator (Bios International, Pompton Plains, New Jersey), the primary calibration device. The air monitoring each day was conducted

over the course of the full work shift. The samples were capped and delivered to the analytical laboratory for analysis according to modified NIOSH 7300, 1994 Method for arsenic analysis.

Micro Analytical Laboratories, Inc. (MAL), of Emeryville, California, analyzed all samples. MAL is accredited for industrial hygiene sample analysis by the Industrial Hygiene Laboratory Accreditation Program (IHLAP) of the American Industrial Hygiene Association (AIHA).

3.3 Quality Assurance

IHI employs, at a minimum, the following methods to help assure the quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH, OSHA, and EPA standard methods;
- Use of accredited laboratories, or in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs;
- Calibration of methods and instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

4.0 FINDINGS

4.1 Field Observations

Personal air samples were collected for arsenic analysis on PSC workers conducting the soil remediation activities. The workers' activities included operating a mechanical backhoe and digging manually with a shovel. The process involved digging up soil using the backhoe and transferring it into a polyethylene-lined dumpster. Mr. Matthews operated the backhoe slowly and carefully to keep visual dust emissions to a minimum. Each time Mr. Matthews dumped soil into the dumpster, he lowered the backhoe arm as low as possible to minimize

the impact of soil as it was dropped into the dumpster. The other two PSC workers, Mr. Clay and Mr. Chavez, kept the visual dust emissions down throughout this process by constantly spraying water on the soil, using a water hose. Mr. Clay and Mr. Chavez also used shovels to assist in digging and to monitor for unknown underground pipes in the area.

Visual airborne particulate emissions were minimal during excavation operations. The work practices employed by PSC workers appeared to be adequate in minimizing their airborne exposure to the arsenic-contaminated soil. PCS employees were not wearing respiratory protection during the excavation activities.

4.2 Results of Sample Analysis

Results of the air monitoring and calculated 8-hour time weighed average (TWA) exposure limits are summarized in Table A1 in Appendix A. The laboratory analytical reports are included in Appendix B. Results are reported in terms of micrograms of contaminant (arsenic) per cubic meter of air ($\mu\text{g}/\text{m}^3$).

Laboratory analyses did not detect any concentrations of arsenic above the method detection limit (<1.0 to $<4.3 \mu\text{g}/\text{m}^3$) for any of the personal air samples collected

5.0 DISCUSSION & RECOMMENDATIONS

The calculated 8-hour TWA exposures are below their respective Cal/OSHA Permissible Exposure Limits (PELs) and American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV[®]s) on the days of the survey. The Cal/OSHA PEL for arsenic and inorganic compounds as arsenic is $0.01 \text{ mg}/\text{m}^3$ ($10 \mu\text{g}/\text{m}^3$) for an 8-hour TWA. The ACGIH TLV[®] for arsenic and inorganic compounds as arsenic is $0.01 \text{ mg}/\text{m}^3$ for an 8-hour TWA.

The monitoring was representative of the conditions on the days of the survey. IHI's scope of work provided only for the air sampling of arsenic and interpreting the results.

Recommendations

- (1) In accordance with T8 CCR §3204, whenever an employee or designated representative requests access to an exposure record, access must be provided within 15 days to any employee requesting the information. Exposure records should include the information listed in the regulations and maintained for a minimum of 30

years. IHI recommends that all employees working with the arsenic-contaminated soils be notified of the arsenic exposure monitoring results reported in this survey.

- (2) With the exception of continuing to follow good work practices, such as dust suppression, IHI has no further recommendations regarding the reduction of airborne arsenic exposures at the Richmond Field Station project, as no arsenic was detected above the method detection limit on any of the samples.

6.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, IHI's professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. IHI assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of IHI, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since IHI is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

APPENDIX A

Personal Air Monitoring Results October 2nd-5th and 12th, 2007

TABLE A1
Air Monitoring Results
October 2nd-5th and 12th, 2007

Sample No.	Employee/Task/Location	Chemical Compound Monitored	Sample Time (min)	Results	8 Hour TWA Results ²
2224-10/2-01	Donald Clay / Shoveling & Assisting Backhoe Operator	Arsenic	495	<1.0 µg/m ³	<1.1 µg/m ³
2224-10/2-02	Israel Chavez / Shoveling & Assisting Backhoe Operator	Arsenic	495	<1.0 µg/m ³	<1.1 µg/m ³
2224-10/2-03	David Matthews / Operating Backhoe	Arsenic	495	<1.0 µg/m ³	<1.1 µg/m ³
2224-10/2-04	Field Blank	Arsenic	NA ¹	<1.0 µg	NA
2224-10/2-05	Field Blank	Arsenic	NA	<1.0 µg	NA
2224-10/3-01	Donald Clay / Shoveling & Assisting Backhoe Operator	Arsenic	585	<1.0 µg/m ³	<1.2 µg/m ³
2224-10/3-02	Israel Chavez / Shoveling & Assisting Backhoe Operator	Arsenic	585	<1.0 µg/m ³	<1.2 µg/m ³
2224-10/3-03	David Matthews / Operating Backhoe	Arsenic	585	<1.0 µg/m ³	<1.2 µg/m ³
2224-10/4-02	Israel Chavez / Shoveling & Assisting Backhoe Operator	Arsenic	475	<1.1 µg/m ³	<1.1 µg/m ³
2224-10/4-03	David Matthews / Operating Backhoe	Arsenic	475	<1.1 µg/m ³	<1.1 µg/m ³
2224-10/5-01	Donald Clay / Shoveling & Assisting Backhoe Operator	Arsenic	470	<1.1 µg/m ³	<1.1 µg/m ³
2224-10/5-02	Israel Chavez / Shoveling & Assisting Backhoe Operator	Arsenic	470	<1.1 µg/m ³	<1.0 µg/m ³
2224-10/5-03	David Matthews / Operating Backhoe	Arsenic	470	<1.1 µg/m ³	<1.0 µg/m ³
2224-10/12-01	David Matthews / Operating Backhoe	Arsenic	111	<1.0 µg/m ³	<0.3 µg/m ³
2224-10/12-02	Israel Chavez / Shoveling & Assisting Backhoe Operator	Arsenic	109	<1.0 µg/m ³	<0.3 µg/m ³

1) NA = Not Applicable

2) Results from samples 10/12-01,02 assume no exposure for the remainder of the shift

APPENDIX B

Laboratory Analytical Reports

MICRO ANALYTICAL LABORATORIES, INC.

METALS - AIR

Page 1 of 2


1098
 IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608

PROJECT:
 PSC - SOIL EXCAVATION
 ARSENIC
 07B-2224

Micro Log In **103721**
 Total Samples 5
 Date Sampled 10/02/2007
 Date Received 10/02/2007
 Date Analyzed 10/03/2007

Sample ID **Concentration ug / m3** **Reporting Limit ug / m3**

Sample ID	Concentration ug / m3	Reporting Limit ug / m3	Volume (L)
103721-01	2224-10/2-01	DAVID CLAY	990
As (Arsenic)	< 1.0	1.0	
103721-02	2224-10/2-02	ISRAEL CHAVEZ	990
As (Arsenic)	< 1.0	1.0	
103721-03	2224-10/2-03	DAVID MATTHEWS	990
As (Arsenic)	< 1.0	1.0	

Technical Supervisor:  10/4/2007 Analyst: TT

Metals Supervisor Date Reported

ND = None Detected (concentration is less than reporting limit). NA= Not Applicable. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. This report must not be reproduced without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

Preparation Method **NIOSH 7300, 1994 (Modified)**
 Analysis Method **EPA 6010B**

Kurt Ettinger

IHI Environmental

1260 45th Street, Suite L

Emeryville, CA 94608

Tel. (510) 923-1661

Fax (510) 923-1468

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis Street, Suite M, Emeryville, California 94608

(510) 653-0824 - (510) 653-1361 - FAX

Log in #

103721

Project

PSC - Soil Excavation

Arsenic

Asbestos

(TEM)

AHERA Yamate II (Mod.) Other

(Specify)

Asbestos

PLM

PCM

Lead Only

Total Lead STLC TCLP

Metals

(Specify)

Arsenic

Total Metals STLC TCLP

Other

Number of Samples

5

Turn-Around Time

Standard

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID #

(For Lab Use Only)

Client Sample ID#

Description

Date Sampled

Time Sampled

Start / Stop / Total Minutes

Average LPM

Total Liters

Filter Pore Size

Micro ID # (For Lab Use Only)	Client Sample ID#	Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size
	<u>2224-10/2-01</u>	<u>Donald Clay</u>	<u>10/2/07</u>	<u>8:15 4:30</u> <u>495</u>	<u>2.0</u>	<u>990</u>	<u>0.8</u>
	<u>" " -02</u>	<u>Israel Chavez</u>	↓	<u>8:15 4:30</u> <u>495</u>	<u>2.0</u>	<u>990</u>	↓
	<u>" " -03</u>	<u>David Matthews</u>		<u>8:15 4:30</u> <u>495</u>	<u>2.0</u>	<u>990</u>	
	<u>" " -04</u>	<u>Field Blank</u>		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	
	<u>" " -05</u>	<u>Blank</u>		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	

Instructions / Comments:

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.

If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature Name

Jeff Klong

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Relinquished By

Date / Time

10/2/07 Drop Box / Courier

Received By

Date / Time

10-2-07 16:47

Relinquished By

Date / Time

Received By

Date / Time

MICRO ANALYTICAL LABORATORIES, INC.

METALS - AIR

1098
 IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608

PROJECT:
 PSC - SOIL EXCAVATION
 ARSENIC - RICHMOND
 FIELD STATION
 07B-2224

Micro Log In **103767**
 Total Samples 3
 Date Sampled 10/03/2007
 Date Received 10/03/2007
 Date Analyzed 10/04/2007

Sample ID **Concentration ug / m3** **Reporting Limit ug / m3**

Sample ID	Concentration ug / m3	Reporting Limit ug / m3	Volume (L)
103767-01	2224-10/3-01	DONALD CLAY	1030
As (Arsenic)	< 1.0	1.0	
103767-02	2224-10/3-02	ISRAEL CHAVEZ	1030
As (Arsenic)	< 1.0	1.0	
103767-03	2224-10/3-03	DAVID MATTHEWS	1030
As (Arsenic)	< 1.0	1.0	

Technical Supervisor: _____ 10/4/2007 Analyst: TT
Metals Supervisor Date Reported

ND = None Detected (concentration is less than reporting limit). NA= Not Applicable. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. This report must not be reproduced without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

Preparation Method **NIOSH 7300, 1994 (Modified)**
 Analysis Method **EPA 6010B**

Chain of Custody Form
1098

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis Street, Suite M, Emeryville, California 94608
(510) 653-0824 - (510) 653-1361 - FAX

Log in #

103767

Name / Client / Address:

Kurt Ettinger

IHT Environmental

1260 45th Street, Suite L

Emeryville, CA 94608

Tel. (510) 923-1661

Fax (510) 923-1468

Project

PSC - Soil Excavation

Arsenic - Richmond

Field Station

Job No. 07B - 2224

Asbestos
(TEM)

ASHERA Yamate II (Mod.) Other
(Specify)

Asbestos

PLM PCM

Lead Only

Total Lead STLC TCLP

Metals
(Specify)

Arsenic
Total Metals STLC TCLP

Other

Number of Samples

5

Turn-Around Time

Standard

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID # (For Lab Use Only)	Client Sample ID#	Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size	
	2224-10/3-01	Donald Clay	10/3/07	7:50 4:25 585	2.0	1170	0.8	
	" " -02	Israel Chavez	↓	7:50 4:25 585	2.0	1170	↓	
	" " -03	David Matthews		7:50 4:25 4585	2.0	1170		
	" " -04	Field Blank		:	N/A	N/A		
	" " -05	Blank		:	N/A	N/A		
				:				
				:				
				:				
				:				
				:				
				:				

Instructions / Comments: *Please do not analyze blank samples.

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.
If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Relinquished By

Date / Time

Drop Box / Courier

Received By

Date / Time

Relinquished By

Date / Time

Received By

Date / Time

MICRO ANALYTICAL LABORATORIES, INC.

METALS - AIR

1098
 IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608

PROJECT:
 PSC - SOIL EXCAVATION
 ARSENIC - RICHMOND
 FIELD STATION
 07B-2224

Micro Log In **103845**
 Total Samples 2
 Date Sampled 10/04/2007
 Date Received 10/05/2007
 Date Analyzed 10/08/2007

Sample ID **Concentration ug / m3** **Reporting Limit ug / m3**

Sample ID	Concentration ug / m3	Reporting Limit ug / m3	Volume (L)
103845-01	2224-10/4-02	ISRAEL CHAVEZ	950
As (Arsenic)	< 1.1	1.1	
103845-02	2224-10/4-03	DAVID MATTHEWS	950
As (Arsenic)	< 1.1	1.1	

Technical Supervisor:  10/9/2007 Analyst: TT
Metals Supervisor Date Reported

ND = None Detected (concentration is less than reporting limit). NA= Not Applicable. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. This report must not be reproduced without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

Preparation Method **NIOSH 7300, 1994 (Modified)**
 Analysis Method **EPA 6010B**

Chain of Custody Form
1098

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis Street, Suite M, Emeryville, California 94608

Log in #

103845

Name / Client / Address:

(510) 653-0824 - (510) 653-1361 - FAX

Kurt Ettinger
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608
Tel. (510) 923-1661
Fax (510) 923-1468

Project
Psc - Soil Excavation
Arsenic - Richmond rd
Field Station
Job No. 07B-2224

Asbestos (TEM) AHERA Yamate II (Mod.) Other
Asbestos (Specify) PLM PCM
Lead Only Total Lead STLC TCLP
Metals (Specify) Arsenic
Other Total Metals STLC TCLP

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Number of Samples 84
Turn-Around Time Standard

Micro ID # (For Lab Use Only) Client Sample ID# Description Date Sampled Time Sampled Start / Stop / Total Minutes Average LPM Total Liters Filter Pore Size

Micro ID #	Client Sample ID#	Description	Date Sampled	Time Sampled	Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size
X	2224-10/4-01	Donald Clay VOID	10/4	8:20		2.0		.8
01	" " -02	Israel Chavez	10/4	8:20	4:15	2.0	950	.8
02	" " -03	David Matthews		8:20	4:15	2.0	950	.8
X	" " -04	Field Blank				N/A	N/A	
X	" " -05	Blank				N/A	N/A	

Instructions / Comments: * Please do not analyze blank samples.

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required. If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name: Jeff v. Long
Relinquished By: Jeff v. Long Date / Time: 10/4/07
Drop Box / Courier: 10:50 Received By: [Signature] Date / Time: 10:28

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis Street, Suite M, Emeryville, California 94608
(510) 653-0824 - (510) 653-1361 - FAX

Log in #

103846

Name / Client / Address:

Kurt Ettinger

IHL Environmental

1260 45th Street, Suite L

Emeryville, CA 94608

Tel. (510) 923-1661

Fax (510) 923-1468

Project

~~PSL~~ PSL - Soil Excavation

Arsenic - Richmond

Field Station

Job No. 07B - 2224

Asbestos (TEM)

AHERA Yamate II (Mod.) Other (Specify)

Asbestos

PLM PCM

Lead Only

Total Lead STCL TCLP

Metals (Specify)

Arsenic
Total Metals STCL TCLP

Other

Number of Samples 5

Turn-Around Time

Standard

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID #

(For Lab Use Only)

Client Sample ID#

Description

Date Sampled Time Sampled Start / Stop / Total Minutes Average LPM Total Liters Filter Pore Size

Micro ID #	Client Sample ID#	Description	Date Sampled	Time Sampled	Average LPM	Total Liters	Filter Pore Size
01	2224 - 10/5 - 01	Donald Clay	10/5	8:15 - 4:05 470	2.0	940	0.3
02	" " - 02	Israel Chavez	↓	8:15 - 4:05 470	2.0	940	↓
03	" " - 03	David Matthews		8:15 - 4:05 470	2.0	940	
X	" " - 04	Field Blank		N/A	N/A	N/A	
X	" " - 05	Blank		N/A	N/A	N/A	

Instructions / Comments: * Please do not analyze blank samples

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.
If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name

Jeff Wong

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Relinquished By

10/5/07
Date / Time

Drop Box / Courier

10-5-07 10:29
Received By

Date / Time

Relinquished By

Date / Time

Drop Box / Courier

Received By

Date / Time

104091

Name / Client / Address:

(510) 653-0824 - (510) 653-1361 - FAX

Kurt Ettinger

Project

PSC Richmond Field

Asbestos

(TEM)

_____ AHERA Yamate II (Mod.) Other

(Specify)

THI Environmental

Asbestos

PLM

PCM

1260 45th Street

Station - Soil

Lead Only

Total Lead STLC TCLP

Emeryville, CA 94608

Excavation

Metals

Arsenic

(Specify)

Total Metals STLC TCLP

ettinger@thi-env.com

Other

Tel. (510) 923-1661

Job No. 07B-2224

Fax (510) 923-1468

Number of Samples _____

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Turn-Around Time Standard

Micro ID #

(For Lab Use Only)

Client Sample ID#

Description

Date Sampled

Time Sampled

Start / Stop /

Total Minutes

Average

LPM

Total

Liters

Filter

Pore Size

Micro ID #	Client Sample ID#	Description	Date Sampled	Time Sampled	Average LPM	Total Liters	Filter Pore Size
<u>(01)</u>	<u>2224-10/12-01</u>	<u>*Personal Air Sample, David Matthews - Soil Excavation</u>	<u>10/12/07</u>	<u>09:02 10:53</u> <u>111</u>	<u>2.1</u>	<u>233.1</u>	
<u>(02)</u>	<u>-02</u>	<u>Personal Air Sample, Israel Chavez - Soil Excavation</u>	<u>↓</u>	<u>09:04 10:53</u> <u>109</u>	<u>2.0</u>	<u>218.0</u>	

Instructions / Comments:

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.

If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Signature / Name Ian Dirk

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Relinquished By Ian Dirk

Date / Time 10/12/07 4:00PM

Drop Box / Courier

Received By [Signature] Date / Time 4:07pm 10/12/07

Relinquished By

Date / Time

Received By

Date / Time

APPENDIX C

Definitions of Common Terms

DEFINITIONS OF COMMON TERMS

Eight-hour time-weighted average (TWA) exposure - the calculated exposure over an eight-hour period, as determined by air monitoring. The eight-hour TWA exposures are compared against the Cal/OSHA Permissible Exposure Limits (PEL) and the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) for the compounds measured.

Permissible Exposure Limit (PEL) – the Cal/OSHA PEL is the maximum allowable exposure to an employee averaged over an eight-hour period. Cal/OSHA regulates employee exposures to specific airborne contaminants under Title 8 California Code of Regulations Section 5155 (T8 CCR §5155). In the case of methylene chloride, Cal/OSHA regulates exposure under T8 CCR 5202.

Short Term Exposure Limit (STEL) – the maximum allowable exposure to an employee averaged over a 15-minute period. Cal/OSHA STELs are provided for certain compounds for which short-term (acute) exposures may result in adverse health effects.

Ceiling Limit - the maximum allowable concentration of a contaminant to which an employee may be exposed at any time.

Action Level – a threshold concentration of a contaminant above which certain regulatory requirements are triggered. Only a few regulations, such as those for methylene chloride and lead, include Action Levels

ACGIH Threshold Limit Values® (TLV®) - exposure guidelines that represent the time-weighted average concentrations for a normal 8-hour workday and a 40-hour workweek, to which it currently believes nearly all workers may be repeatedly exposed, day after day, without adverse health effects. The American Conference of Governmental Industrial Hygienists (ACGIH) TLVs are recommended exposure levels to which employees should not be exposed, but meeting these guidelines is not required by law.

ppm – parts of contaminant per million parts of air

ppb – parts of contaminant per billion parts of air

mg/m³ - milligrams of contaminant per cubic meter of air

µg/m³ - micrograms of contaminant per cubic meter of air

APPENDIX J

SOIL BIN CONTENTS CONFIRMATION SAMPLING RESULTS

Total Extractable Hydrocarbons			
Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	SHAKER TABLE
Project#:	S1518.010.01.01	Analysis:	EPA 8015B
Field ID:	RFSWTLRAP001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Prepared:	10/16/07
Batch#:	130560	Analyzed:	10/16/07

Type:	SAMPLE	Moisture:	8%
Lab ID:	198330-001	Diln Fac:	5.000
Basis:	dry		

Analyte	Result	RL
Diesel C10-C24	220 Y q	5.4
Motor Oil C24-C36	310 q	27

Surrogate	%REC	Limits
Hexacosane	106 q	46-128

Type:	BLANK	Basis:	as received
Lab ID:	QC410611	Diln Fac:	1.000

Analyte	Result	RL
Diesel C10-C24	ND q	1.0
Motor Oil C24-C36	ND q	5.0

Surrogate	%REC	Limits
Hexacosane	94 q	46-128

Y= Sample exhibits chromatographic pattern which does not resemble standard

q= Draft result - ending instrument QC not yet analyzed

ND= Not Detected

RL= Reporting Limit

Batch QC Report

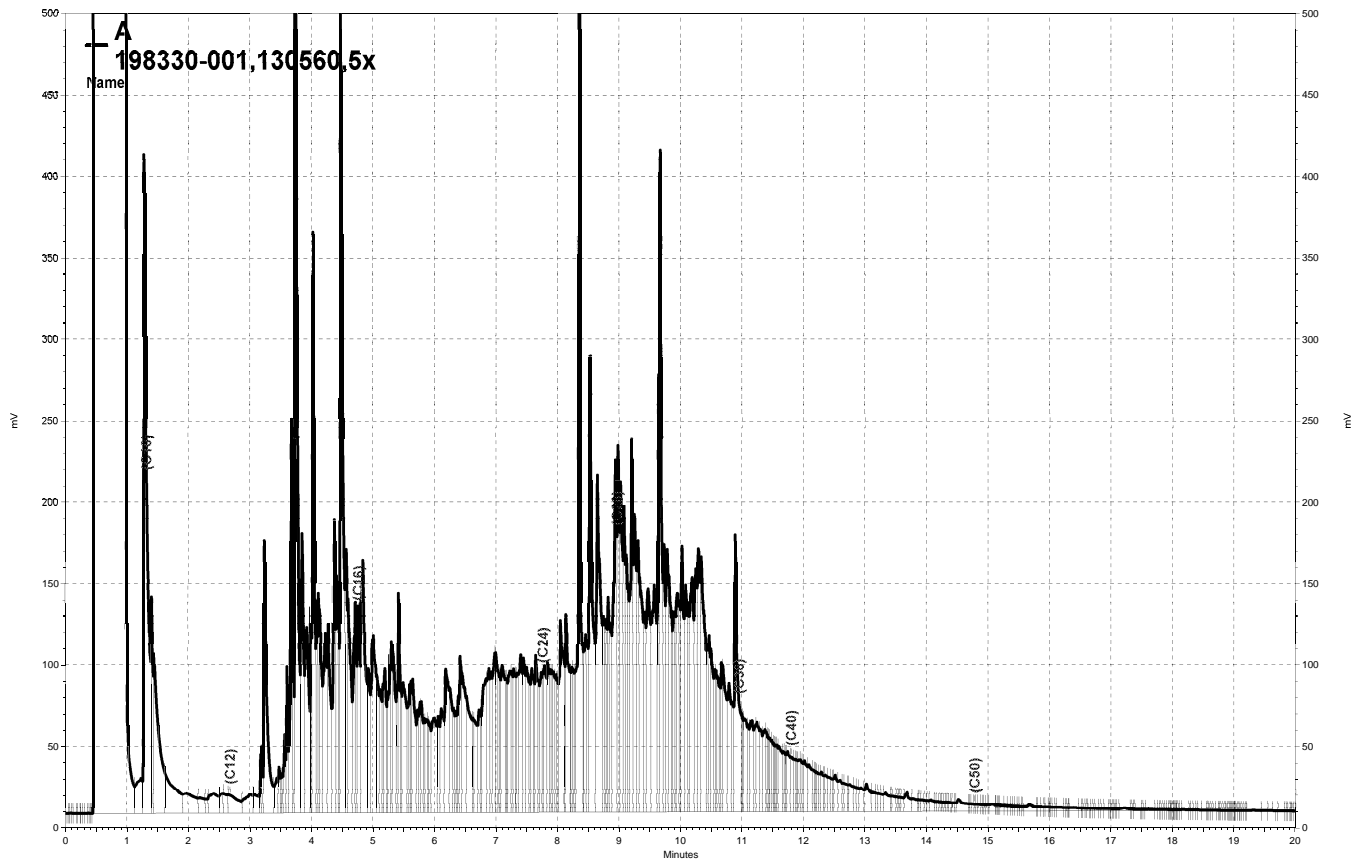
Total Extractable Hydrocarbons			
Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	SHAKER TABLE
Project#:	S1518.010.01.01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC410612	Batch#:	130560
Matrix:	Soil	Prepared:	10/16/07
Units:	mg/Kg	Analyzed:	10/16/07
Basis:	as received		

Cleanup Method: EPA 3630C

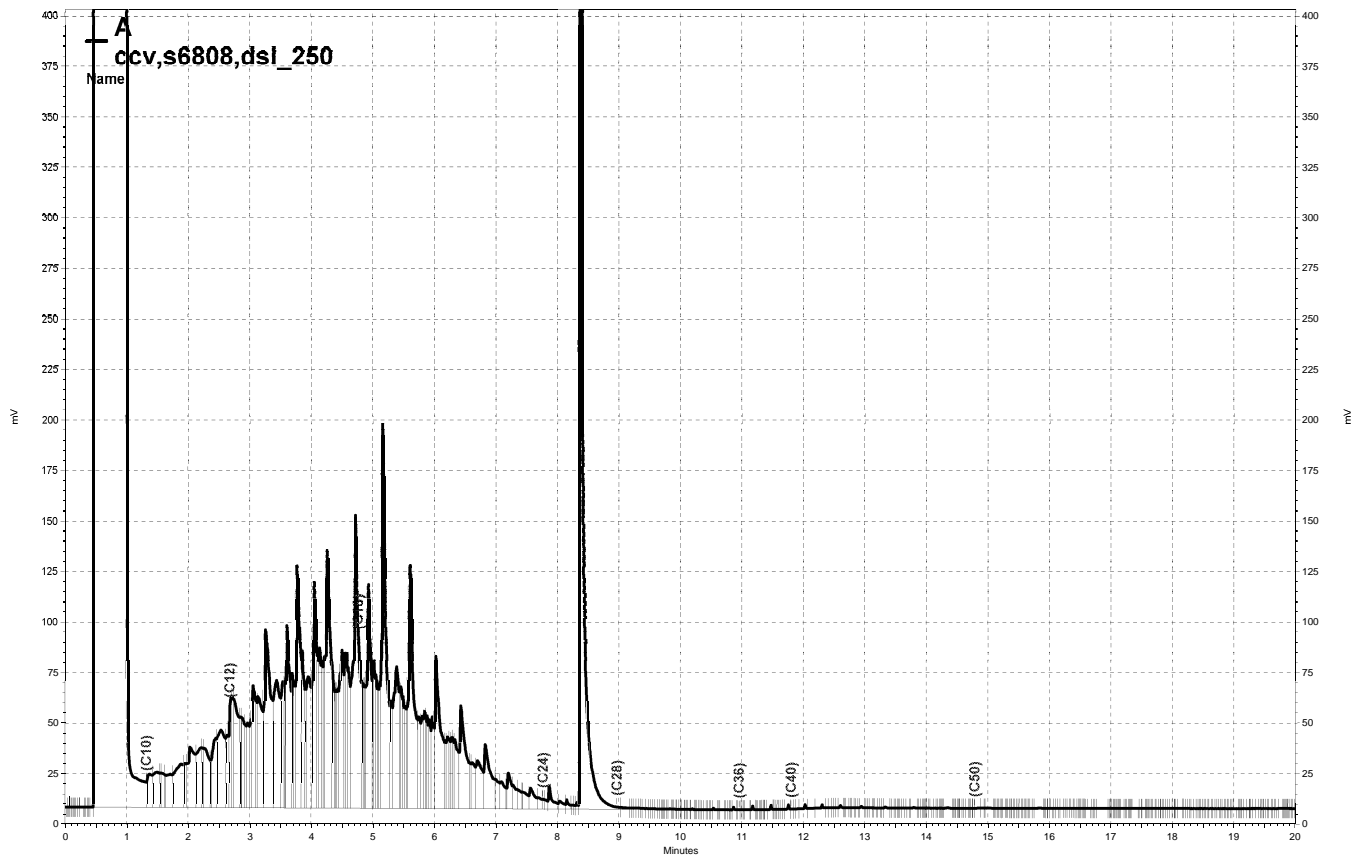
Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.89	33.06 q	66	55-131

Surrogate	%REC	Limits
Hexacosane	65 q	46-128

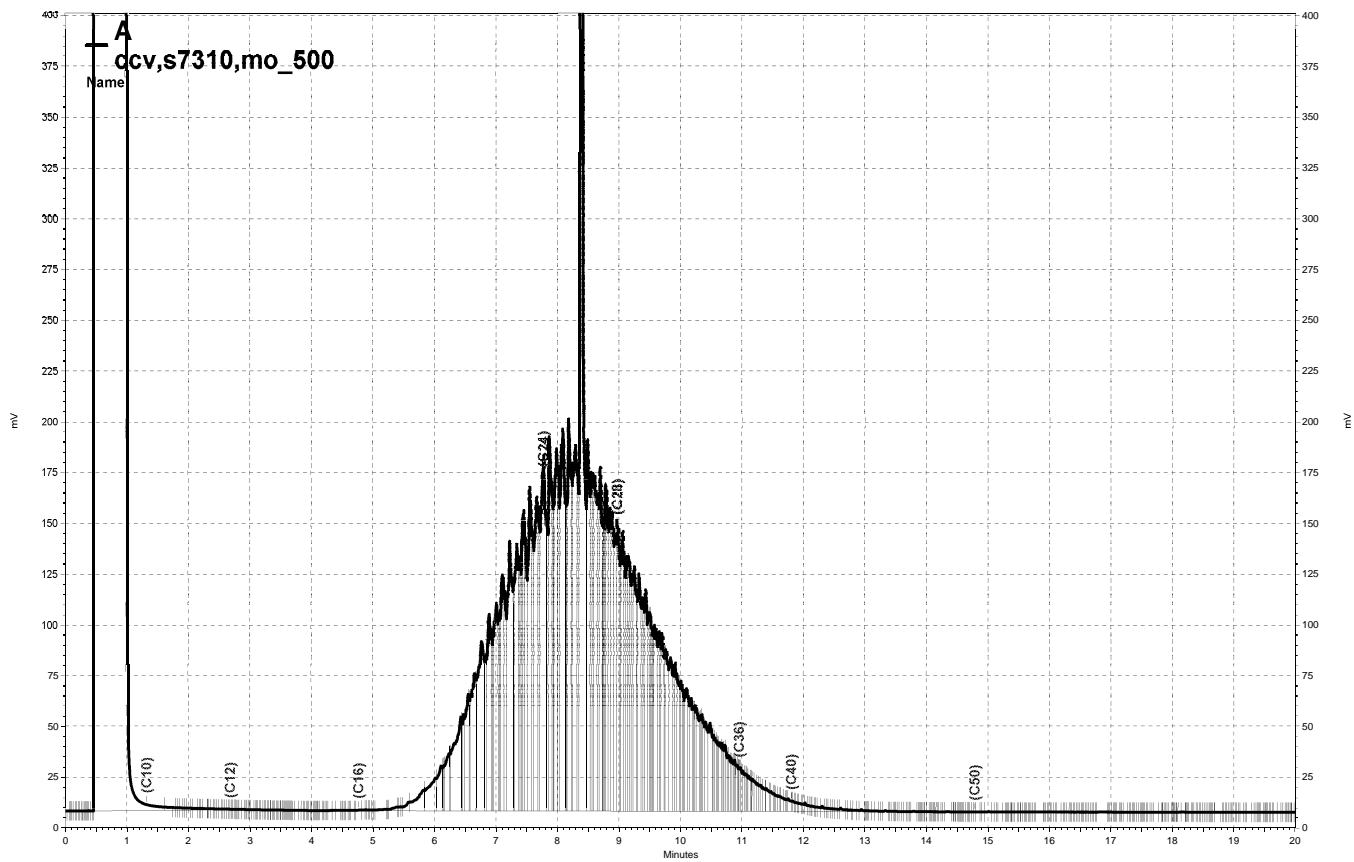
q= Draft result - ending instrument QC not yet analyzed



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\287a092, A



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\287a088, A



— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\287a089, A

Polychlorinated Biphenyls (PCBs)

Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8082
Field ID:	RFSWTLRAP001	Batch#:	130515
Lab ID:	198330-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/13/07
Basis:	dry	Analyzed:	10/15/07
Diln Fac:	1.000		

Moisture: 8%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	127	66-140
Decachlorobiphenyl	130	51-152

ND= Not Detected
 RL= Reporting Limit

Polychlorinated Biphenyls (PCBs)

Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8082
Field ID:	RFSWTLRAP002	Batch#:	130515
Lab ID:	198330-002	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/13/07
Basis:	dry	Analyzed:	10/15/07
Diln Fac:	1.000		

Moisture: 1%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	14 *	66-140
Decachlorobiphenyl	12 *	51-152

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Polychlorinated Biphenyls (PCBs)

Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8082
Field ID:	RFSWTLRAP003	Batch#:	130515
Lab ID:	198330-003	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/13/07
Basis:	dry	Analyzed:	10/15/07
Diln Fac:	1.000		

Moisture: 5%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	25
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	77	51-152

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8082
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC410412	Batch#:	130515
Matrix:	Soil	Prepared:	10/13/07
Units:	ug/Kg	Analyzed:	10/15/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	106	51-152

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	198330	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC410413	Batch#:	130515
Matrix:	Soil	Prepared:	10/13/07
Units:	ug/Kg	Analyzed:	10/15/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	168.0	173.9	103	69-142
Aroclor-1260	168.0	202.2	120	69-155

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	112	51-152

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP001	Batch#:	130359
Lab ID:	198150-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	1.000		

Moisture: 8%

Analyte	Result	RL
N-Nitrosodimethylamine	ND	360
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
Benzyl alcohol	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
bis(2-Chloroisopropyl) ether	ND	360
4-Methylphenol	ND	360
N-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	720
2,4-Dimethylphenol	ND	360
Benzoic acid	ND	1,800
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	ND	72
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	72
Hexachlorocyclopentadiene	ND	720
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	360
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	720
Dimethylphthalate	ND	360
Acenaphthylene	ND	72
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	720
Acenaphthene	ND	72
2,4-Dinitrophenol	ND	720
4-Nitrophenol	ND	720
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360
Diethylphthalate	ND	360
Fluorene	ND	72
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	720
4,6-Dinitro-2-methylphenol	ND	720
N-Nitrosodiphenylamine	ND	360
Azobenzene	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	2,300	720
Phenanthrene	ND	72

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP001	Batch#:	130359
Lab ID:	198150-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	1.000		

Analyte	Result	RL
Anthracene	ND	72
Di-n-butylphthalate	ND	360
Fluoranthene	ND	72
Pyrene	ND	72
Butylbenzylphthalate	ND	360
3,3'-Dichlorobenzidine	ND	720
Benzo(a)anthracene	ND	72
Chrysene	ND	72
bis(2-Ethylhexyl)phthalate	ND	360
Di-n-octylphthalate	ND	360
Benzo(b)fluoranthene	ND	72
Benzo(k)fluoranthene	ND	72
Benzo(a)pyrene	ND	72
Indeno(1,2,3-cd)pyrene	ND	72
Dibenz(a,h)anthracene	ND	72
Benzo(g,h,i)perylene	ND	72

Surrogate	%REC	Limits
2-Fluorophenol	62	33-120
Phenol-d5	71	35-120
2,4,6-Tribromophenol	59	25-120
Nitrobenzene-d5	66	38-120
2-Fluorobiphenyl	70	44-120
Terphenyl-d14	65	40-120

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP002	Batch#:	130359
Lab ID:	198150-002	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	100.0		

Moisture: 1%

Analyte	Result	RL
N-Nitrosodimethylamine	ND	66,000
Phenol	ND	66,000
bis(2-Chloroethyl)ether	ND	66,000
2-Chlorophenol	ND	66,000
1,3-Dichlorobenzene	ND	66,000
1,4-Dichlorobenzene	ND	66,000
Benzyl alcohol	ND	66,000
1,2-Dichlorobenzene	ND	66,000
2-Methylphenol	ND	66,000
bis(2-Chloroisopropyl) ether	ND	66,000
4-Methylphenol	ND	66,000
N-Nitroso-di-n-propylamine	ND	66,000
Hexachloroethane	ND	66,000
Nitrobenzene	ND	66,000
Isophorone	ND	66,000
2-Nitrophenol	ND	130,000
2,4-Dimethylphenol	ND	66,000
Benzoic acid	ND	330,000
bis(2-Chloroethoxy)methane	ND	66,000
2,4-Dichlorophenol	ND	66,000
1,2,4-Trichlorobenzene	ND	66,000
Naphthalene	ND	13,000
4-Chloroaniline	ND	66,000
Hexachlorobutadiene	ND	66,000
4-Chloro-3-methylphenol	ND	66,000
2-Methylnaphthalene	ND	13,000
Hexachlorocyclopentadiene	ND	130,000
2,4,6-Trichlorophenol	ND	66,000
2,4,5-Trichlorophenol	ND	66,000
2-Chloronaphthalene	ND	66,000
2-Nitroaniline	ND	130,000
Dimethylphthalate	ND	66,000
Acenaphthylene	ND	13,000
2,6-Dinitrotoluene	ND	66,000
3-Nitroaniline	ND	130,000
Acenaphthene	ND	13,000
2,4-Dinitrophenol	ND	130,000
4-Nitrophenol	ND	130,000
Dibenzofuran	ND	66,000
2,4-Dinitrotoluene	ND	66,000
Diethylphthalate	ND	66,000
Fluorene	ND	13,000
4-Chlorophenyl-phenylether	ND	66,000
4-Nitroaniline	ND	130,000
4,6-Dinitro-2-methylphenol	ND	130,000
N-Nitrosodiphenylamine	ND	66,000
Azobenzene	ND	66,000
4-Bromophenyl-phenylether	ND	66,000
Hexachlorobenzene	ND	66,000
Pentachlorophenol	ND	130,000

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP002	Batch#:	130359
Lab ID:	198150-002	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	100.0		

Analyte	Result	RL
Phenanthrene	ND	13,000
Anthracene	ND	13,000
Di-n-butylphthalate	ND	66,000
Fluoranthene	ND	13,000
Pyrene	ND	13,000
Butylbenzylphthalate	ND	66,000
3,3'-Dichlorobenzidine	ND	130,000
Benzo(a)anthracene	ND	13,000
Chrysene	ND	13,000
bis(2-Ethylhexyl)phthalate	ND	66,000
Di-n-octylphthalate	ND	66,000
Benzo(b)fluoranthene	ND	13,000
Benzo(k)fluoranthene	ND	13,000
Benzo(a)pyrene	ND	13,000
Indeno(1,2,3-cd)pyrene	ND	13,000
Dibenz(a,h)anthracene	ND	13,000
Benzo(g,h,i)perylene	ND	13,000

Surrogate	%REC	Limits
2-Fluorophenol	DO	33-120
Phenol-d5	DO	35-120
2,4,6-Tribromophenol	DO	25-120
Nitrobenzene-d5	DO	38-120
2-Fluorobiphenyl	DO	44-120
Terphenyl-d14	DO	40-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP003	Batch#:	130359
Lab ID:	198150-003	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	1.000		

Moisture: 5%

Analyte	Result	RL
N-Nitrosodimethylamine	ND	350
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
Benzyl alcohol	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
bis(2-Chloroisopropyl) ether	ND	350
4-Methylphenol	ND	350
N-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	700
2,4-Dimethylphenol	ND	350
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	ND	70
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	70
Hexachlorocyclopentadiene	ND	700
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	350
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	700
Dimethylphthalate	ND	350
Acenaphthylene	ND	70
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	700
Acenaphthene	ND	70
2,4-Dinitrophenol	ND	700
4-Nitrophenol	ND	700
Dibenzofuran	ND	350
2,4-Dinitrotoluene	ND	350
Diethylphthalate	ND	350
Fluorene	ND	70
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	700
4,6-Dinitro-2-methylphenol	ND	700
N-Nitrosodiphenylamine	ND	350
Azobenzene	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	700

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Semivolatile Organics by GC/MS

Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Field ID:	RFSWTLRAP003	Batch#:	130359
Lab ID:	198150-003	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	ug/Kg	Prepared:	10/09/07
Basis:	dry	Analyzed:	10/10/07
Diln Fac:	1.000		

Analyte	Result	RL
Phenanthrene	ND	70
Anthracene	ND	70
Di-n-butylphthalate	ND	350
Fluoranthene	ND	70
Pyrene	ND	70
Butylbenzylphthalate	ND	350
3,3'-Dichlorobenzidine	ND	700
Benzo(a)anthracene	ND	70
Chrysene	ND	70
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	ND	70
Benzo(k)fluoranthene	ND	70
Benzo(a)pyrene	ND	70
Indeno(1,2,3-cd)pyrene	ND	70
Dibenz(a,h)anthracene	ND	70
Benzo(g,h,i)perylene	ND	70

Surrogate	%REC	Limits
2-Fluorophenol	7 *	33-120
Phenol-d5	34 *	35-120
2,4,6-Tribromophenol	6 *	25-120
Nitrobenzene-d5	63	38-120
2-Fluorobiphenyl	64	44-120
Terphenyl-d14	60	40-120

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC409773	Batch#:	130359
Matrix:	Soil	Prepared:	10/09/07
Units:	ug/Kg	Analyzed:	10/10/07
Basis:	as received		

Analyte	Result	RL
N-Nitrosodimethylamine	ND	330
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
bis(2-Chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	660
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	66
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	66
Hexachlorocyclopentadiene	ND	660
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	660
Dimethylphthalate	ND	330
Acenaphthylene	ND	66
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	660
Acenaphthene	ND	66
2,4-Dinitrophenol	ND	660
4-Nitrophenol	ND	660
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
Fluorene	ND	66
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	660
4,6-Dinitro-2-methylphenol	ND	660
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	660
Phenanthrene	ND	66
Anthracene	ND	66
Di-n-butylphthalate	ND	330

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC409773	Batch#:	130359
Matrix:	Soil	Prepared:	10/09/07
Units:	ug/Kg	Analyzed:	10/10/07
Basis:	as received		

Analyte	Result	RL
Fluoranthene	ND	66
Pyrene	ND	66
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	660
Benzo(a)anthracene	ND	66
Chrysene	ND	66
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	66
Benzo(k)fluoranthene	ND	66
Benzo(a)pyrene	ND	66
Indeno(1,2,3-cd)pyrene	ND	66
Dibenz(a,h)anthracene	ND	66
Benzo(g,h,i)perylene	ND	66

Surrogate	%REC	Limits
2-Fluorophenol	66	33-120
Phenol-d5	77	35-120
2,4,6-Tribromophenol	48	25-120
Nitrobenzene-d5	72	38-120
2-Fluorobiphenyl	73	44-120
Terphenyl-d14	69	40-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518.010.01.01	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC409774	Batch#:	130359
Matrix:	Soil	Prepared:	10/09/07
Units:	ug/Kg	Analyzed:	10/10/07
Basis:	as received		

Analyte	Spiked	Result	%REC	Limits
Phenol	2,667	1,772	66	38-120
2-Chlorophenol	2,667	1,675	63	41-120
1,4-Dichlorobenzene	1,333	1,023	77	47-120
N-Nitroso-di-n-propylamine	1,333	969.0	73	29-120
1,2,4-Trichlorobenzene	1,333	1,028	77	46-120
4-Chloro-3-methylphenol	2,667	1,870	70	44-120
Acenaphthene	1,333	909.3	68	43-120
4-Nitrophenol	2,667	1,416	53	31-120
2,4-Dinitrotoluene	1,333	934.5	70	44-120
Pentachlorophenol	2,667	1,545	58	21-120
Pyrene	1,333	864.8	65	42-120

Surrogate	%REC	Limits
2-Fluorophenol	62	33-120
Phenol-d5	70	35-120
2,4,6-Tribromophenol	63	25-120
Nitrobenzene-d5	68	38-120
2-Fluorobiphenyl	68	44-120
Terphenyl-d14	65	40-120

Target Analyte List Metals			
Lab #:	198150	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRAP001	Basis:	dry
Lab ID:	198150-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Analyzed:	10/08/07

Moisture: 8%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Prep	Analysis
Aluminum	12,000	100	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Antimony	1.4	0.54	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Arsenic	39	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Barium	190	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.47	0.11	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cadmium	0.16 J	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Calcium	2,900	27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Chromium	40	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cobalt	14	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Copper	93	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Iron	17,000	100	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Lead	17	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Magnesium	3,200	210	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Manganese	880	5.2	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.64	0.022	1.000	130306	10/08/07	METHOD	EPA 7471A
Molybdenum	0.34	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Nickel	34	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Potassium	1,000	27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Selenium	0.47 J	0.54	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Sodium	140	27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.54	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Vanadium	37	0.27	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Zinc	71	1.1	1.000	130259	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Target Analyte List Metals

Lab #:	198150	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRAP002	Basis:	dry
Lab ID:	198150-002	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Analyzed:	10/08/07

Moisture: 1%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Prep	Analysis
Aluminum	4,100	5.1	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Antimony	0.78	0.51	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Arsenic	1.1	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Barium	30	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.27	0.10	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Calcium	4,100	25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Chromium	8.0	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cobalt	4.0	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Copper	3.7	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Iron	6,200	96	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Lead	3.4	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Magnesium	1,700	25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Manganese	130	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Mercury	ND	0.020	1.000	130306	10/08/07	METHOD	EPA 7471A
Molybdenum	ND	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Nickel	14	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Potassium	840	25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.51	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Silver	ND	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Sodium	100	25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.51	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Vanadium	16	0.25	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Zinc	13	1.0	1.000	130259	10/05/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Target Analyte List Metals

Lab #:	198150	Project#:	S1518.010.01.01
Client:	Tetra Tech EMI	Location:	RFS
Field ID:	RFSWTLRAP003	Basis:	dry
Lab ID:	198150-003	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Analyzed:	10/08/07

Moisture: 5%

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Prep	Analysis
Aluminum	9,800	100	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Antimony	1.1	0.53	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Arsenic	4.8	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Barium	73	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Beryllium	0.24	0.11	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Calcium	80,000	210	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Chromium	37	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Cobalt	5.3	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Copper	17	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Iron	14,000	100	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Lead	2.4	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Magnesium	6,700	210	20.00	130259	10/05/07	EPA 3050B	EPA 6010B
Manganese	280	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Mercury	0.086	0.021	1.000	130306	10/08/07	METHOD	EPA 7471A
Molybdenum	0.37	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Nickel	37	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Potassium	590	26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Selenium	ND	0.53	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Silver	0.23 J	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Sodium	330	26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Thallium	ND	0.53	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Vanadium	20	0.26	1.000	130259	10/05/07	EPA 3050B	EPA 6010B
Zinc	29	1.1	1.000	130259	10/05/07	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC409376	Batch#:	130259
Matrix:	Soil	Prepared:	10/05/07
Units:	mg/Kg	Analyzed:	10/08/07
Basis:	as received		

Analyte	Result	RL
Aluminum	8.7 b	5.0
Antimony	ND	0.50
Arsenic	ND	0.25
Barium	ND	0.25
Beryllium	ND	0.10
Cadmium	ND	0.25
Calcium	ND	25
Chromium	ND	0.25
Cobalt	ND	0.25
Copper	ND	0.25
Iron	3.4 J	5.0
Lead	ND	0.25
Magnesium	ND	25
Manganese	ND	0.25
Molybdenum	ND	0.25
Nickel	ND	0.25
Potassium	ND	25
Selenium	ND	0.50
Silver	ND	0.25
Sodium	ND	25
Thallium	ND	0.50
Vanadium	ND	0.25
Zinc	ND	1.0

J= Estimated value

b= See narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	130259
Units:	mg/Kg	Prepared:	10/05/07
Basis:	as received	Analyzed:	10/08/07
Diln Fac:	1.000		

Type: BSD Lab ID: QC409378

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	1,000	953.2	95	80-120	8	20
Antimony	100.0	98.33	98	80-120	6	20
Arsenic	50.00	50.74	101	80-120	6	20
Barium	100.0	98.03	98	80-120	5	20
Beryllium	2.500	2.572	103	80-120	5	20
Cadmium	10.00	9.816	98	80-120	5	20
Calcium	1,000	992.9	99	80-120	8	20
Chromium	100.0	95.64	96	80-120	5	20
Cobalt	25.00	23.41	94	80-120	5	20
Copper	12.50	11.87	95	80-120	5	20
Iron	1,000	996.3	100	80-120	8	20
Lead	100.0	93.81	94	80-120	6	20
Magnesium	1,000	1,004	100	80-120	9	20
Manganese	25.00	24.37	97	80-120	5	20
Molybdenum	20.00	20.01	100	80-120	6	20
Nickel	25.00	23.57	94	80-120	5	20
Potassium	500.0	466.9	93	80-120	8	20
Selenium	50.00	49.13	98	80-120	7	20
Silver	10.00	9.330	93	80-120	5	20
Sodium	1,000	977.3	98	80-120	9	20
Thallium	50.00	49.07	98	80-120	6	20
Vanadium	25.00	23.89	96	80-120	5	20
Zinc	25.00	23.27	93	80-120	5	20

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	EPA 3050B
Project#:	S1518.010.01.01	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Basis:	as received
Type:	Serial Dilution	Batch#:	130259
MSS Lab ID:	198121-001	Sampled:	10/04/07
Lab ID:	QC409381	Received:	10/05/07
Matrix:	Soil	Analyzed:	10/08/07
Units:	mg/Kg		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac
Aluminum	12,480	92.59	12,960	463.0	4	10	100.0	
Antimony	ND	4.630	ND	23.15	NC	10	100.0	
Arsenic	7.159	0.2500	6.849	1.157	4	10	5.000	
Barium	134.8	0.2500	143.6	1.157	7	10	5.000	
Beryllium	0.4199	0.1000	0.4443 J	0.4630	6	10	5.000	
Cadmium	ND	0.2500	ND	1.157	NC	10	5.000	
Calcium	2,385	25.00	2,512	46.30	5	10	5.000	
Chromium	89.68	0.2500	95.54	1.157	7	10	5.000	
Cobalt	21.50	0.2500	23.21	1.157	8	10	5.000	
Copper	24.99	0.2500	25.12	1.157	1	10	5.000	
Iron	25,730	92.59	26,950	463.0	5	10	100.0	
Lead	9.576	0.2500	11.50	1.062	20 *	10	5.000	
Magnesium	5,435	185.2	5,744	925.9	6	10	100.0	
Manganese	690.2	4.630	699.1	23.15	1	10	100.0	
Molybdenum	0.1454	0.2500	0.1597 J	1.157	NC	10	5.000	
Nickel	114.8	0.2500	124.3	1.157	8	10	5.000	
Potassium	1,263	25.00	1,243	115.7	2	10	5.000	
Selenium	ND	0.5000	ND	1.157	NC	10	5.000	
Silver	ND	0.2500	ND	1.157	NC	10	5.000	
Sodium	86.35	25.00	96.41 J	115.7	12 *	10	5.000	
Thallium	ND	0.5000	ND	1.157	NC	10	5.000	
Vanadium	59.34	0.2500	61.98	1.157	4	10	5.000	
Zinc	47.96	1.000	51.49	4.630	7	10	5.000	

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC409550	Batch#:	130306
Matrix:	Soil	Prepared:	10/08/07
Units:	mg/Kg	Analyzed:	10/08/07

Result	RL
ND	0.020

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	130306
Units:	mg/Kg	Prepared:	10/08/07
Basis:	as received	Analyzed:	10/08/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC409551	0.5000	0.5020	100	80-120		
BSD	QC409552	0.5000	0.5090	102	80-120	1	20

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Field ID:	RFSWTLRAP001	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	130306
MSS Lab ID:	198150-001	Sampled:	10/05/07
Lab ID:	QC409553	Received:	10/05/07
Matrix:	Soil	Analyzed:	10/08/07
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.5858	0.02000	0.5667	0.08333	3	10

RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	198150	Location:	RFS
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518.010.01.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	2.000
Field ID:	RFSWTLRAP001	Batch#:	130306
MSS Lab ID:	198150-001	Sampled:	10/05/07
Matrix:	Soil	Received:	10/05/07
Units:	mg/Kg	Prepared:	10/08/07
Basis:	as received	Analyzed:	10/08/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC409554	0.5858	0.4630	0.8926	66 *	70-143		
MSD	QC409555		0.4808	1.056	98	70-143	15	22

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

198150

Chain of Custody Record No. 8582

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480


Lab PO#: _____ Lab: **CURTIS & TOMPKINS**

No./Container Types

Preservative Added									

Analysis Required

Project name: **RFS**
TtEMI technical contact: **SARAH WOOLEY**
Field samplers: **KEVIN ERNST**

Project (CTO) number: **S1518-φ1φ-φ1-φ1**
TtEMI project manager: **JASON BRODERSON**
Field samplers' signatures: 

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	No./Container Types					Analysis Required						
						40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	
RFSWTLRAPφφ1		10/5/07		SOIL								X	X				
RFSWTLRAPφφ2		10/5/07		ASPHALT								X	X				
RFSWTLRAPφφ3		10/5/07		CONCRETE								X	X				

	Name (print)	Company Name	Date	Time
Relinquished by:	KEVIN ERNST	TETRA TECH EM INC.	10/5/07	5:26
Received by:	Lavanna Curtis	Curtis & Tompk	10/5/07	5:24
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Mercury 7000; All others ~~6010~~ 6010; 24-hr turn around *Per intel of jambi*

Fed Ex #:

APPENDIX K

ALLIED WASTE, WASTE PROFILE SHEETS



GENERATOR WASTE PROFILE SHEET

07289

Requested Disposal Facility: Keller Canyon
an Allied Waste Company

Waste Profile #
2124713604

I. Generator Information

Date: October 23, 2007

Generator Name: <u>University of California, Berkeley</u>			
Generator Site Address: <u>Richmond Field Station, 1301 S. 46th Street</u>			
City: <u>Richmond</u>	County: <u>Contra Costa</u>	State: <u>CA</u>	Zip: <u>94804-4600</u>
Generator State ID Number:		SIC Code Number:	
Generator Mailing Address (if different): <u>Environment, Health & Safety, University Hall 3rd Fl. #1150</u>			
City: <u>Berkeley</u>	County: <u>Alameda</u>	State: <u>CA</u>	Zip: <u>94720</u>
Generator Contact Name: <u>Karl Hans</u>			
Phone Number: <u>(510) 643-9574</u>		Fax Number: <u>(510) 643-7595</u>	

II. Transporter Information

Transporter Name:			
Transporter Address:			
City:	County:	State:	Zip:
Transporter Contact Name:			
Phone Number:		Fax Number:	
State Transportation Number:			

III. Waste Stream Information

Name of Waste: <u>Forest Product Laboratory WTS TERA contaminated with arsenic and pentachlorophenol</u>	
Process Generating Waste: <u>Remediation Cleanup</u>	
Type of Waste:	<input type="checkbox"/> INDUSTRIAL PROCESS WASTE or <input checked="" type="checkbox"/> POLLUTION CONTROL WASTE
Physical State:	<input checked="" type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> POWDER <input type="checkbox"/> LIQUID <input type="checkbox"/> OTHER:
Method of Shipment:	<input checked="" type="checkbox"/> BULK <input type="checkbox"/> DRUM <input type="checkbox"/> BAGGED <input type="checkbox"/> OTHER:
Estimated Annual Volume:	<input checked="" type="checkbox"/> CUBIC YARDS: <u>220</u> <input type="checkbox"/> TONS: <input type="checkbox"/> OTHER:
Frequency:	<input checked="" type="checkbox"/> ONE TIME <input type="checkbox"/> DAILY <input type="checkbox"/> WEEKLY <input type="checkbox"/> MONTHLY <input type="checkbox"/> OTHER:
Special Handling Instructions:	

IV. Representative Sample Certification

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?		<input type="checkbox"/> NO SAMPLE TAKEN
		<input checked="" type="checkbox"/> YES or <input type="checkbox"/> NO
Sample Date: <u>10/03/07</u>	Type of Sample: <input checked="" type="checkbox"/> COMPOSITE SAMPLE <input type="checkbox"/> GRAB SAMPLE	
Sampler's Employer: <u>Tetra Tech EMI</u>		
Sampler's Name (printed): <u>Jason Brodersen, P.G.</u>		Signature:

Initiated/updated by Karl Hans who is employed by U.C. Berkeley

KEY 10/21/07



GENERATOR WASTE PROFILE SHEET (continued)

Waste Profile #

212 47 13604

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Arsenic	39 mg/kg
2. Pentachlorophenol	2.3 mg/kg
3. Soil, asphalt, concrete, debris	soil 75- 90%, asphalt 10- 20%, concrete 10- 20%, debris 5- 10%

Color: brown	Odor (describe): none	Free Liquids: <input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO Content %	% Solids: 100	pH: 2 < pH < 12.5	Flash Point: NA °F	Phenol NApprx
-----------------	--------------------------	--	------------------	----------------------	-----------------------	------------------

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Does this waste or generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in 40 CFR 261.23?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Does this waste contain regulated concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzo-dioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Is this a regulated Toxic Material as defined by Federal and/or State regulations?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO
Is this waste generated at a Federal Superfund Clean Up Site?	<input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO

VI. Generator Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Allied Waste Industries, Inc.

Greg Haet, Associate Director

University of California, Berkeley, Office of Environment, Health & Safety

AUTHORIZED REPRESENTATIVE NAME AND TITLE (Printed)

COMPANY NAME

AUTHORIZED REPRESENTATIVE SIGNATURE

DATE

10/31/07

VII. Allied Waste Decision

Approved Rejected

Expiration:

03/31/08

Conditions:

Roy Rutkowski, Special Waste Analyst

Roy Rutkowski

11/15/07

APPENDIX L

**KELLER CANYON LANDFILL NON-HAZARDOUS
MANIFESTS**

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
FSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604


SITE 01	TICKET 425064	GRID
WEIGHMASTER		
FELIFE C		
DATE IN 15 November 2007	TIME IN 10:45 am	
DATE OUT 15 November 2007	TIME OUT 11:37 am	
VEHICLE LDT1464	ROLL OFF	
REFERENCE 625227	ORIGIN RICHMOND	

01 Gross Weight 74,020.00 lb
Tare Weight 36,260.00 lb
Net Weight 37,760.00 lb 18.88 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.88	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

- | | | | | |
|--|---|--|---|--|
| <input checked="" type="checkbox"/> Keller Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | <input type="checkbox"/> Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | <input type="checkbox"/> Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | <input type="checkbox"/> Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | <input type="checkbox"/> Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|--|---|--|---|--|

674629

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley	
MAILING ADDRESS University Hall, 3rd Floor #1150	
CITY, STATE, ZIP Berkeley, CA 94720	
PHONE (510) 643-9574	
CONTACT PERSON Karl Hans	
SIGNATURE OF AUTHORIZED AGENT / TITLE * <i>Karl Hans</i>	DATE

WASTE ACCEPTANCE NO. 212Y713604
REQUIRED PERSONAL PROTECTIVE EQUIPMENT
<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT
<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST

SPECIAL HANDLING PROCEDURES: #R18134
--

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

RECEIVING FACILITY

WASTE TYPE:	
<input type="checkbox"/> DISPOSAL	<input type="checkbox"/> SLUDGE
<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> WOOD
<input type="checkbox"/> DEBRIS	<input type="checkbox"/> OTHER
<input type="checkbox"/> SPECIAL WASTE	

GENERATING FACILITY Richmond Field Station, 1301 S. 46th Street RICHMOND

TRANSPORTER PSC Environmental Services 21st Century Environmental Mgt	
ADDRESS 535 Getty Court, Suite H	
CITY, STATE, ZIP Benicia, CA 94510	
PHONE (707) 748-3040	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER * <i>[Signature]</i>	DATE 11-15-7

NOTES:	VEHICLE LICENSE NUMBER UP98205	TRUCK NUMBER 1462
LD TRANSPORTATION		
END DUMP <input type="checkbox"/>	BOTTOM DUMP <input type="checkbox"/>	TRANSFER <input type="checkbox"/>
ROLL-OFF(S) <input type="checkbox"/>	FLAT-BED <input type="checkbox"/>	VAN <input type="checkbox"/>
DRUMS <input type="checkbox"/>		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.	
REMARKS	
FACILITY TICKET NUMBER	
SIGNATURE OF AUTHORIZED AGENT * <i>[Signature]</i>	DATE 11/15/07

CUBIC YARDS 29		
DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)		
	DISPOSE	OTHER
<input checked="" type="checkbox"/> SOL	X	
<input type="checkbox"/> CONSTRUCTION DEBRIS		
<input type="checkbox"/> NON-FRIABLE ASBESTOS		
<input type="checkbox"/> WOOD		
<input type="checkbox"/> ASH		
<input type="checkbox"/> SPECIAL OTHER		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181010

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
PSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE 01	TICKET 425068	GRID
WEIGHMASTER FELIPE C		
DATE IN 15 November 2007	TIME IN 11:19 am	
DATE OUT 15 November 2007	TIME OUT 11:43 am	
VEHICLE KWT199	ROLL OFF	
REFERENCE 625213	ORIGIN RICHMOND	

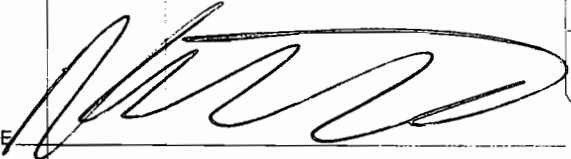
00 Gross Weight 66,780.00 lb
 Stored Tare Weight 36,900.00 lb
 Net Weight 29,880.00 lb 14.94 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.94	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



- | | | | | |
|--|---|--|---|--|
| <input checked="" type="checkbox"/> Keiler Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | <input type="checkbox"/> Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | <input type="checkbox"/> Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | <input type="checkbox"/> Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | <input type="checkbox"/> Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|--|---|--|---|--|

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley		WASTE ACCEPTANCE NO. 212Y713604	
MAILING ADDRESS University Hall, 3rd Floor #1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Berkeley, CA 94720		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
PHONE (510) 643-9574		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
CONTACT PERSON Karl Hans		SPECIAL HANDLING PROCEDURES:	
SIGNATURE OF AUTHORIZED AGENT / TITLE * <i>Karl Hans</i>		RECEIVING FACILITY	
DATE			
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY Richmond Field Station, 1301 S. 46th Street RICHMOND			
TRANSPORTER PSC Environmental Services 21st Century Environmental Mgt		NOTES: VEHICLE LICENSE NUMBER TRUCK NUMBER	
ADDRESS 535 Getty Court, Suite H		9D38319 199	
CITY, STATE, ZIP Benicia, CA 94510		* <i>K. Woten Transport</i>	
PHONE (707) 748-3040			
SIGNATURE OF AUTHORIZED AGENT OR DRIVER * <i>[Signature]</i>		<input type="checkbox"/> END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER	
DATE 11-15-07		<input checked="" type="checkbox"/> ROLL-OFF(S) <input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		DISPOSE OTHER	
		<input checked="" type="checkbox"/> SOIL <i>X</i>	
FACILITY TICKET NUMBER		<input type="checkbox"/> CONSTRUCTION DEBRIS	
SIGNATURE OF AUTHORIZED AGENT * <i>[Signature]</i>		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
DATE 11-15-07		<input type="checkbox"/> WOOD	
		<input type="checkbox"/> ASH	
		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181019

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
PSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE 01	TICKET 425077	GRID
WEIGHMASTER FELIFE C		
DATE IN 15 November 2007	TIME IN 11:28 am	
DATE OUT 15 November 2007	TIME OUT 11:57 am	
VEHICLE JCT831	ROLL OFF	
REFERENCE 625228	ORIGIN RICHMOND	

01 Gross Weight 59,160.00 lb
Stored Tare Weight 35,420.00 lb
Net Weight 23,740.00 lb 11.87 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

Keller Canyon
Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte
Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island
Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward
Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR
University of California, Berkeley
MAILING ADDRESS
University Hall, 3rd Floor #1150
CITY, STATE, ZIP
Berkeley, CA 94720
PHONE
(510) 643-9574
CONTACT PERSON
Karl Hans
 SIGNATURE OF AUTHORIZED AGENT / TITLE _____ DATE _____
 * *Karl Hans* 11-15-07

WASTE ACCEPTANCE NO.
212Y713604
REQUIRED PERSONAL PROTECTIVE EQUIPMENT
 GLOVES GOGGLES RESPIRATOR HARD HAT
 TY-VEK SAFETY VEST
SPECIAL HANDLING PROCEDURES:

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

WASTE TYPE:
 DISPOSAL SLUDGE
 CONSTRUCTION WOOD
 DEBRIS OTHER
 SPECIAL WASTE

GENERATING FACILITY
Richmond Field Station, 1301 S. 46th Street RICHMOND

RECEIVING FACILITY

TRANSPORTER *J. Cushman Trucking*
PSC Environmental Services *21st Century Environmental Mgt*
ADDRESS
535 Gatty Court, Suite H
CITY, STATE, ZIP
Benicia, CA 94510
PHONE
(707) 748-2040
 SIGNATURE OF AUTHORIZED AGENT OR DRIVER _____ DATE _____
 * *[Signature]* 11-15-07

NOTES: VEHICLE LICENSE NUMBER **9B24663** TRUCK NUMBER **831**
Bin # R27981PL
 END DUMP BOTTOM DUMP TRANSFER
 ROLL-OFF(S) FLAT-BED VAN DRUMS

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.
REMARKS
FACILITY TICKET NUMBER
 SIGNATURE OF AUTHORIZED AGENT _____ DATE _____
 * *[Signature]* 11-15-07

CUBIC YARDS
18
DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)

	DISPOSE	OTHER
<input checked="" type="checkbox"/> SOIL	<input checked="" type="checkbox"/>	
<input type="checkbox"/> CONSTRUCTION DEBRIS		
<input type="checkbox"/> NON-FRIABLE ASBESTOS		
<input type="checkbox"/> WOOD		
<input type="checkbox"/> ASH		
<input type="checkbox"/> SPECIAL OTHER		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181028

KELLER CANYON LANDFILL
 901 BAILEY ROAD
 PITTSBURG, CA

674629
 FSC Environmental Services
 535 Getty Court, Suite H

Benicia, CA 94510
 Contract: #212Y713604

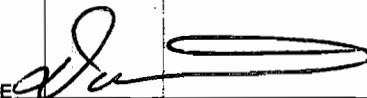
SITE 01	TICKET 425086	GRID
WEIGHMASTER		
FELIFE C		
DATE IN 15 November 2007	TIME IN 11:47 am	
DATE OUT 15 November 2007	TIME OUT 12:18 pm	
VEHICLE FSC900	ROLL OFF	
REFERENCE 625226	ORIGIN RICHMOND	

00 Gross Weight 50,040.00 lb
 Tare Weight 25,440.00 lb
 Net Weight 24,600.00 lb 12.30 TN

Inbound -- SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.30	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

- Keller Canyon Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891
- Coffin Butte Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826
- Ox Mountain Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183
- Newby Island Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871
- Forward Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR <u>University of California, Berkeley</u>		WASTE ACCEPTANCE NO. <b style="font-size: 1.5em;">212Y713604		
MAILING ADDRESS <u>University Hall, 3rd Floor #1150</u>		REQUIRED PERSONAL PROTECTIVE EQUIPMENT		
CITY, STATE, ZIP <u>Berkeley, CA 94720</u>		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST		
PHONE <u>(510) 643-9574</u>		SPECIAL HANDLING PROCEDURES: 		
CONTACT PERSON <u>Karl Hans</u>				
SIGNATURE OF AUTHORIZED AGENT / TITLE DATE * _____				
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.		RECEIVING FACILITY 		
WASTE TYPE:		END DUMP BOTTOM DUMP TRANSFER <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE				
GENERATING FACILITY <u>Richmond Field Station, 1301 S. 46th Street RICHMOND</u>		ROLL-OFF(S) FLAT-BED VAN DRUMS <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
TRANSPORTER <u>PSC Environmental Services 21st Century Environmental Mgt</u>		NOTES: VEHICLE LICENSE NUMBER TRUCK NUMBER		
ADDRESS <u>535 Getty Court, Suite H</u>		<u>33575A NV</u> <u>900</u> <u>PSC 900</u>		
CITY, STATE, ZIP <u>Benicia, CA 94510</u>		CUBIC YARDS 20		
PHONE <u>(707) 748-3040</u>				
SIGNATURE OF AUTHORIZED AGENT OR DRIVER DATE * <u>11/15/02</u>				
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)		
REMARKS FACILITY TICKET NUMBER SIGNATURE OF AUTHORIZED AGENT DATE * <u>11-15-02</u>		<input checked="" type="checkbox"/> SOIL	DISPOSE	OTHER
		<input type="checkbox"/> CONSTRUCTION DEBRIS		
		<input type="checkbox"/> NON-FRIABLE ASBESTOS		
		<input type="checkbox"/> WOOD		
		<input type="checkbox"/> ASH		
		<input type="checkbox"/> SPECIAL OTHER		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

MANIFEST # 605000

181070

KELLER CANYON LANDFILL
 901 BAILEY ROAD
 PITTSBURG, CA

674629
 FSC Environmental Services
 535 Getty Court, Suite H

Benicia, CA 94510
 Contract: #212Y713604

SITE 01	TICKET 425134	GRID
WEIGHMASTER FELIPE C		
DATE IN 15 November 2007	TIME IN 2:44 pm	
DATE OUT 15 November 2007	TIME OUT 3:13 pm	
VEHICLE FSC900	ROLL OFF	
REFERENCE 625222	ORIGIN RICHMOND	

00 Gross Weight 41,100.00 lb
 Stored Tare Weight 25,240.00 lb
 Net Weight 15,860.00 lb 7.93 TN

Inbound -- SCALE TICKET


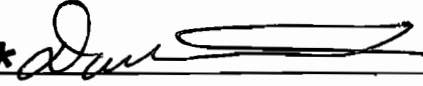
QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
7.93	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

- Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891
- Coffin Butte Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826
- Ox Mountain Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183
- Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871
- Forward Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR		WASTE ACCEPTANCE NO.	
University of California, Berkeley		212Y713604	
MAILING ADDRESS		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
University Hall, 3rd Floor #1150		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
CITY, STATE, ZIP		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
Berkeley, CA 94720		SPECIAL HANDLING PROCEDURES:	
PHONE			
(510) 643-9574			
CONTACT PERSON			
Karl Hain			
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE		
* 	11/15/07		
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:		RECEIVING FACILITY	
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY			
Richmond Field Station, 1301 S. 40th Street		RICHMOND	
TRANSPORTER		NOTES: VEHICLE LICENSE NUMBER TRUCK NUMBER	
PSC Environmental Services 21st Century Environmental Mgt		33575A W 900	
ADDRESS			
535 Getty Court, Suite H			
CITY, STATE, ZIP		END DUMP BOTTOM DUMP TRANSFER	
Benicia, CA 94510		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
PHONE		ROLL-OFF(S) FLAT-BED VAN DRUMS	
(707) 748-3040		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER	DATE		
* 	11/15/07		
REMARKS		CUBIC YARDS	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		20	
FACILITY TICKET NUMBER		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
		DISPOSE OTHER	
SIGNATURE OF AUTHORIZED AGENT		<input checked="" type="checkbox"/> SOIL	
		<input type="checkbox"/> CONSTRUCTION DEBRIS	
		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
		<input type="checkbox"/> WOOD	
		<input type="checkbox"/> ASH	
		<input checked="" type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

18107

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674-629
PSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE 01	TICKET 425135	GRID
WEIGHMASTER		
FELIFE C		
DATE IN 15 November 2007	TIME IN 2:35 pm	
DATE OUT 15 November 2007	TIME OUT 3:15 pm	
VEHICLE LDT1464	ROLL OFF	
REFERENCE 625225	ORIGIN RICHMOND	

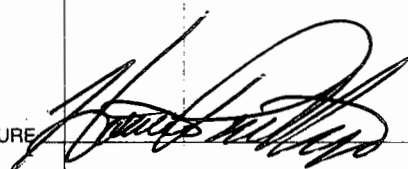
00 Gross Weight 63,180.00 lb
 Stored Tare Weight 37,280.00 lb
 Net Weight 25,900.00 lb 12.95 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.95	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



Keller Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891

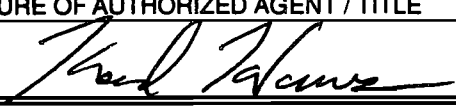
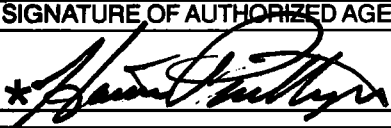

Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183

Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871

Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley		WASTE ACCEPTANCE NO. 212Y713604	
MAILING ADDRESS University Hall, 3rd Floor #1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Berkeley, CA 94720		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
PHONE (510) 643-9574		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
CONTACT PERSON Karl Hans		SPECIAL HANDLING PROCEDURES:	
SIGNATURE OF AUTHORIZED AGENT / TITLE * 		RECEIVING FACILITY	
DATE			
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY Richmond Field Station, 1301 S. 46th Street RICHMOND			
TRANSPORTER PSC Environmental Services 21st Century Environmental Mgt	NOTES:	VEHICLE LICENSE NUMBER UP982 05	TRUCK NUMBER 1464
ADDRESS 535 Getty Court, Suite H	LD TRANSPORTATION LLC		
CITY, STATE, ZIP Benicia, CA 94510	<input type="checkbox"/> END DUMP	<input type="checkbox"/> BOTTOM DUMP	<input type="checkbox"/> TRANSFER
PHONE (707) 748-3040	<input type="checkbox"/> ROLL-OFF(S)	<input type="checkbox"/> FLAT-BED	<input type="checkbox"/> VAN
SIGNATURE OF AUTHORIZED AGENT OR DRIVER * 	<input type="checkbox"/> DRUMS		
DATE 11-15-07	CUBIC YARDS 20		
REMARKS	DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)		
		DISPOSE	OTHER
	<input checked="" type="checkbox"/> SOIL	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> CONSTRUCTION DEBRIS		
	<input type="checkbox"/> NON-FRIABLE ASBESTOS		
	<input type="checkbox"/> WOOD		
<input type="checkbox"/> ASH			
<input type="checkbox"/> SPECIAL OTHER			
SIGNATURE OF AUTHORIZED AGENT * 	DATE 11-15-07		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181078

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
PSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE 01	TICKET 425136	GRID
WEIGHMASTER FELIFE C		
DATE IN 15 November 2007		TIME IN 2:27 pm
DATE OUT 15 November 2007		TIME OUT 3:16 pm
VEHICLE KWT199		ROLL OFF
REFERENCE 625214	ORIGIN RICHMOND	

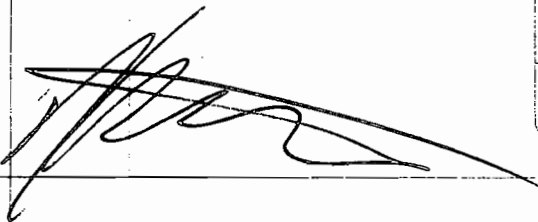
00 Gross Weight 66,680.00 lb
 Stored Tare Weight 36,880.00 lb
 Net Weight 29,800.00 lb 14.90 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.90	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



- Keller Canyon
 Coffin Butte
 Ox Mountain
 Newby Island
 Forward
- | | | | | |
|--|---|---|---|---|
| Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|--|---|---|---|---|

NON-HAZARDOUS WASTE MANIFEST

GENERATOR		WASTE ACCEPTANCE NO.	
University of California, Berkeley		212Y713604	
MAILING ADDRESS		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
University Hall, 3rd Floor #1150		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
CITY, STATE, ZIP		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
Berkeley, CA 94720		SPECIAL HANDLING PROCEDURES:	
PHONE			
(510) 643-9574			
CONTACT PERSON			
Karl Hans			
SIGNATURE OF AUTHORIZED AGENT / TITLE		DATE	
* <i>Karl Hans</i>			
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:		RECEIVING FACILITY	
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY			
Richmond Field Station, 1301 S. 46th Street RICHMOND			

TRANSPORTER		NOTES:	
PSC Environmental Services 21st Century Environmental Mgt		VEHICLE LICENSE NUMBER TRUCK NUMBER	
ADDRESS		9D7837 199	
535 Getty Court, Suite H		<i>McWaters Transport</i>	
CITY, STATE, ZIP		END DUMP BOTTOM DUMP TRANSFER	
Benicia, CA 94510		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
PHONE		ROLL-OFF(S) FLAT-BED VAN DRUMS	
(707) 748-3040		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		DATE	
* <i>[Signature]</i>		11-15-07	
		#R27957PL	

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS	
		20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
		DISPOSE	OTHER
		<input checked="" type="checkbox"/> SOIL	<input checked="" type="checkbox"/>
REMARKS		<input type="checkbox"/> CONSTRUCTION DEBRIS	
FACILITY TICKET NUMBER		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> WOOD	
DATE		<input type="checkbox"/> ASH	
* <i>[Signature]</i>		<input type="checkbox"/> SPECIAL OTHER	
11-15-07			

181080

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
FSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE 01	TICKET 425138	GRID
WEIGHMASTER FELIPE C		
DATE IN 15 November 2007	TIME IN 2:43 pm	
DATE OUT 15 November 2007	TIME OUT 3:18 pm	
VEHICLE JCT831	ROLL OFF	
REFERENCE 625229	ORIGIN RICHMOND	

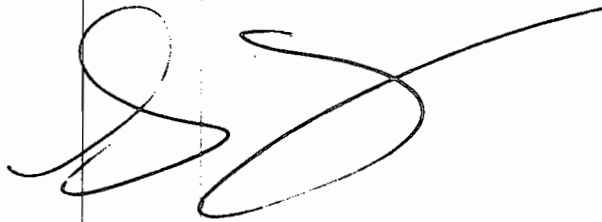
00 Gross Weight 70,340.00 lb
 Stored Tare Weight 35,800.00 lb
 Net Weight 34,540.00 lb 17.27 TN

Inbound -- SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.27	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				


NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



- | | | | | |
|--|---|--|---|--|
| <input checked="" type="checkbox"/> Keller Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | <input type="checkbox"/> Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | <input type="checkbox"/> Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | <input type="checkbox"/> Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | <input type="checkbox"/> Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|--|---|--|---|--|

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley	
MAILING ADDRESS University Hall, 3rd Floor #1150	
CITY, STATE, ZIP Berkeley, CA 94720	
PHONE (510) 643-9574	
CONTACT PERSON Karl Hans	
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE
* 	11-15-07

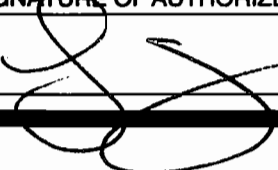
WASTE ACCEPTANCE NO. 212Y713604
REQUIRED PERSONAL PROTECTIVE EQUIPMENT
<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

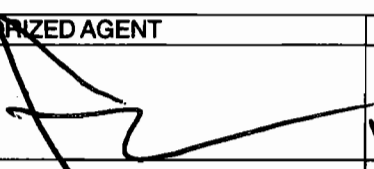
SPECIAL HANDLING PROCEDURES:

WASTE TYPE:
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE
GENERATING FACILITY Richmond Field Station, 1301 S. 40th Street RICHMOND

RECEIVING FACILITY

TRANSPORTER J. Lushenberry Trucking	
PSC Environmental Services 21st Century Environmental Mgt	
ADDRESS 535 Getty Court, Suite H	
CITY, STATE, ZIP Benicia, CA 94510	
PHONE (707) 748-3040	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER	DATE
* 	11-15-07

NOTES:	VEHICLE LICENSE NUMBER	TRUCK NUMBER
	9B24663	831
Bin # R18223ML		
<input type="checkbox"/> END DUMP	<input type="checkbox"/> BOTTOM DUMP	<input type="checkbox"/> TRANSFER
<input checked="" type="checkbox"/> ROLL-OFF(S)	<input type="checkbox"/> FLAT-BED	<input type="checkbox"/> VAN
		<input type="checkbox"/> DRUMS

<p>I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.</p>	
REMARKS	
FACILITY TICKET NUMBER	
SIGNATURE OF AUTHORIZED AGENT	DATE
* 	11-15-07

CUBIC YARDS 18		
DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)		
	DISPOSE	OTHER
<input checked="" type="checkbox"/> SOIL	<input checked="" type="checkbox"/>	
<input type="checkbox"/> CONSTRUCTION DEBRIS		
<input type="checkbox"/> NON-FRIABLE ASBESTOS		
<input type="checkbox"/> WOOD		
<input type="checkbox"/> ASH		
<input type="checkbox"/> SPECIAL OTHER		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

KELLER CANYON LANDFILL
 901 BAILEY ROAD
 PITTSBURG, CA

674629
 PSC Environmental Services
 535 Getty Court, Suite H

Benicia, CA 94510
 Contract: #212Y713604

SITE	TICKET	GRID
01	425145	
WEIGHMASTER		
FELIFE C		
DATE IN	TIME IN	
16 November 2007	7:02 am	
DATE OUT	TIME OUT	
16 November 2007	7:41 am	
VEHICLE	ROLL OFF	
KWT199		
REFERENCE	ORIGIN	
625215	RICHMOND	

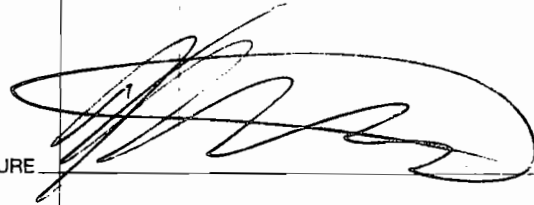
00 Gross Weight 70,760.00 lb
 Stored Tare Weight 37,220.00 lb
 Net Weight 33,540.00 lb 16.77 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.77	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				


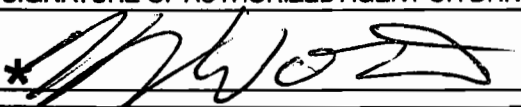
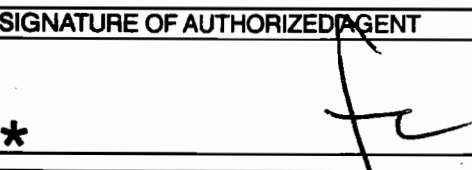
NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



- | | | | | |
|--|---|--|---|--|
| <input checked="" type="checkbox"/> Keller Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | <input type="checkbox"/> Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | <input type="checkbox"/> Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | <input type="checkbox"/> Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | <input type="checkbox"/> Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|--|---|--|---|--|

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley		WASTE ACCEPTANCE NO. 212Y713604	
MAILING ADDRESS University Hall, 3rd Floor #1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Berkeley, CA 94720		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
PHONE (510) 643-9574		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Karl Hans			
SIGNATURE OF AUTHORIZED AGENT / TITLE DATE			
* 			
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>		RECEIVING FACILITY	
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY Richmond Field Station, 1301 S. 46th Street RICHMOND			
TRANSPORTER PSC Environmental Services 21st Century Environmental Mgt		NOTES: VEHICLE LICENSE NUMBER TRUCK NUMBER	
ADDRESS 535 Getty Court, Suite H		9D38319 199	
CITY, STATE, ZIP Benicia, CA 94510		K. Wotter Transport	
PHONE (707) 748-3040		<input type="checkbox"/> END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER <input checked="" type="checkbox"/> ROLL-OFF(S) <input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER DATE		#R18213ML	
* 		11-16-07	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL <input checked="" type="checkbox"/> DISPOSE <input type="checkbox"/> OTHER <input type="checkbox"/> CONSTRUCTION DEBRIS <input type="checkbox"/> NON-FRIABLE ASBESTOS	
		<input type="checkbox"/> WOOD <input type="checkbox"/> ASH <input type="checkbox"/> SPECIAL OTHER	
FACILITY TICKET NUMBER			
SIGNATURE OF AUTHORIZED AGENT DATE			
* 		11/16/07	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181120

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

FSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

SITE	TICKET	GRID
01	425176	
WEIGHMASTER		
FELIFE C		
DATE IN	TIME IN	
16 November 2007	7:05 am	
DATE OUT	TIME OUT	
VEHICLE	ROLL OFF	
	LDT1464	
REFERENCE	ORIGIN	
	625223	RICHMOND

00 Gross Weight 77,140.00 lb Inbound -- SCALE TICKET
 Stored Tare Weight 36,660.00 lb
 Net Weight 40,480.00 lb 20.24 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
	20.24 TN	SW-CONT SOIL				
	1.00 LD	ENVIRONMENTAL FEE				
	1.00 LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR
 University of California, Berkeley
MAILING ADDRESS
 University Hall, 3rd Floor #1150
CITY, STATE, ZIP
 Berkeley, CA 94720
PHONE
 (510) 643-9574
CONTACT PERSON
 Karl Hans
SIGNATURE OF AUTHORIZED AGENT / TITLE **DATE**
 * *Karl Hans*

WASTE ACCEPTANCE NO.
212Y713604

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
 GLOVES GOGGLES RESPIRATOR HARD HAT
 TY-VEK SAFETY VEST

SPECIAL HANDLING PROCEDURES:

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

WASTE TYPE:
 DISPOSAL SLUDGE
 CONSTRUCTION WOOD
 DEBRIS OTHER
 SPECIAL WASTE

GENERATING FACILITY
 Richmond Field Station, 1301 S. 46th Street RICHMOND

RECEIVING FACILITY

TRANSPORTER
 PSC Environmental Services 21st Century Environmental Mgt
ADDRESS
 535 Getty Court, Suite H
CITY, STATE, ZIP
 Benicia, CA 94510
PHONE
 (707) 748-3040
SIGNATURE OF AUTHORIZED AGENT OR DRIVER **DATE**
 * *[Signature]* 11-16-07

NOTES: **VEHICLE LICENSE NUMBER** **TRUCK NUMBER**
 UP98205 *1464*
LD TRANSPORTATION LLC

END DUMP **BOTTOM DUMP** **TRANSFER**

ROLL-OFF(S) **FLAT-BED** **VAN** **DRUMS**

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

REMARKS

FACILITY TICKET NUMBER

SIGNATURE OF AUTHORIZED AGENT **DATE**
 * *[Signature]* 11-16-07

CUBIC YARDS
20

DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)

	DISPOSE	OTHER
<input checked="" type="checkbox"/> SOIL	<i>X</i>	
<input type="checkbox"/> CONSTRUCTION DEBRIS		
<input type="checkbox"/> NON-FRIABLE ASBESTOS		
<input type="checkbox"/> WOOD		
<input type="checkbox"/> ASH		
<input type="checkbox"/> SPECIAL OTHER		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

18118

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
FSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

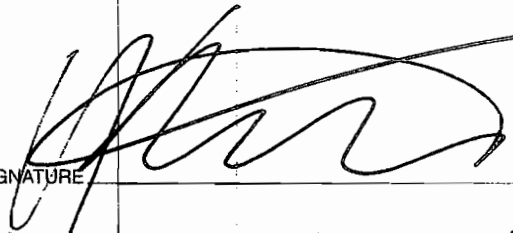
SITE 01	TICKET 425236	GRID
WEIGHMASTER FELIFE C		
DATE IN 16 November 2007	TIME IN 10:14 am	
DATE OUT 16 November 2007	TIME OUT 10:43 am	
VEHICLE KWT199	ROLL OFF	
REFERENCE 625216	ORIGIN RICHMOND	

00 Gross Weight 72,140.00 lb
 Stored Tare Weight 36,760.00 lb
 Net Weight 35,380.00 lb 17.69 TN

Inbound -- SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.69	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

Keller Canyon
Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte
Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island
Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward
Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR		WASTE ACCEPTANCE NO.																				
University of California, Berkeley		212Y713604																				
MAILING ADDRESS																						
University Hall, 3rd Floor #1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT																				
CITY, STATE, ZIP		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT																				
Berkeley, CA 94720		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST																				
PHONE		SPECIAL HANDLING PROCEDURES:																				
(510) 643-9574																						
CONTACT PERSON																						
Karl Hans		RECEIVING FACILITY																				
SIGNATURE OF AUTHORIZED AGENT / TITLE																						
* <i>Karl Hans</i>																						
DATE																						
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>																						
WASTE TYPE:																						
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE																						
GENERATING FACILITY																						
Richmond Field Station, 1301 S. 46th Street RICHMOND																						
TRANSPORTER		NOTES:																				
PSC Environmental Services 21st Century Environmental Mgt		VEHICLE LICENSE NUMBER TRUCK NUMBER																				
ADDRESS		9038319 199																				
535 Getty Court, Suite H		<i>K. Woten Transport</i>																				
CITY, STATE, ZIP																						
Benicia, CA 94510		END DUMP BOTTOM DUMP TRANSFER																				
PHONE		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																				
(707) 748-3040		ROLL-OFF(S) FLAT-BED VAN DRUMS																				
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																				
* <i>K. Woten</i>		# R25962 PL																				
DATE		11-16-07																				
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS																				
		23																				
REMARKS		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)																				
		<table border="1"> <tr> <td></td> <td>DISPOSE</td> <td>OTHER</td> </tr> <tr> <td><input checked="" type="checkbox"/> SOIL</td> <td><i>Y</i></td> <td></td> </tr> <tr> <td><input type="checkbox"/> CONSTRUCTION DEBRIS</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> NON-FRIABLE ASBESTOS</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> WOOD</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> ASH</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> SPECIAL OTHER</td> <td></td> <td></td> </tr> </table>			DISPOSE	OTHER	<input checked="" type="checkbox"/> SOIL	<i>Y</i>		<input type="checkbox"/> CONSTRUCTION DEBRIS			<input type="checkbox"/> NON-FRIABLE ASBESTOS			<input type="checkbox"/> WOOD			<input type="checkbox"/> ASH			<input type="checkbox"/> SPECIAL OTHER
	DISPOSE	OTHER																				
<input checked="" type="checkbox"/> SOIL	<i>Y</i>																					
<input type="checkbox"/> CONSTRUCTION DEBRIS																						
<input type="checkbox"/> NON-FRIABLE ASBESTOS																						
<input type="checkbox"/> WOOD																						
<input type="checkbox"/> ASH																						
<input type="checkbox"/> SPECIAL OTHER																						
FACILITY TICKET NUMBER																						
SIGNATURE OF AUTHORIZED AGENT		DATE																				
* <i>[Signature]</i>		11-16-07																				

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

18128

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

674629
FSC Environmental Services
535 Getty Court, Suite H

Benicia, CA 94510
Contract: #212Y713604

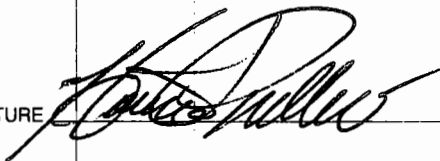
SITE	TICKET	GRID
01	425342	
WEIGHMASTER		
FELIFE C		
DATE IN	TIME IN	
16 November 2007	12:19 pm	
DATE OUT	TIME OUT	
16 November 2007	2:13 pm	
VEHICLE	ROLL OFF	
LDT1464		
REFERENCE	ORIGIN	
625224	RICHMOND	

00 Gross Weight 68,440.00 lb
 Stored Tare Weight 45,800.00 lb
 Net Weight 22,640.00 lb 11.32 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.32	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE 

- | | | | | |
|---|--|---|--|---|
| <input checked="" type="checkbox"/> Keller Canyon
Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891 | <input type="checkbox"/> Coffin Butte
Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826 | <input type="checkbox"/> Ox Mountain
Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183 | <input type="checkbox"/> Newby Island
Sanitary Landfill
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871 | <input type="checkbox"/> Forward
Landfill
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009 |
|---|--|---|--|---|

NON-HAZARDOUS WASTE MANIFEST

GENERATOR University of California, Berkeley		WASTE ACCEPTANCE NO. 212Y713604		
MAILING ADDRESS University Hall, 3rd Floor #1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT		
CITY, STATE, ZIP Berkeley, CA 94720		<input checked="" type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST		
PHONE (510) 643-9574		SPECIAL HANDLING PROCEDURES:		
CONTACT PERSON Karl Hans		RECEIVING FACILITY 		
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE			
* <i>Karl Hans</i>				
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>				
WASTE TYPE:				
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> DEBRIS <input type="checkbox"/> SPECIAL WASTE		<input type="checkbox"/> SLUDGE <input type="checkbox"/> WOOD <input type="checkbox"/> OTHER		
GENERATING FACILITY Richmond Field Station, 1301 S. 46th Street RICHMOND				
TRANSPORTER PSC Environmental Services 21st Century Environmental Met		NOTES: VEHICLE LICENSE NUMBER TRUCK NUMBER		
ADDRESS 535 Getty Court, Suite H		VP98205 146N		
CITY, STATE, ZIP Benicia, CA 94510		LD TRANSPORTATION LLC		
PHONE (707) 748-3040		<input type="checkbox"/> END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER <input type="checkbox"/> ROLL-OFF(S) <input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS		
SIGNATURE OF AUTHORIZED AGENT OR DRIVER	DATE	<input checked="" type="checkbox"/> AN RIB213 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
* <i>[Signature]</i>	11-16-7			
REMARKS I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20-20		
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)		
FACILITY TICKET NUMBER		<input checked="" type="checkbox"/> OIL	DISPOSE	OTHER
		<input type="checkbox"/> CONSTRUCTION DEBRIS	2	
		<input type="checkbox"/> NON-FRIABLE ASBESTOS		
		<input type="checkbox"/> WOOD		
		<input type="checkbox"/> ASH		
		<input type="checkbox"/> SPECIAL OTHER		
SIGNATURE OF AUTHORIZED AGENT		DATE		
* <i>[Signature]</i>		11-16-07		

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181482

KELLER CANYON LANDFILL
 901 BAILEY ROAD
 PITTSBURG, CA

674629
 PSC Environmental Services
 535 Getty Court, Suite H

Benicia, CA 94510
 Contract: #212Y713604

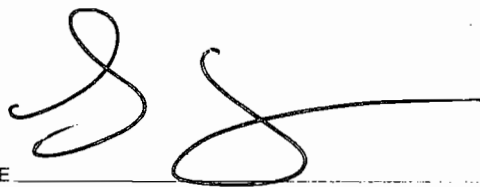
SITE	TICKET	GRID
01	425524	
WEIGHMASTER		
JZ00023 MANUEL Z		
DATE IN	TIME IN	
19 November 2007	9:36 am	
DATE OUT	TIME OUT	
19 November 2007	10:26 am	
VEHICLE	ROLL OFF	
JCT831		
REFERENCE	ORIGIN	
589402	RICHMOND	

00 Gross Weight 68,320.00 lb
 Stored Tare Weight 39,040.00 lb
 Net Weight 29,280.00 lb 14.64 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.64	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

ENTERED
PREPARED
CHANGE
CHECK NO.

SIGNATURE 

Keller Canyon

Coffin Butte

Ox Mountain

Newby Island

Colward

Sanitary Landfill

Landfill

Sanitary Landfill

Sanitary Landfill

Landfill

901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891

28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826

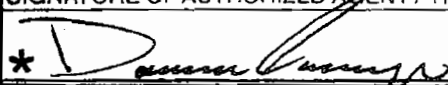
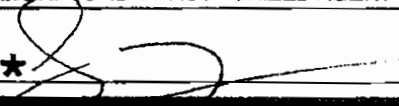
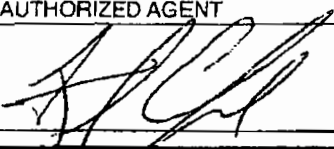
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183

1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871

9999 S. Austin Road
Manleca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

574629

GENERATOR		WASTE ACCEPTANCE NO.	
UNIVERSITY OF CALIFORNIA, BERKELEY		- 212Y713 - 604	
MAILING ADDRESS		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
UNIVERSITY HALL 3RD FLOOR, ROOM 1150		<input type="checkbox"/> GLOVES <input checked="" type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
CITY, STATE, ZIP		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
Berkeley CA 94720		SPECIAL HANDLING PROCEDURES:	
PHONE			
(510) 643-9574			
CONTACT PERSON			
KARL HANS			
SIGNATURE OF AUTHORIZED AGENT / TITLE			
* 			
DATE			
11/19/07			
GENERATOR'S CERTIFICATION. I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.		RECEIVING FACILITY	
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE			
<input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD			
<input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER			
<input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY			
ALHAMBRA FIELD STATION, 1301 S. 46TH ST. RICHMOND CA			
TRANSPORTER		NOTES: VEHICLE LICENSE NUMBER	
J. Coshabert Trucking		9B24663	
K&C ENV SERVICES, 21ST CENTURY ENVIRONMENTAL MANAGEMENT		TRUCK NUMBER	
ADDRESS		831	
535 GERN CT SUITE 14		Bin # R1955ML	
CITY, STATE, ZIP		END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER <input type="checkbox"/>	
Benicia CA 94510		ROLL-OFF(S) <input checked="" type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS <input type="checkbox"/>	
PHONE			
(925) (707) 748-3400			
SIGNATURE OF AUTHORIZED AGENT OR DRIVER			
* 			
DATE			
11-19-07			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS	
		18 Yards	
REMARKS		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
		DISPOSE OTHER	
FACILITY TICKET NUMBER		<input checked="" type="checkbox"/> SOIL	
		<input type="checkbox"/> CONSTRUCTION DEBRIS	
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
* 		<input type="checkbox"/> WOOD	
DATE		<input type="checkbox"/> ASH	
11/19/07		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

181581

KELLER CANYON LANDFILL
 901 BAILEY ROAD
 PITTSBURG, CA

674629
 PSC Environmental Services
 535 Getty Court, Suite H

Benicia, CA 94510
 Contract: #212Y713604

SITE	TICKET	GRID
01	425623	
WEIGHMASTER		
JZ00023 MANUEL Z		
DATE IN	TIME IN	
19 November 2007	12:59 pm	
DATE OUT	TIME OUT	
19 November 2007	2:16 pm	
VEHICLE	ROLL OFF	
JCT831		
REFERENCE	ORIGIN	
589420	RICHMOND	

00 Gross Weight 76,860.00 lb
 Stored Tare Weight 39,600.00 lb
 Net Weight 37,260.00 lb 18.63 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.63	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

RESTAURANT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

Keller Canyon Coffin Butte

Ox Mountain

Newby Island

Forwards

Sanitary Landfill

Landfill

Sanitary Landfill

Sanitary Landfill

Landfill

901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891

28972 Coffin Butte Road
Corvallis, OR 97330
Phone (541) 745-2018
Fax (541) 745-3826

12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183

1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871

9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR UNIVERSITY OF CALIFORNIA, BERKELEY		WASTE ACCEPTANCE NO. - 2124713-604	
MAILING ADDRESS UNIVERSITY HALL 3RD Floor Room 1150		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP BERKELEY CA 94720		<input type="checkbox"/> GLOVES <input checked="" type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT	
PHONE (510) 643-7574		<input type="checkbox"/> TY-VEK <input checked="" type="checkbox"/> SAFETY VEST	
CONTACT PERSON KARL HANS		SPECIAL HANDLING PROCEDURES:	
SIGNATURE OF AUTHORIZED AGENT / TITLE * [Signature]		DATE 11/19/07	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.		RECEIVING FACILITY	
WASTE TYPE: <input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY RICHMOND FIELD STATION, 1301 S 46TH ST RICHMOND CA			
TRANSPORTER J. Cushmanberry Trucking		NOTES:	VEHICLE LICENSE NUMBER
PSC ENVIRONMENTAL SERVICES 21ST CENTURY			9B24663
ADDRESS ENVIRONMENTAL MANAGEMENT			831
CITY, STATE, ZIP BENILA CA 94510		Bin # R18155	
PHONE (707) 748-3040		END DUMP	BOTTOM DUMP
SIGNATURE OF AUTHORIZED AGENT OR DRIVER * [Signature]		<input type="checkbox"/>	<input type="checkbox"/>
DATE 11/19/07		ROLL-OFF(S)	FLAT-BED
		<input checked="" type="checkbox"/>	<input type="checkbox"/>
			VAN
			<input type="checkbox"/>
			DRUMS
			<input type="checkbox"/>
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 18	
REMARKS		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
FACILITY TICKET NUMBER		DISPOSE	
SIGNATURE OF AUTHORIZED AGENT * [Signature]		OTHER	
DATE 11/19/07		<input checked="" type="checkbox"/> SOIL	
		<input type="checkbox"/> CONSTRUCTION DEBRIS	
		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
		<input type="checkbox"/> WOOD	
		<input type="checkbox"/> ASH	
		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.