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January 6, 2012

Mr. Jerry Wickham Senior Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577

c/o

Ms. Jan Shipley Livermore Valley Joint Unified School District (LVJUSD) 685 East Jack London Boulevard Livermore, California 94550

RE: Soil and Groundwater Characterization Report/Request for Low Risk Closure Report Laidlaw Transit-2900 Ladd Avenue, Livermore, California Fuel Leak Case No. RO0000188, GeoTracker Global ID T0600100844 ACC Project Number: 3054-103.01

Dear Mr. Wickham:

ACC Environmental Consultants Inc. (ACC) has prepared this Soil and Groundwater Characterization Report/Request for Low Risk Closure Report for the Laidlaw Transit Property located 2900 Ladd Avenue, Livermore, California on behalf of the Livermore Joint and Unified School District (LVJUSD). The primary goals of this investigation and report were to delineate the extent of soil and groundwater impact related to the former underground storage tanks (USTs) related to Fuel Leak Case No. RO0000188. ACC prepared a Work Plan on April 20, 2011 that was submitted and approved by Alameda County Heath Care Services (ACHCS) to address the November 18, 2010 Notice of Violation. This report summarizes the findings of the investigation outlined in the ACC April 20, 2011 work plan that was conducted to comply with the ACHCS Notice of Violation.

If you have any questions regarding the report, please contact me at (510) 638-8400, ext. 110 or email me at jsiudyla@accenv.com.

Sincerely,

Julia Siudyla Project Geologist

Enclosures



Soil and Groundwater Characterization Report/Request for Low Risk Closure Report Fuel Leak Case No. RO0000188, GeoTracker Global ID T0600100844

2900 Lad Avenue Livermore, California

ACC Project Number: 3054-103.01

Prepared for:

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Senior Hazardous Materials Specialist
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1131 Harbor Bay Parkway
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Soil and Groundwater Characterization Report/Request for Low Risk Closure Report Fuel Leak Case No. RO0000188, GeoTracker Global ID T0600100844

1.0 INTRODUCTION

At the request of the Livermore Valley Joint and Unified School District (LVJUSD), ACC Environmental Consultants (ACC) has prepared this Soil and Groundwater Characterization Report/Request for Low Risk Closure Report summarizing subsurface investigation work performed at Laidlaw Transit- 2900 Ladd Avenue, Livermore California (Site). The primary goals of this investigation and report were to identify the extent of soil and groundwater impact related to the former underground storage tanks (USTs) at the Site. ACC prepared a Work Plan on April 20, 2011 that was submitted and approved by ACHCS to address the November 18, 2010 Notice of Violation. This report summarizes the findings of the investigation outlined in the April 20, 2011 ACC Work Plan that was conducted to comply with the ACHCS 2010 Notice of Violation.

This Soil and Groundwater Characterization/ Request for Low Risk Closure Report is prepared for the express use of LVJUSD, its agents and employees and shall not be relied upon by third party interests unless written authorization is provided by LVJUSD and ACC. The information included in this Report shall be submitted to regulatory agencies overseeing work as required by the work plan approval. This Report is not intended to be used to address items outside the scope of this document or to provide guidance for remedial activities unless otherwise stated.

2.0 BACKGROUND

The Site is located at 2900 Ladd Avenue in Livermore, California (Figure 1). The Site is currently occupied by Laidlaw Transit Maintenance Yard (a.k.a. the LVJUSD Bus Barn). The former Underground Storage Tank complex at the site consisted of three (3) USTs consisting of; 6,000-gallon regular gasoline, 6,000-gallon unleaded gasoline, and a 10,000-gallon diesel (Figure 2). In 1990, the 6,000-gallon regular gasoline UST failed tank tightness testing. As a result a soil boring investigation was conducted that confirmed an unauthorized release. All three USTs that were located on the subject property were removed from the ground in 1992. It should be noted that a forth UST located on an adjacent LVJUSD property was also removed in 1992.

Following tank removal, numerous soil and groundwater investigations were subsequently conducted at the site from 1990 through 2003 in an effort to delineate the extent of impact. These investigations are summarized in Section 2.1 below. The groundwater monitoring and sampling continued until 2003. It is unclear why the groundwater-monitoring program was discontinued. On November 18, 2010 Alameda County Heath Care Services (ACHCS) issued a Notice of Violation to LVJUSD pertaining to Fuel Leak Case Number RO0000188/GeoTracker Global ID T0600100844. ACEHS specifically requested a work plan to evaluate if the existing monitoring wells act as conduits for vertical contamination migration; characterize the magnitude in the shallow and deeper groundwater zones through detailed lithologic assessment; conduct a water supply well survey within 2000 feet of the site; and comply with GeoTracker requirements. ACC prepared a Work Plan on April 20, 2011 that was submitted and approved by ACHS to address the Notice of Violation. This report summarizes the findings of the investigative scope outlined in the April 20, 2011 Work Plan.

2.1 Previous Site Investigations

August 1990 BSK & Associates (BSK) - Soil Boring/Sampling and Chemical Testing Report:

In 1990 the 6,000-gallon regular gasoline UST failed tank tightness testing. As a result of this failure BSK conducted one angled soil boring (EB-1) to obtain a soil samples from underneath the UST. Two soil samples (EB-1, No. 2 and EB-1, No. 3) indicated elevated levels of Total Petroleum Hydrocarbons as Gasoline (TPHg) (1,500-2,300 mg/kg), Benzene (7.3-9.8 mg/kg), Toluene (54-79 mg/kg), Ethylbenzene (22-38mg/kg) and Total Xylenes (140-220 mg/kg) (BTEX). These levels exceeded the 1990 State Water Resource Control Board (SWRCB) Action Levels for TPHg and BTEX.

1990-1991 ENGEO Incorporated (ENGEO) Investigations:

In December of 1990 ENGEO conducted a soil and groundwater study in the vicinity of the site's UST basin. ENGEO conducted three borings and converted one boring into monitoring well MW-1. Both soil and groundwater samples were collected at MW-1. MW-1 was completed to 67 feet bgs and the well screen was set from 42-67 feet below ground surface (bgs). Groundwater was encountered at 57 feet bgs during drilling and stabilized at 10 feet bgs.

Only soil sampling was conducted at the other two soil boring locations (B-1 and B-2). Soil samples indicated petroleum hydrocarbon soil impacts from 15- 40 feet bgs. The groundwater sample from MW-1 indicated TPHg at 1,400 ppb (ug/L), Benzene at 63 ppb (μ g/L), Ethylbenzene at 8 ppb (μ g/L), Toluene at 52 ppb (μ g/L), and Xylenes at 590 ppb (μ g/L).

It should be noted that during this investigation ENGEO punctured the 6,000-gallon regular gasoline UST. However, the UST was reportedly empty and no fuel was released.

1992 ENGEO Investigations:

In July and August of 1992 ENGEO conducted a groundwater-sampling event, well destruction, and removed the three (3) USTs. Groundwater sampling conducted on July 1, 1992 from MW-1 reported elevated concentrations of petroleum constituents. Well MW-1 was destroyed on July 9, 1992. In August of 1992 the remaining product and USTs were removed. A forth UST located on an adjacent LVJUSD property was also removed. At the time of the removal 13-soil verification samples were collected from beneath the USTs, product piping and dispensers. TPHg was detected at levels exceeding the laboratory detection limits under the north end of the leaded gasoline UST and under the unleaded gasoline dispenser. Total Petroleum Hydrocarbons as Diesel (TPHd) was detected at levels exceeding the laboratory detection limits the north end of the leaded gasoline UST and under the diesel dispenser. Soil over-excavation was conducted under the unleaded gasoline and diesel dispensers. Approximately 40 cubic yards (20 cubic yards from the UST basin and 20 cubic yards from the dispenser areas) of soil was removed and disposed of off site.

1993 ENGEO Investigations:

On July 8, 1993 ENGEO published a Soil and Groundwater Investigation Report that summarized results for 6 soil borings and the installation of MW-2, which was completed to 57 feet bgs and screened from 32 to 57 feet bgs. Information obtained from this report indicates that soil and groundwater impacts appear to be confined to the area to the northwest of the former UST Basin.

Soil impacts appear to extend from 15 feet bgs to the top of the water table (approximately 35 feet bgs). Groundwater levels during the 1993 investigation were reported 15 feet higher than the 1992 event and the groundwater concentrations were also reported elevated compared to previous events.

1994 ENGEO Investigations:

In July 1994 ENGEO conducted additional soil, groundwater, and soil gas investigation, which included the installation of monitoring wells MW-3 and MW-4. Both wells were completed to 53 feet bgs. Well MW-3 was screened from 28 to 53 ft bgs and well MW-4 was screened from 26 to 53 feet bgs. The groundwater sample from MW-2 reported 7,000 μ g/L TPHg and 520 μ g/L benzene. Wells MW-3 and MW-4 were both non-detect for TPHg and BTEX. Hydropunch groundwater samples collected from B10 and "A" indicated elevated levels of TPHg and BTEX up to 70,000 μ g/L TPHg and 12,000 μ g/L benzene. Soil samples collected during this investigation reported low to below laboratory detection limits for TPHg and BTEX. Based on the investigation, ENGEO indicated that a perched zone of groundwater was found at test holes B-9, B-10 "A", and in MW-4 at 20 feet bgs.

1998 SCA Environmental Inc. Tier 2 Assessment: Based on the Tier 2 assessment, two exposure pathways were identified at the site: 1) Soil leaching to groundwater and, 2) groundwater ingestion.

1999 ENEGO Investigations:

In July and August of 1999 well MW-5 was installed with a screen interval from 15 to 25 feet bgs. One soil sample was collected and analyzed from this boring (21.5 feet) and was non-detect for TPHg and BTEX. Groundwater from this well was subsequently sampled and indicated elevated levels of TPHg and BTEX up to 92,000 μ g/L TPHg and 9,900 μ g/L benzene. MTBE was below laboratory detection limits.

Groundwater monitoring:

Periodic groundwater monitoring and sampling was conducted from 1995 through 2003. Initial sampling events reported detectable concentrations of constituents in well MW-2 and periodic detections in the other wells. In 2001, sheen was noted on the groundwater collected from MW-5. Depth to groundwater and groundwater flow direction were reported to vary seasonally. Comprehensive Soil and Groundwater sample results are summarized in Soil and Groundwater Summary Tables included as Table 1 and Table 2.

2011 ACC Groundwater Monitoring Event:

In March of 2011 three monitoring wells were gauged and sampled. Depth to water in the wells ranged from 22.52 to 23.48 feet below top of well casing. During this event wells MW-2 and MW-3 were non-detect for TPHg and BTEX, MW-4 was not sampled due to its location under the hockey rink, and MW-5 had detections of TPHg and BTEX. No Free Product was observed. Groundwater flow direction was not calculated.

All Previous sample locations are provided on Figure 3- Historical Sample Location Map.

3.0 SITE GEOLOGY

Based on ACC's initial site review, the existing network of four onsite monitoring wells appear to be screening in two water-bearing zones that have been identified below the site; Zone A at approximately 20 feet bgs (monitored by MW-5) and Zone B at approximately 35-55 feet bgs. Zone A appears to be a seasonal perched zone that does not appear to be horizontally continuous as it was only encountered during drilling of B-5/MW-2 and MW-5. Zone B appears to be monitored exclusively by well MW1 at 42 to 67 feet bgs. Depth to groundwater varies seasonally. Since only well MW5 was completed in the shallow zone, the groundwater flow direction in Zone A was not determined.

3.1 Regional Hydrogeology

According to the September 2005 *Groundwater Management Plan* prepared by the Zone 7 Water Agency (Zone 7), the site is located in the Mocho II Sub-Basin of the Main Livermore-Amadore Valley Groundwater Basin. Zone 7 Water Agency extracts groundwater from this basin for municipal drinking water. Sediments in this basin are described as recent alluvium consisting of sandy gravel and sandy clayey gravel from the surface to approximately 150 feet below grade (fbg). This alluvium overlies the Livermore Formation.

3.2 Site lithology

Based on the boring and well logs for the site, there appears to be shallow gravel/sand unit at approximately 12 to 25 feet bgs that is periodically saturated. The shallow unit was encountered in a majority of the borings B5 through B10, and MW1 – 5, however, during the initial investigation work conducted in 1990 B1 – B4 and MW-1 (Dec 1990) and during the ACC 2011 site characterization work (ACC2-ACC5), no free water was encountered in the shallow unit (Zone A). It is likely that this unit may have become saturated after completion of the monitoring wells that were completed with screens and well pack intervals that extended into to the shallow zone.

In general from review of the logs, a 6 to 10 foot thick fine-grain unit (clay to silt) was noted across the site that was found to separate the upper shallow unit with a deeper water-bearing zone. The deeper zone was noted in the logs as occurring in gravel/sandy zone at approximately 45 feet bgs and extends to the depth investigated of 67 feet bgs.

The well screens and sand pack for wells MW-2 through MW-4 extend from the deeper zone through the fine-grain clay layer separating the shallow and deeper zones and into the shallow zone. Well MW-5 was constructed to screen the shallow zone only and did not extend into the deeper zone. The majority of the residual soil impacts appear to be in the shallow permeable zone and extend into the fine-grain soil above the deeper water-bearing zone (11 to 36 feet bgs). No soil impacts were reported in the deeper permeable zone.

In reviewing the borings logs, it appears that soil logging and soil interpretation varied from the early 1990 through 2011. Because there appears to be some inconsistency in historical logging, our interpretation of the lithologic subsurface conditions are approximated and based on the observations made during our investigation in September 2011. Cross sections A-A' (Figure 8) and B-B' (Figure 9) illustrate the approximate subsurface conditions.

3.3 Hydrogeology

Previous groundwater monitoring of the existing wells associated with the site have found the depth to groundwater to range from 17.28 ft bgs to 39.5 ft bgs in the deeper screened wells (MW-1 through MW-4) and from 20.19 ft bgs to 24.35 ft bgs in the shallow screened well (MW-5). It is unknown if the monitoring wells have been surveyed to an established benchmark, and since the well screens for wells MW2 through MW4 appear to extend through two zones, the groundwater flow direction was not calculated for the site. Based on sites in the area, the regional groundwater flow is generally varies from north to west.

Full descriptions of these sampling methods are described below in Section 3.0. Detailed cross sections are included as Figures 8 and 9. A Well Construction Details from the previously installed monitoring wells is summarized in Table 3.

4.0 FIELD INVESTIGATION METHODS

4.1 Soil Borings (Hollow Stem Auger) and Soil Sampling

During the week of September 12th to 16th, 2011, ACC's Project Geologist, Julia Siudyla, performed eight (8) soil borings in an effort to delineate the extent of soil and groundwater impact at the Site. These soil borings were conducted to a max depth of 65 feet below ground surface (bgs) with a portable sampling rig equipped with 6-inch hollow stem augers. The ground surface immediately adjacent to the boring was measured and compared with a datum to measure sample depth. The horizontal location of each boring was measured from a permanent site fixture with a measuring tape/wheel.

Soil samples were collected from select depth intervals (5 foot to 10 foot intervals depending on indications of field impact). Additional samples for analysis were also collected at the first encountered water, lithologic changes, or areas depicting field impact. Samples were collected utilizing a hollow-stem auger equipped with 140 lb hammer equipped with a split barrel sampler lined with stainless steel or brass sampling tubes (18-inch sample). Samples were obtained by driving the sampler into undisturbed soil. Once retrieved, the stainless steel lines that contained samples intended for laboratory analysis were immediately covered with polyethylene sheeting and tight-fitting plastic caps, or filed preserved via EPA Method 5035, labeled, placed in resealable plastic bags, and placed in a pre-chilled insulated container and prepared for transport and analysis using standard chain of custody protocol. Soil samples collected for analysis were sealed and cooled as soon as feasible to minimize potential volatilization. All samples were in a locked vehicle or in direct observation at all times.

The subsurface materials in the soil borings were logged using the Unified Soil Classification System. All sample intervals were field screened with a Photoionization Detector (PID). All sampling equipment was either new disposable equipment or pre-cleaned, stainless steel sampling equipment. Decontamination of the 6-inch hollow stem augers, hand auger, and samplers was performed between sample locations by washing the equipment with a tap water and Alconox cleaning solution, rinsing the equipment with clean tap water, and a final rinse with tap water. New clean nitrile surgical gloves were worn at each new sample location and at each new depth at each sample location.

Prior to conducting all invasive work, ACC contacted Underground Service Alert (USA), underground utility locator to mark all utilities at the subject property. ACC obtained a drilling permit from Zone 7 Water District for this scope of work. A copy of the permit is attached.

After completion of the soil boring and under the supervision of Zone 7 Water District, the soil borings were backfilled by via tremie with cement grout or cement grout/sand mixture (cement slurry consisting of approximately six gallons of water mixed with 94 pounds of Portland cement). The cement slurry was prepared with an electric mixing rod to minimize cement lumps in the slurry mix. The surface of the soil boring was covered with approximately 3 to 6 inches of concrete and colored to match the existing surface. All cuttings remaining or unused were containerized the containers were clearly labeled to the ownership of the container and labeled (pending disposal) Once analytical results were obtained all drums and containers were hauled to an offsite disposal facility, US Ecology. Copies of the disposal receipts are attached.

4.2 Grab Groundwater Sampling

Grab groundwater samples were collected with the use of a PVC schedule 40, 2-inch, temporary monitoring wells. Each soil boring was conducted to the respective depth of interest (65 feet bgs or five feet below the depth in which groundwater was first encountered) and the temporary monitoring well were set with a 5-foot long screen, which was exposed to the formation. Grab groundwater samples were collected using low-flow, low-turbidity techniques. The amount of sediment and turbidity observed in the water samples was noted on field logs. Grab groundwater samples were collected into laboratory-supplied 40-milliliter sample vials without headspace, and 1-liter amber bottles, labeled and immediately sealed and cooled to minimize potential volatilization.

4.3 Soil Borings (MIP)

ACC conducted three (3) CPT borings utilizing Columbia Technologies High Resolution Vertical Profiling Membrane Interface Probe (MIP). The MIP borings were completed adjacent to soil borings ACC2, ACC4, and ACC5 to evaluate the subsurface lithology and areas of higher residual impacts. The Subsurface Characterization MIP report prepared by Columbia Technologies is provided in Appendix D.

4.4 Groundwater Monitoring

In March of 2011 three monitoring wells were gauged and sampled. Depth to water in the wells ranged from 22.52 to 23.48 feet below top of well casing. During this event wells MW-2 and MW-3 were non detect for TPHg and BTEX, MW-4 was not sampled due to its location underneath the hockey rink, and MW-5 had detections of TPHg and BTEX. No Free Product was observed. Groundwater flow direction was not calculated.

The groundwater analytical data from this monitoring event is summarized in Table 2.

4.5 Analytical Methods

An EPA certified analytical laboratory analyzed all soil and groundwater samples. All soil and groundwater samples were analyzed for the following:

 Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) and MtBE by EPA Method 5035/8260B. Total Petroleum Hydrocarbons purgeable (as gasoline) (TPHg) by EPA Method 5035/8015B.

At soil boring location ACC-7 near the southeastern corner of the UST basin, and drain the following analysis were conducted per ACEHS request:

- Soil samples were collected for laboratory analysis from zones where visible staining, odor, or elevated PID readings were observed and to define the vertical extent of contamination. At minimum, samples were recommended to be obtained for analysis at 5, 10, 15, 20, and 25 feet bgs or in a manor sufficient to define the potential soil impacts.
- Soil samples collected at 25 feet were analyzed for Total Petroleum Hydrocarbons as gasoline using EPA method 5035/8015B, volatile organic compounds (full scan including chlorinated solvents) using EPA Method 5035/8260B, organochlorine pesticides using EPA Method 8081A or equivalent, and CAM 17 metals using EPA Method 6000/7000 series. Soil samples collected below a depth of 25 feet bgs were analyzed for Total Petroleum Hydrocarbons as gasoline using EPA method 5035/8015B and BTEX and MTBE using EPA Method 5035/8260B.
- The grab groundwater samples were analyzed for Total Petroleum Hydrocarbons as gasoline using EPA method 5035/8015B, volatile organic compounds (full scan including chlorinated solvents) using EPA Method 5035/8260B, and organochlorine pesticides using EPA Method 8081A or equivalent.

5.0 FIELD OBSERVATIONS

5.1 Hollow Stem Auger Soil Boring and Samples

Soil Boring ACC-1:

This soil boring is located on the northwestern side of the hockey rink located at the Site. This soil boring was conducted to a total depth of 50 feet bgs. Soil samples submitted for analysis were collected at 13.5-15' feet bgs (sample ACC-1 (13.5-15')) and at 33.5-35 feet bgs (sample ACC-1 (33.5-35')). All sample intervals were field screened with a PID. No obvious signs (staining, olfactory odors, or positive PID response) of impact were observed. Soils encountered consisted of brown to dark yellowish brown to very dark grayish brown gravelly sand, clayey gravel, clay, silty sand, and silty clay. Groundwater was not encountered during the boring but equilibrated to approximately 39.5 feet bgs. The groundwater sample was clear during sample collection. Siltstone bedrock and drilling refusal was encountered at 50 feet bgs.

Soil Boring ACC-2:

This soil boring is located on the southwestern side of the hockey rink located at the Site, near MW-gs3. This soil boring was conducted to a total depth of 60 feet bgs. Soil samples submitted for analysis were collected at 18.5-20' feet bgs (sample ACC-2 (18.5-20')) and at 38.5-40 feet bgs (sample ACC-2 (38.5-40')) in this soil boring. All sample intervals were field screened with a PID. No obvious signs (staining, olfactory odors, or positive PID response) of impact were observed. Soils encountered consisted of brown to dark yellowish brown clay, fine to medium-grained sands with silt and gravels. Groundwater was encountered at 48.5 feet bgs and equilibrated to approximately 46 feet bgs. The groundwater sample was observed to be slightly turbid during sample collection.

Soil Boring ACC-3:

This soil boring is located on the southern side of the batting cages at the Site, near MW-5. This soil boring was conducted to a total depth of 60 feet bgs. Soil samples submitted for analysis were collected at 8.5-10 feet bgs (sample ACC-3 (8.5-10')), at 18.5-20 feet bgs (sample ACC-3 (18.5-20')), at 23.5-25 feet bgs (sample ACC-3 (23.5-25')), and at 33.5-35 feet bgs (sample ACC-3 (33.5-35')). All sample intervals were field screened with a PID. Obvious signs of impact (staining, olfactory odors, or positive PID response) were noted in the boring from approximately 10 to 30 feet bgs in this boring. Samples ACC-3 (18.5-20'), ACC-3 (23.5-25'), ACC-3 (28.5-30'), and ACC-3 (33.5-35') elicited a positive PID response ranging from 0.331 to 458 PPM. Grayish staining and a mild to strong gas odor were observed in samples ACC-3 (18.5-20'), ACC-3 (23.5-25'), and ACC-3 (28.5-30'). Soils encountered consisted of very dark grayish brown to dark brown to dark yellowish brown sandy clay, clayey sand, clay with silty sand, and gravelly clay. Groundwater was encountered at 40 feet bgs and equilibrated to approximately 39 feet bgs. The groundwater sample was observed to be turbid during sample collection.

Soil Boring ACC-4:

This soil boring is located on the northeastern side of the batting cages, northwest of the UST excavation at the Site. This soil boring was conducted to a total depth of 65 feet bgs. Soil samples submitted for analysis were collected at 8.5-10 feet bgs (sample ACC-4 (8.5-10')), at 18.5-20 feet bgs (sample ACC-4 (18.5-20')), at 23.5-25 feet bgs (sample ACC-4 (23.5-25')), and at 48.5-50 feet bgs (sample ACC-4 (48.5-50'). All sample intervals were field screened with a PID. Obvious signs of impact (staining, olfactory odors, or positive PID response) were noted in this boring from approximately 10 to 40 feet bgs. Samples ACC-4 (18.5-20') and ACC-4 (23.5-25') elicited a positive PID response ranging from 0.592 to 1,281 PPM. Gray staining and a mild to strong gas odor were observed in both samples. Soils encountered consisted of very dark grayish brown to grayish brown to dark yellowish brown to brown sandy clay, clayey sand, with silts and gravel. Coarse gravel was encountered from approximately 55 to the total depth explored (65 feet bgs). Groundwater was encountered during the boring at 43.5 feet bgs and equilibrated to approximately 41.15 feet bgs. The groundwater sample was clear during sample collection.

Soil Boring ACC-5:

This soil boring is located on the northern side of the batting cages, northwest of ACC4 at the Site. This soil boring was conducted to a total depth of 65 feet bgs. Soil samples submitted for analysis were collected at 18.5-20 feet bgs (sample ACC-5 (18.5-20')) and at 38.5-40 feet bgs (sample ACC-5 (38.5-40')). All sample intervals were field screened with a PID. Obvious signs of impact (staining, olfactory odors, or positive PID response) were noted in this boring from approximately 10 to 40 feet bgs. Samples ACC-5 (18.5-20') and ACC-5 (38.5-40') elicited a positive PID response ranging from 0.3 to 499 PPM. Grayish staining and a gas odor were observed in sample ACC-5 (18.5-20'). Soils encountered consisted of dark grayish brown to brown to dark yellowish gray to dark yellowish brown sandy clay, clayey sand with silt and gravel. Groundwater was observed at approximately 43.5 feet bgs. The groundwater sample was clear during sample collection.

Soil Boring ACC-6:

This soil boring is located on the northern side of the batting cages and the northwestern side of the former UST locations at the Site. This soil boring was conducted to a total depth of 45 feet bgs. A soil sample submitted for analysis was collected at 33.5-35 feet bgs (sample ACC-6 (33.5-35')) in this soil

boring. All sample intervals were field screened with a PID. No obvious signs (staining, olfactory odors, or positive PID response) of impact were observed. Soils encountered consisted of very dark grayish brown to brown to dark yellowish brown silty sand, clayey gravel and sandy clay with trace gravel. Groundwater was encountered at approximately 43.5 feet bgs. The groundwater sample was clear during sample collection.

Soil Boring ACC-7:

This soil boring is located on the northwestern side of the Maintenance Building and the eastern side of the former UST locations at the Site. This soil boring was conducted to a total depth of 50 feet bgs. Soil samples submitted for analysis were collected at 13.5-15 feet bgs (sample ACC-7 (13.5-15')) and at 38.5-40 feet bgs (sample ACC-7 (38.5-40') in this soil boring. All sample intervals were field screened with a PID. No obvious signs (staining or olfactory odors) of impact were observed. A slight positive PID response was elicited in sample ACC-7 (38.5-40') ranging from 0.87-2 PPM. Soils encountered consisted of very dark grayish brown to brown to yellowish brown sandy clay with trace gravel. Groundwater was encountered at 45 feet bgs during the boring and equilibrated to approximately 42.6 feet bgs. The groundwater sample was clear during sample collection.

Soil Boring ACC-8:

This soil boring is located on the western side of the Maintenance Building, under the former disperser island located at the Site. This soil boring was conducted to a total depth of 50 feet bgs. Soil samples submitted for analysis were collected at 5-6.5' feet bgs (sample ACC-8 (5-6.5')) and at 43.5-45 feet bgs (sample ACC-8 (43.5-45')) in this soil boring. All sample intervals were field screened with a PID. No obvious signs (staining, olfactory odors, or positive PID response) of impact were observed. Soils encountered consisted of very dark grayish brown to brown to dark yellowish brown sandy clay with silty and trace gravel. Groundwater was encountered during the boring at 48.5 feet bgs and equilibrated to approximately 46.8 feet bgs. The groundwater sample was clear during sample collection.

Boring logs are attached in Appendix B

5.2 MIP Soil Borings

MIP Soil Boring ACC2MIP:

This MIP soil boring is located on the southwestern side of the hockey rink located at the Site. This soil boring was conducted to a total depth of 60 feet bgs. Slightly elevated readings as indicated by the Electron Capture Detector (ECD), Flame Ionization Detector (FID), and Photo Ionization Detector (PID) measured between 25 to 30 feet bgs and more significantly elevated readings were measured between 42 to 60 feet bgs. Based on the electrical conductivity readings, it appears that finer grained materials were encountered between 25 to 35 feet bgs.

MIP Soil Boring ACC4MIP:

This MIP soil boring is located on the northeastern side of the batting cages at the Site. This soil boring was conducted to a total depth of 60 feet bgs. Elevated peaks were indicated by the ECD at 14 ft bgs, 18 feet bgs, and 28 ft bgs, the FID had elevated readings from 13 to 30 ft bgs, and the PID readings exceeded the equipment calibration scale at depths from 13 to 60 ft bgs. Based on the electrical

conductivity readings, it appears that finer grained materials were encountered between 29 to 33 feet bgs.

MIP Soil Boring ACC5MIP:

This MIP soil boring is located on the northern side of the batting cages at the Site. This soil boring was conducted to a total depth of 60 feet bgs. Slightly elevated ECD readings were encountered throughout the entire depth of this boring, elevated peaks were measured on the FID at 45ft bgs, 55 ft bgs, and 59 ft bgs, and elevated PID readings were measured between 13 to 28 feet bgs. Based on the electrical conductivity readings, it appears that finer grained materials were encountered between 13 to 18 to 35 feet bgs, 23 to 28 ft bgs and 30 to 33 ft bgs.

A copy of the Columbia Technologies MIP report is included in Appendix D.

6.0 ANALYTICAL RESULTS

All soil sample analytical data is summarized in Table 1 and compared to the following Risk Based Screening Levels (RBSLs):

- The San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for both commercial and residential properties, Interim Final November 2007 (Revised May 2008).
- The California Environmental Protection Agency (EPA)/Integrated Risk Assessment Branch of the Office of Environmental Health Hazard Assessment- California Human Health Screening Levels (CHHSLs), January 2008.
- United States Environmental Protection Agency (US EPA) Region 9-Preliminary Remediation Goals (PRGs) for Residential and Industrial Properties.

All groundwater sample analytical data is summarized in Table 2 and compared to the following Risk Based Screening Levels (RBSLs):

- The San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for where groundwater is a source of drinking water, Interim Final November 2007 (Revised May 2008).
- United States Environmental Protection Agency (US EPA) Region 9-Preliminary Remediation Goals (PRGs), Maximum Contamination Levels (MCLs).

6.1 Soil Analytical Data

6.1.1 September 2011 Soil Boring Soil Samples

All soil samples collected from borings ACC-1 (13.5-15' and 33.5-35'), ACC-2 (18.5-20' and 38.5-40'), ACC-6 (33.5-35'), ACC-7 (13.5-15' and 38.5-40'), and ACC-8 (5-6.5' and 43.5-45') were all non-detect for TPHg, BTEX and MtBE.

In soil boring ACC-3 both the shallow soil sample ACC-3 (8.5-10') and the deep soil sample ACC-3 (33.5-.5') were non-detect for TPHg, BTEX, and MtBE. Soil sample ACC-3 (18.5-20') reported detections of TPHg and Benzene. Only the concentration of benzene in this sample exceeded its ESL for both residential and commercial site usage. The soil sample ACC-3 (23.5-25') had detections of

TPHg and Total Xylenes at levels that exceeded their respective ESLs for both residential and commercial site usage. In addition, the reporting limits for Benzene and MtBE (both <2 mg/kg) in soil sample ACC-3 (23.5-25') exceeded their respective ELS for both residential and commercial site usage. No PRGs or CHHSLs were exceeded in any of the soil samples from soil boring ACC-3.

In soil boring ACC-4, the shallow soil sample ACC-4 (8.5-10') was non-detect for TPHg, BTEX, and MtBE. The soil sample ACC-4 (23.5-25') had detections of TPHg and BTEX that exceeded their respective ESLs for both residential and commercial site usage. In, addition the level of benzene detected in ACC-4 (23.5-25') also exceeds its residential PRG. The reporting limit for MtBE (<2.3 mg/kg) in soil sample ACC-4 (23.5-25') also exceeded its ELS for both residential and commercial site usage. The deep soil sample ACC-4 (43.5-45') had detections of TPHg and BTEX, all below the residential and commercial ESLs and PRGs.

In soil boring ACC-5 the soil sample ACC-5 (18.5-20') had detections of TPHg and BTEX that exceeded their respective ESLs for both residential and commercial site usage. In addition, the level of benzene detected in ACC-5 (18.5-20') also exceeds its residential PRG and the reporting limit for MtBE (<1.1 mg/kg) in soil sample ACC-5 (18.5-20') exceeded its ELS for both residential and commercial site usage. Sample ACC-5 (38.5-40') was non-detect for TPHg, BTEX and MtBE.

The additional investigation and soil borings defined the extent of impact remaining at the site. Based on the sample results, only minimal residual impact remains in the soil at approximately 18 to 25 feet bgs and limited in extent immediately adjacent to the former UST excavation, to the northwest area.

6.2 Groundwater Analytical Data

6.2.1 March 2011 Groundwater Monitoring Event

In March of 2011, onsite monitoring wells MW-2, MW-3, and MW-5 were gauged and sampled. MW-4 was not sampled (due to it's location under the hockey rink). Depth to water in the wells ranged from 22.52 to 23.48 feet below top of the well casing. During this event wells MW-2 and MW-3 were non detect for TPHg and BTEX. Only well MW-5 (screened in the shallow perched water-bearing zone) reported elevated concentrations of constituents of TPHg and BTEX exceeded their respective ESLs where groundwater is a source of drinking water. In addition, the reporting limit for MtBE was <500 which exceeds its ESL were groundwater is a source of drinking water. No Free Product was observed.

The groundwater data from this monitoring event is summarized in Table 2.

6.2.2 September 2011 Soil Boring Grab Groundwater Samples

In September 2011 ACC collected eight (8) grab groundwater samples from the eight (8) soil boring locations depicted on Figure 4. Laboratory analysis of grab groundwater samples ACC-1, ACC-2, ACC-6, ACC-7, and ACC-8 were all non-detect for TPHg, BTEX, and MtBE. Laboratory analysis of grab groundwater samples from ACC-3 and ACC-4 had elevated concentrations of TPHg, BTEX and MtBE. Concentrations of TPHg and BTEX in ACC-3 and ACC-4 exceed their respective ESLs were

groundwater is a source of drinking water. The level of MtBE in ACC-3 also exceeds its ESL were groundwater is a source of drinking water. In addition, the levels of Benzene in ACC-3 and ACC-4 and the level of Toluene in ACC-4 also exceed their respective MCLs.

Grab groundwater sample ACC-5 had detections of TPHG and BTEX. The levels of TPHg and Benzene detected in ACC-5 exceed their respective ESLs where groundwater is a source of drinking water.

The grab groundwater sample collected from ACC-7 was analyzed for Total Petroleum Hydrocarbons as gasoline using EPA method 5035/8015B, volatile organic compounds (full scan including chlorinated solvents) using EPA Method 5035/8260B, and organochlorine pesticides using EPA Method 8081A. No elevated concentrations of these constituents were found in ACC-7.

The groundwater data from this soil boring investigation is summarized in Table 2.

7.0 SENSITIVE SITE RECEPTOR SURVEY

Based on the results of the sensitive receptor surveys conducted at sites in the area, there two active water supply wells/drinking water wells within 1/2 mile of the site. However, both of these water supply wells/drinking water wells are located over 0.25 miles from the site. The closer water supply wells/drinking water well is located upgradient from the site and the second water supply wells/drinking water well is located approximately 0.46 miles northwest (downgradient) from the site.

As presented on Figure 6, TPHg and Benzene Iso Concentration Map, the extent of the dissolved plume is appears to be confined to the immediate downgradient vicinity of the UST basin around MW-2 and MW-5 on the site. The properties downgradient and surrounding the site are residential homes and an elementary school. However, based on the confined extent of the plume and the lack of any onsite structures over the plume, the potential risk of residual plume to affect human health or the environment is considered low. Groundwater flow direction has been measured in previous groundwater monitoring events at the site to be to the North-Northwest. Therefore, the potential for impact from the onsite plume is minimal.

8.0 DISCUSSION

The primary goals of this investigation and report were to identify the extent of soil and groundwater impact related to the former underground storage tanks (USTs) at the Site.

ACC advanced eight (8) exploratory soil borings in select locations relative to probable sources, such as the former UST locations and the dispenser islands/pump locations. The soil boring locations were selected to define the extent of soil impact. The boring locations were also selected to evaluate the extent of groundwater impact. Based on the results of the investigation, the extent of residual impact in the soil is limited to the immediate area northwest of the former tank excavation in shallow soils from approximately 18 to 25 feet bgs in a limited area surrounding boring ACC-4. The lateral extent of soil impact as delineated by borings ACC-3, ACC-5, and ACC-7.

Grab groundwater samples collected from the borings confirm the limited extent of the plume, as presented in Figure 6, the extent is defined by borings ACC2, ACC5, ACC6, ACC-7, and ACC-8.

Based on the findings from the additional investigation and limited extent of residual impact, the site appears to meet the San Francisco Bay Area Regional Water Quality Control Board's criteria for a low-risk site whereas:

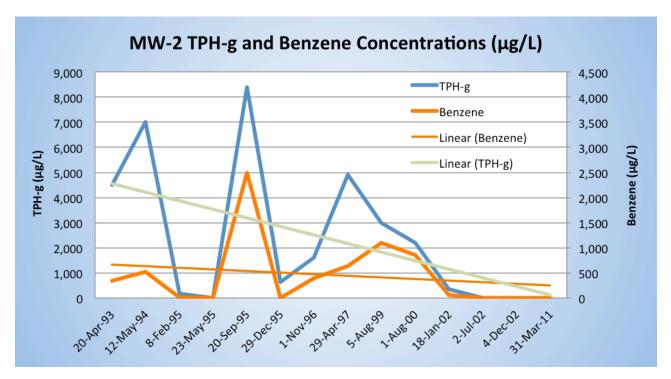
- Contaminants remaining in the vadose zone must not reverse or threaten to reverse the mass reduction rate of groundwater pollutants.
- Separate-phase product has been removed to the extent practicable.
- No existing water supply wells, deeper aquifers, surface water or other receptors are threatened by pollutants remaining in the aquifer.
- The total pollutant mass remaining in the groundwater is decreasing at predicted rates and neither creates a risk to human health and safety or future beneficial uses(s) of the aquifer.

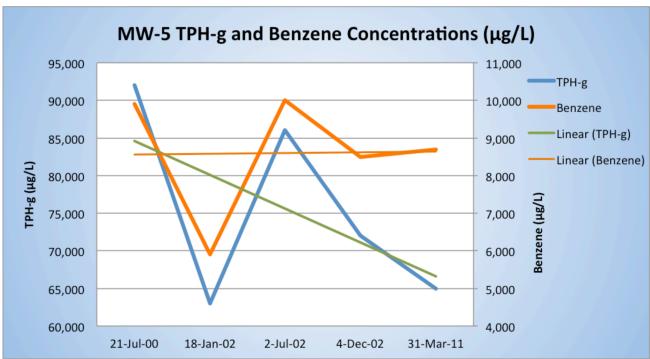
Each of the low-risk groundwater case characteristics, as they relate to the site, is discussed below.

Contaminants remaining in the vadose zone must not reverse or threaten to reverse the mass reduction rate of groundwater pollutants:

Petroleum hydrocarbons concentrations as TPHg, BTEX, and MtBE reported the grab groundwater sampling and groundwater monitoring events conducted are decreasing over time as presented in the graph of TPHg and Benzene concentrations over time, with the exception of benzene in MW-5. However, MW-5 is the only monitoring well screened in the shallow seasonal perched water bearing zone from 15-25 feet bgs. Adjacent monitoring well MW-2 reported no detectable concentrations above laboratory reporting limits. Due to the limited lateral extent of the shallow perched water-bearing zone, it is likely that the levels of TPHg and BTEX found in this well are more indicative of residual soil impacts rather than groundwater contamination.

Based on results of groundwater monitoring conducted following remedial action (soil excavation in 1992), the overall concentrations in the source area well (MW-2) have decreased with time. It is evident that the residual impact is degrading over time and therefore, unlikely that residual constituents in the vadose zone will reverse or threaten to reverse the mass reduction rate of groundwater pollutants.





Separate-Phase product has been removed to the extent practicable: No evidence of significant volumes of separate-phase hydrocarbons have been observed or reported in the borings or monitoring wells following over-excavation activities.

No existing water supply wells, deeper aquifers, surface water or other receptors are threatened by pollutants remaining in the aquifer: Based on the results of the sensitive receptor surveys conducted at sites in the area, there two active water supply wells/drinking water wells within 1/2 mile of the site. Both of these water supply wells/drinking water wells are located over 0.25 mile from the site. The closer water supply wells/drinking water well is located south from the site and the second water supply wells/drinking water well is located approximately 0.46 mile southwest from the site. Figure 5 illustrated the well locations.

As presented on Figure 6, TPHg Iso-concentration Map, the extent of the dissolved plume is appears to be confined to the immediate downgradient vicinity of the UST basin around MW-5 on the site. As compared to the 2000 groundwater plume, the residual groundwater plume is shrinking and confined to the shallow perched zone onsite.

The properties downgradient and surrounding the site are residential homes and an elementary school. However, based on the limited extent of the plume and the lack of any onsite structures over the plume, the potential risk of residual plume to affect human health or the environment is considered low since the residual impact is localized in the soil immediately adjacent to the former tank excavation at depths from 18 to 25 feet bgs. Groundwater flow direction has been measured in previous groundwater monitoring events at the site to be to the North-Northwest. The regional groundwater flow is generally varies from north to west.

Based on the limited extent of the plume and degraded concentrations over time, the potential for the onsite plume to impact neighboring properties and water supply wells is minimal.

The total pollutant mass remaining in the groundwater is decreasing at predicted rates and neither creates a risk to human health and safety or future beneficial uses(s) of the aquifer: As presented above, only elevated concentrations of TPHg and BTEX remain in the immediate down gradient vicinity of the former tank excavation. The lateral extent of the TPHg and BTEX plume is defined on site and the overall concentration trend is decreasing over time through natural attenuation processes. Based on the work completed to date the site is not a risk to human health, safety, or the environment.

9.0 CONCLUSIONS

Based on sample analytical results, and field observations, ACC has concluded the following:

- The remaining concentrations of TPHg and BTEX reported in the soil samples indicate that the impact is limited to the immediate down gradient vicinity of the former UST basin at depths ranging from 18-25 ft bgs.
- The remaining concentrations of TPHg and BTEX reported in the groundwater samples indicate that the impact is limited to the immediate down gradient vicinity of the former UST

basin. Figure 6 depicts the extent of TPHg and Benzene in groundwater. The plume extends approximately 90 feet laterally from the source area. The majority of the impact appears to be limited to the shallow perched seasonal water-bearing zone that is separated by fine-grain soil. Concentrations in well MW2 and from adjacent grab water samples ACC3 and ACC4 are lower in then groundwater concentrations reported in well MW5, indicating the screen intervals extending into shallower impacted soil may contribute to elevated analyte concentrations in groundwater samples.

- Existing monitoring wells at the site may be constructed to provide seasonal vertical conduits between shallow and the deeper water-bearing zones. Therefore, well abandonment is recommended to eliminate potential vertical preferential pathways.
- Soils at the Site are primarily fine-grained gravely clays with low estimated permeability which limit potential vertical, downward migration of dissolved-phase petroleum hydrocarbons into groundwater, and also minimize potential vertical, upward migration of vapor-phase petroleum hydrocarbons in soil gas;

10.0 RECOMMENDATIONS

Based on conclusions of this investigation, ACC recommends the following:

- Monitoring wells MW2 through MW-4 appear to be constructed to provide potential vertical
 conduit for shallow impacts into the deeper zones. Therefore, the wells should be properly
 abandoning the existing groundwater monitoring wells at the site.
- Based on the limited residual impact and degrading concentrations over time, the residual concentrations in the soil and groundwater pose minimal risk to human health or the environment. Therefore, ACC recommends this site be evaluated for Low Risk Closure.

11.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

TABLE 1 Soil Analytical Summary Table 2900 Ladd Avenue Livermore, California ACC Project Number: 3054-103.01

Inte	sampling Depth / erval - Feet Below bund Surface (bgs) 13.5-15 33.5-35 18.5-20 38.5-40 8.5-10 18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15 38.5-40	Sampling Date 12-Sep-11 12-Sep-11 13-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11 15-Sep-11	Matrix Soil (mg/kg)	<0.240 <0.130 <0.120 <0.120 <0.120 0.52 270 <0.110 <0.110	NT	<0.0049 <0.0027 <0.0024 <0.0024 <0.0023 0.046	<pre><0.0049 <0.0027 <0.0024 <0.0024 <0.0023</pre>	<pre><pre><0.0049 <0.0027 <0.0024 <0.0024 <0.0023</pre></pre>	<0.0098 <0.0053 <0.0048 <0.0048	<0.0049 <0.0027 <0.0024 <0.0024 <0.0023	ТИ
ACC1 (33.5-35) ACC2 (18.5-20') ACC2 (38.5-40') ACC3 (8.5-10') ACC3 (18.5-20') ACC3 (23.5-25') ACC3 (33.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (13.5-15') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MWV1-2	33.5-35 18.5-20 38.5-40 8.5-10 18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	12-Sep-11 13-Sep-11 13-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11	Soil (mg/kg)	<0.130 <0.120 <0.120 <0.120 <0.120 0.52 270 <0.110	NT NT NT NT	<0.0027 <0.0024 <0.0024 <0.0023	<0.0027 <0.0024 <0.0024 <0.0023	<0.0027 <0.0024 <0.0024	<0.0053 <0.0048 <0.0048	<0.0027 <0.0024 <0.0024	NT NT NT
ACC2 (18.5-20') ACC2 (38.5-40') ACC3 (8.5-10') ACC3 (18.5-20') ACC3 (18.5-20') ACC3 (23.5-25') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (6-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	18.5-20 38.5-40 8.5-10 18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	13-Sep-11 13-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg)	<0.120 <0.120 <0.120 0.52 270 <0.110	NT NT NT	<0.0024 <0.0024 <0.0023	<0.0024 <0.0024 <0.0023	<0.0024 <0.0024	<0.0048 <0.0048	<0.0024 <0.0024	NT NT
ACC2 (38.5-40') ACC3 (8.5-10') ACC3 (18.5-20') ACC3 (18.5-20') ACC3 (23.5-25') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	38.5-40 8.5-10 18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	13-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11	Soil (mg/kg)	<0.120 <0.120 0.52 270 <0.110	NT NT NT	<0.0024 <0.0023	<0.0024 <0.0023	<0.0024	<0.0048	<0.0024	NT
ACC3 (8.5-10') ACC3 (18.5-20') ACC3 (18.5-20') ACC3 (23.5-25') ACC4 (3.3.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC5 (18.5-20') ACC5 (18.5-20') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	8.5-10 18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg)	<0.120 0.52 270 <0.110	NT NT	<0.0023	<0.0023	<u> </u>		<u> </u>	
ACC3 (18.5-20') ACC3 (23.5-25') ACC3 (33.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	18.5-20 23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg)	0.52 270 <0.110	NT		ļ	<0.0023	<0.0046	<0.0053	
ACC3 (23.5-25') ACC3 (33.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	23.5-25 33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg) Soil (mg/kg) Soil (mg/kg)	270 <0.110	ļ	0.046			-0.0040	~0.0023	NT
ACC3 (23.5-25') ACC3 (33.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	33.5-35 8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg) Soil (mg/kg)	<0.110	NT		0.0047	0.027	0.097	<0.0021	NT
ACC3 (33.5-35') ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	8.5-10 23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg) Soil (mg/kg)		K	<2	2.7	<2	31	<2	NT
ACC4 (8.5-10') ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg) Soil (mg/kg)	<0.110	NT	<0.0023	0.0024	<0.0023	0.0074	<0.0023	NT
ACC4 (23.5-25') ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	23.5-25 43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 14-Sep-11 15-Sep-11	Soil (mg/kg)		NT	<0.0022	<0.0022	<0.0022	<0.0045	<0.0022	NT
ACC4 (43.5-45') ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	43.5-45 18.5-20 38.5-40 33.5-35 13.5-15	14-Sep-11 15-Sep-11	+	240	NT	2.3	12	2.8	24	<2.3	NT
ACC5 (18.5-20') ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	18.5-20 38.5-40 33.5-35 13.5-15	15-Sep-11	Soil (mg/kg)	0.58	NT	0.02	0.051	0.001	0.058	<0.0047	NT
ACC5 (38.5-40') ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	38.5-40 33.5-35 13.5-15		Soil (mg/kg)	300	NT	1.2	8.7	4.8	30	<1.1	NT
ACC6 (33.5-35') ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	33.5-35 13.5-15	15-Sep-11	Soil (mg/kg)	<0.098	NT	<0.002	<0.002	<0.002	<0.0039	<0.002	N1
ACC7 (13.5-15') ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	13.5-15	15-Sep-11	Soil (mg/kg)	<0.094	NT	<0.002	<0.002	<0.002	<0.0038	<0.002	N1
ACC7 (38.5-40') ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2		16-Sep-11	Soil (mg/kg)	<0.110	NT	<0.0019	<0.0019	<0.0019	<0.0038	<0.0019	N1
ACC8 (5-6.5') ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	36.5-40				NT	<0.0023	<0.0023	<0.0023	ļ	 	
ACC8 (43.5-45') B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	EGE	16-Sep-11	Soil (mg/kg)	<0.120 <0.110	NT	<0.0024	<0.0024	<0.0024	<0.0048 <0.0044	<0.0024 <0.0022	
B1-2 B1-3 B1-5 B1-11 B2-2 MW1-2	5-6.5	16-Sep-11	Soil (mg/kg)		}	+		ļ	 	ļ	
B1-3 B1-5 B1-11 B2-2 MW1-2	43.5-45	16-Sep-11	Soil (mg/kg)	<0.120	NT	<0.0023	<0.0023	<0.0023	<0.0047	<0.0023	N ⁻
B1-5 B1-11 B2-2 MW1-2	16	13-Dec-90	Soil (mg/kg)	1.1	NT	0.18	0.036	0.0053	0.032	NT	N
B1-11 B2-2 MW1-2	21	13-Dec-90	Soil (mg/kg)	1.5	NT	0.16	0.071	0.0081	0.051	NT	N
B2-2 MW1-2	31	13-Dec-90	Soil (mg/kg)	ND	NT	0.013	ND	ND	ND	NT	N
MW1-2	44	13-Dec-90	Soil (mg/kg)	ND	NT	0.004	ND	ND	ND	NT	N
	16	13-Dec-90	Soil (mg/kg)	ND	NT	0.016	0.0026	ND	ND	NT	N
MW1-4	16	13-Dec-90	Soil (mg/kg)	970	NT	8.1	27	13	27	NT	N
	26	13-Dec-90	Soil (mg/kg)	1,000	NT	ND	27	10	53	NT	N
MW1-6	36	13-Dec-90	Soil (mg/kg)	2,700	NT	ND	27	10	53	NT	N
MW1-8	46	13-Dec-90	Soil (mg/kg)	ND	NT	0.001	0.004	ND	0.0099	NT	N
EB-1, No. 2	14	25-Jul-90	Soil (mg/kg)	2,300	NT	9.8	79	38	220	NT	NΊ
EB-1, No. 3	17	25-Jul-90	Soil (mg/kg)	1,500	NT	7.3	54	22	140	NT	N
T2-1N	11.5	6-Aug-92	Soil (mg/kg)	ND	37	ND	ND	ND	ND	NT	N
T2-1S	12	6-Aug-92	Soil (mg/kg)	NT	ND	ND	ND	ND	ND	NT	N
T3-1N	11.5	6-Aug-92	Soil (mg/kg)	ND	Nt	ND	ND	ND	ND	NT	N'
T3-1S	12	6-Aug-92	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	N
T4-1N	11.5	6-Aug-92	Soil (mg/kg)	1,200	NT	2.1	4.2	2.4	160	NT	12
T4-1S	12	6-Aug-92	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	8.
PL-1	4	6-Aug-92	Soil (mg/kg)	ND	ND	ND	ND	ND	ND	NT	N ⁻
PL-2	4	6-Aug-92	Soil (mg/kg)	ND	ND	ND	ND	ND	ND	NT	N'
DP-1	3.75	6-Aug-92	Soil (mg/kg)	NT	46	ND	ND	ND	ND	NT	N ⁻
RULP-1	3.5	6-Aug-92	Soil (mg/kg)	3	NT	ND	ND	0.0074	0.013	NT	12
RLP-1	3.75	6-Aug-92	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	N
Re	esidential Land Use	Shallow Soil (<u><</u> 3 m)	Soil (mg/kg)	83	83	0.044	2.9	2.30	2.26	0.023	20
ESLs - Groundwater is a rrent source of drinking		Deep Soil (>3 m)	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	75
water Con	ommercial / Industrial Land Use	Shallow Soil (<3 m) Deep Soil	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	75
		(>3 m)	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	75
PRG's		Residential	Soil (mg/kg)	NA	NA	1.1	5,000	5.4	630	43	40
		Commercial	Soil (mg/kg)	NA	NA	5.4	46,000	27	2,700	220	80
alifornia Human Health		Residential	Soil (mg/kg)	NA	NA	NA	NA	NA	NA	NA	80

TABLE 1 Soil Analytical Summary Table 2900 Ladd Avenue Livermore, California

ACC Project Number: 3054-103.01

	Sampling Depth / Interval - Feet Below Ground Surface (bgs)			Constituents & Concentrations mg/kg								
Boring / Sample ID		Sampling Date	Matrix	ТРН9	PH4T	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Lead	
B4-2	21	9-Apr-93	Soil (mg/kg)	800	9.1	1.9	22	8.1	56	NT	NT	
B4-3	26	9-Apr-93	Soil (mg/kg)	2,300	ND	7.7	88	35	210	NT	NT	
B4-4	30.5	9-Apr-93	Soil (mg/kg)	31	ND	0.051	0.64	3.5	2.4	NT	NT	
B5-2	20.5	9-Apr-93	Soil (mg/kg)	790	ND	2.8	21	6.7	4.1	NT	NT	
B5-3	25.5	9-Apr-93	Soil (mg/kg)	24	ND	0.052	0.62	3.3	2.2	NT	NT	
B5-4	36	9-Apr-93	Soil (mg/kg)	1.1	ND	0.23	0.0083	ND	0.13	NT	NT	
B5-5	41	9-Apr-93	Soil (mg/kg)	ND	ND	ND	ND	ND	ND	NT	NT	
B6-1	15.5	9-Apr-93	Soil (mg/kg)	860	46	ND	13	83	55	NT	NT	
B6-2	21	9-Apr-93	Soil (mg/kg)	530	120	1.9	17	73	44	NT	NT	
B6-3	26	9-Apr-93	Soil (mg/kg)	1,200	ND	4.1	39	150	100	NT	NT	
B6-4	31	9-Apr-93	Soil (mg/kg)	410	ND	ND	4.5	35	22	NT	NT	
B7-1	16	9-Apr-93	Soil (mg/kg)	670	ND	1.2	16	97	58	NT	NT	
B7-2	21	9-Apr-93	Soil (mg/kg)	46	ND	0.19	1.3	6	3.6	NT	NT	
B7-3	26	9-Apr-93	Soil (mg/kg)	480	ND	ND	6.7	40	25	NT	NT	
B7-4	31	9-Apr-93	Soil (mg/kg)	65	ND	8.4	1.3	7.5	4.8	NT	NT	
B8-2	21	9-Apr-93	Soil (mg/kg)	18	ND	1.6	3.1	3.3	2.2	NT	NT	
B8-3	26	9-Apr-93	Soil (mg/kg)	ND	ND	0.08	0.77	0.11	0.73	NT	NT	
B8-4	30.5	9-Apr-93	Soil (mg/kg)	ND	ND	0.05	0.20	0.005	0.37	NT	NT	
MW3-1	10	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-2	15	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-3	20	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-4	25	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-5	30	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-6	35	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW3-7	40	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-1	10	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-2	15	1-Jul-94	Soil (mg/kg)	26	NT	0.21	0.75	0.21	1.4	NT	NT	
MW4-3	20	1-Jul-94	Soil (mg/kg)	44	NT	0.25	0.70	0.28	2.3	NT	NT	
MW4-4	25	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-5	30	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-6	35	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-7	40	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW4-8	45	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
B9-1	15	1-Jul-94	Soil (mg/kg)	ND	NT	0.074	0.008	0.011	0.059	NT	NT	
B9-2	20	1-Jul-94	Soil (mg/kg)	640	NT	4.2	23	10	70	NT	NT	
B9-3	25	1-Jul-94	Soil (mg/kg)	ND	NT	0.12	0.013	ND	0.02	NT	NT	
B10-1	14	1-Jul-94	Soil (mg/kg)	3	NT	0.5	0.57	0.11	0.62	NT	NT	
B10-2	18	1-Jul-94	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	NT	NT	
MW5-4	22	28-Jun-00	Soil (mg/kg)	ND	NT	ND	ND	ND	ND	ND	NT	
	Residential Land Use	Shallow Soil (<3 m) Deep Soil	Soil (mg/kg)	83	83	0.044	2.9	2.30	2.26	0.023	200	
**ESLs - Groundwater is a current source of drinking		(>3 m)	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	750	
water	Commercial / Industrial	Shallow Soil (< 3 m)	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	750	
	Land Use	Deep Soil (>3 m)	Soil (mg/kg)	83	83	0.044	2.9	3.27	2.26	0.023	750	
BB CI		Residential	Soil (mg/kg)	NA	NA	1.1	5,000	5.4	630	43	400	
PRG's		Commercial	Soil (mg/kg)	NA	NA	5.4	46,000	27	2,700	220	800	
California Human Health		Residential	Soil (mg/kg)	NA	NA	NA	NA	NA	NA	NA	80	
creening Levels (CHHSLS)		Commercial	Soil (mg/kg)	NA	NA	NA	NA	NA	NA	NA	320	

NT: Not Tested; NM: Not Measured; NS: Not Sampled

*-- No Data

Shadeded/Bolded Values Exceed Their Respective Criteria

^{**}ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where Groundwater IS a Current Source of Drinking Water PRGs=EPA Region 9 Preliminary Remediation Goal (April 2009)
CHHSLs = California Human Health Screening Levels for Soil, Cal EPA (January 2005) (Lead Revision September 2009)

TABLE 2 Groundwater Analytical Summary Table 2900 Ladd Ave Livermore, CA

ACC Project Number: 3054-103.01

				Constituents and Concentrations (µg/L)							
Boring / Well ID	Sampling Date	Matrix	DTW (in feet)	ТЕРН-9	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE		
ACC-1	12-Sep-11	Water	39.5	<50	<0.50	<0.50	<0.50		<0.50		
ACC-2	13-Sep-11	Water	48.5	<50	<0.50	<0.50	<0.50	<1.0	<0.50		
ACC-3	14-Sep-11	Water	39	4,100	170	260	100	1,000	20		
ACC-4	14-Sep-11	Water	41.15	14,000	1,500	1,900	500	2,500	4.5		
ACC-5	15-Sep-11	Water	43.5	100	1.7	8.9	4.4	19	<0.50		
ACC-6	15-Sep-11	Water	43.5	<50	<0.50	<0.50	<0.50	<1.0	<0.50		
ACC-7	16-Sep-11	Water	42.6	<50	<0.50	<0.50	<0.50	<1.0	<0.50		
ACC-8	16-Sep-11	Water	46.8	<50	<0.50	<0.50	<0.50	<1.0	<0.50		
AMA/ O	20-Apr-93	Water	30.81	4,500	340	110	8	630	NT		
MW-2	12-May-94	Water	31.12	7,000	520	220	35	410	NT		
	8-Feb-95	Water	28.04	170	8.9	4.5	2.1	17	NT		
	23-May-95	Water	17.77	<50	<0.5	<0.5	<0.5	<0.5	NT		
	20-Sep-95	Water	25.55	8,400	2,500	1,200	180	940	NT		
	29-Dec-95	Water	20.91	640	0.7	<0.5	1.9	4.7	NT		
	1-Nov-96	Water	22.63	1,600	390	140	25	120	NT		
	29-Apr-97	Water	20.39	4,900	640	240	83	200	<250		
	5-Aug-99	Water	26.18	3,000	1,100	370	97	240	<25		
	1-Aug-00	Water	23.96	2,200	850	240	74	240	<50		
	18-Jan-02	Water	30.85	350	62	0.85	0.82	2.5	<5		
	2-Jul-02	Water	33.45				-				
	4-Dec-02	Water	36.21								
	31-Mar-11	Water		<50	<0.5	<0.5	<0.5	<1	<0.5		
MAA 2	12-Jul-94	Water	38.76	<50	<0.5	<0.5	<0.5	<0.5	NT		
MW-3	8-Feb-95	Water	27.08	<50	<0.5	<0.5	<0.5	<0.5	NT		
	23-May-95	Water	17.28	<50	<0.5	<0.5	<0.5	<0.5	NT		
	20-Sep-95	Water	25.06	<50	1.4	<0.5	<0.5	<0.5	NT		
	29-Dec-95	Water	20.25	50	1.8	<0.5	<0.5	<0.5	NT		
	1-Nov-96	Water	22.22	<50	<0.5	<0.5	<0.5	<0.5	NT		
	29-Apr-97	Water	20.05	<50	1.7	<0.5	<0.5	<0.5	<5		
	5-Aug-99	Water	26.07	<50	<0.5	<0.5	<0.5	<0.5	<5		
	20-Jul-00	Water	23.35	<50	1.4	3.6	<0.5	3.9	<5		
	18-Jan-02	Water	30.5	<50	<.5	<0.5	<0.5	<0.5	<5		
	2-Jul-02	Water	33.53								
**ESLs	Groundwater is a Current or Potential Source of Drinking Water	Water		100	1	40	30	20	5		
PRG's	MCLs	Water		NA	5	1,000	7,000	10,000	NA		

ACC Environmental Consultants, Inc. • 7977 Capwell Drive, Suite 100, Oakland, CA 94621 • (510) 638-8400 • Fax (510) 638-8404

TABLE 2 Groundwater Analytical Summary Table 2900 Ladd Ave Livermore, CA

ACC Project Number: 3054-103.01

				Constituents and Concentrations (µg/L)							
Boring / Well ID	Sampling Date	Matrix	DTW (in feet)	ТЕРН-9	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE		
MW-3	4-Dec-02	Water	36.35								
	31-Mar-11	Water		<50	<0.5	<0.5	<0.5	<1	<0.5		
MW-4	12-Jul-94	Water	39.5	<50	<0.5	<0.5	<0.5	<0.5	NT		
	8-Feb-95	Water	27.66	<50	<0.5	<0.5	<0.5	<0.5	NT		
	23-May-95	Water	17.68	60	<0.5	<0.5	<0.5	<0.5	NT		
	20-Sep-95	Water	25.81	<50	<0.5	<0.5	<0.5	<0.5	NT		
	29-Dec-95	Water	20.9	<50	<0.5	<0.5	<0.5	<0.5	NT		
	1-Nov-96	Water	22.84	<50	2.7	<0.5	<0.5	<0.5	NT		
	29-Apr-97	Water	20.57	<50	2.6	<0.5	<0.5	<0.5	9.2		
	5-Aug-99	Water	26.64	120	59.0	<0.5	<0.5	<0.5	19.0		
	20-Jul-00	Water	23.91	97	21.0	6.8	0.66	4.6	11.0		
	18-Jan-02	Water	NM	NS	NS	NS	NS	NS	NS		
	2-Jul-02	Water									
MW-5	21-Jul-00	Water	20.19	92,000	9,900	15,000	540	17,000	<1,300		
-	18-Jan-02	Water	23.61	63,000	5,900	10,000	1,900	15,000	<1,300		
	2-Jul-02	Water	24.29	86,000	10,000	14,000	2,100	15,000	<1,300		
	4-Dec-02	Water	24.35	72,000	8,500	11,000	1,600	10,000	<1,300		
	31-Mar-11	Water		65,000	8,700	8,700	2,800	16,000	<500		
**ESLs	Groundwater is a Current or Potential Source of Drinking Water	Water		100	1	40	30	20	5		
PRG's	MCLs	Water		NA	5	1,000	7,000	10,000	NA		

Notes

**ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008)

where Groundwater IS a Current or Potential Source of Drinking Water

PRGs=EPA Region 9 Preliminary Remediation Goal November 2009)

¹Metals analysis for these samples was run on unfiltered groundwater.

DTW: ;Depth to water (ft.) measured from top of casing (TOC).

NT: Not Tested; NM: Not Measured; NS: Not Sampled

*-- No Data

Shaded/Bolded Values Exceed Their Respective Criteria

TABLE 3 Well Construction Detail Table Laidlaw Transit 2900 Ladd Avnue Livermore, California 3054-103.01

Well ID	Date Installed	тос	Total Depth (bgs)	Casing Diameter (inches)	Screen Interval (bgs)	Zone	Status
MW-1	12/14/90	489.5	67 Feet	6	42-67		Inactive/ Abandoned
MW-2	4/13/93	Unknown	57 Feet	2	30-57		Active
MW-3	7/1/94	Unknown	53 Feet	2	28-53	Undetermined	Active
MW-4	6/30/94	Unknown	53 Feet	2 (Not Verified)	28-53		Inactive/ Needs to be located
MW-5	5/28/00	Unknown	25 Feet	2	15-25		Active

Notes:

bgs=below ground surface

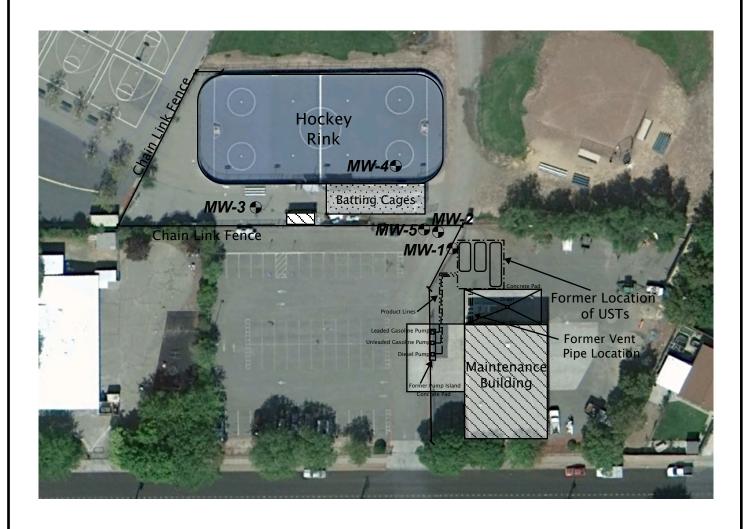
TOC= Top of Casing



Source: Google Earth, 2011

Title Site Location Map 2900 Ladd Avenue Livermore, California

Livermore, California						
Figure Number: 1	Scale: None					
Project Number: 3054-103.01	Drawn By: JS					
	Date: 4/7/11					
ENVIRONMENTAL CONSULTANTS	$W \stackrel{N}{\longrightarrow} E$					
An Employee Owned Company	l S					



Title Site Plan 2900 Ladd Avenue Livermore, California

Figure Number: 2

Project Number: 3054-103.01

Drawn By: JS

Date:4/6/11

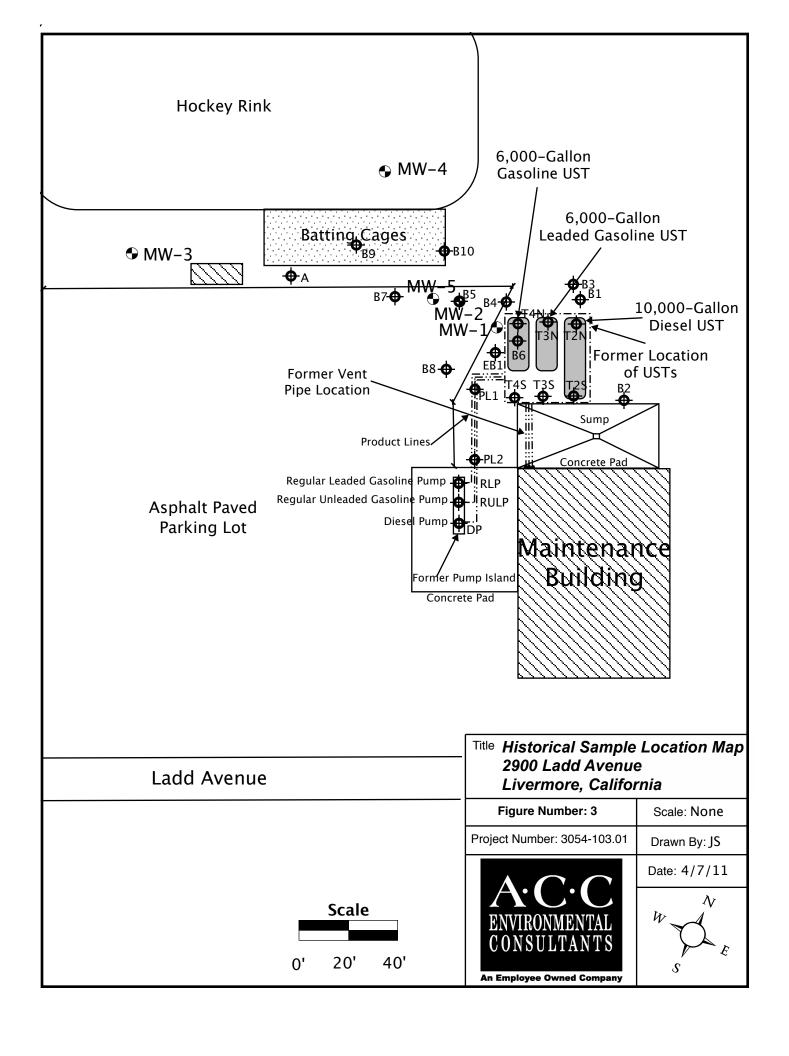
A.C.C ENVIRONMENTAL

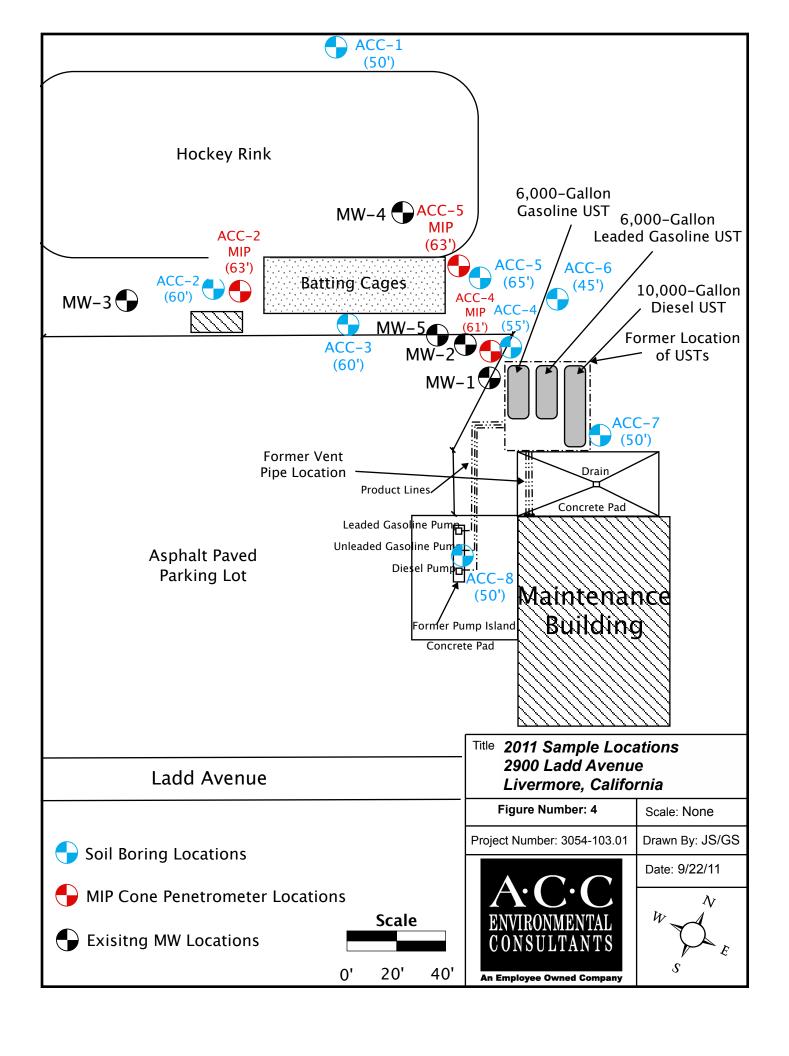
An Employee Owned Company

 $W \xrightarrow{S} E$

Scale

0' 37.5' 75'









Legend:

Municipal Water Wells

Monitoring Wells

Subject Property

Approximate 1/2 Mile Radius around Subject Property

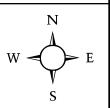
Notes:

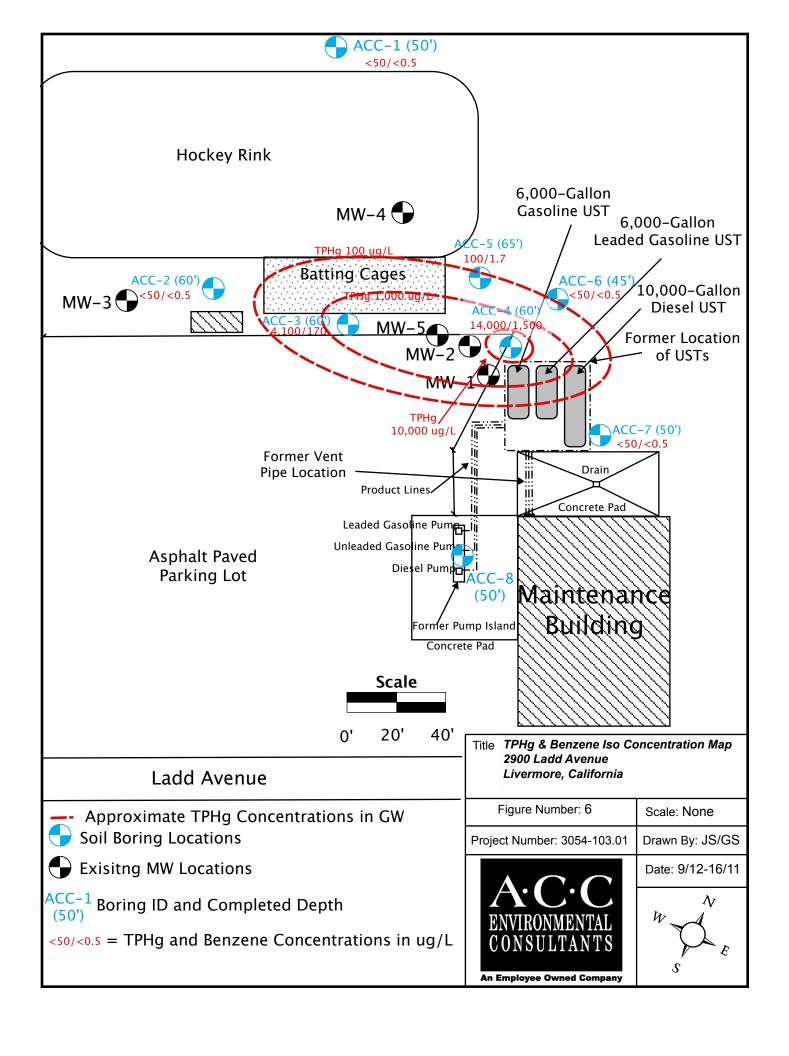
Image: Google Earth 2011

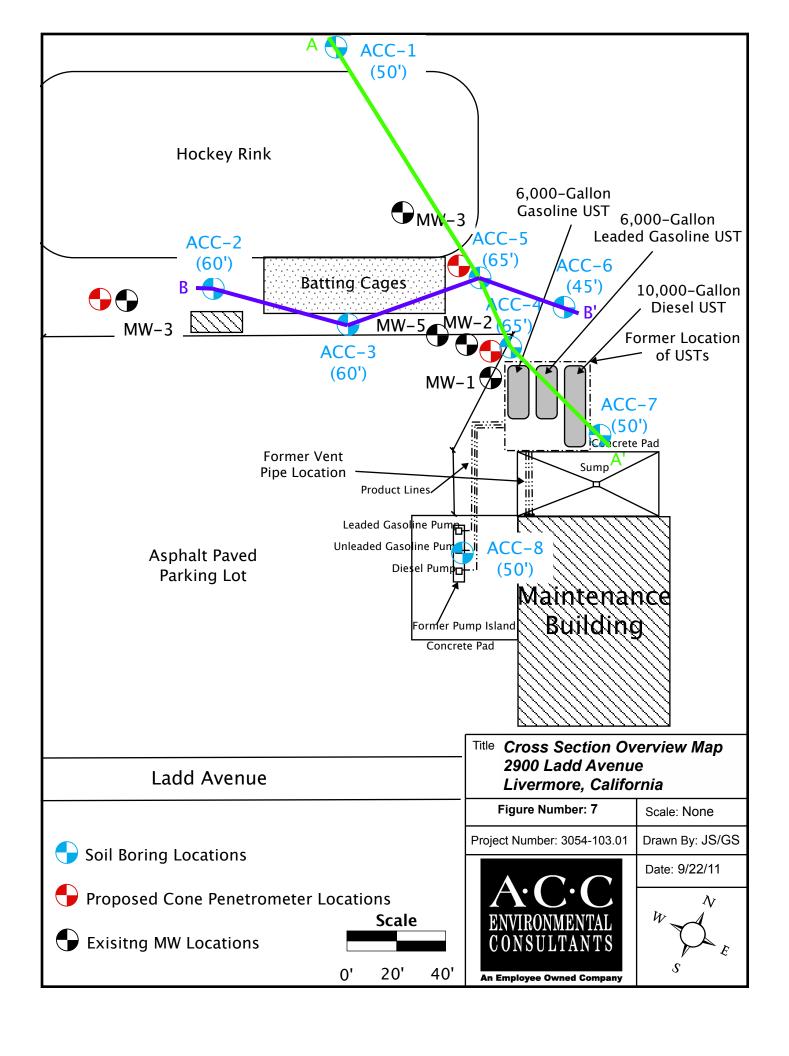
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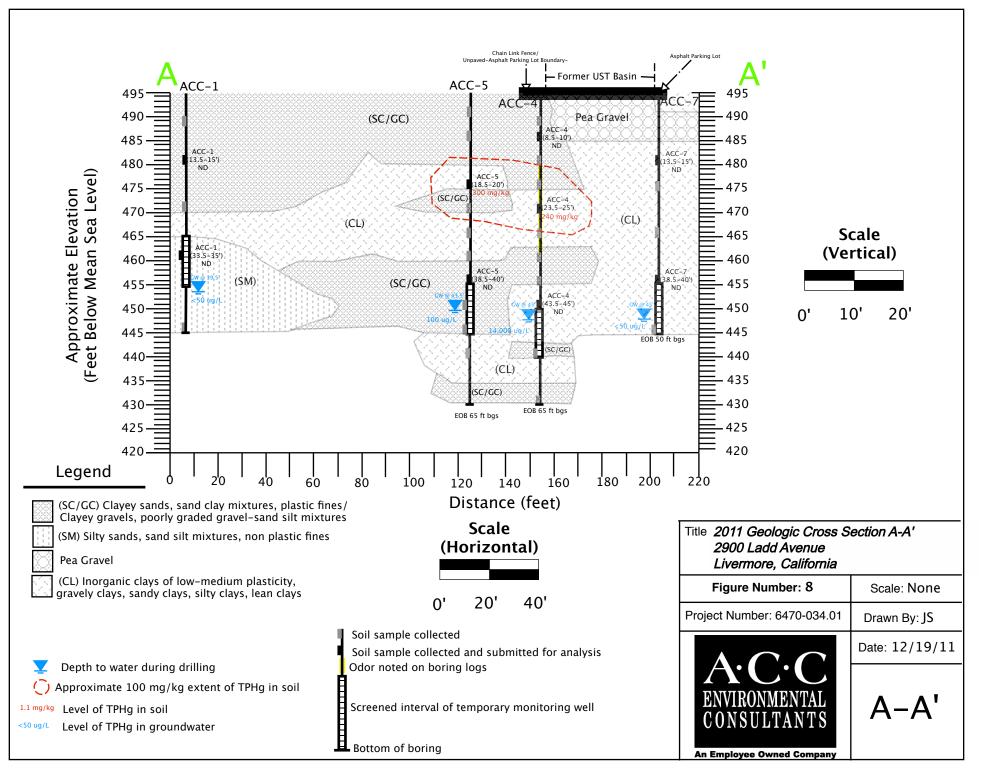
Figure: 5	Date: 12/15/2011
Project: 3054-103.01	Drawn By: CH

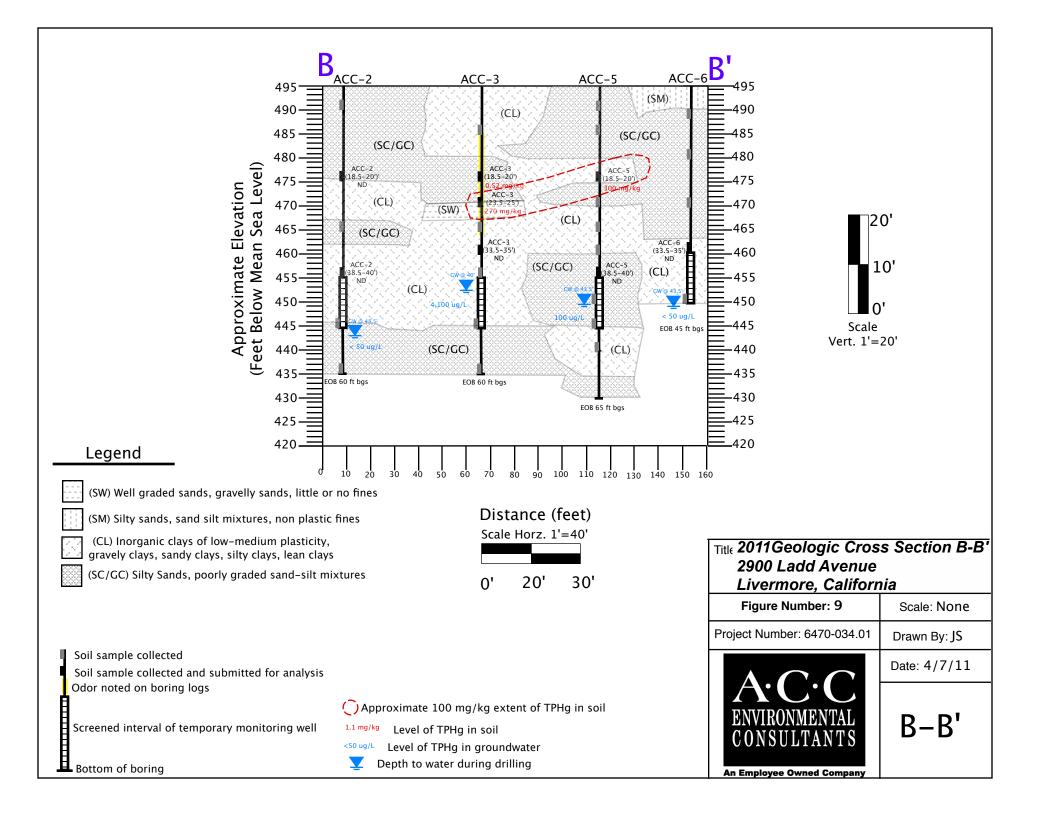
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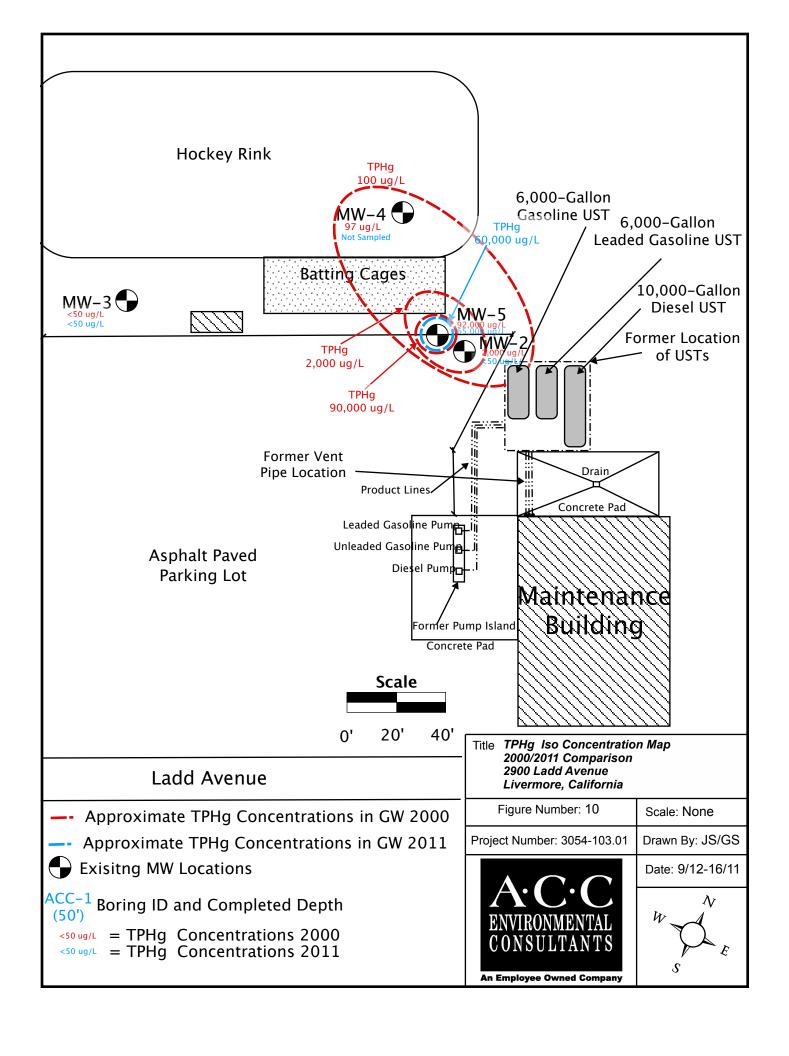














THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-37420-1

Client Project/Site: Ladd Ave., Livermore

For:

ACC Environmental Consultants 7977 Capwell Drive Suite 100 Oakland, California 94621

Attn: Julia Siudyla

Shaema

Authorized for release by: 09/16/2011 10:28:47 AM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com

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Page 1 of 21 09/16/2011

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Definitions/Glossary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Job ID: 720-37420-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative 720-37420-1

Comments

No additional comments.

Received 1 sample (sleeve only) not listed on coc ACC1 48.5-50'. Logged on hold.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

TestAmerica Job ID: 720-37420-1

Detection Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore	TestAmerica Job ID: 720-37420-1
Client Sample ID: ACC1 (13.5-15')	Lab Sample ID: 720-37420-2
No Detections	
Client Sample ID: ACC1 (33.5-35')	Lab Sample ID: 720-37420-4
No Detections	
Client Sample ID: ACC2 (5-6.5')	Lab Sample ID: 720-37420-5
No Detections	
Client Sample ID: ACC1	Lab Sample ID: 720-37420-6

No Detections

TestAmerica San Francisco 09/16/2011

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Client Sample ID: ACC1 (13.5-15')

Lab Sample ID: 720-37420-2 Date Collected: 09/12/11 09:55

Matrix: Solid

Date Received: 09/12/11 15:41

Method: 8260B - Volatile Organ	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Benzene	ND		4.9		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Ethylbenzene	ND		4.9		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Toluene	ND		4.9		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Xylenes, Total	ND		9.8		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		09/13/11 08:45	09/13/11 13:38	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		45 - 131				09/13/11 08:45	09/13/11 13:38	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140				09/13/11 08:45	09/13/11 13:38	1
Toluene-d8 (Surr)	97		58 - 140				09/13/11 08:45	09/13/11 13:38	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Lab Sample ID: 720-37420-4

D Gample 1D. 720-57-420-4

Matrix: Solid

Client Sample ID: ACC1 (33.5-35')

Date Collected: 09/12/11 10:15 Date Received: 09/12/11 15:41

Analyte	DIt	O1161	RL	MDL	1114	_	B	A II	D:: F
	Result	Qualifier	KL .	MIDL		D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.7		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
Benzene	ND		2.7		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
Ethylbenzene	ND		2.7		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
Toluene	ND		2.7		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
Xylenes, Total	ND		5.3		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
Gasoline Range Organics (GRO)	ND		130		ug/Kg		09/13/11 08:45	09/13/11 15:05	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		45 - 131				09/13/11 08:45	09/13/11 15:05	1
1,2-Dichloroethane-d4 (Surr)	112		60 - 140				09/13/11 08:45	09/13/11 15:05	1
Toluene-d8 (Surr)	98		58 - 140				09/13/11 08:45	09/13/11 15:05	1

TestAmerica San Francisco 09/16/2011

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Lab Sample ID: 720-37420-5

Client Sample ID: ACC2 (5-6.5')

Date Collected: 09/12/11 13:55 Date Received: 09/12/11 15:41

Matrix: Solid

Method: 8260B - Volatile Organ	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.1		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
Benzene	ND		3.1		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
Ethylbenzene	ND		3.1		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
Toluene	ND		3.1		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
Xylenes, Total	ND		6.1		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
Gasoline Range Organics (GRO)	ND		150		ug/Kg		09/13/11 08:45	09/13/11 17:00	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		45 - 131				09/13/11 08:45	09/13/11 17:00	1
1,2-Dichloroethane-d4 (Surr)	104		60 - 140				09/13/11 08:45	09/13/11 17:00	1
Toluene-d8 (Surr)	97		58 - 140				09/13/11 08:45	09/13/11 17:00	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

liant Cample ID: ACCA

Client Sample ID: ACC1

Date Collected: 09/12/11 11:35

Lab Sample ID: 720-37420-6

Matrix: Water

Date Collected: 09/12/11 11:35 Matrix: Water Date Received: 09/12/11 15:41

Method: 8260B/CA_LUFTMS - 82	260B / CA LUF1	MS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/12/11 20:37	1
Benzene	ND		0.50		ug/L			09/12/11 20:37	1
Ethylbenzene	ND		0.50		ug/L			09/12/11 20:37	1
Toluene	ND		0.50		ug/L			09/12/11 20:37	1
Xylenes, Total	ND		1.0		ug/L			09/12/11 20:37	1
Gasoline Range Organics (GRO)	ND		50		ug/L			09/12/11 20:37	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		67 - 130			-		09/12/11 20:37	1
1,2-Dichloroethane-d4 (Surr)	97		67 - 130					09/12/11 20:37	1
Toluene-d8 (Surr)	94		70 - 130					09/12/11 20:37	1

TestAmerica Job ID: 720-37420-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Lab Sample ID: MB 720-98904/1-A

Matrix: Solid

Analysis Batch: 98901

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Method Blank Prep Type: Total/NA

	Prep Batch: 98904						
repared	Analyzed	Dil Fac					
3/11 08:45	09/13/11 09:42	1					
2/44 00:45	00/12/11 00:42	1					

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		09/13/11 08:45	09/13/11 09:42	1
Benzene	ND		5.0		ug/Kg		09/13/11 08:45	09/13/11 09:42	1
Ethylbenzene	ND		5.0		ug/Kg		09/13/11 08:45	09/13/11 09:42	1
Toluene	ND		5.0		ug/Kg		09/13/11 08:45	09/13/11 09:42	1
Xylenes, Total	ND		10		ug/Kg		09/13/11 08:45	09/13/11 09:42	1
Gasoline Range Organics (GRO)	ND		250		ug/Kg		09/13/11 08:45	09/13/11 09:42	1

MB MB

MB MB

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97	45 - 131	09/13/11 08:45	09/13/11 09:42	1
1,2-Dichloroethane-d4 (Surr)	105	60 - 140	09/13/11 08:45	09/13/11 09:42	1
Toluene-d8 (Surr)	98	58 ₋ 140	09/13/11 08:45	09/13/11 09:42	1

Lab Sample ID: LCS 720-98904/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 98901 Prep Batch: 98904

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	50.0	47.4		ug/Kg		95	71 - 144	
Benzene	50.0	45.4		ug/Kg		91	82 - 124	
Ethylbenzene	50.0	48.6		ug/Kg		97	80 - 137	
Toluene	50.0	47.8		ug/Kg		96	83 - 128	
m-Xylene & p-Xylene	100	100		ug/Kg		100	79 - 146	
o-Xylene	50.0	50.0		ug/Kg		100	84 - 140	

LCS LCS

Surrogate	% Recovery Qualifie	r Limits
4-Bromofluorobenzene	100	45 - 131
1,2-Dichloroethane-d4 (Surr)	102	60 - 140
Toluene-d8 (Surr)	99	58 - 140

Lab Sample ID: LCS 720-98904/4-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 98901

, , , , , , , , , , , , , , , , , , , ,	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Gasoline Range Organics (GRO)	1000	908		ug/Kg	_	91	61 - 128

-C5-C12

Methyl tert-butyl ether

	LCS LCS	
Surrogate	% Recovery Qualif	ier Limits
4-Bromofluorobenzene	102	45 - 131
1,2-Dichloroethane-d4 (Surr)	103	60 - 140
Toluene-d8 (Surr)	97	58 - 140

Lab Sample ID: LCSD 720-98904/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 98901** Prep Batch: 98904 LCSD LCSD Spike % Rec. RPD Analyte Added Result Qualifier Unit % Rec Limits RPD Limit

49.0

ug/Kg

50.0

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71 - 144

Prep Type: Total/NA

Prep Batch: 98904

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-98904/3-A

Matrix: Solid

Analysis Batch: 98901

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 98904

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	50.0	46.6		ug/Kg		93	82 - 124	3	20
Ethylbenzene	50.0	50.8		ug/Kg		102	80 - 137	4	20
Toluene	50.0	50.2		ug/Kg		100	83 - 128	5	20
m-Xylene & p-Xylene	100	105		ug/Kg		105	79 - 146	5	20
o-Xylene	50.0	52.4		ug/Kg		105	84 - 140	5	20

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	97		60 - 140
Toluene-d8 (Surr)	98		58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98904

Lab Sample ID: LCSD 720-98904/5-A

Matrix: Solid

Analysis Batch: 98901

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	1000	916		ug/Kg		92	61 - 128	1	20

-C5-C12

	LCSD	LCSD	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		45 - 131
1,2-Dichloroethane-d4 (Surr)	105		60 - 140
Toluene-d8 (Surr)	99		58 ₋ 140

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-98820/5 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 98820

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/12/11 10:38	1
Benzene	ND		0.50		ug/L			09/12/11 10:38	1
Ethylbenzene	ND		0.50		ug/L			09/12/11 10:38	1
Toluene	ND		0.50		ug/L			09/12/11 10:38	1
Xylenes, Total	ND		1.0		ug/L			09/12/11 10:38	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/12/11 10:38	1

MB MB

Surrogate	% Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene	93	67 - 130	09/12/11 10:3	3 1
1,2-Dichloroethane-d4 (Surr)	91	67 - 130	09/12/11 10:3	3 1
Toluene-d8 (Surr)	96	70 - 130	09/12/11 10:3	3 1

TestAmerica Job ID: 720-37420-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Lab Sample ID: LCS 720-98820/6

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 98820

Matrix: Water

	Spike	LCS	LCS		% Rec.
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits
Methyl tert-butyl ether	25.0	24.2	ug/L	97	62 - 130
Benzene	25.0	24.1	ug/L	96	82 - 127
Ethylbenzene	25.0	24.3	ug/L	97	86 - 135
Toluene	25.0	25.2	ug/L	101	83 - 129
m-Xylene & p-Xylene	50.0	48.4	ug/L	97	70 - 142
o-Xylene	25.0	24.7	ug/L	99	89 - 136

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	87		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCS 720-98820/8 Client Sample ID: Lab Control Sample

Matrix: Water Prep Type: Total/NA

Analysis Batch: 98820

 Analyte
 Added Gasoline Range Organics (GRO)
 Result Spike
 LCS LCS
 LCS Rec.
 % Rec.

 4 dded Gasoline Range Organics (GRO)
 500
 414
 Unit ug/L
 D % Rec Limits

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	91		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 720-98820/7

Matrix: Water

Analysis Batch: 98820

Client Sample ID: Lab	Control Sample Dup
	Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	25.0	23.0		ug/L		92	62 - 130	5	20	
Benzene	25.0	24.1		ug/L		96	82 _ 127	0	20	
Ethylbenzene	25.0	24.5		ug/L		98	86 - 135	1	20	
Toluene	25.0	25.3		ug/L		101	83 - 129	0	20	
m-Xylene & p-Xylene	50.0	48.9		ug/L		98	70 - 142	1	20	
o-Xylene	25.0	24.8		ug/L		99	89 - 136	0	20	

LCSD LCSD

Surrogate	% Recovery Qualified	r Limits
4-Bromofluorobenzene	92	67 - 130
1,2-Dichloroethane-d4 (Surr)	85	67 - 130
Toluene-d8 (Surr)	98	70 - 130

Lab Sample ID: LCSD 720-98820/9

Matrix: Water

Analysis Batch: 98820

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	500	407		ug/L		81	62 - 117	2	20
-C5-C12									

TestAmerica San Francisco 09/16/2011

Prep Type: Total/NA

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QC Sample Results

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-98820/9

Matrix: Water

Analysis Batch: 98820

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

LCSD LCSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	95	67 - 130
1,2-Dichloroethane-d4 (Surr)	89	67 - 130
Toluene-d8 (Surr)	98	70 - 130

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QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

GC/MS VOA

Analysis Batch: 98820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
720-37420-6	ACC1	Total/NA	Water	8260B/CA_LUFT
				MS
LCS 720-98820/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT
				MS
LCS 720-98820/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT
				MS
LCSD 720-98820/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT
				MS
LCSD 720-98820/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT
				MS
MB 720-98820/5	Method Blank	Total/NA	Water	8260B/CA_LUFT
				MS

Analysis Batch: 98901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37420-2	ACC1 (13.5-15')	Total/NA	Solid	8260B	98904
720-37420-4	ACC1 (33.5-35')	Total/NA	Solid	8260B	98904
720-37420-5	ACC2 (5-6.5')	Total/NA	Solid	8260B	98904
LCS 720-98904/2-A	Lab Control Sample	Total/NA	Solid	8260B	98904
LCS 720-98904/4-A	Lab Control Sample	Total/NA	Solid	8260B	98904
LCSD 720-98904/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	98904
LCSD 720-98904/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	98904
MB 720-98904/1-A	Method Blank	Total/NA	Solid	8260B	98904

Prep Batch: 98904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37420-2	ACC1 (13.5-15')	Total/NA	Solid	5035	
720-37420-4	ACC1 (33.5-35')	Total/NA	Solid	5035	
720-37420-5	ACC2 (5-6.5')	Total/NA	Solid	5035	
LCS 720-98904/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-98904/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-98904/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-98904/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-98904/1-A	Method Blank	Total/NA	Solid	5035	

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A

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Lab Sample ID: 720-37420-2

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Water

Client Sample ID: ACC1 (13.5-15')

Date Collected: 09/12/11 09:55 Date Received: 09/12/11 15:41

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab	
Total/NA	Prep	5035			98904	09/13/11 08:45	JZ	TAL SF	_
Total/NA	Analysis	8260B		1	98901	09/13/11 13:38	AC	TAL SF	

Client Sample ID: ACC1 (33.5-35')

Lab Sample ID: 720-37420-4

Date Collected: 09/12/11 10:15

Date Received: 09/12/11 15:41

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			98904	09/13/11 08:45	JZ	TAL SF
Total/NA	Analysis	8260B		1	98901	09/13/11 15:05	AC	TAL SF

Client Sample ID: ACC2 (5-6.5')

Lab Sample ID: 720-37420-5

Date Collected: 09/12/11 13:55

Date Received: 09/12/11 15:41

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			98904	09/13/11 08:45	JZ	TAL SF
Total/NA	Analysis	8260B		1	98901	09/13/11 17:00	AC	TAL SF

Client Sample ID: ACC1 Lab Sample ID: 720-37420-6

Date Collected: 09/12/11 11:35

Date Received: 09/12/11 15:41

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98820	09/12/11 20:37	AC	TAL SF

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37420-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL SF
S			

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Matrix

Solid

Solid

Solid

Water

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID

ACC1 (13.5-15')

ACC1 (33.5-35')

ACC2 (5-6.5')

ACC1

Lab Sample ID

720-37420-2

720-37420-4

720-37420-5

720-37420-6

TestAmerica Job ID: 720-37420-1

Collected	Received
09/12/11 09:55	09/12/11 15:41
09/12/11 10:15	09/12/11 15:41

09/12/11 13:55

09/12/11 11:35

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09/12/11 15:41

09/12/11 15:41

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133660

San Francisco

1220 Quarry Lane

720-37420

Chain of Custody Record

TestAmerica

Pleasanton, CA 94566																			TestAmerica Laboratories, Inc.
phone 925.484.1919 fax 925.600.3002	Tu		a			lon.	0 .			~ .			1.		2 11				COC No:
Client Contact ACC Environmental Consultatns		nager: Julia	Siudyla			 			Julia	Sindy	la		Carr		2-111				of COCs
	Tel/Fax: 51			· · · ·		Lab	ab Contact:				Carr	ier:	: T T T T T T T T				Job No. 3054-103.01		
7977 Capwell Drive, Suite 100	 _	***************************************	urnaround 1															ı	300 No. 10034-100.01
Oakland, CA		ar (C) or Wo				(1) (1)			-										
(510) 638-8400 x110 Phone		FAT if different f	rom Below 👲	any:	٠.														0001
(510) 638-8404 FAX Project Name: LVJUSD Maintenance Yard		2	weeks																SDG No.
Project Name: LVJUSD Maintenance Yard		1	week				۽ ا	۱۵			1								
Site: 2900 Ladd Avenue, Livermore, CA		2	2 days					8	4		1							İ	
P O # 3054-103.01]	day			Ē	m	BTEX/MitBE- 8260B	VOUS- 8200B	CAM 17- 6010B								-	
							TPHg-8051B	BTEX/MfBE-	65 S	7-6								4970	
	Sample	Sample	Sample				Hg	3 5	ية الإ	Σ								12	
Sample Identification	Date	Time	Туре	Matrix	# of Cont.	Ē	٤١	E S	2 8	్ట్									Sample Specific Notes:
ACC1 (5-6.5°)	9/12/11	9:404	Sori	Soil	4													×	
ACC1 (5-6.5) ACC1 (13.5-15) ACC1 (23.5-25) ACC1 (33.5-35)	11	9:55A	4]	Soil	4		XX	4											
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Preservation Used (1) Ice, (2) HCl; 3= H2SO4; 4=HNO3; 5=NaOH; (6) Possible Hazard Identification Non-Hazard Planmable Skin Irritant F	Other	EOH	<u>L</u>	.1	L	┪	$\neg \dagger$	十	╁				11	十	\top			+-	
Possible Hazard Identification						1	Samı	ple D	ispo	sai (i	4 fee m	ay be a	ssess	ed if :	sample	s are i	etaine	d long	ger than 1 month) Months
Non-Hazard Plammable SKM Irritant F	oison B	minos	vn				L	Ret	um T	o Clie	nt	泛	i Isposai	By L	ab		arcrive	For_	Months
Special Instructions/QC Requirements & Comments:										·									
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Relinquished by:	Company	11		Date/Tir	ne:	1/4.	Recei	ved t	y:) Å .	Λ	Λ	ļç	ompany	ſΛ	,		Date/Time:
		لل								w	. VV	<u>w</u>	بىلا				m	~~	9-12-11 (541
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Relinquished by:	Company:			Date/Tir	ne:		Recei	ved b	y:	• •	···		·	c	ompany	/ :			Date/Time:
	1				l														

Sharma, Dimple

From:

Sent:

Julia Siudyla [jsiudyla@accenv.com] Tuesday, September 13, 2011 10:27 AM

To: Subject: Sharma, Dimple 2900 Ladd ave

Dimple,

On the samples delivered yesterday, can you please take sample ACC 2 (5-6.5) off of hold and run it for TPHg, BTEX & MtBE. Standard TAT.

Thank you.

Julia Siudyla

ACC Environmental Consultants

Please forgive any errors. Sent from my iPhone

1

Page 20 of 21

Login Sample Receipt Checklist

Client: ACC Environmental Consultants

Job Number: 720-37420-1

Login Number: 37420 List Source: TestAmerica San Francisco

List Number: 1 Creator: Mullen, Joan

Creator. Mulleri, Joan		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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13



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-37448-1

Client Project/Site: Ladd Ave., Livermore

For:

ACC Environmental Consultants 7977 Capwell Drive Suite 100 Oakland, California 94621

Attn: Julia Siudyla

Shaema

Authorized for release by: 09/19/2011 12:51:36 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com

results through
Total Access

Have a Question?

·····LINKS ·······

Review your project

Ask
The
Expert

Visit us at: www.testamericainc.com This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica San Francisco 09/19/2011

Case Narrative

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Job ID: 720-37448-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative 720-37448-1

Comments

No additional comments.

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client Sample ID: ACC 2 (18.5-20')

Client Sample ID: ACC 2 (18.5-20')

Client Sample ID: ACC 2 (38.5-40')

No Detections

Client Sample ID: ACC 2 (38.5-40')

No Detections

Client Sample ID: ACC 2 (38.5-40')

Lab Sample ID: 720-37448-3

Lab Sample ID: 720-37448-6

No Detections

7

8

9

11

13

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Lab Sample ID: 720-37448-1

Matrix: Solid

Client Sample ID: ACC 2 (18.5-20')

Date Collected: 09/13/11 08:00 Date Received: 09/13/11 15:20

Method: 8260B - Volatile Organi	c Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
Benzene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
Ethylbenzene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
Toluene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
Xylenes, Total	ND		4.8		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
Gasoline Range Organics (GRO)	ND		120		ug/Kg		09/14/11 08:00	09/14/11 14:40	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		45 - 131				09/14/11 08:00	09/14/11 14:40	1
1,2-Dichloroethane-d4 (Surr)	96		60 - 140				09/14/11 08:00	09/14/11 14:40	1
Toluene-d8 (Surr)	97		58 - 140				09/14/11 08:00	09/14/11 14:40	1

Client: ACC Environmental Consultants

TestAmerica Job ID: 720-37448-1

Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC 2 (38.5-40')

Date Collected: 09/13/11 08:22 Date Received: 09/13/11 15:20 Lab Sample ID: 720-37448-3

Matrix: Solid

Method: 8260B - Volatile Organ	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
Benzene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
Ethylbenzene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
Toluene	ND		2.4		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
Xylenes, Total	ND		4.8		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
Gasoline Range Organics (GRO)	ND		120		ug/Kg		09/14/11 08:00	09/14/11 15:09	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		45 - 131				09/14/11 08:00	09/14/11 15:09	1
1,2-Dichloroethane-d4 (Surr)	102		60 - 140				09/14/11 08:00	09/14/11 15:09	1
Toluene-d8 (Surr)	98		58 ₋ 140				09/14/11 08:00	09/14/11 15:09	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Client Sample ID: ACC 2 Lab Sample ID: 720-37448-6 Date Collected: 09/13/11 10:15

Matrix: Water

Date	Conecteu.	09/13/11	10.15
Date	Received:	09/13/11	15:20

Method: 8260B/CA_LUFTMS - 8	3260B / CA LUF1	ΓMS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/15/11 04:10	1
Benzene	ND		0.50		ug/L			09/15/11 04:10	1
Ethylbenzene	ND		0.50		ug/L			09/15/11 04:10	1
Toluene	ND		0.50		ug/L			09/15/11 04:10	1
Xylenes, Total	ND		1.0		ug/L			09/15/11 04:10	1
Gasoline Range Organics (GRO)	ND		50		ug/L			09/15/11 04:10	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		67 - 130			-		09/15/11 04:10	1
1,2-Dichloroethane-d4 (Surr)	109		67 - 130					09/15/11 04:10	1
Toluene-d8 (Surr)	94		70 - 130					09/15/11 04:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-99023/1-A

Matrix: Solid

Analysis Batch: 98976

Gasoline Range Organics (GRO)

Methyl tert-butyl ether

Client Sample ID: Method Blank Prep Type: Total/NA

09/14/11 11:42

Prep Batch: 99023

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		5.0		ug/Kg		09/14/11 08:00	09/14/11 11:42	1
ND		5.0		ug/Kg		09/14/11 08:00	09/14/11 11:42	1
ND		5.0		ug/Kg		09/14/11 08:00	09/14/11 11:42	1
ND		5.0		ug/Kg		09/14/11 08:00	09/14/11 11:42	1
ND		10		ug/Kg		09/14/11 08:00	09/14/11 11:42	1

ug/Kg

-C5-C12

Analyte

Benzene Ethylbenzene Toluene Xylenes, Total

MB MB

ND

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		45 - 131	09/14/11 08:00	09/14/11 11:42	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140	09/14/11 08:00	09/14/11 11:42	1
Toluene-d8 (Surr)	97		58 ₋ 140	09/14/11 08:00	09/14/11 11:42	1

250

Lab Sample ID: LCS 720-99023/2-A

Matrix: Solid

Analysis Batch: 98976

Client Sample ID: Lab Control Sample

09/14/11 08:00

Prep Type: Total/NA

Prep Batch: 99023

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	50.0	50.6		ug/Kg	_	101	71 - 144	
Benzene	50.0	48.4		ug/Kg		97	82 - 124	
Ethylbenzene	50.0	53.0		ug/Kg		106	80 - 137	
Toluene	50.0	51.6		ug/Kg		103	83 - 128	
m-Xylene & p-Xylene	100	110		ug/Kg		110	79 - 146	
o-Xylene	50.0	54.4		ug/Kg		109	84 - 140	

LCS LCS

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	102	45 - 131
1,2-Dichloroethane-d4 (Surr)	103	60 - 140
Toluene-d8 (Surr)	100	58 ₋ 140

Lab Sample ID: LCS 720-99023/4-A

Matrix: Solid

Analysis Batch: 98976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99023

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)	1000	922		ug/Kg	_	92	61 - 128	

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		45 - 131
1,2-Dichloroethane-d4 (Surr)	104		60 - 140
Toluene-d8 (Surr)	100		58 ₋ 140

Lab Sample ID: LCSD 720-99023/3-A

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 98976							Prep	Batch:	99023
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	50.0	49.2		ug/Kg		98	71 - 144	3	20

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99023/3-A

Matrix: Solid

Analysis Batch: 98976

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 99023

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	50.0	47.4		ug/Kg		95	82 - 124	2	20
Ethylbenzene	50.0	51.8		ug/Kg		104	80 - 137	2	20
Toluene	50.0	50.4		ug/Kg		101	83 - 128	2	20
m-Xylene & p-Xylene	100	107		ug/Kg		107	79 - 146	2	20
o-Xylene	50.0	53.4		ug/Kg		107	84 - 140	2	20

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	98		60 - 140
Toluene-d8 (Surr)	100		58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 99023

Lab Sample ID: LCSD 720-99023/5-A **Matrix: Solid**

Analysis Batch: 98976

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	1000	908		ug/Kg	_	91	61 - 128	2	20

-C5-C12

LCSD LCSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	101	45 - 131
1,2-Dichloroethane-d4 (Surr)	106	60 - 140
Toluene-d8 (Surr)	100	58 - 140

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-99031/5 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99031

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/14/11 20:34	1
Benzene	ND		0.50		ug/L			09/14/11 20:34	1
Ethylbenzene	ND		0.50		ug/L			09/14/11 20:34	1
Toluene	ND		0.50		ug/L			09/14/11 20:34	1
Xylenes, Total	ND		1.0		ug/L			09/14/11 20:34	1
Gasoline Range Organics (GRO)	ND		50		ug/L			09/14/11 20:34	1

MB MB

Surrogate	% Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93	67 - 130		09/14/11 20:34	1
1,2-Dichloroethane-d4 (Surr)	105	67 - 130		09/14/11 20:34	1
Toluene-d8 (Surr)	94	70 - 130		09/14/11 20:34	1

TestAmerica Job ID: 720-37448-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Lab Sample ID: LCS 720-99031/6

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water
Analysis Batch: 99031

-	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	25.0	24.7		ug/L		99	62 - 130	
Benzene	25.0	23.2		ug/L		93	82 - 127	
Ethylbenzene	25.0	24.5		ug/L		98	86 - 135	
Toluene	25.0	24.0		ug/L		96	83 - 129	
m-Xylene & p-Xylene	50.0	50.2		ug/L		100	70 - 142	
o-Xylene	25.0	25.9		ug/L		104	89 - 136	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water Analysis Batch: 99031

Lab Sample ID: LCS 720-99031/8

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Gasoline Range Organics (GRO)	500	405		ug/L		81	62 - 117

-C5-C12

LCS LCS

Surrogate	% Recovery Qualify	ier Limits
4-Bromofluorobenzene	101	67 - 130
1,2-Dichloroethane-d4 (Surr)	104	67 - 130
Toluene-d8 (Surr)	98	70 ₋ 130

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water Analysis Batch: 99031

Lab Sample ID: LCSD 720-99031/7

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	25.0	24.5		ug/L		98	62 - 130	1	20
Benzene	25.0	23.7		ug/L		95	82 _ 127	2	20
Ethylbenzene	25.0	24.8		ug/L		99	86 - 135	1	20
Toluene	25.0	24.5		ug/L		98	83 - 129	2	20
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 142	0	20
o-Xylene	25.0	25.7		ug/L		103	89 - 136	1	20

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 720-99031/9

Matrix: Water

Analysis Batch: 99031

7 maryoto Batom occor									
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	500	404		ug/L		81	62 - 117	0	20
-C5-C12									

TestAmerica San Franco

Prep Type: Total/NA

Page 11 of 19

QC Sample Results

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99031/9

Matrix: Water

Analysis Batch: 99031

I CSD	I CSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	99	67 - 130
1,2-Dichloroethane-d4 (Surr)	100	67 - 130
Toluene-d8 (Surr)	99	70 - 130

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

GC/MS VOA

Analysis Batch: 98976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37448-1	ACC 2 (18.5-20')	Total/NA	Solid	8260B	99023
720-37448-3	ACC 2 (38.5-40')	Total/NA	Solid	8260B	99023
LCS 720-99023/2-A	Lab Control Sample	Total/NA	Solid	8260B	99023
LCS 720-99023/4-A	Lab Control Sample	Total/NA	Solid	8260B	99023
LCSD 720-99023/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99023
LCSD 720-99023/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99023
MB 720-99023/1-A	Method Blank	Total/NA	Solid	8260B	99023

Prep Batch: 99023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37448-1	ACC 2 (18.5-20')	Total/NA	Solid	5035	
720-37448-3	ACC 2 (38.5-40')	Total/NA	Solid	5035	
LCS 720-99023/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99023/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99023/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99023/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99023/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 99031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37448-6	ACC 2	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99031/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99031/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99031/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99031/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99031/5	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

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Lab Chronicle

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Client Sample ID: ACC 2 (18.5-20')

Lab Sample ID: 720-37448-1 Date Collected: 09/13/11 08:00

Matrix: Solid

Date Received: 09/13/11 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99023	09/14/11 08:00	PGM	TAL SF
Total/NA	Analysis	8260B		1	98976	09/14/11 14:40	LL	TAL SF

Lab Sample ID: 720-37448-3

Client Sample ID: ACC 2 (38.5-40') Date Collected: 09/13/11 08:22

Matrix: Solid

Date Received: 09/13/11 15:20

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
	Total/NA	Prep	5035			99023	09/14/11 08:00	PGM	TAL SF
ı	Total/NA	Analysis	8260B		1	98976	09/14/11 15:09	LL	TAL SF

Client Sample ID: ACC 2 Lab Sample ID: 720-37448-6

Matrix: Water

Date Collected: 09/13/11 10:15 Date Received: 09/13/11 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	99031	09/15/11 04:10	JZ	TAL SF

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TestAmerica San Fran 09/19/20

Certification Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL SF
9			

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-37448-1	ACC 2 (18.5-20')	Solid	09/13/11 08:00	09/13/11 15:20
720-37448-3	ACC 2 (38.5-40')	Solid	09/13/11 08:22	09/13/11 15:20
720-37448-6	ACC 2	Water	09/13/11 10:15	09/13/11 15:20

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San Francisco 1220 Quarry Lane









720-37448

Chain of Custody Record

/ 33488 TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

Pleasanton, CA 94566 phone 925,484,1919 fax 925,600,3002																			West to see the East of the See
Client Contact	Project Me	nager: Julia	Sindula		- Is	Sto C	antoo		ia Siud	lulo		Dat	ુ બ	13	1	***********	***************************************		TestAmerica Laboratories, Inc.
ACC Environmental Consultatns	<u> </u>	0-773-0752	Sidayia				ontac		ia Siuc	lyin			rier:	110					of COCs
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Oakland, CA	Calend		ork Days (W	····															
(510) 638-8400 x110 Phone			from Below		9									1					
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(510) 638-8404 FAX Project Name: LVJUSD Maintenance Yard	1 _		z weeks l week																
Site: 2900 Ladd Avenue, Livermore, CA	1 7		2 days		4		89												
P O # 3054-103.01	1 =		2 days 1 day				82	_	¥ 8										
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	Sample	Sample	Sample			8 8	Š	, e	cide 7									2	
Sample Identification	Date	Time	Туре	Matrix	# of Cont.	rucred Samp TPHg-8051B	BTEX/MIBE- 8260B	VOCs- 8260B	Pesticides-8081A CAM 17- 6010B]	704	Sample Specific Notes:
Acc 2/18.5-20')	9 13 11	8A	Sail	5011		-	×					T			Ħ				
ACC 2 (28.5-30')	1	8.15A	1											1		T		X	
ACC 2 (38.5-40')		8:557				×	X										\Box		
ACLZ 148.5-60')		8:35A																X	A CONTRACTOR OF THE PROPERTY O
ACC (58.5-60')		8.48A	-0	10		-									1			×	
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						1	1						i i	\top	Ħ	1	\top	П	
Preservation Used: (1) Ice, (2) HCl; 3= H2SO4; 4=HNO3; 5=NaOH; (2)	Other Me	DH	1	I.		+				1				┪	\vdash	+	1		
Possible Hazard Identification	oison B	Gnkno				Sa	mple	Disp	osal (To Cli	A fee	may be a	ssess Tsposa	ed if s	sampi	les ar	e retai	ined Io	onge	er than 1 month)
Special Instructions/QC Requirements & Comments:	oison b	Опкно	wn				K	etum	10 CII	ent	7	nsposa	ii By La	ab		Arcn	ive Fo	эr	Months
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Temp 5.3°

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: ACC Environmental Consultants

Job Number: 720-37448-1

Login Number: 37448 List Source: TestAmerica San Francisco

List Number: 1 Creator: Apostol, Anita

• , "		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica San Francisco
Page 19 of 19
09/19/2011

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-37475-1

Client Project/Site: Ladd Ave., Livermore

For:

ACC Environmental Consultants 7977 Capwell Drive Suite 100 Oakland, California 94621

Attn: Julia Siudyla

Shaema

Authorized for release by: 09/19/2011 05:29:25 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com



.....LINKS

Have a Question?



Visit us at: www.testamericainc.com This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Page 1 of 43 09/19/2011

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Definitions/Glossary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Case Narrative

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Job ID: 720-37475-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative 720-37475-1

Comments

No additional comments.

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

No analytical or quality issues were noted.

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-3 (8.5-10)

Lab Sample ID: 720-37475-1

No Detections

Client Sample ID: ACC-3 (18.5-20)

Lab	Sample	: ID:	720-3	7475-2

Analyte Benzene	Result Qualifier 46	RL 2.1	MDL Unit	Dil Fac 1	Method 8260B	Prep Type Total/NA
Ethylbenzene	27	2.1	ug/Kg	1	8260B	Total/NA
Toluene	4.7	2.1	ug/Kg	1	8260B	Total/NA
Xylenes, Total	97	4.2	ug/Kg	1	8260B	Total/NA
Gasoline Range Organics (GRO) -C5-C12	520	100	ug/Kg	1	8260B	Total/NA

Client Sample ID: ACC-3 (23.5-25)

Lab Sample ID: 720-37475-3

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Toluene	2700	2000	ug/Kg	1	8260B	Total/NA
Xylenes, Total	31000	3900	ug/Kg	1	8260B	Total/NA
GRO (C5-C12)	270000	99000	ug/Kg	1	8260B	Total/NA

Client Sample ID: ACC-3 (33.5-35)

Lab Sample ID: 720-37475-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Р	rep Type
Toluene	2.4		2.3		ug/Kg	1	_	8260B	T	otal/NA
Xylenes, Total	7.4		4.5		ug/Kg	1		8260B	Т	otal/NA

Client Sample ID: ACC-3

Lab Sample ID: 720-37475-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	20	0.50		ug/L	1	_	8260B/CA_LUFTM	Total/NA
Benzene	170	0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	100	5.0		ug/L	10		8260B/CA_LUFTM	Total/NA
Toluene	260	5.0		ug/L	10		8260B/CA_LUFTM	Total/NA
Xylenes, Total	1000	10		ug/L	10		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO)	4100	500		ug/L	10		8260B/CA_LUFTM	Total/NA

Client Sample ID: ACC-4 (8.5-10)

Lab Sample ID: 720-37475-10

No Detections

Client Sample ID: ACC-4 (23.5-25)

Lab Sample ID: 720-37475-13

Analyte	Result C	Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2300	2300		ug/Kg	1		8260B	Total/NA
Ethylbenzene	2800	2300		ug/Kg	1		8260B	Total/NA
Toluene	12000	2300		ug/Kg	1		8260B	Total/NA
Xylenes, Total	24000	4600		ug/Kg	1		8260B	Total/NA
GRO (C5-C12)	240000	110000		ug/Kg	1		8260B	Total/NA

Client Sample ID: ACC-4 (43.5-45)

Lab Sample ID: 720-37475-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	20		4.7		ug/Kg	1	_	8260B/CA_LUFTM	Total/NA
Ethylbenzene	10		4.7		ug/Kg	1		8260B/CA_LUFTM	Total/NA
Toluene	51		4.7		ug/Kg	1		8260B/CA_LUFTM	Total/NA

Detection Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Lab Sample ID: 720-37475-17

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Client Sample ID: ACC-4 (43.5-45) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	58		9.3		ug/Kg	1	_	8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO)	580		230		ug/Kg	1		8260B/CA_LUFTM	Total/NA
-C5-C12									

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Client Sample ID: ACC-4

-C5-C12

Analyte	Result	Qualifier	RL MDL	Unit	Dil Fac D	Method	Prep Type
Methyl tert-butyl ether	4.5	0.	50	ug/L		8260B/CA_LUFTM	Total/NA
Benzene	1500		25	ug/L	50	8260B/CA_LUFTM	Total/NA
Ethylbenzene	500		25	ug/L	50	8260B/CA_LUFTM	Total/NA
Toluene	1900		25	ug/L	50	8260B/CA_LUFTM	Total/NA
Xylenes, Total	2500		50	ug/L	50	8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO)	14000	25	00	ug/L	50	8260B/CA_LUFTM	Total/NA

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Lab Sample ID: 720-37475-1

Matrix: Solid

Client Sample ID: ACC-3 (8.5-10)

Date Collected: 09/14/11 08:00 Date Received: 09/14/11 16:03

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND —	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	
Acetone	ND	23	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Benzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	•
Dichlorobromomethane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	,
Bromobenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chlorobromomethane	ND	9.2	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Bromoform	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Bromomethane	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
2-Butanone (MEK)	ND	23	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
n-Butylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
sec-Butylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	
tert-Butylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	
Carbon disulfide	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	,
Carbon tetrachloride	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chlorobenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chloroethane	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chloroform	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chloromethane	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
2-Chlorotoluene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
4-Chlorotoluene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Chlorodibromomethane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,2-Dichlorobenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	· · · · · · · · · · · · · · · · · · ·
1,3-Dichlorobenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,4-Dichlorobenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,3-Dichloropropane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	· · · · · · · · · · · · · · · · · · ·
1,1-Dichloropropene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,2-Dibromo-3-Chloropropane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Ethylene Dibromide	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	· · · · · · · · · · · · · · · · · · ·
Dibromomethane	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Dichlorodifluoromethane	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,1-Dichloroethane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,2-Dichloroethane	ND	2.3	ug/Kg ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,1-Dichloroethene	ND	2.3	ug/Kg ug/Kg		09/14/11 19:31	09/15/11 02:41	1
							'
cis-1,2-Dichloroethene	ND ND	2.3 2.3	ug/Kg		09/14/11 19:31 09/14/11 19:31	09/15/11 02:41 09/15/11 02:41	1
trans-1,2-Dichloroethene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	'
1,2-Dichloropropane			ug/Kg				
cis-1,3-Dichloropropene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
trans-1,3-Dichloropropene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Ethylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Hexachlorobutadiene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
2-Hexanone	ND	23	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
Isopropylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	
4-Isopropyltoluene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	Ź
Methylene Chloride	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	,
4-Methyl-2-pentanone (MIBK)	ND	23	ug/Kg		09/14/11 19:31	09/15/11 02:41	
Naphthalene	ND	4.6	ug/Kg		09/14/11 19:31	09/15/11 02:41	•
N-Propylbenzene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	•
Styrene	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,1,1,2-Tetrachloroethane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1
1,1,2,2-Tetrachloroethane	ND	2.3	ug/Kg		09/14/11 19:31	09/15/11 02:41	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Xylenes, Total

2,2-Dichloropropane

Toluene-d8 (Surr)

Gasoline Range Organics (GRO)

1,2-Dichloroethane-d4 (Surr)

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-3 (8.5-10) Lab Sample ID: 720-37475-1

Date Collected: 09/14/11 08:00 Date Received: 09/14/11 16:03

ND

ND

104

96

Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued) Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed Tetrachloroethene ND 2.3 09/14/11 19:31 09/15/11 02:41 ug/Kg ND Toluene 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1,2,3-Trichlorobenzene ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1.2.4-Trichlorobenzene ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1,1,1-Trichloroethane ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1,1,2-Trichloroethane ND 09/14/11 19:31 09/15/11 02:41 2.3 ug/Kg Trichloroethene ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 Trichlorofluoromethane ND 2.3 09/14/11 19:31 09/15/11 02:41 ug/Kg ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41

1,2,3-Trichloropropane 1,1,2-Trichloro-1,2,2-trifluoroethane ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1,2,4-Trimethylbenzene ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 1,3,5-Trimethylbenzene ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 ND Vinyl acetate 23 ug/Kg 09/14/11 19:31 09/15/11 02:41 Vinyl chloride ND 2.3 ug/Kg 09/14/11 19:31 09/15/11 02:41 ND

-C5-C12 Surrogate % Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene 95 45 - 131 09/14/11 19:31 09/15/11 02:41

60 - 140

58 - 140

4.6

2.3

120

ug/Kg

ug/Kg

ug/Kg

09/14/11 19:31

09/14/11 19:31

09/14/11 19:31

09/14/11 19:31

09/14/11 19:31

09/15/11 02:41

09/15/11 02:41

09/15/11 02:41

09/15/11 02:41

09/15/11 02:41

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-3 (18.5-20)

Date Collected: 09/14/11 08:15 Date Received: 09/14/11 16:03 Lab Sample ID: 720-37475-2

Matrix: Solid

D	Prepared	Analyzed	Dil Fac
_	09/14/11 19:31	09/15/11 03:10	1
	09/14/11 19:31	09/15/11 03:10	1
	09/14/11 19:31	09/15/11 03:10	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.1		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
Benzene	46		2.1		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
Ethylbenzene	27		2.1		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
Toluene	4.7		2.1		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
Xylenes, Total	97		4.2		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
Gasoline Range Organics (GRO)	520		100		ug/Kg		09/14/11 19:31	09/15/11 03:10	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		45 - 131				09/14/11 19:31	09/15/11 03:10	1
1,2-Dichloroethane-d4 (Surr)	107		60 - 140				09/14/11 19:31	09/15/11 03:10	1
Toluene-d8 (Surr)	97		58 - 140				09/14/11 19:31	09/15/11 03:10	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-3 (23.5-25)

Date Collected: 09/14/11 08:20 Date Received: 09/14/11 16:03 Lab Sample ID: 720-37475-3

Matrix: Solid

Method: 8260B - Volatile Orga	inic Compounds ((GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2000		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
Benzene	ND		2000		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
Ethylbenzene	ND		2000		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
Toluene	2700		2000		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
Xylenes, Total	31000		3900		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
GRO (C5-C12)	270000		99000		ug/Kg		09/15/11 15:23	09/15/11 16:25	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		66 - 148				09/15/11 15:23	09/15/11 16:25	1
1,2-Dichloroethane-d4 (Surr)	102		62 - 137				09/15/11 15:23	09/15/11 16:25	1
Toluene-d8 (Surr)	100		65 - 141				09/15/11 15:23	09/15/11 16:25	1

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-3 (33.5-35) Lab Sample ID: 720-37475-5 Date Collected: 09/14/11 08:45

Matrix: Solid

Date Received: 09/14/11 16:03

Method: 8260B - Volatile Organ	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.3		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
Benzene	ND		2.3		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
Ethylbenzene	ND		2.3		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
Toluene	2.4		2.3		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
Xylenes, Total	7.4		4.5		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
Gasoline Range Organics (GRO)	ND		110		ug/Kg		09/15/11 08:49	09/15/11 17:39	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		45 - 131				09/15/11 08:49	09/15/11 17:39	1
1,2-Dichloroethane-d4 (Surr)	75		60 - 140				09/15/11 08:49	09/15/11 17:39	1
Toluene-d8 (Surr)	96		58 ₋ 140				09/15/11 08:49	09/15/11 17:39	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Lab Sample ID: 720-37475-7

09/16/11 07:35

09/16/11 17:16

Matrix: Water

Client Sample ID: ACC-3
Date Collected: 09/14/11 09:30

Date Received: 09/14/11 16:03

Toluene-d8 (Surr)

Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - 82	260B / CA LUFT	MS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	20		0.50		ug/L			09/16/11 07:35	1
Benzene	170		0.50		ug/L			09/16/11 07:35	1
Ethylbenzene	100		5.0		ug/L			09/16/11 17:16	10
Toluene	260		5.0		ug/L			09/16/11 17:16	10
Xylenes, Total	1000		10		ug/L			09/16/11 17:16	10
Gasoline Range Organics (GRO)	4100		500		ug/L			09/16/11 17:16	10
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene			67 - 130			_		09/16/11 07:35	1
4-Bromofluorobenzene	105		67 - 130					09/16/11 17:16	10
1,2-Dichloroethane-d4 (Surr)	107		67 - 130					09/16/11 07:35	1
1,2-Dichloroethane-d4 (Surr)	107		67 - 130					09/16/11 17:16	10

70 - 130

70 - 130

102

102

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-4 (8.5-10)

Lab Sample ID: 720-37475-10

Date Collected: 09/14/11 13:10

Date Received: 09/14/11 16:03

Matrix: Solid

Method: 8260B - Volatile Organ	nic Compounds ((GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.2		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
Benzene	ND		2.2		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
Ethylbenzene	ND		2.2		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
Toluene	ND		2.2		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
Xylenes, Total	ND		4.5		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
Gasoline Range Organics (GRO)	ND		110		ug/Kg		09/15/11 08:49	09/15/11 15:06	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		45 - 131				09/15/11 08:49	09/15/11 15:06	1
1,2-Dichloroethane-d4 (Surr)	80		60 - 140				09/15/11 08:49	09/15/11 15:06	1
Toluene-d8 (Surr)	95		58 - 140				09/15/11 08:49	09/15/11 15:06	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-4 (23.5-25)

Lab Sample ID: 720-37475-13 Date Collected: 09/14/11 13:33

Matrix: Solid

Date Received: 09/14/11 16:03

Method: 8260B - Volatile Orga	anic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2300		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
Benzene	2300		2300		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
Ethylbenzene	2800		2300		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
Toluene	12000		2300		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
Xylenes, Total	24000		4600		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
GRO (C5-C12)	240000		110000		ug/Kg		09/15/11 16:08	09/15/11 16:54	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		66 - 148				09/15/11 16:08	09/15/11 16:54	1
1,2-Dichloroethane-d4 (Surr)	99		62 - 137				09/15/11 16:08	09/15/11 16:54	1
Toluene-d8 (Surr)	100		65 - 141				09/15/11 16:08	09/15/11 16:54	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Lab Sample ID: 720-37475-17

09/15/11 15:31

09/15/11 08:53

Matrix: Solid

Client Sample ID: ACC-4 (43.5-45)

Date Collected: 09/14/11 14:10 Date Received: 09/14/11 16:03

-C5-C12

Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - 826	OB / CA LUFT MS						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	4.7	ug/Kg		09/15/11 08:53	09/15/11 15:31	1
Benzene	20	4.7	ug/Kg		09/15/11 08:53	09/15/11 15:31	1
Ethylbenzene	10	4.7	ug/Kg		09/15/11 08:53	09/15/11 15:31	1
Toluene	51	4.7	ug/Kg		09/15/11 08:53	09/15/11 15:31	1
Xylenes, Total	58	9.3	ug/Kg		09/15/11 08:53	09/15/11 15:31	1
Gasoline Range Organics (GRO)	580	230	ug/Kg		09/15/11 08:53	09/15/11 15:31	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108	45 - 131	09/15/11 08:53	09/15/11 15:31	1
1,2-Dichloroethane-d4 (Surr)	113	60 - 140	09/15/11 08:53	09/15/11 15:31	1

58 - 140

102

0

0

0

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4 /

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Client Sample ID: ACC-4

Lab Sample ID: 720-37475-18

Matrix: Water

Date Collected: 09/14/11 14:50 Date Received: 09/14/11 16:03

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	4.5		0.50		ug/L			09/16/11 15:00	1
Benzene	1500		25		ug/L			09/17/11 15:15	50
Ethylbenzene	500		25		ug/L			09/17/11 15:15	50
Toluene	1900		25		ug/L			09/17/11 15:15	50
Xylenes, Total	2500		50		ug/L			09/17/11 15:15	50
Gasoline Range Organics (GRO) -C5-C12	14000		2500		ug/L			09/17/11 15:15	50

Surrogate	% Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene	110		67 - 130	09/16/11 15:0	0 1
4-Bromofluorobenzene	99		67 - 130	09/17/11 15:1	5 50
1,2-Dichloroethane-d4 (Surr)	101		67 - 130	09/16/11 15:0	0 1
1,2-Dichloroethane-d4 (Surr)	107		67 - 130	09/17/11 15:1	5 50
Toluene-d8 (Surr)	101		70 - 130	09/16/11 15:0	0 1
Toluene-d8 (Surr)	98		70 - 130	09/17/11 15:1	5 50

5

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0

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RL

5.0

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

2

D

Prepared

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

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09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

09/14/11 16:42

MDL Unit

ug/Kg

Method: 8260B - Volatile Organic Compounds (GC/MS)

мв мв

ND

Result Qualifier

Lab Sample ID: MB 720-99048/1-A

Matrix: Solid

Analyte

Analysis Batch: 99028

Methyl tert-butyl ether

1,1-Dichloroethene

cis-1,2-Dichloroethene

1,2-Dichloropropane

Ethylbenzene Hexachlorobutadiene

2-Hexanone

Naphthalene

Styrene

N-Propylbenzene

Isopropylbenzene

4-Isopropyltoluene

Methylene Chloride

4-Methyl-2-pentanone (MIBK)

1,1,1,2-Tetrachloroethane

trans-1,2-Dichloroethene

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

Client Sample ID: Method Blank Prep Type: Total/NA

Analyzed

09/14/11 16:51

Prep Batch: 99048

Dil Fac

Acetone	ND	50	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Benzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Dichlorobromomethane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Bromobenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chlorobromomethane	ND	20	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Bromoform	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Bromomethane	ND	10	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
2-Butanone (MEK)	ND	50	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
n-Butylbenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
sec-Butylbenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
tert-Butylbenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Carbon disulfide	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Carbon tetrachloride	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chlorobenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chloroethane	ND	10	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chloroform	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chloromethane	ND	10	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
2-Chlorotoluene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
4-Chlorotoluene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Chlorodibromomethane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,2-Dichlorobenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,3-Dichlorobenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,4-Dichlorobenzene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,3-Dichloropropane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,1-Dichloropropene	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,2-Dibromo-3-Chloropropane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Ethylene Dibromide	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Dibromomethane	ND	10	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
Dichlorodifluoromethane	ND	10	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,1-Dichloroethane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1
1,2-Dichloroethane	ND	5.0	ug/Kg	09/14/11 16:42	09/14/11 16:51	1

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

50

5.0

5.0

10

50

10

5.0

5.0

5.0

ug/Kg

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

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09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

09/14/11 16:51

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-99048/1-A

Matrix: Solid

Analysis Batch: 99028

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99048

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Tetrachloroethene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Toluene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Trichloroethene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Trichlorofluoromethane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Vinyl acetate	ND		50		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Vinyl chloride	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Xylenes, Total	ND		10		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
2,2-Dichloropropane	ND		5.0		ug/Kg		09/14/11 16:42	09/14/11 16:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		09/14/11 16:42	09/14/11 16:51	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		45 - 131	09/14/11 16:42	09/14/11 16:51	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140	09/14/11 16:42	09/14/11 16:51	1
Toluene-d8 (Surr)	98		58 ₋ 140	09/14/11 16:42	09/14/11 16:51	1

Lab Sample ID: LCS 720-99048/2-A

Matrix: Solid

Analysis Batch: 99028

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 99048

	Spike	LCS	LCS			% Rec.
Analyte	Added	Result	Qualifier	Unit	D % Rec	Limits
Methyl tert-butyl ether	50.0	48.4		ug/Kg	97	71 - 144
Acetone	250	214		ug/Kg	85	30 _ 162
Benzene	50.0	46.8		ug/Kg	94	82 - 124
Dichlorobromomethane	50.0	50.0		ug/Kg	100	86 - 131
Bromobenzene	50.0	48.2		ug/Kg	96	88 - 120
Chlorobromomethane	50.0	48.6		ug/Kg	97	81 - 116
Bromoform	50.0	54.8		ug/Kg	110	59 - 158
Bromomethane	50.0	46.6		ug/Kg	93	59 - 132
2-Butanone (MEK)	250	247		ug/Kg	99	61 - 150
n-Butylbenzene	50.0	54.4		ug/Kg	109	80 - 142
sec-Butylbenzene	50.0	52.2		ug/Kg	104	85 - 136
tert-Butylbenzene	50.0	51.4		ug/Kg	103	71 _ 130
Carbon disulfide	50.0	42.8		ug/Kg	86	60 - 136
Carbon tetrachloride	50.0	51.6		ug/Kg	103	81 - 138
Chlorobenzene	50.0	49.2		ug/Kg	98	87 - 113
Chloroethane	50.0	49.2		ug/Kg	98	65 - 126
Chloroform	50.0	47.8		ug/Kg	96	77 ₋ 127
Chloromethane	50.0	48.0		ug/Kg	96	60 - 149
2-Chlorotoluene	50.0	50.0		ug/Kg	100	80 - 138
4-Chlorotoluene	50.0	49.2		ug/Kg	98	79 - 136

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

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Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

	Lab Sample ID: LCS 720-99048/2-A					Client	Sample I	D: Lab Control Sample
İ	Matrix: Solid							Prep Type: Total/NA
l	Analysis Batch: 99028							Prep Batch: 99048
l		Spike	LCS	LCS				% Rec.
	Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits

Analysis Batch: 99028							Prep Batch: 990
	Spike	LCS	LCS				% Rec.
Analyte	Added		Qualifier	Unit	D	% Rec	Limits
Chlorodibromomethane	50.0	51.8		ug/Kg		104	75 - 146
1,2-Dichlorobenzene	50.0	48.8		ug/Kg		98	84 - 130
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	84 - 131
1,4-Dichlorobenzene	50.0	48.4		ug/Kg		97	85 - 125
1,3-Dichloropropane	50.0	50.4		ug/Kg		101	79 - 140
1,1-Dichloropropene	50.0	50.0		ug/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	55.2		ug/Kg		110	68 - 145
Ethylene Dibromide	50.0	52.6		ug/Kg		105	79 - 140
Dibromomethane	50.0	50.4		ug/Kg		101	80 - 139
Dichlorodifluoromethane	50.0	49.0		ug/Kg		98	37 - 158
1,1-Dichloroethane	50.0	47.2		ug/Kg		94	85 - 124
1,2-Dichloroethane	50.0	48.6		ug/Kg		97	72 - 130
1,1-Dichloroethene	50.0	43.8		ug/Kg		88	76 - 122
cis-1,2-Dichloroethene	50.0	54.8		ug/Kg		110	87 - 138
trans-1,2-Dichloroethene	50.0	40.8		ug/Kg		82	67 - 108
1,2-Dichloropropane	50.0	46.8		ug/Kg		94	73 - 127
cis-1,3-Dichloropropene	50.0	50.6		ug/Kg		101	68 - 147
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	84 - 136
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137
Hexachlorobutadiene	50.0	52.6		ug/Kg		105	72 - 132
2-Hexanone	250	263		ug/Kg		105	60 - 161
Isopropylbenzene	50.0	53.4		ug/Kg ug/Kg		107	88 ₋ 128
4-Isopropyltoluene	50.0	51.8		ug/Kg ug/Kg		104	85 - 133
Methylene Chloride	50.0	47.0		ug/Kg ug/Kg		94	72 ₋ 134
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg ug/Kg		108	69 ₋ 160
Naphthalene	50.0	53.8				108	70 - 147
N-Propylbenzene	50.0	48.8		ug/Kg ug/Kg		98	70 - 147 72 - 125
* *	50.0	51.8		ug/Kg ug/Kg		104	89 ₋ 126
Styrene							90 - 130
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/Kg		101	
1,1,2,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	82 ₋ 146
Tetrachloroethene	50.0	50.8		ug/Kg		102	78 - 132
Toluene	50.0	49.0		ug/Kg		98	83 - 128
1,2,3-Trichlorobenzene	50.0	52.4		ug/Kg		105	82 - 135
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	70 - 131
1,1,1-Trichloroethane	50.0	50.4		ug/Kg		101	80 - 127
1,1,2-Trichloroethane	50.0	49.0		ug/Kg		98	82 - 125
Trichloroethene	50.0	48.6		ug/Kg		97	81 - 133
Trichlorofluoromethane	50.0	54.0		ug/Kg		108	71 ₋ 139
1,2,3-Trichloropropane	50.0	52.6		ug/Kg		105	76 - 146
1,1,2-Trichloro-1,2,2-trifluoroetha	50.0	49.0		ug/Kg		98	70 - 130
ne		40.4					04 400
1,2,4-Trimethylbenzene	50.0	49.4		ug/Kg		99	84 - 130
1,3,5-Trimethylbenzene	50.0	50.8		ug/Kg		102	82 - 131
Vinyl acetate	50.0	58.6		ug/Kg		117	38 - 176
Vinyl chloride	50.0	47.2		ug/Kg		94	58 - 125
m-Xylene & p-Xylene	100	103		ug/Kg		103	79 - 146
o-Xylene	50.0	51.4		ug/Kg		103	84 _ 140
2,2-Dichloropropane	50.0	54.4		ug/Kg		109	73 - 162

QC Sample Results

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-99048/2-A

Lab Sample ID: LCSD 720-99048/3-A

Matrix: Solid

Matrix: Solid

Carbon tetrachloride

Chlorobenzene

Chloroethane

Chloromethane

2-Chlorotoluene

4-Chlorotoluene

Chlorodibromomethane

Chloroform

Analysis Batch: 99028

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 99048

LCS LCS

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	101	45 - 131
1,2-Dichloroethane-d4 (Surr)	102	60 - 140
Toluene-d8 (Surr)	99	58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

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Analysis Batch: 99028							Prep	Batch:	99048
	Spike	LCSD	LCSD	CSD			% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	50.0	48.8		ug/Kg		98	71 - 144	1	20
Acetone	250	222		ug/Kg		89	30 - 162	4	30
Benzene	50.0	46.8		ug/Kg		94	82 - 124	0	20
Dichlorobromomethane	50.0	50.2		ug/Kg		100	86 - 131	0	20
Bromobenzene	50.0	48.2		ug/Kg		96	88 - 120	0	20
Chlorobromomethane	50.0	48.8		ug/Kg		98	81 - 116	0	20
Bromoform	50.0	55.4		ug/Kg		111	59 - 158	1	20
Bromomethane	50.0	48.0		ug/Kg		96	59 - 132	3	20
2-Butanone (MEK)	250	255		ug/Kg		102	61 - 150	3	20
n-Butylbenzene	50.0	54.2		ug/Kg		108	80 - 142	0	20
sec-Butylbenzene	50.0	51.6		ug/Kg		103	85 - 136	1	20
tert-Butylbenzene	50.0	51.2		ug/Kg		102	71 - 130	0	20
Carbon disulfide	50.0	42.8		ug/Kg		86	60 - 136	0	20

50.0 42.8 ug/Kg 86 60 - 1360 50.0 51.4 103 81 - 138 20 ug/Kg 50.0 48.8 87 - 113ug/Kg 98 20 50.0 50.8 ug/Kg 102 65 - 126 20 50.0 47.6 ug/Kg 95 77 _ 127 20 50.0 50.8 ug/Kg 102 60 - 149 20 50.0 50.4 101 80 - 138 20 ug/Kg 50.0 49.2 ug/Kg 98 79 - 136 20 50.0 51.8 104 75 - 146 20 ug/Kg

1,2-Dichlorobenzene 50.0 48.6 ug/Kg 97 84 - 13050.0 49.0 84 - 131 1,3-Dichlorobenzene ug/Kg 98 1,4-Dichlorobenzene 50.0 48.8 ug/Kg 98 85 - 125 1,3-Dichloropropane 50.0 50.6 ug/Kg 101 79 - 140 50.0 50.0 100 70 - 1301,1-Dichloropropene ug/Kg 1,2-Dibromo-3-Chloropropane 50.0 57.6 115 68 - 145 ug/Kg Ethylene Dibromide 50.0 52.8 106 79 _ 140 ug/Kg Dibromomethane 50.0 50.6 101 80 - 139 ug/Kg

Dichlorodifluoromethane 50.0 50.8 102 37 - 158 20 ug/Kg 1,1-Dichloroethane 50.0 47.4 ug/Kg 95 85 - 124 1,2-Dichloroethane 50.0 48.4 97 72 - 130 0 ug/Kg 76 - 122 1,1-Dichloroethene 50.0 43.8 ug/Kg 88 20 cis-1,2-Dichloroethene 50.0 55.2 110 87 - 138 ug/Kg trans-1,2-Dichloroethene 50.0 40.6 ug/Kg 81 67 - 10820

50.0 47.0 94 73 - 127 20 1,2-Dichloropropane ug/Kg cis-1,3-Dichloropropene 50.0 50.8 ug/Kg 102 68 - 1470 20 trans-1,3-Dichloropropene 50.0 53.8 ug/Kg 108 84 - 136 Ethylbenzene 50.0 50.0 100 80 - 137ug/Kg 0 Hexachlorobutadiene 50.0 51.6 103 72 - 132 ug/Kg

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99048/3-A

Matrix: Solid

Analysis Batch: 99028

Client Sample ID: Lab Control Sample Dup **Prep Type: Total/NA**

Prep Batch: 99048

Alialysis Dalcii. 99020						Prep	Daten.	33040
	Spike	LCSD	LCSD			% Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	% Rec	Limits	RPD	Limit
2-Hexanone	250	284	ug/Kg		113	60 - 161	7	20
Isopropylbenzene	50.0	53.2	ug/Kg		106	88 - 128	0	20
4-Isopropyltoluene	50.0	51.8	ug/Kg		104	85 - 133	0	20
Methylene Chloride	50.0	47.6	ug/Kg		95	72 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	280	ug/Kg		112	69 - 160	4	20
Naphthalene	50.0	55.2	ug/Kg		110	70 - 147	3	20
N-Propylbenzene	50.0	48.8	ug/Kg		98	72 _ 125	0	20
Styrene	50.0	51.4	ug/Kg		103	89 - 126	1	20
1,1,1,2-Tetrachloroethane	50.0	50.2	ug/Kg		100	90 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	51.4	ug/Kg		103	82 - 146	2	20
Tetrachloroethene	50.0	50.4	ug/Kg		101	78 - 132	1	20
Toluene	50.0	48.8	ug/Kg		98	83 - 128	0	20
1,2,3-Trichlorobenzene	50.0	53.0	ug/Kg		106	82 - 135	1	20
1,2,4-Trichlorobenzene	50.0	49.8	ug/Kg		100	70 - 131	0	20
1,1,1-Trichloroethane	50.0	50.4	ug/Kg		101	80 - 127	0	20
1,1,2-Trichloroethane	50.0	49.4	ug/Kg		99	82 - 125	1	20
Trichloroethene	50.0	48.8	ug/Kg		98	81 - 133	0	20
Trichlorofluoromethane	50.0	54.4	ug/Kg		109	71 - 139	1	20
1,2,3-Trichloropropane	50.0	53.6	ug/Kg		107	76 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroetha	50.0	49.0	ug/Kg		98	70 - 130	0	20
ne								
1,2,4-Trimethylbenzene	50.0	49.2	ug/Kg		98	84 - 130	0	20
1,3,5-Trimethylbenzene	50.0	50.6	ug/Kg		101	82 - 131	0	20
Vinyl acetate	50.0	59.8	ug/Kg		120	38 _ 176	2	20
Vinyl chloride	50.0	49.8	ug/Kg		100	58 - 125	5	20
m-Xylene & p-Xylene	100	103	ug/Kg		103	79 - 146	0	20
o-Xylene	50.0	51.4	ug/Kg		103	84 - 140	0	20
2,2-Dichloropropane	50.0	55.2	ug/Kg		110	73 - 162	1	20

LCSD LCSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	101	45 - 131
1,2-Dichloroethane-d4 (Surr)	101	60 - 140
Toluene-d8 (Surr)	99	58 ₋ 140

Lab Sample ID: MB 720-99081/1-A

Matrix: Solid

Analysis Batch: 99065

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99081

	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Benzene	ND		5.0		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Ethylbenzene	ND		5.0		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Toluene	ND		5.0		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Xylenes, Total	ND		9.9		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Gasoline Range Organics (GRO)	ND		250		ug/Kg		09/15/11 08:49	09/15/11 10:06	1
-C5-C12									

MB MB

Surrogate	% Recovery	Qualifier	Limits	Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		45 - 131	09/1	5/11 08:49	09/15/11 10:06	1

3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-99081/1-A

Matrix: Solid

Analysis Batch: 99065

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99081

MB MB

	Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	106		60 - 140	09/15/11 08:4	9 09/15/11 10:06	1
١	Toluene-d8 (Surr)	95		58 ₋ 140	09/15/11 08:4	9 09/15/11 10:06	1

Lab Sample ID: LCS 720-99081/2-A

Matrix: Solid

Analysis Batch: 99065

Client Sample ID: Lab Control Sample Prep Type: Total/NA

102

Prep Batch: 99081

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	49.8	46.4		ug/Kg		93	71 - 144	
Benzene	49.8	46.6		ug/Kg		94	82 - 124	
Ethylbenzene	49.8	49.0		ug/Kg		98	80 _ 137	
Toluene	49.8	48.4		ug/Kg		97	83 _ 128	
m-Xylene & p-Xylene	99.6	100		ug/Kg		101	79 - 146	

51.0

ug/Kg

49.8

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	99		60 - 140
Toluene-d8 (Surr)	99		58 - 140

Lab Sample ID: LCS 720-99081/4-A

Matrix: Solid

o-Xylene

Analysis Batch: 99065

Client Sample ID: Lab Control Sample

84 - 140

Prep Type: Total/NA

Prep Batch: 99081

-	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)	988	802		ug/Kg	_	81	61 - 128	

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	102		60 - 140
Toluene-d8 (Surr)	99		58 ₋ 140

Lab Sample ID: LCSD 720-99081/3-A

Matrix: Solid

Analysis Batch: 99065

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 99081

	Бріке	LC3D	LUGD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	49.4	49.0		ug/Kg		99	71 - 144	5	20	
Benzene	49.4	46.2		ug/Kg		94	82 - 124	1	20	
Ethylbenzene	49.4	48.0		ug/Kg		97	80 - 137	2	20	
Toluene	49.4	47.8		ug/Kg		97	83 - 128	1	20	
m-Xylene & p-Xylene	98.8	97.8		ug/Kg		99	79 - 146	3	20	
o-Xylene	49.4	49.6		ug/Kg		100	84 - 140	3	20	

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LCSD LCSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	96	45 - 131
1,2-Dichloroethane-d4 (Surr)	98	60 - 140
Toluene-d8 (Surr)	98	58 ₋ 140

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99081/5-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Analysis Batch: 99065

Prep Type: Total/NA

Prep Batch: 99081 % Rec. RPD Limit Limits **RPD**

LCSD LCSD Spike Analyte Added Result Qualifier Unit % Rec 996 828 ug/Kg 83 61 - 128 3 Gasoline Range Organics (GRO)

-C5-C12

LCSD LCSD Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 97 45 - 131 60 - 140 1,2-Dichloroethane-d4 (Surr) 101 Toluene-d8 (Surr) 99 58 - 140

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 99115

Prep Batch: 99115

Matrix: Solid

Lab Sample ID: MB 720-99115/1-A

Analysis Batch: 99063

	IVID	VID							
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Benzene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Ethylbenzene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Toluene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Xylenes, Total	ND		1000		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
GRO (C5-C12)	ND		25000		ug/Kg		09/15/11 09:00	09/15/11 09:41	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		66 - 148	09/15/11 09:00	09/15/11 09:41	1
1,2-Dichloroethane-d4 (Surr)	97		62 - 137	09/15/11 09:00	09/15/11 09:41	1
Toluene-d8 (Surr)	98		65 - 141	09/15/11 09:00	09/15/11 09:41	1

Lab Sample ID: LCS 720-99115/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 99063

	Spike	LCS	LCS			% Rec.	
Analyte	Added	Result	Qualifier	Unit D	% Rec	Limits	
Methyl tert-butyl ether	5000	4660		ug/Kg	93	71 - 146	
Benzene	5000	4740		ug/Kg	95	76 ₋ 122	
Ethylbenzene	5000	5160		ug/Kg	103	76 ₋ 137	
Toluene	5000	5060		ug/Kg	101	77 - 120	
m-Xylene & p-Xylene	10000	10600		ug/Kg	106	71 ₋ 142	
o-Xylene	5000	5240		ug/Kg	105	71 - 142	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		66 - 148
1,2-Dichloroethane-d4 (Surr)	95		62 - 137
Toluene-d8 (Surr)	99		65 - 141

Lab Sample ID: LCS 720-99115/4-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 99063 Prep Batch: 99115 Spike LCS LCS % Rec.

Analyte Added Result Qualifier Unit % Rec Limits GRO (C5-C12) 100000 85700 ug/Kg 86 70 - 130

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-99115/4-A

Lab Sample ID: LCSD 720-99115/3-A

Matrix: Solid

Analysis Batch: 99063

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 99115

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		66 - 148
1,2-Dichloroethane-d4 (Surr)	104		62 - 137
Toluene-d8 (Surr)	100		65 - 141

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 99115

Prep Type: Total/NA

Prep Type: Total/NA

% Rec.

Prep Batch: 99048

Matrix: Solid

Analysis Batch: 99063

7 many cho Battom cocco									
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	5000	4840		ug/Kg		97	71 - 146	4	20
Benzene	5000	4720		ug/Kg		94	76 - 122	0	20
Ethylbenzene	5000	5100		ug/Kg		102	76 - 137	1	20
Toluene	5000	5000		ug/Kg		100	77 - 120	1	20
m-Xylene & p-Xylene	10000	10500		ug/Kg		105	71 - 142	0	20
o-Xylene	5000	5220		ug/Kg		104	71 - 142	0	20

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		66 - 148
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
Toluene-d8 (Surr)	99		65 - 141

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 720-99115/5-A **Matrix: Solid**

Analysis Batch: 99063

Prep Batch: 99115 LCSD LCSD RPD Spike % Rec. Analyte Added Result Qualifier % Rec **RPD** Limit

GRO (C5-C12) 100000 88700 ug/Kg 89 70 - 130 20

	LUSD	LUSD	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		66 - 148
1,2-Dichloroethane-d4 (Surr)	103		62 - 137
Toluene-d8 (Surr)	100		65 - 141

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: LCS 720-99048/4-A **Client Sample ID: Lab Control Sample**

Matrix: Solid **Analysis Batch: 99028**

-C5-C12

LCS LCS Spike

Analyte Added Result Qualifier Limits Unit % Rec 1000 Gasoline Range Organics (GRO) 893 ug/Kg 89 61 - 128

	LCS LCS	
Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	101	45 - 131
1,2-Dichloroethane-d4 (Surr)	102	60 - 140
Toluene-d8 (Surr)	100	58 ₋ 140

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99048/5-A

Matrix: Solid

Analysis Batch: 99028

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 99048 % Rec. RPD

Limit Limits **RPD**

Analyte Added Result Qualifier Unit % Rec 1000 5 Gasoline Range Organics (GRO) 937 ug/Kg 61 - 128

Spike

LCSD LCSD

-C5-C12

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	102		60 - 140
Toluene-d8 (Surr)	100		58 ₋ 140

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 99082

Lab Sample ID: MB 720-99082/1-A

Matrix: Solid

Analysis Batch: 99062

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
Benzene	ND		5.0		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
Ethylbenzene	ND		5.0		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
Toluene	ND		5.0		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
Xylenes, Total	ND		10		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
Gasoline Range Organics (GRO)	ND		250		ug/Kg		09/15/11 08:53	09/15/11 10:21	1
-C5-C12									

мв мв

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		45 - 131	09/15/11 08:53	09/15/11 10:21	1
1,2-Dichloroethane-d4 (Surr)	109		60 - 140	09/15/11 08:53	09/15/11 10:21	1
Toluene-d8 (Surr)	101		58 - 140	09/15/11 08:53	09/15/11 10:21	1

Lab Sample ID: LCS 720-99082/2-A

Matrix: Solid

Analysis Batch: 99062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99082

% Rec.

Spike Analyte Added Result Qualifier Unit % Rec Limits 1000 Gasoline Range Organics (GRO) 941 ug/Kg 61 - 128

LCS LCS

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	104		45 - 131
1,2-Dichloroethane-d4 (Surr)	113		60 - 140
Toluene-d8 (Surr)	103		58 ₋ 140

Lab Sample ID: LCS 720-99082/4-A

Matrix: Solid

Analysis Batch: 99062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99082

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	49.2	57.5		ug/Kg		117	71 - 144	
Benzene	49.2	50.2		ug/Kg		102	82 _ 124	
Ethylbenzene	49.2	48.0		ug/Kg		98	80 - 137	
Toluene	49.2	48.4		ug/Kg		98	83 _ 128	
m-Xylene & p-Xylene	98.4	97.4		ug/Kg		99	79 - 146	

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99082/4-A

Matrix: Solid

Lab Sample ID: LCSD 720-99082/3-A

Lab Sample ID: LCSD 720-99082/5-A

Analysis Batch: 99062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 99082

LCS LCS Spike Added Result Qualifier Unit D % Rec Limits 49.2 102 50.2 84 - 140 ug/Kg

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	112		60 - 140
Toluene-d8 (Surr)	103		58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 99082

Analysis Batch: 99062

LCSD LCSD Spike % Rec. RPD

Analyte Added Result Qualifier Limits RPD Limit Unit % Rec 996 844 ug/Kg 85 61 - 128 20 Gasoline Range Organics (GRO)

-C5-C12

Matrix: Solid

Analyte

o-Xylene

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	106		45 - 131
1,2-Dichloroethane-d4 (Surr)	114		60 - 140
Toluene-d8 (Surr)	102		58 - 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 99082

Analysis Batch: 99062

Matrix: Solid

LCSD LCSD Spike % Rec. **RPD** Analyte Added Result Qualifier Unit D % Rec Limits RPD Limit Methyl tert-butyl ether 49.8 61.0 ug/Kg 122 71 - 144 6 20 Benzene 49.8 51.4 ug/Kg 103 82 _ 124 2 20 Ethylbenzene 49.8 48.0 ug/Kg 96 80 - 137 0 20 83 - 128 Toluene 49.8 47.8 96 20 ug/Kg 98.0 79 - 146 m-Xylene & p-Xylene 99.6 ug/Kg 98 20 49.8 51.0 102 84 _ 140 20 o-Xylene ug/Kg

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	113		60 - 140
Toluene-d8 (Surr)	103		58 - 140

Lab Sample ID: MB 720-99138/4 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99138

-C5-C12

мв мв Result Qualifier Unit D Prepared Dil Fac Analyzed Methyl tert-butyl ether ND 0.50 09/15/11 21:23 ug/L ND Benzene 0.50 ug/L 09/15/11 21:23 Ethylbenzene ND 0.50 ug/L 09/15/11 21:23 Toluene ND 0.50 ug/L 09/15/11 21:23 Xylenes, Total ND 1.0 ug/L 09/15/11 21:23 Gasoline Range Organics (GRO) ND 50 ug/L 09/15/11 21:23

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-99138/4

Matrix: Water

Analysis Batch: 99138

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB

	Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	4-Bromofluorobenzene	91		67 - 130		09/15/11 21:23	1
İ	1,2-Dichloroethane-d4 (Surr)	76		67 - 130		09/15/11 21:23	1
l	Toluene-d8 (Surr)	96		70 - 130		09/15/11 21:23	1

Lab Sample ID: LCS 720-99138/5

Matrix: Water

Analysis Batch: 99138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

•	Spike	LCS	LCS		% Rec.
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits
Methyl tert-butyl ether	25.0	21.7	ug/L	87	62 - 130
Benzene	25.0	23.7	ug/L	95	82 - 127
Ethylbenzene	25.0	23.2	ug/L	93	86 - 135
Toluene	25.0	25.1	ug/L	100	83 - 129
m-Xylene & p-Xylene	50.0	46.1	ug/L	92	70 - 142
o-Xylene	25.0	23.5	ug/L	94	89 - 136

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	91		67 - 130
1,2-Dichloroethane-d4 (Surr)	73		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCS 720-99138/7

Matrix: Water

Analysis Batch: 99138

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)	500	413		ug/L	_	83	62 - 117	

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	74		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab

Mat

Ana

ab Sample ID: LCSD 720-99138/6	Client Sample ID: Lab Control Sample Dup
atrix: Water	Prep Type: Total/NA
nalysis Batch: 99138	

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	25.0	21.6		ug/L		86	62 _ 130	0	20	
Benzene	25.0	23.9		ug/L		96	82 _ 127	1	20	
Ethylbenzene	25.0	23.3		ug/L		93	86 - 135	0	20	
Toluene	25.0	25.5		ug/L		102	83 - 129	2	20	
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 142	0	20	
o-Xylene	25.0	23.3		ug/L		93	89 - 136	1	20	

LCSD LCSD

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	90	67 - 130
1,2-Dichloroethane-d4 (Surr)	72	67 - 130

TestAmerica San Fran 09/19/20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99138/6

Lab Sample ID: LCSD 720-99138/8

Matrix: Water

Matrix: Water

Analysis Batch: 99138

LCSD LCSD

Surrogate % Recovery Qualifier Limits Toluene-d8 (Surr) 97 70 - 130 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 99138

LCSD LCSD RPD Spike % Rec. Analyte Added Result Qualifier Unit % Rec Limits RPD Limit 500 406 ug/L 81 62 - 117 2 Gasoline Range Organics (GRO)

-C5-C12

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	74		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: MB 720-99163/4 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99163

мв мв

Analyte	Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	ι	ug/L			09/16/11 09:42	1
Benzene	ND		0.50	ι	ug/L			09/16/11 09:42	1
Ethylbenzene	ND		0.50	ι	ug/L			09/16/11 09:42	1
Toluene	ND		0.50	ι	ug/L			09/16/11 09:42	1
Xylenes, Total	ND		1.0	ι	ug/L			09/16/11 09:42	1
Gasoline Range Organics (GRO) -C5-C12	ND		50	ι	ug/L			09/16/11 09:42	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130		09/16/11 09:42	1
1,2-Dichloroethane-d4 (Surr)	99		67 - 130		09/16/11 09:42	1
Toluene-d8 (Surr)	97		70 - 130		09/16/11 09:42	1

Lab Sample ID: LCS 720-99163/5 Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99163

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	25.0	22.9		ug/L		92	62 - 130	
Benzene	25.0	23.3		ug/L		93	82 _ 127	
Ethylbenzene	25.0	25.4		ug/L		102	86 - 135	
Toluene	25.0	24.9		ug/L		100	83 _ 129	
m-Xylene & p-Xylene	50.0	52.5		ug/L		105	70 - 142	
o-Xylene	25.0	26.0		ug/L		104	89 - 136	

LCS LCS

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	100	67 - 130
1,2-Dichloroethane-d4 (Surr)	97	67 - 130
Toluene-d8 (Surr)	98	70 - 130

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99163/7 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99163

İ		Spike	LCS	LCS				% Rec.	
	Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
	Gasoline Range Organics (GRO)	 500	499		ug/L		100	62 - 117	

-C5-C12

	LCS		
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 720-99163/6 Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99163

•	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	25.0	23.2		ug/L	_	93	62 - 130	1	20	
Benzene	25.0	23.3		ug/L		93	82 - 127	0	20	
Ethylbenzene	25.0	25.5		ug/L		102	86 - 135	0	20	
Toluene	25.0	24.9		ug/L		100	83 _ 129	0	20	
m-Xylene & p-Xylene	50.0	52.6		ug/L		105	70 - 142	0	20	
o-Xylene	25.0	26.2		ug/L		105	89 - 136	1	20	

LCSD LCSD Surrogate % Recovery Qualifier Limits 67 - 130 4-Bromofluorobenzene 102 1,2-Dichloroethane-d4 (Surr) 99 67 - 130 70 - 130 Toluene-d8 (Surr) 100

Lab Sample ID: LCSD 720-99163/8 Client Sample ID: Lab Control Sample Dup

Analysis Batch: 99163

Matrix: Water

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)	500	470		ug/L		94	62 - 117	6	20	

-C5-C12

	LCSD	LCSD	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MB 720-99198/5 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99198

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/16/11 09:36	1
Benzene	ND		0.50		ug/L			09/16/11 09:36	1
Ethylbenzene	ND		0.50		ug/L			09/16/11 09:36	1
Toluene	ND		0.50		ug/L			09/16/11 09:36	1
Xylenes, Total	ND		1.0		ug/L			09/16/11 09:36	1

Prep Type: Total/NA

TestAmerica Job ID: 720-37475-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-99198/5

Matrix: Water

Analysis Batch: 99198

Gasoline Range Organics (GRO)

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB MDL Unit RL Result Qualifier D Prepared Analyzed Dil Fac 50 09/16/11 09:36 ug/L ND

-C5-C12

Analyte

MB MB

Surrogate	% Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	_		09/16/11 09:36	1
1,2-Dichloroethane-d4 (Surr)	104		67 - 130			09/16/11 09:36	1
Toluene-d8 (Surr)	99		70 - 130			09/16/11 09:36	1

Lab Sample ID: LCS 720-99198/6

Matrix: Water

Analysis Batch: 99198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

LCS LCS % Rec. Spike Analyte Result Qualifier Limits Added Unit D % Rec Methyl tert-butyl ether 62 _ 130 25.0 26.2 ug/L 105 Benzene 25.0 24.9 100 82 - 127 ug/L Ethylbenzene 25.0 24 7 ug/L 99 86 - 135 Toluene 25.0 24.6 ug/L 98 83 - 129 m-Xylene & p-Xylene 50.0 50.3 ug/L 101 70 - 142 o-Xylene 25.0 25.8 ug/L 103 89 - 136

LCS LCS

Surrogate	% Recovery Qualit	ier Limits
4-Bromofluorobenzene	99	67 - 130
1,2-Dichloroethane-d4 (Surr)	103	67 - 130
Toluene-d8 (Surr)	100	70 - 130

Lab Sample ID: LCS 720-99198/8

Matrix: Water

Analyte

-C5-C12

Analysis Batch: 99198

Client Sample ID: Lab Control Sample Prep Type: Total/NA

LCS LCS % Rec. Spike babbA Result Qualifier Limits Unit % Rec 500 62 _ 117 ug/L 82 Gasoline Range Organics (GRO) 411

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 720-99198/7

Matrix: Water Analysis Batch: 99198 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	25.0	25.8		ug/L		103	62 - 130	2	20
Benzene	25.0	24.6		ug/L		98	82 - 127	1	20
Ethylbenzene	25.0	24.6		ug/L		98	86 - 135	0	20
Toluene	25.0	24.2		ug/L		97	83 - 129	2	20
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 142	0	20
o-Xylene	25.0	25.8		ug/L		103	89 - 136	0	20

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99198/7

Lab Sample ID: LCSD 720-99198/9

Matrix: Water

Analysis Batch: 99198

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99198

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)	500	397		ug/L		79	62 _ 117	4	20	

-C5-C12

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99224

Lab Sample ID: MB 720-99224/4

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/17/11 12:05	1
Benzene	ND		0.50		ug/L			09/17/11 12:05	1
Ethylbenzene	ND		0.50		ug/L			09/17/11 12:05	1
Toluene	ND		0.50		ug/L			09/17/11 12:05	1
Xylenes, Total	ND		1.0		ug/L			09/17/11 12:05	1
Gasoline Range Organics (GRO)	ND		50		ug/L			09/17/11 12:05	1
-C5-C12									

мв мв

Surrogate	% Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130	_		09/17/11 12:05	1
1,2-Dichloroethane-d4 (Surr)	105		67 - 130			09/17/11 12:05	1
Toluene-d8 (Surr)	101		70 - 130			09/17/11 12:05	1

Matrix: Water

Analysis Batch: 99224

Lab Sample ID: LCS 720-99224/5 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	25.0	27.5		ug/L		110	62 - 130	
Benzene	25.0	27.2		ug/L		109	82 _ 127	
Ethylbenzene	25.0	25.2		ug/L		101	86 - 135	
Toluene	25.0	24.7		ug/L		99	83 - 129	
m-Xylene & p-Xylene	50.0	51.5		ug/L		103	70 - 142	
o-Xylene	25.0	26.2		ug/L		105	89 - 136	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits		
4-Bromofluorobenzene	104		67 - 130		

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99224/5

Lab Sample ID: LCS 720-99224/7

Matrix: Water

Analysis Batch: 99224

Client Sample ID: Lab Control Sample Prep Type: Total/NA

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		67 - 130
Toluene-d8 (Surr)	102		70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99224

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)	500	449		ug/L		90	62 _ 117	

-C5-C12

LCS LCS Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 67 - 130 106 1,2-Dichloroethane-d4 (Surr) 105 67 - 130 Toluene-d8 (Surr) 102 70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 720-99224/6 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 99224

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	25.0	27.9		ug/L		112	62 - 130	1	20	
Benzene	25.0	27.4		ug/L		110	82 _ 127	1	20	
Ethylbenzene	25.0	25.3		ug/L		101	86 - 135	0	20	
Toluene	25.0	24.9		ug/L		100	83 _ 129	1	20	
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	70 - 142	0	20	
o-Xylene	25.0	26.3		ug/L		105	89 - 136	0	20	

LCSD LCSD Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 103 67 - 130 1,2-Dichloroethane-d4 (Surr) 105 67 - 130 Toluene-d8 (Surr) 102 70 - 130

Analysis Batch: 99224

Lab Sample ID: LCSD 720-99224/8	Client Sample ID: Lab Control Sample Dup
Matrix: Water	Prep Type: Total/NA

LCSD LCSD Spike % Rec. RPD Analyte Added Result Qualifier RPD Limit Unit % Rec Limits 500 Gasoline Range Organics (GRO) 465 93 20 ug/L 62 - 117-C5-C12

	LCSD LCSD	
Surrogate	% Recovery Qualifie	er Limits
4-Bromofluorobenzene	103	67 - 130
1,2-Dichloroethane-d4 (Surr)	101	67 - 130
Toluene-d8 (Surr)	101	70 - 130

QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

GC/MS VOA

Analysis Batch: 99028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-1	ACC-3 (8.5-10)	Total/NA	Solid	8260B/CA_LUFT	99048
				MS	
720-37475-2	ACC-3 (18.5-20)	Total/NA	Solid	8260B	99048
LCS 720-99048/2-A	Lab Control Sample	Total/NA	Solid	8260B	99048
LCS 720-99048/4-A	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	99048
				MS	
LCSD 720-99048/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99048
LCSD 720-99048/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	99048
				MS	
MB 720-99048/1-A	Method Blank	Total/NA	Solid	8260B	99048

Prep Batch: 99048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-1	ACC-3 (8.5-10)	Total/NA	Solid	5035	
720-37475-2	ACC-3 (18.5-20)	Total/NA	Solid	5035	
LCS 720-99048/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99048/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99048/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99048/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99048/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 99062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-17	ACC-4 (43.5-45)	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	
LCS 720-99082/2-A	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	
LCS 720-99082/4-A	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	
LCSD 720-99082/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	
LCSD 720-99082/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	
MB 720-99082/1-A	Method Blank	Total/NA	Solid	8260B/CA_LUFT	99082
				MS	

Analysis Batch: 99063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-3	ACC-3 (23.5-25)	Total/NA	Solid	8260B	99115
720-37475-13	ACC-4 (23.5-25)	Total/NA	Solid	8260B	99115
LCS 720-99115/2-A	Lab Control Sample	Total/NA	Solid	8260B	99115
LCS 720-99115/4-A	Lab Control Sample	Total/NA	Solid	8260B	99115
LCSD 720-99115/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99115
LCSD 720-99115/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99115
MB 720-99115/1-A	Method Blank	Total/NA	Solid	8260B	99115

Analysis Batch: 99065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-5	ACC-3 (33.5-35)	Total/NA	Solid	8260B	99081
720-37475-10	ACC-4 (8.5-10)	Total/NA	Solid	8260B	99081
LCS 720-99081/2-A	Lab Control Sample	Total/NA	Solid	8260B	99081
LCS 720-99081/4-A	Lab Control Sample	Total/NA	Solid	8260B	99081
LCSD 720-99081/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99081
LCSD 720-99081/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99081

TestAmerica San Francisco 09/19/2011

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QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

GC/MS VOA (Continued)

Analysis Batch: 99065 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-99081/1-A	Method Blank	Total/NA	Solid	8260B	99081

Prep Batch: 99081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-5	ACC-3 (33.5-35)	Total/NA	Solid	5035	 -
720-37475-10	ACC-4 (8.5-10)	Total/NA	Solid	5035	
LCS 720-99081/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99081/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99081/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99081/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99081/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 99082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-17	ACC-4 (43.5-45)	Total/NA	Solid	5030B	 :
LCS 720-99082/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCS 720-99082/4-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 720-99082/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
LCSD 720-99082/5-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
MB 720-99082/1-A	Method Blank	Total/NA	Solid	5030B	

Prep Batch: 99115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-3	ACC-3 (23.5-25)	Total/NA	Solid	5035	
720-37475-13	ACC-4 (23.5-25)	Total/NA	Solid	5035	
LCS 720-99115/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99115/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99115/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99115/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99115/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 99138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-7	ACC-3	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99138/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99138/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99138/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99138/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99138/4	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

Analysis Batch: 99163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-18	ACC-4	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99163/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99163/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	

TestAmerica San Francisco 09/19/2011

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QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

GC/MS VOA (Continued)

Analysis Batch: 99163 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bat	:ch
LCSD 720-99163/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	_
				MS	
LCSD 720-99163/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99163/4	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

Analysis Batch: 99198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-7	ACC-3	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99198/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99198/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99198/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99198/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99198/5	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

Analysis Batch: 99224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37475-18	ACC-4	Total/NA	Water	8260B/CA_LUFT	-
				MS	
LCS 720-99224/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99224/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99224/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99224/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99224/4	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Date Received: 09/14/11 16:03

Client Sample ID: ACC-3 (8.5-10) Date Collected: 09/14/11 08:00

Lab Sample ID: 720-37475-1

Matrix: Solid

Batch Batch Dilution Batch Prepared Prep Type Type Method Run Factor Number Or Analyzed Analyst Lab Total/NA 5035 99048 09/14/11 19:31 PGM TAL SF Prep 09/15/11 02:41 99028 Total/NA Analysis 8260B/CA_LUFTMS 1 AC TAL SF

Client Sample ID: ACC-3 (18.5-20) Lab Sample ID: 720-37475-2

Date Collected: 09/14/11 08:15 Matrix: Solid Date Received: 09/14/11 16:03

Batch Dilution Batch Prepared Batch Method Number Or Analyzed Prep Type Туре Run Factor Analyst Lab 5035 99048 09/14/11 19:31 PGM TAL SF Total/NA Prep 99028 09/15/11 03:10 Total/NA Analysis 8260B 1 AC TAL SF

Client Sample ID: ACC-3 (23.5-25) Lab Sample ID: 720-37475-3

Date Collected: 09/14/11 08:20 Matrix: Solid

Date Received: 09/14/11 16:03

99063

09/15/11 16:25

LL

TAL SF

Batch Batch Dilution Batch Prepared Method Prep Type Type Run Factor Number Or Analyzed Analyst Lab Total/NA Prep 5035 99115 09/15/11 15:23 JΖ TAL SF

1

Lab Sample ID: 720-37475-5 Client Sample ID: ACC-3 (33.5-35)

Date Collected: 09/14/11 08:45 Matrix: Solid

Date Received: 09/14/11 16:03

Total/NA

8260B

Analysis

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99081	09/15/11 08:49	JZ	TAL SF
Total/NA	Analysis	8260B		1	99065	09/15/11 17:39	LL	TAL SF

Client Sample ID: ACC-3 Lab Sample ID: 720-37475-7

Date Collected: 09/14/11 09:30 Matrix: Water

Date Received: 09/14/11 16:03

Date Received: 09/14/11 16:03

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS			99138	09/16/11 07:35	AC	TAL SF
Total/NA	Analysis	8260B/CA LUFTMS		10	99198	09/16/11 17:16	AC	TAL SF

Client Sample ID: ACC-4 (8.5-10) Lab Sample ID: 720-37475-10

Date Collected: 09/14/11 13:10 **Matrix: Solid**

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99081	09/15/11 08:49	JZ	TAL SF
Total/NA	Analysis	8260B		1	99065	09/15/11 15:06	LL	TAL SF

Lab Chronicle

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-4 (23.5-25)

TestAmerica Job ID: 720-37475-1

Lab Sample ID: 720-37475-13

Matrix: Solid

Date Collected: 09/14/11 13:33 Date Received: 09/14/11 16:03

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99115	09/15/11 16:08	JZ	TAL SF
Total/NA	Analysis	8260B		1	99063	09/15/11 16:54	LL	TAL SF

Lab Sample ID: 720-37475-17 Client Sample ID: ACC-4 (43.5-45)

Date Collected: 09/14/11 14:10 **Matrix: Solid**

Date Received: 09/14/11 16:03

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			99082	09/15/11 08:53	JZ	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		1	99062	09/15/11 15:31	LL	TAL SF

Client Sample ID: ACC-4 Lab Sample ID: 720-37475-18

Date Collected: 09/14/11 14:50 Matrix: Water

Date Received: 09/14/11 16:03

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	99163	09/16/11 15:00	AC	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		50	99224	09/17/11 15:15	AC	TAL SF

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Laboratory	Authority	Program	EPA Region	Certification ID	
TestAmerica San Francisco	California	State Program	9	2496	

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL SF
c			

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37475-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-37475-1	ACC-3 (8.5-10)	Solid	09/14/11 08:00	09/14/11 16:03
720-37475-2	ACC-3 (18.5-20)	Solid	09/14/11 08:15	09/14/11 16:03
720-37475-3	ACC-3 (23.5-25)	Solid	09/14/11 08:20	09/14/11 16:03
720-37475-5	ACC-3 (33.5-35)	Solid	09/14/11 08:45	09/14/11 16:03
720-37475-7	ACC-3	Water	09/14/11 09:30	09/14/11 16:03
720-37475-10	ACC-4 (8.5-10)	Solid	09/14/11 13:10	09/14/11 16:03
720-37475-13	ACC-4 (23.5-25)	Solid	09/14/11 13:33	09/14/11 16:03
720-37475-17	ACC-4 (43.5-45)	Solid	09/14/11 14:10	09/14/11 16:03
720-37475-18	ACC-4	Water	09/14/11 14:50	09/14/11 16:03

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San Francisco 1220 Quarry Lane

Pleasanton, CA 94566

720.37475

Chain of Custody Record

phone 925.484.1919 fax 925.600.3002																	TestAmerica Laboratories, Inc.
Client Contact	Project Ma	nager: Julia	Siudyla			Site C	Contac	ct: Ju	lia Sit	ıdyla	D.	ate: 🌱	14/1	1			COC No:
ACC Environmental Consultatns	Tel/Fax: 51	0-773-0752				Lab C	Conta	ct:			C	arrier:	····		<i>.</i>	,	1 of 2 COCs
7977 Capwell Drive, Suite 100		Analysis T	urnaround]														Job No. 3054-103.01
Oakland, CA		ar (C) or Wo				580 580									1		
(510) 638-8400 x110 Phone	•	TAT if different f	from Below	<u>s dorb</u>					1. [
(510) 638-8404 FAX		2	weeks!	•		GIR? Lista					1 1						SDG No.
Project Name: LVJUSD Maintenance Yard		1	week				a										
Site: 2900 Ladd Avenue, Livermore, CA		:	2 days				8260B		4	اي				1			
P O # 3054-103.01			l đay			E 5	+ +		808	<u> </u>				1			
	Sample	Sample	Sample			Filtered Sam TPHs-8051B	BTEX/MtBE-	VOCs- 8260B	Pesticides-8081A	CAM 17-6010B						17091	
Sample Identification	Date	Time	Туре		# of Cont.	all to		Š	Pest	3		<u> </u>				当	Sample Specific Notes:
ACC-3 (8.5-10)	9/14/11	0600		Soil	山	V		\mathbb{X}							<u> </u>		
ACC -3 (18,5-20) ACC -3 (23.5-25)	9/14/1	0812		Soil	4	\	/ /										
VCC-3 (52.2-52)	91州1	06,7°		Soil	4		/ V										
A(C-3 (28,5-30)	9/14/11	೧೩೧೭		Soil	4		生,	1_									
ACC-3 (33,5-35)	9/14/11			Soil	4	<u> </u>	/\/						11				<u>/</u>
ACC-5 (38,5-46)	9 40	1880		Soil	4	1	VV	_							<u> </u>	\searrow	
ACC-3 (Vater)	D/1411	0930		1/20	4	l	/ V	1_									4
ACC-3 (49.5-50)	9/14/1	950		501)	V	/し	1_								$ \checkmark $	
AC-3 (585-60)		1000		501	4	۷	/ し	1_								V	
	' '							<u> </u>									
Preservation Used 1= Ico 2= HCl; 5= H2SO4; 4=HNO3; 5=NaOH 6	Othe 1	ROH	and I)I v													
Possible Hazurd Identification Non-Hazard Flammable Skin Irritani P	oison B	Umano:		₫99	isithe stituer		F		s pos a m To (ee may be asse	ssed if : sal By L	sample ah		etained arcrive f		er than 1 month) Months
Special Instructions/QC Requirements & Comments:	OISON D	Ondio)	CGA	31-100	.01		10101	77 70 1	J110111	27520	our by			00000	<u> </u>	
	the	Sam	مالاد	M	whee	el	-	4	1/1								
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Relinquished by:	Company:	fr C	ブル	Date/Ti	[] [] ne:	R	eceive	ed by:	بيا مسير :	gVVV			/ // Company				9//9// 73 Date/Time:
1	1							,				-	. ,				
Relinquished by:	Company:			Date/Ti	ne:	R	eceive	ed by:	:			C	ompany	/:	1,11		Date/Time:
	·											L			e e e e e e e e e e e e e e e e e e e		Form No. CA-C-WI-002, dated 04/07/2011

Temp 4.32

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San Francisco 1220 Quarry Lane







720.37475

Chain of Custody Record

Pleasanton, CA 94566			·		TestAmerica Laboratories, Inc.
phone 925.484.1919 fax 925.600.3002 Client Contact	Project Manager: Julia Siudyla		Site Contact: Julia Siudyla	Date: 9/14/1	COC No:
ACC Environmental Consultatns	Tel/Fax: 510-773-0752		Lab Contact:	Carrier:	2 of 2 COCs
7977 Capwell Drive, Suite 100	Analysis Turnaround	d Time			Job No. 3054-103.01
Oakland, CA	Calendar (C) or Work Days (V				
(510) 638-8400 x110 Phone	TAT if different from Below				
(510) 638-8404 FAX	2 weeks				SDG No.
Project Name: LVJUSD Maintenance Yard	l week				
Site: 2900 Ladd Avenue, Livermore, CA	2 days		1A 18 18 18 19 18 19 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18		
P O # 3054-103.01	l day		1 1 1 1 1 1 1 1 1 1		
Sample Identification	Sample Sample Sample Date Time Type		Elitered Sample TPHg-8051B BTEX/M1BE-82 VOCs-8260B Pesticides-8081A CAM 17-6010B	Носр	Sample Specific Notes:
ACC-4 (8.5-10)	9/4/1/1310	, Sai 4			
ACC-4 (13,5-15)	JH1) 13(6	54		X	
ACC-4(185-20)	914/11/326	501 4	, , .		
AC-4(23.5-25)	19/H/11/1333	5/14	Х×		
AC-4 (285-30)	9/40 340	561 4			
ACC-4 (332 - 3I)	9/14/11/350	Sul 4			
ACC-4 (38.5- 40)	9/4/1/400	561. 4		<u> </u>	
ACC-4(43.5 ~ 45)	9/14/0/1410	Sail 1	X×		
ACC-4 (water)	1114/11/120	Ho 4	××		
A(C-4(Z3Z-2Z)	9/14/11/1510	501) 1			
AU-4(63.2 - 62)	19/19/11 1522	Sei'l 1			
Preservation Used: 1= Io, = HCD 3= H2SO4; 4=HNO3; 5=NaOH; 6	=Other MeOH, DI	water			
Possible Hazard Identification Non-Hazard Flammable Skin Irritant I	Poison B Unknown	De Sarin	Sample Disposal (A fee may be as	sposal By Lab Archive For	ger than 1 month) Months
Special Instructions/QC Requirements & Comments:					
	<u> </u>	1		·	403
Relinquished by: Cony Hragen	Company ACC GAV	Date/Time:		Company:	Date/Time: /
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: ACC Environmental Consultants

Job Number: 720-37475-1

Login Number: 37475 List Source: TestAmerica San Francisco

List Number: 1
Creator: Apostol. Anita

Creator: Apostol, Anita		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica San Francisco
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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-37503-1

Client Project/Site: Ladd Ave., Livermore

For:

ACC Environmental Consultants 7977 Capwell Drive Suite 100 Oakland, California 94621

Attn: Julia Siudyla

Shaema

Authorized for release by: 09/21/2011 05:26:03 PM

Dimple Sharma Project Manager I dimple.sharma@testamericainc.com

Total Access **Have a Question?**

·····LINKS ·······

Review your project results through

Visit us at: www.testamericainc.com This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

0

4.6

44

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Case Narrative

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Job ID: 720-37503-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative 720-37503-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

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TestAmerica Job ID: 720-37503-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-5 (18.5-20)

Lab Sample ID: 720-37503-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1200		1100		ug/Kg	500	_	8260B	Total/NA
Ethylbenzene	4800		1100		ug/Kg	500		8260B	Total/NA
Toluene	8700		1100		ug/Kg	500		8260B	Total/NA
Xylenes, Total	30000		2100		ug/Kg	500		8260B	Total/NA
GRO (C5-C12)	300000		53000		ua/Ka	500		8260B	Total/NA

Client Sample ID: ACC-5 (38.5-40)

Lab Sample ID: 720-37503-7

No Detections

Client Sample ID: ACC-5 (WATER)

Lab Sample ID: 720-37503-10

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Benzene	1.7	0.50	ug/L		8260B/CA_LUFTM	Total/NA
Ethylbenzene	4.4	0.50	ug/L	1	8260B/CA_LUFTM	Total/NA
Toluene	8.9	0.50	ug/L	1	8260B/CA_LUFTM	Total/NA
Xylenes, Total	19	1.0	ug/L	1	8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	100	50	ug/L	1	8260B/CA_LUFTM	Total/NA

Client Sample ID: ACC-6 (33.5-35)

Lab Sample ID: 720-37503-15

No Detections

Client Sample ID: ACC-6 (WATER)

Lab Sample ID: 720-37503-17

No Detections

3

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Client Sample ID: ACC-5 (18.5-20) Lab Sample ID: 720-37503-3

Date Collected: 09/15/11 08:25 Date Received: 09/15/11 16:07

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1100		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
Benzene	1200		1100		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
Ethylbenzene	4800		1100		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
Toluene	8700		1100		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
Xylenes, Total	30000		2100		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
GRO (C5-C12)	300000		53000		ug/Kg		09/15/11 19:43	09/15/11 22:22	500
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		66 - 148				09/15/11 19:43	09/15/11 22:22	500
1,2-Dichloroethane-d4 (Surr)	103		62 - 137				09/15/11 19:43	09/15/11 22:22	500
Toluene-d8 (Surr)	101		65 - 141				09/15/11 19:43	09/15/11 22:22	500

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Client Sample ID: ACC-5 (38.5-40) Lab Sample ID: 720-37503-7 Date Collected: 09/15/11 09:00

Matrix: Solid

Date Received: 09/15/11 16:07

Method: 8260B - Volatile Organ	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.0		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
Benzene	ND		2.0		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
Ethylbenzene	ND		2.0		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
Toluene	ND		2.0		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
Xylenes, Total	ND		3.9		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
Gasoline Range Organics (GRO)	ND		98		ug/Kg		09/15/11 16:49	09/15/11 18:39	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		45 - 131				09/15/11 16:49	09/15/11 18:39	1
1,2-Dichloroethane-d4 (Surr)	77		60 - 140				09/15/11 16:49	09/15/11 18:39	1
Toluene-d8 (Surr)	95		58 - 140				09/15/11 16:49	09/15/11 18:39	1

TestAmerica San Francisco 09/21/2011

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Client Sample ID: ACC-5 (WATER)

Lab Sam

Date Collected: 09/15/11 10:15 Date Received: 09/15/11 16:07 Lab Sample ID: 720-37503-10

Matrix: Water

Method: 8260B/CA_LUFTMS - 82	260B / CA LUF1	ΓMS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/16/11 21:55	1
Benzene	1.7		0.50		ug/L			09/16/11 21:55	1
Ethylbenzene	4.4		0.50		ug/L			09/16/11 21:55	1
Toluene	8.9		0.50		ug/L			09/16/11 21:55	1
Xylenes, Total	19		1.0		ug/L			09/16/11 21:55	1
Gasoline Range Organics (GRO)	100		50		ug/L			09/16/11 21:55	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		67 - 130			_		09/16/11 21:55	1
1,2-Dichloroethane-d4 (Surr)	117		67 - 130					09/16/11 21:55	1
Toluene-d8 (Surr)	101		70 - 130					09/16/11 21:55	1

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Client: ACC Environmental Consultants

TestAmerica Job ID: 720-37503-1

Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-6 (33.5-35)

Date Collected: 09/15/11 13:40 Date Received: 09/15/11 16:07

Lab Sample ID: 720-37503-15

Matrix: Solid

Method: 8260B - Volatile Organic	Compounds ((GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.9		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
Benzene	ND		1.9		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
Ethylbenzene	ND		1.9		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
Toluene	ND		1.9		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
Xylenes, Total	ND		3.8		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
Gasoline Range Organics (GRO)	ND		94		ug/Kg		09/15/11 16:49	09/15/11 18:09	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		45 - 131				09/15/11 16:49	09/15/11 18:09	1
1,2-Dichloroethane-d4 (Surr)	73		60 - 140				09/15/11 16:49	09/15/11 18:09	1
Toluene-d8 (Surr)	96		58 - 140				09/15/11 16:49	09/15/11 18:09	1

0.50

1.0

50

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Lab Sample ID: 720-37503-17

Matrix: Water

Client Sample ID: ACC-6 (WATER)

Date Collected: 09/15/11 14:40 Date Received: 09/15/11 16:07

Method: 8260B/CA LUFTMS - 8260B / CA LUFT MS Analyte Result Qualifier RL MDL Unit D Methyl tert-butyl ether ND 0.50 ug/L Benzene ND 0.50 ug/L Ethylbenzene ND 0.50

ND

ND

ND

Toluene

Xylenes, Total

Gasoline Range Organics (GRO)

-C5-C12

 Surrogate
 % Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene
 104
 67 - 130

 1,2-Dichloroethane-d4 (Surr)
 115
 67 - 130

 Toluene-d8 (Surr)
 100
 70 - 130

 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

 ug/L
 09/16/11 22:24
 1

Prepared Analyzed Dil Fo 09/16/11 22:24 09/16/11 22:24 09/16/11 22:24

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-99081/1-A Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA Analysis Batch: 99065 Prep Batch: 99081

	MB MB						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND ND	5.0	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Benzene	ND	5.0	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Ethylbenzene	ND	5.0	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Toluene	ND	5.0	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Xylenes, Total	ND	9.9	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
Gasoline Range Organics (GRO)	ND	250	ug/Kg		09/15/11 08:49	09/15/11 10:06	1
-C5-C12							

	MB MB				
Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94	45 - 131	09/15/11 08:49	09/15/11 10:06	1
1,2-Dichloroethane-d4 (Surr)	106	60 - 140	09/15/11 08:49	09/15/11 10:06	1
Toluene-d8 (Surr)	95	58 - 140	09/15/11 08:49	09/15/11 10:06	1
	4-Bromofluorobenzene 1,2-Dichloroethane-d4 (Surr)	Surrogate% RecoveryQualifier4-Bromofluorobenzene941,2-Dichloroethane-d4 (Surr)106	Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 94 45 - 131 1,2-Dichloroethane-d4 (Surr) 106 60 - 140	Surrogate % Recovery 4-Bromofluorobenzene Qualifier 94 Limits 45 - 131 Prepared 09/15/11 08:49 1,2-Dichloroethane-d4 (Surr) 106 60 - 140 09/15/11 08:49	Surrogate % Recovery Qualifier Limits Prepared Analyzed 4-Bromofluorobenzene 94 45 - 131 09/15/11 08:49 09/15/11 10:06 1,2-Dichloroethane-d4 (Surr) 106 60 - 140 09/15/11 08:49 09/15/11 10:06

Lab Sample ID: LCS 720-99081/2-A				Client	Sample I	D: Lab Control Sample
Matrix: Solid						Prep Type: Total/NA
Analysis Batch: 99065						Prep Batch: 99081
	Spike	LCS LCS				% Rec.
Analyte	Added	Result Qualif	ier Unit	D	% Rec	Limits

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	49.8	46.4		ug/Kg		93	71 - 144	
Benzene	49.8	46.6		ug/Kg		94	82 - 124	
Ethylbenzene	49.8	49.0		ug/Kg		98	80 - 137	
Toluene	49.8	48.4		ug/Kg		97	83 - 128	
m-Xylene & p-Xylene	99.6	100		ug/Kg		101	79 - 146	
o-Xylene	49.8	51.0		ug/Kg		102	84 - 140	

	LCS LCS	
Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	99	45 - 131
1,2-Dichloroethane-d4 (Surr)	99	60 - 140
Toluene-d8 (Surr)	99	58 ₋ 140

Lab Sample ID: LCS 720-99081/4-A	Client Sample ID: Lab Control Sample
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 99065	Prep Batch: 99081

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)	988	802		ug/Kg	_	81	61 - 128	

Analyte		Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics (GRO)		988	802		ug/Kg		81	61 - 128	
-C5-C12									
	LCS LCS								

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	102		60 - 140
Toluene-d8 (Surr)	99		58 - 140

Lab Sample ID: LCSD 720-99081/3-A				Client	Samp	le ID: La	ab Control	Sampl	e Dup
Matrix: Solid							Prep Ty	pe: To	al/NA
Analysis Batch: 99065							Prep	Batch:	99081
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	49.4	49.0		ug/Kg		99	71 - 144	5	20

TestAmerica Job ID: 720-37503-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99081/3-A

Matrix: Solid

Analysis Batch: 99065

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 99081

-	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Benzene	49.4	46.2		ug/Kg		94	82 - 124	1	20	
Ethylbenzene	49.4	48.0		ug/Kg		97	80 - 137	2	20	
Toluene	49.4	47.8		ug/Kg		97	83 - 128	1	20	
m-Xylene & p-Xylene	98.8	97.8		ug/Kg		99	79 - 146	3	20	
o-Xylene	49.4	49.6		ug/Kg		100	84 - 140	3	20	

LCSD LCSD

828

Result Qualifier

Unit

ug/Kg

Limits

45 - 131

60 - 140

58 - 140

Spike

Added

996

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 99081

> % Rec. RPD % Rec Limits RPD Limit 61 - 128 3

Gasoline Range Organics (GRO) -C5-C12

Analyte

Surrogate

4-Bromofluorobenzene

Toluene-d8 (Surr)

Matrix: Solid

1,2-Dichloroethane-d4 (Surr)

Analysis Batch: 99065

LCSD LCSD

LCSD LCSD

% Recovery Qualifier

96

98

98

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	101		60 - 140
Toluene-d8 (Surr)	99		58 ₋ 140

Lab Sample ID: MB 720-99115/1-A

Lab Sample ID: LCSD 720-99081/5-A

Matrix: Solid

Analysis Batch: 99063

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 99115

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Benzene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Ethylbenzene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Toluene	ND		500		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
Xylenes, Total	ND		1000		ug/Kg		09/15/11 09:00	09/15/11 09:41	1
GRO (C5-C12)	ND	2	25000		ug/Kg		09/15/11 09:00	09/15/11 09:41	1

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Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		66 - 148	09/15/11 09:00	09/15/11 09:41	1
1,2-Dichloroethane-d4 (Surr)	97		62 - 137	09/15/11 09:00	09/15/11 09:41	1
Toluene-d8 (Surr)	98		65 - 141	09/15/11 09:00	09/15/11 09:41	1

Lab Sample ID: LCS 720-99115/2-A

Matrix: Solid

Analysis Batch: 99063

Client Sample ID: Lab Control Sample)
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Prep Type: Total/NA

Prep Batch: 99115

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	5000	4660		ug/Kg		93	71 - 146	
Benzene	5000	4740		ug/Kg		95	76 - 122	
Ethylbenzene	5000	5160		ug/Kg		103	76 - 137	

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Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-99115/2-A

Matrix: Solid

Analysis Batch: 99063

Spike

LCS LCS

Rec.

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	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Toluene	5000	5060		ug/Kg		101	77 _ 120	
m-Xylene & p-Xylene	10000	10600		ug/Kg		106	71 - 142	
o-Xylene	5000	5240		ug/Kg		105	71 - 142	
0-Aylene	3000	3240		ug/itg		105	11-172	

	LCS	LCS	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		66 - 148
1,2-Dichloroethane-d4 (Surr)	95		62 - 137
Toluene-d8 (Surr)	99		65 - 141

Lab Sample ID: LCS 720-99115/4-A Client Sample ID: Lab Control Sample

Matrix: Solid
Analysis Batch: 99063

Prep Type: Total/NA
Prep Batch: 99115

	Spike	LCS LCS			% Rec.	
Analyte	Added	Result Qualifi	ier Unit	D % Rec	Limits	
GRO (C5-C12)	100000	85700	ug/Kg	86	70 - 130	

	LCS LCS	
Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	100	66 - 148
1,2-Dichloroethane-d4 (Surr)	104	62 - 137
Toluene-d8 (Surr)	100	65 - 141

Lab Sample ID: LCSD 720-99115/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 99063

	Spike	LCSD	LCSD				% Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	
Methyl tert-butyl ether	5000	4840		ug/Kg		97	71 - 146	4	20	
Benzene	5000	4720		ug/Kg		94	76 - 122	0	20	
Ethylbenzene	5000	5100		ug/Kg		102	76 - 137	1	20	
Toluene	5000	5000		ug/Kg		100	77 - 120	1	20	
m-Xylene & p-Xylene	10000	10500		ug/Kg		105	71 - 142	0	20	
o-Xylene	5000	5220		ug/Kg		104	71 - 142	0	20	
	Methyl tert-butyl ether Benzene Ethylbenzene Toluene m-Xylene & p-Xylene	Analyte Added Methyl tert-butyl ether 5000 Benzene 5000 Ethylbenzene 5000 Toluene 5000 m-Xylene & p-Xylene 10000	Analyte Added Result Methyl tert-butyl ether 5000 4840 Benzene 5000 4720 Ethylbenzene 5000 5100 Toluene 5000 5000 m-Xylene & p-Xylene 10000 10500	Analyte Added Result Qualifier Methyl tert-butyl ether 5000 4840 Benzene 5000 4720 Ethylbenzene 5000 5100 Toluene 5000 5000 m-Xylene & p-Xylene 10000 10500	Analyte Added Result Qualifier Unit Methyl tert-butyl ether 5000 4840 ug/Kg Benzene 5000 4720 ug/Kg Ethylbenzene 5000 5100 ug/Kg Toluene 5000 5000 ug/Kg m-Xylene & p-Xylene 10000 10500 ug/Kg	Analyte Added Result qualifier Unit ug/Kg D Methyl tert-butyl ether 5000 4840 ug/Kg Benzene 5000 4720 ug/Kg Ethylbenzene 5000 5100 ug/Kg Toluene 5000 5000 ug/Kg m-Xylene & p-Xylene 10000 10500 ug/Kg	Analyte Added Result Qualifier Unit Unit D % Rec Methyl tert-butyl ether 5000 4840 ug/Kg 97 Benzene 5000 4720 ug/Kg 94 Ethylbenzene 5000 5100 ug/Kg 102 Toluene 5000 5000 ug/Kg 100 m-Xylene & p-Xylene 10000 10500 ug/Kg 105	Analyte Added Result Qualifier Unit D % Rec Limits Methyl tert-butyl ether 5000 4840 ug/Kg 97 71 - 146 Benzene 5000 4720 ug/Kg 94 76 - 122 Ethylbenzene 5000 5100 ug/Kg 102 76 - 137 Toluene 5000 5000 ug/Kg 100 77 - 120 m-Xylene & p-Xylene 10000 10500 ug/Kg 105 71 - 142	Analyte Added Result Qualifier Unit D % Rec Limits RPD Methyl tert-butyl ether 5000 4840 ug/Kg 97 71 - 146 4 Benzene 5000 4720 ug/Kg 94 76 - 122 0 Ethylbenzene 5000 5100 ug/Kg 102 76 - 137 1 Toluene 5000 5000 ug/Kg 100 77 - 120 1 m-Xylene & p-Xylene 10000 10500 ug/Kg 105 71 - 142 0	Analyte Added Result Qualifier Unit D % Rec Limits RPD Limits Methyl tert-butyl ether 5000 4840 ug/Kg 97 71 - 146 4 20 Benzene 5000 4720 ug/Kg 94 76 - 122 0 20 Ethylbenzene 5000 5100 ug/Kg 102 76 - 137 1 20 Toluene 5000 5000 ug/Kg 100 77 - 120 1 20 m-Xylene & p-Xylene 1000 10500 ug/Kg 105 71 - 142 0 20

	LCSD	LCSD	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		66 - 148
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
Toluene-d8 (Surr)	99		65 - 141

Lab Sample ID: LCSD 720-99115/5-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 99063

Spike LCSD LCSD Prep Type: Total/NA
Prep Batch: 99115
% Rec. RPD

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
GRO (C5-C12)	100000	88700		ug/Kg		89	70 - 130	3	20

	LCSD	LCSD	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		66 - 148
1,2-Dichloroethane-d4 (Surr)	103		62 - 137

Prep Type: Total/NA

Prep Batch: 99115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99115/5-A

Matrix: Solid

Analysis Batch: 99063

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 99115

LCSD LCSD

Surrogate % Recovery Qualifier Limits Toluene-d8 (Surr) 100 65 - 141

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-99213/4

Matrix: Water

Analysis Batch: 99213

Client Sample ID: Method Blank

Prep Type: Total/NA

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Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	0.50	ug/L		09/16/11 19:30	1
Benzene	ND	0.50	ug/L		09/16/11 19:30	1
Ethylbenzene	ND	0.50	ug/L		09/16/11 19:30	1
Toluene	ND	0.50	ug/L		09/16/11 19:30	1
Xylenes, Total	ND	1.0	ug/L		09/16/11 19:30	1
Gasoline Range Organics (GRO) -C5-C12	ND	50	ug/L		09/16/11 19:30	1

мв мв

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		67 - 130		09/16/11 19:30	1
1,2-Dichloroethane-d4 (Surr)	119		67 - 130		09/16/11 19:30	1
Toluene-d8 (Surr)	101		70 - 130		09/16/11 19:30	1

Lab Sample ID: LCS 720-99213/5 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 99213

,,	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Methyl tert-butyl ether	25.0	27.9		ug/L		112	62 - 130
Benzene	25.0	25.1		ug/L		100	82 _ 127
Ethylbenzene	25.0	23.7		ug/L		95	86 ₋ 135
Toluene	25.0	23.5		ug/L		94	83 - 129
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	70 - 142
o-Xylene	25.0	25.1		ug/L		100	89 _ 136

LCS LCS

Surrogate	% Recovery Qualifier	Limits
4-Bromofluorobenzene	104	67 - 130
1,2-Dichloroethane-d4 (Surr)	117	67 - 130
Toluene-d8 (Surr)	104	70 - 130

Lab Sample ID: LCS 720-99213/7

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ab Sample ID: LCS 720-99213/7	Client Sample ID: Lab Control Sample
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 99213	

LCS LCS

Spike Added Result Qualifier Unit D % Rec Limits 500 62 - 117 441 ug/L 88 Gasoline Range Organics (GRO)

-C5-C12

	LCS	LUS	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	107		67 - 130

% Rec.

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99213/7

Lab Sample ID: LCSD 720-99213/6

Matrix: Water

Matrix: Water

Analysis Batch: 99213

Client Sample ID: Lab Control Sample Prep Type: Total/NA

LCS LCS

Surrogate	% Recovery Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	121	67 - 130
Toluene-d8 (Surr)	102	70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 99213

LCSD LCSD Spike % Rec. RPD Added Result Qualifier % Rec Limits RPD Limit Unit Methyl tert-butyl ether 25.0 29.3 117 62 - 130 20 5 ug/L Benzene 25.0 25.4 ug/L 102 82 _ 127 20 Ethylbenzene 25.0 24.0 96 86 - 135 ug/L 20 Toluene 25.0 23.5 ug/L 94 83 - 129 0 20 m-Xylene & p-Xylene 50.0 49.0 ug/L 98 70 - 142 2 20 20 o-Xylene 25.0 25.5 ug/L 102 89 - 136 2

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	115		67 - 130
Toluene-d8 (Surr)	104		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 99213

Matrix: Water

Lab Sample ID: LCSD 720-99213/8

LCSD LCSD Spike % Rec. RPD Analyte Added Result Qualifier Unit Limits Limit % Rec RPD 500 429 62 - 117 20 ug/L 86 Gasoline Range Organics (GRO)

-C5-C12

	LCSD	LCSD
ırroqate	% Pocovory	Oualifi

Surrogate	% Recovery Qualitier	Limits
4-Bromofluorobenzene	107	67 - 130
1,2-Dichloroethane-d4 (Surr)	119	67 - 130
Toluene-d8 (Surr)	103	70 130

QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

GC/MS VOA

Analysis Batch: 99063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-99115/2-A	Lab Control Sample	Total/NA	Solid	8260B	99115
LCS 720-99115/4-A	Lab Control Sample	Total/NA	Solid	8260B	99115
LCSD 720-99115/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99115
LCSD 720-99115/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99115
MB 720-99115/1-A	Method Blank	Total/NA	Solid	8260B	99115

Analysis Batch: 99065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37503-7	ACC-5 (38.5-40)	Total/NA	Solid	8260B	99081
720-37503-15	ACC-6 (33.5-35)	Total/NA	Solid	8260B	99081
LCS 720-99081/2-A	Lab Control Sample	Total/NA	Solid	8260B	99081
LCS 720-99081/4-A	Lab Control Sample	Total/NA	Solid	8260B	99081
LCSD 720-99081/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99081
LCSD 720-99081/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99081
MB 720-99081/1-A	Method Blank	Total/NA	Solid	8260B	99081

Prep Batch: 99081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37503-7	ACC-5 (38.5-40)	Total/NA	Solid	5035	
720-37503-15	ACC-6 (33.5-35)	Total/NA	Solid	5035	
LCS 720-99081/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99081/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99081/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99081/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99081/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 99115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
720-37503-3	ACC-5 (18.5-20)	Total/NA	Solid	5035	<u> </u>
LCS 720-99115/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99115/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99115/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99115/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99115/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 99139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37503-3	ACC-5 (18.5-20)	Total/NA	Solid	8260B	99115

Analysis Batch: 99213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37503-10	ACC-5 (WATER)	Total/NA	Water	8260B/CA_LUFT	
				MS	
720-37503-17	ACC-6 (WATER)	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99213/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99213/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99213/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99213/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	

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QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

GC/MS VOA (Continued)

Analysis Batch: 99213 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-99213/4	Method Blank	Total/NA	Water	8260B/CA_LUFT	_
				MS	

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-5 (18.5-20)

Date Collected: 09/15/11 08:25 Date Received: 09/15/11 16:07 Lab Sample ID: 720-37503-3

Matrix: Solid

Matrix: Solid

Matrix: Water

Matrix: Solid

Matrix: Water

TAL SF

Lab Sample ID: 720-37503-15

ı		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
	Total/NA	Prep	5035			99115	09/15/11 19:43	JZ	TAL SF
ı	Total/NA	Analysis	8260B		500	99139	09/15/11 22:22	AC	TAL SF

Client Sample ID: ACC-5 (38.5-40)

Lab Sample ID: 720-37503-7

Date Collected: 09/15/11 09:00

Date Received: 09/15/11 16:07

Prep Type

Total/NA

Total/NA

Batch		Dilution	Batch	Prepared		
Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
5035			99081	09/15/11 16:49	JZ	TAL SF

09/15/11 18:39

LL

99065

Client Sample ID: ACC-5 (WATER)

Lab Sample ID: 720-37503-10

Date Collected: 09/15/11 10:15

Date Received: 09/15/11 16:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	99213	09/16/11 21:55	AC	TAL SF

Client Sample ID: ACC-6 (33.5-35)

Batch

Туре

Prep

Analysis

8260B

Date Collected: 09/15/11 13:40

Date Received: 09/15/11 16:07

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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99081	09/15/11 16:49	JZ	TAL SF
Total/NA	Analysis	8260B		1	99065	09/15/11 18:09	LL	TAL SF

Client Sample ID: ACC-6 (WATER)

Lab Sample ID: 720-37503-17

Date Collected: 09/15/11 14:40

Date Received: 09/15/11 16:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	99213	09/16/11 22:24	AC	TAL SF

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL SF
9			

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37503-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-37503-3	ACC-5 (18.5-20)	Solid	09/15/11 08:25	09/15/11 16:07
720-37503-7	ACC-5 (38.5-40)	Solid	09/15/11 09:00	09/15/11 16:07
720-37503-10	ACC-5 (WATER)	Water	09/15/11 10:15	09/15/11 16:07
720-37503-15	ACC-6 (33.5-35)	Solid	09/15/11 13:40	09/15/11 16:07
720-37503-17	ACC-6 (WATER)	Water	09/15/11 14:40	09/15/11 16:07

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Page 22 of 24







Company:















Chain of Custody Record



Pleasanton,	CA.	94566

Relinquished by:

San Francisco 1220 Quarry Lane

phone 925,484.1919 fax 925.600.3002										i	<i>y</i> .			TestAmerica Laboratories, In	iC.
Client Contact	Project Manager: Julia Siudyla		Site Contact: Julia Siudyla Date: 9/15/(COC No:					
ACC Environmental Consultatns	Tel/Fax: 510-773-0752	. !	Lab Contact:					Car	rier:					of <u>L</u> COCs	
7977 Capwell Drive, Suite 100	Analysis Turnaround Time			\Box								\Box	Jób No. 3054-103.01		
Oakland, CA	Calendar (C) or Work Days (W)				111										
(510) 638-8400 x110 Phone		TAT if different from Below Schays													
(510) 638-8404 FAX	2 weeks													SDG No.	
Project Name: LVJUSD Maintenance Yard	□ 1 week													1	
Site: 2900 Ladd Avenue, Livermore, CA	2 days	ľ	ete gid	27 28 28 28 28 28 28 28 28 28 28 28 28 28											
P O # 3054-103.01				88	831/4	8 7							·		
			Sa Sa	BTEX/MtBE-	VOCs- 8260B Pesticides-8081A	CAM 17-6010B									
-	Sample Sample Sample		Hg-8	EX.	ا الله	ž Q									
Sample Identification	Date Time Type Matri	trix # of Cont.		E S	2 g	51								Sample Specific Notes	<u> </u>
ACC-5(5-63)	9/15/11/205 50:														
			╂╂╌┼	+	+		++		+	v V	1	++	\top		
ACC-5 (8.5-10)	9/15/11 0810 501		\coprod			$\perp \perp \downarrow \perp \downarrow$			1						
ACC-5 (18.5-20)	9/15/11 0025 501	14	V	V											
A(C-5 (BS 25)	9/15/11/0837 501	1 4				V							\perp		
ACC-5 (285-30)	9/15/10 (B45 ° 56)				\bot										
ACC-5 (33.5-35)	9/15/1/08/22 50/	il #-										÷			
A(C-5/30,5-40)	9/d/1 0100 50°		V	V	T										
AC -5 (435-45)	9/18/10910 501	1) 4						ŝ							6
27(-5 (48,5 -66)	9/19/1 0135 Sev														
ACC-S (water)	9/5/11 6745 idis 420	04	117	7											
ACC-5 (53.5 - 55)	9/15/11/030 501	*, }		П		117									
ACC-5 (3.5-55) CH .	118/11/040 CH Ser		(H	П	\top		3								
Preservation Used: 1= Ice 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOl		1	-	一十	\top				1"1		11				
Preservation Used: 1= Icel 2= HCI; 3= H2SO4; 4=HNO3; 5=NaOr Possible Hazard Identification	Re-outer 1 m-11 Dar our a	19050 PM	Ne Sar	npie i	Dispos	sal (A fe	may be	asses	sed if	sampi	ies are	retain	ed ion	nger than 1 month)	
Non-Hazard Planmable Skin Irritant	Poison B Granown	censtitus				o Client	2	Dispos	al By L	.ab		Archiv	re For	Months	
Special Instructions/OC Requirements & Comments:	7 0301 2											***************************************		*	
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	<i>f</i> *	8			~	_									

Company: ACL ENV Relinquished by: Received by: Relinquished by:

Received by:

Form No. CA-C-WI-002, dated 04/07/2011

Temp 3.2°

Date/Time:

Company:

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Page 23 of 24

San Francisco 1220 Quarry Lane







720.37503

133739 THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

Pleasanton, CA 94566 phone 925.484.1919 fax 925.600.3002																				TestAmerica La	boratories, In	ıc.
Client Contact	Project Manager: Julia Siudyla					Site Contact: Julia Siudyla Date:							ne: 9/15/()						COC No:			
ACC Environmental Consultatns	Tel/Fax: 510-773-0752											arrier:						L of L	COCs			
7977 Capwell Drive, Suite 100			urnaround '							T										Job No. 3054-1	03.01	
Oakland, CA	Calenda	ar (C) or Wo	ork Days (W)	W	,													į				
(510) 638-8400 x110 Phone] 1	TAT if different t	from Below 🚾	Schar	2											-						
(510) 638-8404 FAX		2	weeks	•						1										SDG No.		
Project Name: LVJUSD Maintenance Yard		1	week			S.												ŀ				
Site: 2900 Ladd Avenue, Livermore, CA			2 days				8260B		«													
P O # 3054-103.01			day			i i		89	3081													N
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Samp	BTEX/MIBE	VOCs- 8260B	Pesticides-8081A	100		·								Sample	Specific Notes:	
ACC-G (5-6.5)	9/15/11	1310		521	F	П				V												
ACC -6 (13.5-15)	9/15/11	1318		501	Ū					V	1										***************************************	
ACC-6 (73,5-25)	Alish	375	ě	Sal	Y					V		7		1				\neg	\top			
A(C-6(335-35)	Alishi	1340		Soil	4	I	/	1			1	H				1			+			
ACC-G(435-45)	112116	1356		Seil				CH	\top	V		Ť		1		┪			_			
ACC-6 (Water)	9/15/11	1440		H ₂ O	4					Ť		\dashv	1	1		+						
ACC-6 CH	9/18/17	(H		1150	•	H	+			+	+-+		_	-		+			+		***************************************	
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Preservation Used 1= Ice 2= HClr 3= H2SO4; 4=HNO3; 5=NaOH;	Other A	reort	1 2	I. W	ater	`																
	oison B	(777R/110)	s ⁿ	M J	nstitu	i si	ample 	Dis _l etum	p osal n To Ci	(A fe lient	e ma	y be.	asses Jispos	sed i sal By	f sam Lab	ples a	are re	taine criive	for_	ger than 1 month) Month	s	
Special Instructions/QC Requirements & Comments:		A. 11																				
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Relinquished by:	Company:			Date/Tin	ne:	R	eceive	d by:	***************************************						Comp	any:		***************************************		Date/Time:	-	
	<u> </u>			<u> </u>											L					Form No. CA-C-V	VI-002, dated (04/07/2011

Tem 3.2°

Login Sample Receipt Checklist

Client: ACC Environmental Consultants

Job Number: 720-37503-1

Login Number: 37503 List Source: TestAmerica San Francisco

List Number: 1 Creator: Apostol, Anita

Creator. Apostor, Armia		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-37521-1

Client Project/Site: Ladd Ave., Livermore

For:

ACC Environmental Consultants 7977 Capwell Drive Suite 100 Oakland, California 94621

Attn: Julia Siudyla

Shaema

Authorized for release by: 09/23/2011 11:44:22 AM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com

results through
Total Access

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Page 1 of 44

09/23/2011

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Definitions/Glossary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Job ID: 720-37521-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative 720-37521-1

Comments

No additional comments.

Receipt

1/ Did not receive TRIP BLANK.

2/ Sample ACC-7 (13.5-15): 1 vial withDI water/stir bar was received broken.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

Method 8260B: The sample ACC-7(13.5-15) was analyzed from DI water vial and the results were ND but the internal standard 1,4-Dichlorobenzene-d4 was below calibration criteria. The 2nd vial was received broken. The samples was analyzed from the sleeve and the results were confirmed.

No other analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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21-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-7 (13.5-15)

Analyte	Result	Qualifier RL	MDL Un	it	Dil Fac	D	Method	Prep Type
Antimony	2.3	1.9	mg	g/Kg	4		6010B	Total/NA
Arsenic	4.1	3.7	mg	g/Kg	4		6010B	Total/NA
Barium	100	1.9	mg	g/Kg	4		6010B	Total/NA
Beryllium	0.47	0.37	mg	g/Kg	4		6010B	Total/NA
Chromium	39	1.9	mg	g/Kg	4		6010B	Total/NA
Cobalt	11	0.75	mg	g/Kg	4		6010B	Total/NA
Copper	28	5.6	mg	g/Kg	4		6010B	Total/NA
Lead	5.4	1.9	mg	g/Kg	4		6010B	Total/NA
Molybdenum	2.7	1.9	mg	g/Kg	4		6010B	Total/NA
Nickel	91	1.9	mg	J/Kg	4		6010B	Total/NA
Vanadium	18	1.9	mg	g/Kg	4		6010B	Total/NA
Zinc	44	5.6	mg	g/Kg	4		6010B	Total/NA
Mercury	0.12	0.0097	mo	g/Kg	1		7471A	Total/NA

Client Sample ID: ACC-7 (38.5-40)

Lab Sample ID: 720-37521-4

No Detections

Client Sample ID: ACC-7 (WATER)

Lab Sample ID: 720-37521-6

No Detections

Client Sample ID: ACC-8 (5-6.5)

Lab Sample ID: 720-37521-7

No Detections

Client Sample ID: ACC-8 (43.5-45)

Lab Sample ID: 720-37521-11

No Detections

Client Sample ID: ACC-8 (WATER)

Lab Sample ID: 720-37521-12

No Detections

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-1

Matrix: Solid

Client Sample ID: ACC-7 (13.5-15)

Date Collected: 09/16/11 08:10 Date Received: 09/16/11 14:08

1,1,2,2-Tetrachloroethane

Analyte	Result Qualit	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Acetone	ND	23	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Benzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Dichlorobromomethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Bromobenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chlorobromomethane	ND	9.0	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Bromoform	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Bromomethane	ND	4.5	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
2-Butanone (MEK)	ND	23	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
n-Butylbenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
sec-Butylbenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
tert-Butylbenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Carbon disulfide	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Carbon tetrachloride	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chlorobenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chloroethane	ND	4.5	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chloroform	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chloromethane	ND	4.5	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
2-Chlorotoluene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
4-Chlorotoluene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Chlorodibromomethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,2-Dichlorobenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,3-Dichlorobenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,4-Dichlorobenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,3-Dichloropropane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,1-Dichloropropene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,2-Dibromo-3-Chloropropane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Ethylene Dibromide	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Dibromomethane	ND	4.5	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Dichlorodifluoromethane	ND	4.5	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,1-Dichloroethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,2-Dichloroethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,1-Dichloroethene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
cis-1,2-Dichloroethene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
trans-1,2-Dichloroethene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,2-Dichloropropane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
cis-1,3-Dichloropropene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	
trans-1,3-Dichloropropene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Ethylbenzene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Hexachlorobutadiene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	· · · · · · · · · · · · · · · · · · ·
2-Hexanone	ND	23	ug/Kg ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Isopropylbenzene	ND	2.3	ug/Kg ug/Kg		09/16/11 15:20	09/17/11 18:20	1
4-Isopropyltoluene	ND	2.3	ug/Kg ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Methylene Chloride	ND	4.5	ug/Kg ug/Kg		09/16/11 15:20	09/17/11 18:20	1
4-Methyl-2-pentanone (MIBK)	ND ND	23	ug/Kg ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Naphthalene	ND				09/16/11 15:20	09/17/11 18:20	1
•		4.5	ug/Kg				1
N-Propylbenzene Styrono	ND ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Styrene 1.1.1.2 Tetraphlereethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
1,1,1,2-Tetrachloroethane	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1

09/17/11 18:20

09/16/11 15:20

2.3

ug/Kg

ND

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-1

09/16/11 15:20

09/16/11 15:20

09/16/11 15:20

09/17/11 18:20

09/17/11 18:20

09/17/11 18:20

Matrix: Solid

Client Sample ID: ACC-7 (13.5-15)

Date Collected: 09/16/11 08:10 Date Received: 09/16/11 14:08

4-Bromofluorobenzene

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

Analyte	Result Qualifie	er RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	2.3	ug/Kg		09/16/11 15:20	09/17/11 18:20	1
Toluene	ND	2.3	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
1,2,3-Trichlorobenzene	ND	2.3	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
1,2,4-Trichlorobenzene	ND	2.3	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
1,1,1-Trichloroethane	ND	2.3	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
1,1,2-Trichloroethane	ND	2.3	ug/Kg	J	09/16/11 15:20	09/17/11 18:20	1
Trichloroethene	ND	2.3	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
Trichlorofluoromethane	ND	2.3	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
1,2,3-Trichloropropane	ND	2.3	ug/Kg	J	09/16/11 15:20	09/17/11 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.3	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
1,2,4-Trimethylbenzene	ND	2.3	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
1,3,5-Trimethylbenzene	ND	2.3	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
Vinyl acetate	ND	23	ug/Kg	1	09/16/11 15:20	09/17/11 18:20	1
Vinyl chloride	ND	2.3	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
Xylenes, Total	ND	4.5	ug/Kg	J	09/16/11 15:20	09/17/11 18:20	1
2,2-Dichloropropane	ND	2.3	ug/Kg	J	09/16/11 15:20	09/17/11 18:20	1
Gasoline Range Organics (GRO) -C5-C12	ND	110	ug/Kg]	09/16/11 15:20	09/17/11 18:20	1
Surrogate	% Recovery Qualifie	er Limits			Prepared	Analyzed	Dil Fac

45 - 131

60 - 140

58 - 140

105

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Dieldrin	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endrin aldehyde	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endrin	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endrin ketone	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Heptachlor	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Heptachlor epoxide	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
4,4'-DDT	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
4,4'-DDE	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
4,4'-DDD	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endosulfan I	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endosulfan II	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
alpha-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
beta-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
delta-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Endosulfan sulfate	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Methoxychlor	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Toxaphene	ND		39		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Chlordane (technical)	ND		39		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
alpha-Chlordane	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
gamma-Chlordane	ND		2.0		ug/Kg		09/20/11 08:42	09/22/11 03:45	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		34 - 110				09/20/11 08:42	09/22/11 03:45	1

RL

1.9

3.7 1.9

0.37

1.9

5.6

MDL Unit

mg/Kg mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-1

Analyzed

09/22/11 03:45

Analyzed

00/20/11 20:34

09/20/11 20:34

09/20/11 20:34

09/20/11 20:34

09/20/11 20:34

Matrix: Solid

Client Sample ID: ACC-7 (13.5-15)

Date Collected: 09/16/11 08:10 Date Received: 09/16/11 14:08

Method: 8081A - Organochio	orine Pesticides (G	C) (Continu	ed)
Surrogate	% Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	112		21 - 136

ırrogate	% Recovery	Qualifier	Limits
CB Decachlorobiphenyl	112		21 - 136

-			
Method: 6010B - Metals (ICP)			
Analyte	Result	Qualifier	
Antimony	2.3		

Arsenic	4.1
Barium	100
Beryllium	0.47
Cadmium	ND
Chromium	39

Cadmium	ND	0.47
Chromium	39	1.9
Cobalt	11	0.75
Copper	28	5.6
Lead	5.4	1.9

Molybdenum	2.7	1.9
Nickel	91	1.9
Selenium	ND	3.7
Silver	ND	0.93
Thallium	ND	1.9

—
Method: 7471A - Mercury (CVAA)
Analyte

Vanadium

Zinc

Analyte	Result	Qualifier	RL	MDL	Unit	D	1
Mercury	0.12		0.0097		mg/Kg		

18

,	13/20/11	13.07	03/20/11	20.54
(09/20/11	15:07	09/20/11	20:34
(09/20/11	15:07	09/20/11	20:34
(09/20/11	15:07	09/20/11	20:34
(09/20/11	15:07	09/20/11	20:34
(09/20/11	15:07	09/20/11	20:34
(09/20/11	15:07	09/20/11	20:34

mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4
mg/Kg	09/20/11 15:07	09/20/11 20:34	4

Prepared

09/20/11 08:42

Prepared

00/20/11 15:07

MDL	Unit	D	Prepared	Analyzed	Dil Fac
	mg/Kg		09/20/11 14:35	09/20/11 17:46	1

09/20/11 15:07

09/20/11 15:07

09/20/11 15:07

09/20/11 15:07

Dil Fac

Dil Fac

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-7 (38.5-40)

Lab Samp

Date Collected: 09/16/11 08:40 Date Received: 09/16/11 14:08 Lab Sample ID: 720-37521-4

Matrix: Solid

Method: 8260B - Volatile Organic	Compounds ((GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.4		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
Benzene	ND		2.4		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
Ethylbenzene	ND		2.4		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
Toluene	ND		2.4		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
Xylenes, Total	ND		4.8		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
Gasoline Range Organics (GRO)	ND		120		ug/Kg		09/16/11 15:20	09/21/11 04:38	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		45 - 131				09/16/11 15:20	09/21/11 04:38	1
1,2-Dichloroethane-d4 (Surr)	112		60 - 140				09/16/11 15:20	09/21/11 04:38	1
Toluene-d8 (Surr)	97		58 - 140				09/16/11 15:20	09/21/11 04:38	1

5

46

10

12

13

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-6

Matrix: Water

Client Sample ID: ACC-7 (WATER)

Date Collected: 09/16/11 09:05 Date Received: 09/16/11 14:08

1,1,2,2-Tetrachloroethane

Analyte	Result Qualifi	er RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	0.50	ug/L		09/20/11 05:32	1
Acetone	ND	50	ug/L		09/20/11 05:32	1
Benzene	ND	0.50	ug/L		09/20/11 05:32	1
Dichlorobromomethane	ND	0.50	ug/L		09/20/11 05:32	1
Bromobenzene	ND	1.0	ug/L		09/20/11 05:32	1
Chlorobromomethane	ND	1.0	ug/L		09/20/11 05:32	1
Bromoform	ND	1.0	ug/L		09/20/11 05:32	1
Bromomethane	ND	1.0	ug/L		09/20/11 05:32	1
2-Butanone (MEK)	ND	50	ug/L		09/20/11 05:32	1
n-Butylbenzene	ND	1.0	ug/L		09/20/11 05:32	1
sec-Butylbenzene	ND	1.0	ug/L		09/20/11 05:32	1
tert-Butylbenzene	ND	1.0	ug/L		09/20/11 05:32	1
Carbon disulfide	ND	5.0	ug/L		09/20/11 05:32	1
Carbon tetrachloride	ND	0.50	ug/L		09/20/11 05:32	1
Chlorobenzene	ND	0.50	ug/L		09/20/11 05:32	1
Chloroethane	ND	1.0	ug/L		09/20/11 05:32	1
Chloroform	ND	1.0	ug/L		09/20/11 05:32	
Chloromethane	ND	1.0	ug/L		09/20/11 05:32	
2-Chlorotoluene	ND	0.50	ug/L		09/20/11 05:32	· · 1
4-Chlorotoluene	ND	0.50	ug/L		09/20/11 05:32	1
Chlorodibromomethane	ND	0.50	ug/L		09/20/11 05:32	1
1,2-Dichlorobenzene	ND	0.50	ug/L		09/20/11 05:32	
1,3-Dichlorobenzene	ND	0.50	ug/L		09/20/11 05:32	1
1,4-Dichlorobenzene	ND	0.50	ug/L		09/20/11 05:32	1
		1.0	.		09/20/11 05:32	
1,3-Dichloropropane	ND		ug/L		09/20/11 05:32	,
1,1-Dichloropropene	ND	0.50	ug/L			,
1,2-Dibromo-3-Chloropropane	ND	1.0	ug/L		09/20/11 05:32	
Ethylene Dibromide	ND	0.50	ug/L		09/20/11 05:32	
Dibromomethane	ND	0.50	ug/L		09/20/11 05:32	
Dichlorodifluoromethane	ND	0.50	ug/L		09/20/11 05:32	
1,1-Dichloroethane	ND	0.50	ug/L 		09/20/11 05:32	•
1,2-Dichloroethane	ND	0.50	ug/L		09/20/11 05:32	1
1,1-Dichloroethene	ND	0.50	ug/L		09/20/11 05:32	
cis-1,2-Dichloroethene	ND	0.50	ug/L		09/20/11 05:32	,
trans-1,2-Dichloroethene	ND	0.50	ug/L		09/20/11 05:32	•
1,2-Dichloropropane	ND	0.50	ug/L		09/20/11 05:32	
cis-1,3-Dichloropropene	ND	0.50	ug/L		09/20/11 05:32	•
trans-1,3-Dichloropropene	ND	0.50	ug/L		09/20/11 05:32	•
Ethylbenzene	ND	0.50	ug/L		09/20/11 05:32	1
Hexachlorobutadiene	ND	1.0	ug/L		09/20/11 05:32	1
2-Hexanone	ND	50	ug/L		09/20/11 05:32	1
Isopropylbenzene	ND	0.50	ug/L		09/20/11 05:32	
4-Isopropyltoluene	ND	1.0	ug/L		09/20/11 05:32	
Methylene Chloride	ND	5.0	ug/L		09/20/11 05:32	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L		09/20/11 05:32	
Naphthalene	ND	1.0	ug/L		09/20/11 05:32	
N-Propylbenzene	ND	1.0	ug/L		09/20/11 05:32	•
Styrene	ND	0.50	ug/L		09/20/11 05:32	1
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L		09/20/11 05:32	
	ND	2 = 2			00/00/44 05 00	

09/20/11 05:32

0.50

ug/L

ND

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-7 (WATER)

Date Collected: 09/16/11 09:05 Date Received: 09/16/11 14:08

4-Bromofluorobenzene

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

Lab Sample ID: 720-37521-6

09/20/11 05:32

09/20/11 05:32

09/20/11 05:32

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.50		ug/L			09/20/11 05:32	1
Toluene	ND		0.50		ug/L			09/20/11 05:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/20/11 05:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/20/11 05:32	1
1,1,1-Trichloroethane	ND		0.50		ug/L			09/20/11 05:32	1
1,1,2-Trichloroethane	ND		0.50		ug/L			09/20/11 05:32	1
Trichloroethene	ND		0.50		ug/L			09/20/11 05:32	1
Trichlorofluoromethane	ND		1.0		ug/L			09/20/11 05:32	1
1,2,3-Trichloropropane	ND		0.50		ug/L			09/20/11 05:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			09/20/11 05:32	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			09/20/11 05:32	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			09/20/11 05:32	1
Vinyl acetate	ND		10		ug/L			09/20/11 05:32	1
Vinyl chloride	ND		0.50		ug/L			09/20/11 05:32	1
Xylenes, Total	ND		1.0		ug/L			09/20/11 05:32	1
2,2-Dichloropropane	ND		0.50		ug/L			09/20/11 05:32	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/20/11 05:32	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

67 - 130

67 - 130

70 - 130

97

111

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Dieldrin	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endrin aldehyde	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endrin	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endrin ketone	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Heptachlor	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Heptachlor epoxide	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
4,4'-DDT	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
4,4'-DDE	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
4,4'-DDD	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endosulfan I	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endosulfan II	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
alpha-BHC	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
beta-BHC	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
gamma-BHC (Lindane)	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
delta-BHC	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Endosulfan sulfate	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Methoxychlor	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Toxaphene	ND		1.1		ug/L		09/19/11 16:04	09/22/11 15:18	1
Chlordane (technical)	ND		1.1		ug/L		09/19/11 16:04	09/22/11 15:18	1
alpha-Chlordane	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
gamma-Chlordane	ND		0.065		ug/L		09/19/11 16:04	09/22/11 15:18	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	54		36 - 112				09/19/11 16:04	09/22/11 15:18	

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-7 (WATER) Lab Sample ID: 720-37521-6

Date Collected: 09/16/11 09:05 Date Received: 09/16/11 14:08

Matrix: Water

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate % Recovery Qualifier Limits Prepared Analyzed Dil Fac DCB Decachlorobiphenyl 34 14 - 103 09/19/11 16:04 09/22/11 15:18

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-7

Matrix: Solid

Client Sample ID: ACC-8 (5-6.5)

Date Collected: 09/16/11 11:55 Date Received: 09/16/11 14:08

Method: 8260B - Volatile Organic Com	pounds (GC/MS)
Analyte	Result Qualifier

motrica: 0200B Volutilo Organio	Compounds (Conno							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.2		ug/Kg		09/16/11 15:20	09/21/11 05:06	1
Benzene	ND		2.2		ug/Kg		09/16/11 15:20	09/21/11 05:06	1
Ethylbenzene	ND		2.2		ug/Kg		09/16/11 15:20	09/21/11 05:06	1
Toluene	ND		2.2		ug/Kg		09/16/11 15:20	09/21/11 05:06	1
Xylenes, Total	ND		4.4		ug/Kg		09/16/11 15:20	09/21/11 05:06	1
Gasoline Range Organics (GRO) -C5-C12	ND		110		ug/Kg		09/16/11 15:20	09/21/11 05:06	1

Surrogate	% Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89	45 - 131	09/16/11 15:20	09/21/11 05:06	1
1,2-Dichloroethane-d4 (Surr)	114	60 - 140	09/16/11 15:20	09/21/11 05:06	1
Toluene_d8 (Surr)	96	58 140	00/16/11 15:20	00/21/11 05:06	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-8 (43.5-45)

Date Collected: 09/16/11 13:17 Date Received: 09/16/11 14:08

Toluene-d8 (Surr)

Lab Sample ID: 720-37521-11

09/21/11 05:35

09/16/11 15:20

Matrix: Solid

Method: 8260B - Volatile Organ	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.3		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
Benzene	ND		2.3		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
Ethylbenzene	ND		2.3		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
Toluene	ND		2.3		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
Xylenes, Total	ND		4.7		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
Gasoline Range Organics (GRO)	ND		120		ug/Kg		09/16/11 15:20	09/21/11 05:35	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		45 - 131				09/16/11 15:20	09/21/11 05:35	1
1,2-Dichloroethane-d4 (Surr)	105		60 - 140				09/16/11 15:20	09/21/11 05:35	1

58 - 140

5

q

10

11

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Lab Sample ID: 720-37521-12

Matrix: Water

Client Sample ID: ACC-8 (WATER)

Date Collected: 09/16/11 13:40 Date Received: 09/16/11 14:08

Method: 8260B/CA_LUFTMS - 8	3260B / CA LUF1	Γ MS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/20/11 01:16	1
Benzene	ND		0.50		ug/L			09/20/11 01:16	1
Ethylbenzene	ND		0.50		ug/L			09/20/11 01:16	1
Toluene	ND		0.50		ug/L			09/20/11 01:16	1
Xylenes, Total	ND		1.0		ug/L			09/20/11 01:16	1
Gasoline Range Organics (GRO)	ND		50		ug/L			09/20/11 01:16	1
-C5-C12									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130			-		09/20/11 01:16	1
1,2-Dichloroethane-d4 (Surr)	113		67 - 130					09/20/11 01:16	1
Toluene-d8 (Surr)	97		70 - 130					09/20/11 01:16	1

5

6

8

9

10

13

4 /

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-99396/1-A **Matrix: Solid**

Analysis Batch: 99386

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99396

Analyte	Result Qua	alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	5.0	ug/Kg		09/20/11 17:18	09/20/11 20:05	1
Benzene	ND	5.0	ug/Kg		09/20/11 17:18	09/20/11 20:05	1
Ethylbenzene	ND	5.0	ug/Kg		09/20/11 17:18	09/20/11 20:05	1
Toluene	ND	5.0	ug/Kg		09/20/11 17:18	09/20/11 20:05	1
Xylenes, Total	ND	10	ug/Kg		09/20/11 17:18	09/20/11 20:05	1
Gasoline Range Organics (GRO) -C5-C12	ND	250	ug/Kg		09/20/11 17:18	09/20/11 20:05	1

MB MB

MR MR

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		45 - 131	09/20/11 17:18	09/20/11 20:05	1
1,2-Dichloroethane-d4 (Surr)	86		60 - 140	09/20/11 17:18	09/20/11 20:05	1
Toluene-d8 (Surr)	96		58 - 140	09/20/11 17:18	09/20/11 20:05	1

Lab Sample ID: LCS 720-99396/2-A

Matrix: Solid

Analysis Batch: 99386

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99396

-	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methyl tert-butyl ether	50.0	53.6		ug/Kg	_	107	71 - 144	
Benzene	50.0	54.8		ug/Kg		110	82 - 124	
Ethylbenzene	50.0	53.2		ug/Kg		106	80 - 137	
Toluene	50.0	52.0		ug/Kg		104	83 - 128	
m-Xylene & p-Xylene	100	109		ug/Kg		109	79 - 146	
o-Xylene	50.0	54.8		ug/Kg		110	84 - 140	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	103		60 - 140
Toluene-d8 (Surr)	100		58 ₋ 140

Lab Sample ID: LCS 720-99396/4-A

Matrix: Solid

Analysis Batch: 99386

Cli	ient	Sampl	e ID:	Lab	Control	Samp	le
-----	------	-------	-------	-----	---------	------	----

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 99396

LCS LCS Spike % Rec. Analyte Added Result Qualifier Unit % Rec Limits 1000 886 89 61 - 128 Gasoline Range Organics (GRO) ug/Kg -C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	105		45 - 131
1,2-Dichloroethane-d4 (Surr)	108		60 - 140
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: LCSD 720-99396/3-A

Matrix: Solid							Prep Ty	pe: Tof	tal/NA
Analysis Batch: 99386							Prep	Batch:	99396
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	50.0	48.6		ug/Kg		97	71 - 144	10	20

TestAmerica

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-99396/3-A

Matrix: Solid

Analysis Batch: 99386

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 99396

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	50.0	54.6		ug/Kg		109	82 - 124	0	20
Ethylbenzene	50.0	55.4		ug/Kg		111	80 - 137	4	20
Toluene	50.0	53.2		ug/Kg		106	83 - 128	2	20
m-Xylene & p-Xylene	100	112		ug/Kg		112	79 - 146	3	20
o-Xylene	50.0	56.0		ug/Kg		112	84 - 140	2	20

Spike

Added

1000

LCSD LCSD

872

Result Qualifier

Unit

ug/Kg

LCSD LCSD

Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 100 45 - 131 1,2-Dichloroethane-d4 (Surr) 60 - 140 96 Toluene-d8 (Surr) 99 58 - 140

Client Sample ID: Lab Control Sample Dup

% Rec

% Rec.

Limits

61 - 128

Prep Type: Total/NA

RPD

2

Prep Batch: 99396

RPD Limit

Matrix: Solid Analysis Batch: 99386

Analyte Gasoline Range Organics (GRO)

-C5-C12

Lab Sample ID: LCSD 720-99396/5-A

LCSD LCSD

Surrogate % Recovery Qualifier Limits 4-Bromofluorobenzene 103 45 - 131 1,2-Dichloroethane-d4 (Surr) 60 - 140 108 Toluene-d8 (Surr) 100 58 - 140

Method: 8260B/CA	I UFTMS	- 8260R	/CA	I UFT	MS

Lab Sample ID: MB 720-99283/1-A

Matrix: Solid

Analysis Batch: 99228

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99283

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Acetone	ND		50		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Benzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Dichlorobromomethane	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Bromobenzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Chlorobromomethane	ND		20		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Bromoform	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Bromomethane	ND		10		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
2-Butanone (MEK)	ND		50		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
n-Butylbenzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
sec-Butylbenzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
tert-Butylbenzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Carbon disulfide	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Carbon tetrachloride	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Chlorobenzene	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Chloroethane	ND		10		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Chloroform	ND		5.0		ug/Kg		09/17/11 12:00	09/17/11 12:06	1
Chloromethane	ND		10		ug/Kg		09/17/11 12:00	09/17/11 12:06	1

RL

5.0

MDL Unit

ug/Kg

TestAmerica Job ID: 720-37521-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

MB MB

ND

ND

ND

ND

ND

ND

ND

ND

Result Qualifier

Lab Sample ID: MB 720-99283/1-A

Matrix: Solid

2-Chlorotoluene

1,2,4-Trimethylbenzene

1,3,5-Trimethylbenzene

Vinyl acetate

Vinyl chloride

Xylenes, Total

-C5-C12

2,2-Dichloropropane

Gasoline Range Organics (GRO)

Analyte

Analysis Batch: 99228

Client Sample ID: Method Blank Prep Type: Total/NA

Analyzed

09/17/11 12:06

Prepared

09/17/11 12:00

Prep Batch: 99283

Dil Fac

4-Chlorotoluene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Chlorodibromomethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2-Dichlorobenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,3-Dichlorobenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,4-Dichlorobenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,3-Dichloropropane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1-Dichloropropene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2-Dibromo-3-Chloropropane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Ethylene Dibromide	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Dibromomethane	ND	10	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Dichlorodifluoromethane	ND	10	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1-Dichloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2-Dichloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1-Dichloroethene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2-Dichloropropane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Ethylbenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Hexachlorobutadiene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
2-Hexanone	ND	50	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Isopropylbenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
4-Isopropyltoluene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Methylene Chloride	ND	10	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Naphthalene	ND	10	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
N-Propylbenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Styrene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Tetrachloroethene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Toluene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1,1-Trichloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1,2-Trichloroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Trichloroethene	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
Trichlorofluoromethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,2,3-Trichloropropane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/Kg	09/17/11 12:00 09/17/11 12:	06 1
	<u></u>				

09/17/11 12:06

09/17/11 12:06

09/17/11 12:06

09/17/11 12:06

09/17/11 12:06

09/17/11 12:06

09/17/11 12:06

5.0

5.0

50

5.0

10

5.0

250

ug/Kg

ug/Kg

ug/Kg

ug/Kg

ug/Kg

ug/Kg

ug/Kg

09/17/11 12:00

09/17/11 12:00

09/17/11 12:00

09/17/11 12:00

09/17/11 12:00

09/17/11 12:00

09/17/11 12:00

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-99283/1-A

Matrix: Solid

Analysis Batch: 99228

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99283

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		45 - 131	09/17/11 12:00	09/17/11 12:06	1
1,2-Dichloroethane-d4 (Surr)	100		60 - 140	09/17/11 12:00	09/17/11 12:06	1
Toluene-d8 (Surr)	97		58 ₋ 140	09/17/11 12:00	09/17/11 12:06	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 720-99283/16-A Matrix: Solid

Lab Sample ID: LCS 720-99283/2-A

Matrix: Solid

Analysis Batch: 99228

Chorte Campio III Lab Control Campio
Prep Type: Total/NA
Prep Batch: 99283

% Rec.

LCS LCS Spike Analyte Added Result Qualifier Unit % Rec Limits Gasoline Range Organics (GRO) 1000 927 ug/Kg 61 - 128

-C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	93		60 - 140
Toluene-d8 (Surr)	101		58 ₋ 140

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 99228							Prep Batch: 99283
7 maryono Datom 30220	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Methyl tert-butyl ether	50.0	54.6		ug/Kg		109	71 - 144
Acetone	250	262		ug/Kg		105	30 - 162
Benzene	50.0	52.0		ug/Kg		104	82 _ 124
Dichlorobromomethane	50.0	55.8		ug/Kg		112	86 - 131
Bromobenzene	50.0	48.2		ug/Kg		96	88 - 120
Chlorobromomethane	50.0	54.4		ug/Kg		109	81 - 116
Bromoform	50.0	53.4		ug/Kg		107	59 - 158
Bromomethane	50.0	58.8		ug/Kg		118	59 - 132
2-Butanone (MEK)	250	291		ug/Kg		116	61 - 150
n-Butylbenzene	50.0	48.2		ug/Kg		96	80 - 142
sec-Butylbenzene	50.0	49.0		ug/Kg		98	85 _ 136
tert-Butylbenzene	50.0	51.0		ug/Kg		102	71 - 130
Carbon disulfide	50.0	53.2		ug/Kg		106	60 - 136
Carbon tetrachloride	50.0	55.4		ug/Kg		111	81 - 138
Chlorobenzene	50.0	48.0		ug/Kg		96	87 - 113
Chloroethane	50.0	59.4		ug/Kg		119	65 _ 126
Chloroform	50.0	51.6		ug/Kg		103	77 ₋ 127
Chloromethane	50.0	52.0		ug/Kg		104	60 - 149
2-Chlorotoluene	50.0	50.6		ug/Kg		101	80 - 138
4-Chlorotoluene	50.0	49.0		ug/Kg		98	79 - 136
Chlorodibromomethane	50.0	58.8		ug/Kg		118	75 - 146
1,2-Dichlorobenzene	50.0	46.8		ug/Kg		94	84 - 130
1,3-Dichlorobenzene	50.0	48.0		ug/Kg		96	84 _ 131
1,4-Dichlorobenzene	50.0	47.6		ug/Kg		95	85 _ 125
1,3-Dichloropropane	50.0	54.6		ug/Kg		109	79 - 140
1,1-Dichloropropene	50.0	52.2		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	52.6		ug/Kg		105	68 - 145

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99283/2-A

Matrix: Solid

Analysis Batch: 99228

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 99283

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Ethylene Dibromide	50.0	56.0		ug/Kg		112	79 - 140	
Dibromomethane	50.0	54.0		ug/Kg		108	80 _ 139	
Dichlorodifluoromethane	50.0	52.8		ug/Kg		106	37 _ 158	
1,1-Dichloroethane	50.0	50.4		ug/Kg		101	85 _ 124	
1,2-Dichloroethane	50.0	49.8		ug/Kg		100	72 _ 130	
1,1-Dichloroethene	50.0	48.6		ug/Kg		97	76 - 122	
cis-1,2-Dichloroethene	50.0	57.4		ug/Kg		115	87 - 138	
trans-1,2-Dichloroethene	50.0	46.0		ug/Kg		92	67 - 108	
1,2-Dichloropropane	50.0	50.2		ug/Kg		100	73 - 127	
cis-1,3-Dichloropropene	50.0	56.0		ug/Kg		112	68 - 147	
trans-1,3-Dichloropropene	50.0	56.6		ug/Kg		113	84 - 136	
Ethylbenzene	50.0	48.6		ug/Kg		97	80 - 137	
Hexachlorobutadiene	50.0	41.0		ug/Kg		82	72 _ 132	
2-Hexanone	250	270		ug/Kg		108	60 - 161	
Isopropylbenzene	50.0	50.8		ug/Kg		102	88 - 128	
4-Isopropyltoluene	50.0	48.6		ug/Kg		97	85 - 133	
Methylene Chloride	50.0	53.0		ug/Kg		106	72 - 134	
4-Methyl-2-pentanone (MIBK)	250	271		ug/Kg		108	69 - 160	
Naphthalene	50.0	51.2		ug/Kg		102	70 - 147	
N-Propylbenzene	50.0	47.8		ug/Kg		96	72 - 125	
Styrene	50.0	52.2		ug/Kg		104	89 - 126	
1,1,1,2-Tetrachloroethane	50.0	53.6		ug/Kg		107	90 - 130	
1,1,2,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	82 - 146	
Tetrachloroethene	50.0	51.8		ug/Kg		104	78 ₋ 132	
Toluene	50.0	49.2		ug/Kg		98	83 - 128	
1,2,3-Trichlorobenzene	50.0	46.4		ug/Kg		93	82 - 135	
1,2,4-Trichlorobenzene	50.0	45.0		ug/Kg		90	70 - 131	
1,1,1-Trichloroethane	50.0	54.8		ug/Kg		110	80 - 127	
1,1,2-Trichloroethane	50.0	54.2		ug/Kg		108	82 _ 125	
Trichloroethene	50.0	50.6		ug/Kg		101	81 - 133	
Trichlorofluoromethane	50.0	55.4		ug/Kg		111	71 - 139	
1,2,3-Trichloropropane	50.0	52.2		ug/Kg		104	76 ₋ 146	
1,1,2-Trichloro-1,2,2-trifluoroetha	50.0	52.4		ug/Kg		105	70 - 130	
ne								
1,2,4-Trimethylbenzene	50.0	49.8		ug/Kg		100	84 _ 130	
1,3,5-Trimethylbenzene	50.0	51.8		ug/Kg		104	82 - 131	
Vinyl acetate	50.0	60.4		ug/Kg		121	38 _ 176	
Vinyl chloride	50.0	59.0		ug/Kg		118	58 - 125	
m-Xylene & p-Xylene	100	99.0		ug/Kg		99	79 ₋ 146	
o-Xylene	50.0	50.2		ug/Kg		100	84 - 140	
2,2-Dichloropropane	50.0	64.8		ug/Kg		130	73 - 162	

LCS LCS

Surrogate	% Recovery Qualifier	r Limits
4-Bromofluorobenzene	99	45 - 131
1,2-Dichloroethane-d4 (Surr)	98	60 - 140
Toluene-d8 (Surr)	101	58 ₋ 140

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99283/17-A

Matrix: Solid

Analysis Batch: 99228

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 99283

RPD % Rec. Limits RPD

Analyte Added Result Qualifier Unit D % Rec Limit 1000 975 ug/Kg 97 61 - 128 5 20 Gasoline Range Organics (GRO)

Spike

LCSD LCSD

-C5-C12

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	99		60 - 140
Toluene-d8 (Surr)	101		58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Lab Sample ID: LCSD 720-99283/3-A

Bromobenzene

Carbon tetrachloride

Chlorobenzene

Analysis Batch: 99228

Prep Type: Total/NA

109

96

Prep Batch: 99283

20

20

20

20

20

20

20

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20

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LCSD LCSD RPD Spike % Rec. Analyte Added Result Qualifier Unit % Rec Limits RPD Limit Methyl tert-butyl ether 50.0 53.6 ug/Kg 107 71 - 144 2 20 250 30 - 162 Acetone 242 97 30 ug/Kg 8 Benzene 50.0 51.6 ug/Kg 103 82 - 12420 50.0 54.2 Dichlorobromomethane ug/Kg

47.4

54.4

47.8

ug/Kg

ug/Kg

108 86 - 131 3 20 95 88 _ 120 2 20 106 81 - 116 3 20 59 - 158 3 20 20

81 - 138

87 - 113

Chlorobromomethane 50.0 52.8 ug/Kg Bromoform 50.0 51.6 ug/Kg 103 Bromomethane 50.0 59.8 ug/Kg 120 59 _ 132 250 61 _ 150 2-Butanone (MEK) 281 ug/Kg 112 50.0 47.2 94 80 - 142 2 n-Butylbenzene ug/Kg 85 - 136 sec-Butylbenzene 50.0 48.0 ug/Kg 96 tert-Butylbenzene 50.0 50.8 ug/Kg 102 71 - 130 Carbon disulfide 50.0 53.2 106 60 - 136 ug/Kg

50.0

50.0

50.0

ug/Kg Chloroethane 50.0 60.6 121 65 - 126 2 ug/Kg Chloroform 50.0 50.8 102 77 - 127 ug/Kg Chloromethane 50.0 54.4 ug/Kg 109 60 - 1495 2-Chlorotoluene 50.0 49.4 ug/Kg 99 80 - 138 2 4-Chlorotoluene 50.0 47 6 ug/Kg 95 79 - 136 Chlorodibromomethane 50.0 56.0 ug/Kg 112 75 - 146

50.0 45.6 84 _ 130 1,2-Dichlorobenzene ug/Kg 91 3 1,3-Dichlorobenzene 50.0 46.8 ug/Kg 94 84 - 131 46.0 85 - 125 1.4-Dichlorobenzene 50.0 92 3 ug/Kg 1,3-Dichloropropane 50.0 52.6 105 79 - 140 ug/Kg 1,1-Dichloropropene 50.0 52.2 ug/Kg 104 70 - 130

1,2-Dibromo-3-Chloropropane 50.0 52.0 ug/Kg 104 68 - 145 Ethylene Dibromide 50.0 54.4 109 79 - 140 3 ug/Kg Dibromomethane 50.0 52.6 105 80 - 139 ug/Kg Dichlorodifluoromethane 50.0 53.2 106 37 - 158 ug/Kg 1,1-Dichloroethane 50.0 50.2 ug/Kg 100 85 - 124

1,2-Dichloroethane 50.0 47.8 96 72 _ 130 ug/Kg 1.1-Dichloroethene 50.0 48.4 ug/Kg 97 76 - 1220 cis-1,2-Dichloroethene 50.0 56.4 ug/Kg 113 87 - 138 trans-1,2-Dichloroethene 50.0 46.4 67 _ 108 ug/Kg 93 1,2-Dichloropropane 50.0 49.8 ug/Kg 100 73 - 127

Spike

LCSD LCSD

TestAmerica Job ID: 720-37521-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99283/3-A

Matrix: Solid

Analysis Batch: 99228

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 99283

Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
cis-1,3-Dichloropropene	50.0	55.0		ug/Kg		110	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	55.2		ug/Kg		110	84 - 136	3	20
Ethylbenzene	50.0	48.2		ug/Kg		96	80 - 137	1	20
Hexachlorobutadiene	50.0	42.2		ug/Kg		84	72 - 132	3	20
2-Hexanone	250	265		ug/Kg		106	60 - 161	2	20
Isopropylbenzene	50.0	50.4		ug/Kg		101	88 - 128	1	20
4-Isopropyltoluene	50.0	47.6		ug/Kg		95	85 - 133	2	20
Methylene Chloride	50.0	52.8		ug/Kg		106	72 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	264		ug/Kg		106	69 - 160	3	20
Naphthalene	50.0	50.0		ug/Kg		100	70 - 147	2	20
N-Propylbenzene	50.0	46.8		ug/Kg		94	72 - 125	2	20
Styrene	50.0	51.0		ug/Kg		102	89 - 126	2	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	90 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	51.4		ug/Kg		103	82 - 146	3	20
Tetrachloroethene	50.0	50.6		ug/Kg		101	78 - 132	2	20
Toluene	50.0	49.4		ug/Kg		99	83 - 128	0	20
1,2,3-Trichlorobenzene	50.0	45.0		ug/Kg		90	82 - 135	3	20
1,2,4-Trichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	3	20
1,1,1-Trichloroethane	50.0	53.8		ug/Kg		108	80 - 127	2	20
1,1,2-Trichloroethane	50.0	51.4		ug/Kg		103	82 - 125	5	20
Trichloroethene	50.0	49.8		ug/Kg		100	81 - 133	2	20
Trichlorofluoromethane	50.0	55.2		ug/Kg		110	71 _ 139	0	20
1,2,3-Trichloropropane	50.0	51.4		ug/Kg		103	76 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroetha	50.0	52.2		ug/Kg		104	70 - 130	0	20
ne									
1,2,4-Trimethylbenzene	50.0	48.8		ug/Kg		98	84 - 130	2	20
1,3,5-Trimethylbenzene	50.0	50.6		ug/Kg		101	82 - 131	2	20
Vinyl acetate	50.0	60.4		ug/Kg		121	38 - 176	0	20
Vinyl chloride	50.0	59.8		ug/Kg		120	58 - 125	1	20

100

50.0

50.0

LCSD LCSD

Surrogate	% Recovery Quali	fier Limits
4-Bromofluorobenzene	98	45 - 131
1,2-Dichloroethane-d4 (Surr)	95	60 - 140
Toluene-d8 (Surr)	101	58 - 140

Lab Sample ID: MB 720-99301/5

Matrix: Water

m-Xylene & p-Xylene

2,2-Dichloropropane

o-Xylene

Analysis Batch: 99301

Client	Sample	ID:	Method	l Blank	
	_	_	_		

97

98

127

79 - 146

84 - 140

73 - 162

2

20

20

Prep Type: Total/NA

	MB	MB						
Analyte	Result	Qualifier F	L MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	0.5	0	ug/L			09/19/11 20:31	1
Acetone	ND	5	0	ug/L			09/19/11 20:31	1
Benzene	ND	0.5	0	ug/L			09/19/11 20:31	1
Dichlorobromomethane	ND	0.5	0	ug/L			09/19/11 20:31	1
Bromobenzene	ND	1	0	ug/L			09/19/11 20:31	1
Chlorobromomethane	ND	1	0	ug/L			09/19/11 20:31	1
Bromoform	ND	1	0	ug/L			09/19/11 20:31	1

96.6

49.2

63.6

ug/Kg

ug/Kg

ug/Kg

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-99301/5

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Method Blank

Prep	Type:	Total/NA	

	Analyzed	Dil Fac	
_	09/19/11 20:31	1	
	09/19/11 20:31	1	

Ameliate	MB		5 1	MDI			
Analyte		Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fa
Bromomethane	ND		1.0	ug/L		09/19/11 20:31	
2-Butanone (MEK)	ND		50	ug/L		09/19/11 20:31	
n-Butylbenzene	ND		1.0	ug/L		09/19/11 20:31	
sec-Butylbenzene	ND		1.0	ug/L		09/19/11 20:31	
tert-Butylbenzene	ND		1.0	ug/L		09/19/11 20:31	
Carbon disulfide	ND		5.0	ug/L		09/19/11 20:31	
Carbon tetrachloride	ND		0.50	ug/L		09/19/11 20:31	
Chlorobenzene	ND		0.50	ug/L		09/19/11 20:31	
Chloroethane	ND		1.0	ug/L		09/19/11 20:31	
Chloroform	ND		1.0	ug/L		09/19/11 20:31	
Chloromethane	ND		1.0	ug/L		09/19/11 20:31	
2-Chlorotoluene	ND		0.50	ug/L		09/19/11 20:31	
4-Chlorotoluene	ND		0.50	ug/L		09/19/11 20:31	
Chlorodibromomethane	ND		0.50	ug/L		09/19/11 20:31	
1,2-Dichlorobenzene	ND		0.50	ug/L		09/19/11 20:31	
1,3-Dichlorobenzene	ND		0.50	ug/L		09/19/11 20:31	
1,4-Dichlorobenzene	ND		0.50	ug/L		09/19/11 20:31	
1,3-Dichloropropane	ND		1.0	ug/L		09/19/11 20:31	
1,1-Dichloropropene	ND		0.50	ug/L		09/19/11 20:31	
1,2-Dibromo-3-Chloropropane	ND		1.0	ug/L		09/19/11 20:31	
Ethylene Dibromide	ND		0.50	ug/L		09/19/11 20:31	
Dibromomethane	ND		0.50	ug/L		09/19/11 20:31	
Dichlorodifluoromethane	ND		0.50	ug/L		09/19/11 20:31	
1,1-Dichloroethane	ND		0.50	ug/L		09/19/11 20:31	
1,2-Dichloroethane	ND		0.50	ug/L		09/19/11 20:31	
1,1-Dichloroethene	ND		0.50	ug/L		09/19/11 20:31	
cis-1,2-Dichloroethene	ND		0.50	ug/L		09/19/11 20:31	
trans-1,2-Dichloroethene	ND		0.50	ug/L		09/19/11 20:31	
1,2-Dichloropropane	ND		0.50	ug/L		09/19/11 20:31	
cis-1,3-Dichloropropene	ND		0.50	ug/L		09/19/11 20:31	
trans-1,3-Dichloropropene	ND		0.50	ug/L		09/19/11 20:31	
Ethylbenzene	ND		0.50	ug/L		09/19/11 20:31	
Hexachlorobutadiene	ND		1.0	-		09/19/11 20:31	
	ND ND			ug/L			
2-Hexanone	ND ND		50	ug/L		09/19/11 20:31 09/19/11 20:31	
Isopropylbenzene			0.50	ug/L			
4-Isopropyltoluene	ND		1.0	ug/L		09/19/11 20:31	
Methylene Chloride	ND		5.0	ug/L		09/19/11 20:31	
4-Methyl-2-pentanone (MIBK)	ND		50	ug/L		09/19/11 20:31	
Naphthalene	ND		1.0	ug/L		09/19/11 20:31	
N-Propylbenzene	ND		1.0	ug/L		09/19/11 20:31	
Styrene	ND		0.50	ug/L		09/19/11 20:31	
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L		09/19/11 20:31	
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L		09/19/11 20:31	
Tetrachloroethene	ND		0.50	ug/L		09/19/11 20:31	
Toluene	ND		0.50	ug/L		09/19/11 20:31	
1,2,3-Trichlorobenzene	ND		1.0	ug/L		09/19/11 20:31	
1,2,4-Trichlorobenzene	ND		1.0	ug/L		09/19/11 20:31	
1,1,1-Trichloroethane	ND		0.50	ug/L		09/19/11 20:31	
1,1,2-Trichloroethane	ND		0.50	ug/L		09/19/11 20:31	
Trichloroethene	ND		0.50	ug/L		09/19/11 20:31	

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-99301/5

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Method Blank Prep Type: Total/NA

мв мв

Analyte	Result C	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND	1.0		ug/L			09/19/11 20:31	1
1,2,3-Trichloropropane	ND	0.50		ug/L			09/19/11 20:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.50		ug/L			09/19/11 20:31	1
1,2,4-Trimethylbenzene	ND	0.50		ug/L			09/19/11 20:31	1
1,3,5-Trimethylbenzene	ND	0.50		ug/L			09/19/11 20:31	1
Vinyl acetate	ND	10		ug/L			09/19/11 20:31	1
Vinyl chloride	ND	0.50		ug/L			09/19/11 20:31	1
Xylenes, Total	ND	1.0		ug/L			09/19/11 20:31	1
2,2-Dichloropropane	ND	0.50		ug/L			09/19/11 20:31	1
Gasoline Range Organics (GRO) -C5-C12	ND	50		ug/L			09/19/11 20:31	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130		09/19/11 20:31	1
1,2-Dichloroethane-d4 (Surr)	107		67 - 130		09/19/11 20:31	1
Toluene-d8 (Surr)	97		70 - 130		09/19/11 20:31	1

Lab Sample ID: LCS 720-99301/6

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS		% Rec.
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits
Methyl tert-butyl ether	25.0	26.8	ug/L	107	62 _ 130
Acetone	125	97.6	ug/L	78	26 - 180
Benzene	25.0	26.0	ug/L	104	82 - 127
Dichlorobromomethane	25.0	27.8	ug/L	111	70 - 130
Bromobenzene	25.0	25.3	ug/L	101	79 - 127
Chlorobromomethane	25.0	26.2	ug/L	105	70 - 130
Bromoform	25.0	22.9	ug/L	92	68 - 136
Bromomethane	25.0	23.3	ug/L	93	43 - 151
2-Butanone (MEK)	125	123	ug/L	98	66 - 149
n-Butylbenzene	25.0	27.1	ug/L	108	79 - 142
sec-Butylbenzene	25.0	26.4	ug/L	106	81 - 134
ert-Butylbenzene	25.0	26.2	ug/L	105	82 - 135
Carbon disulfide	25.0	24.5	ug/L	98	58 - 124
Carbon tetrachloride	25.0	28.4	ug/L	114	77 ₋ 146
Chlorobenzene	25.0	25.4	ug/L	102	70 - 130
Chloroethane	25.0	24.5	ug/L	98	62 - 138
Chloroform	25.0	26.1	ug/L	104	70 - 130
Chloromethane	25.0	23.4	ug/L	94	52 - 175
2-Chlorotoluene	25.0	27.2	ug/L	109	70 - 130
4-Chlorotoluene	25.0	26.6	ug/L	106	70 - 130
Chlorodibromomethane	25.0	29.4	ug/L	118	78 - 145
1,2-Dichlorobenzene	25.0	26.3	ug/L	105	70 - 130
1,3-Dichlorobenzene	25.0	26.5	ug/L	106	70 - 130
1,4-Dichlorobenzene	25.0	25.9	ug/L	104	87 - 118
1,3-Dichloropropane	25.0	27.7	ug/L	111	82 - 128
1,1-Dichloropropene	25.0	25.7	ug/L	103	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.1	ug/L	108	72 _ 136
Ethylene Dibromide	25.0	27.5	ug/L	110	70 - 130

Spike

LCS LCS

TestAmerica Job ID: 720-37521-1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99301/6

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

% Rec.

	Opike				/0 IXEC.	
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits	
Dibromomethane	25.0	27.1	ug/L	108	70 - 130	
Dichlorodifluoromethane	25.0	20.3	ug/L	81	33 - 125	
1,1-Dichloroethane	25.0	26.1	ug/L	104	70 - 130	
1,2-Dichloroethane	25.0	26.6	ug/L	106	70 - 126	
1,1-Dichloroethene	25.0	22.9	ug/L	92	64 - 128	
cis-1,2-Dichloroethene	25.0	29.9	ug/L	120	70 - 130	
trans-1,2-Dichloroethene	25.0	21.4	ug/L	86	68 - 118	
1,2-Dichloropropane	25.0	26.2	ug/L	105	70 - 130	
cis-1,3-Dichloropropene	25.0	27.0	ug/L	108	88 - 137	
trans-1,3-Dichloropropene	25.0	28.5	ug/L	114	83 - 140	
Ethylbenzene	25.0	26.1	ug/L	104	86 - 135	
Hexachlorobutadiene	25.0	24.6	ug/L	98	70 - 130	
2-Hexanone	125	135	ug/L	108	60 - 164	
Isopropylbenzene	25.0	26.8	ug/L	107	70 - 130	
4-Isopropyltoluene	25.0	26.6	ug/L	106	70 - 130	
Methylene Chloride	25.0	28.1	ug/L	112	73 - 147	
4-Methyl-2-pentanone (MIBK)	125	141	ug/L	113	63 - 165	
Naphthalene	25.0	26.9	ug/L	108	78 - 135	
N-Propylbenzene	25.0	25.3	ug/L	101	70 - 130	
Styrene	25.0	26.7	ug/L	107	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	27.1	ug/L	108	70 - 130	
1,1,2,2-Tetrachloroethane	25.0	28.1	ug/L	112	70 - 130	
Tetrachloroethene	25.0	25.2	ug/L	101	70 - 130	
Toluene	25.0	25.7	ug/L	103	83 - 129	
1,2,3-Trichlorobenzene	25.0	26.1	ug/L	104	70 - 130	
1,2,4-Trichlorobenzene	25.0	25.2	ug/L	101	70 - 130	
1,1,1-Trichloroethane	25.0	26.9	ug/L	108	70 - 130	
1,1,2-Trichloroethane	25.0	26.8	ug/L	107	82 - 128	
Trichloroethene	25.0	25.1	ug/L	100	70 - 130	
Trichlorofluoromethane	25.0	24.3	ug/L	97	66 - 132	
1,2,3-Trichloropropane	25.0	26.7	ug/L	107	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	24.8	ug/L	99	42 - 162	
ne						
1,2,4-Trimethylbenzene	25.0	26.1	ug/L	104	70 - 132	
1,3,5-Trimethylbenzene	25.0	26.7	ug/L	107	70 - 130	
Vinyl acetate	25.0	29.0	ug/L	116	43 - 163	
Vinyl chloride	25.0	22.9	ug/L	92	63 ₋ 125	
m-Xylene & p-Xylene	50.0	53.5	ug/L	107	70 - 142	
o-Xylene	25.0	27.4	ug/L	110	89 - 136	
2,2-Dichloropropane	25.0	26.7	ug/L	107	70 - 140	

LCS LCS

Surrogate	% Recovery C	Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	98		70 ₋ 130

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-99301/8

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

LCS LCS Spike % Rec. Analyte Added Result Qualifier Limits Unit % Rec 500 62 - 117 Gasoline Range Organics (GRO) 391 ug/L 78 -C5-C12

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Lab Sample ID: LCSD 720-99301/7

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Methyl tert-butyl ether	25.0	26.2		ug/L		105	62 - 130	2	20
Acetone	125	89.6		ug/L		72	26 - 180	9	30
Benzene	25.0	26.0		ug/L		104	82 _ 127	0	20
Dichlorobromomethane	25.0	27.8		ug/L		111	70 - 130	0	20
Bromobenzene	25.0	25.8		ug/L		103	79 - 127	2	20
Chlorobromomethane	25.0	25.9		ug/L		104	70 - 130	1	20
Bromoform	25.0	22.7		ug/L		91	68 - 136	1	20
Bromomethane	25.0	23.2		ug/L		93	43 - 151	0	20
2-Butanone (MEK)	125	114		ug/L		91	66 - 149	8	20
n-Butylbenzene	25.0	27.1		ug/L		108	79 - 142	0	20
sec-Butylbenzene	25.0	26.8		ug/L		107	81 - 134	2	20
tert-Butylbenzene	25.0	26.8		ug/L		107	82 _ 135	2	20
Carbon disulfide	25.0	24.6		ug/L		98	58 - 124	0	20
Carbon tetrachloride	25.0	29.3		ug/L		117	77 - 146	3	20
Chlorobenzene	25.0	25.5		ug/L		102	70 - 130	0	20
Chloroethane	25.0	24.5		ug/L		98	62 - 138	0	20
Chloroform	25.0	26.1		ug/L		104	70 - 130	0	20
Chloromethane	25.0	23.4		ug/L		94	52 _ 175	0	20
2-Chlorotoluene	25.0	27.8		ug/L		111	70 - 130	2	20
4-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130	1	20
Chlorodibromomethane	25.0	29.4		ug/L		118	78 - 145	0	20
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	70 - 130	0	20
1,3-Dichlorobenzene	25.0	26.5		ug/L		106	70 - 130	0	20
1,4-Dichlorobenzene	25.0	26.1		ug/L		104	87 - 118	1	20
1,3-Dichloropropane	25.0	27.0		ug/L		108	82 - 128	3	20
1,1-Dichloropropene	25.0	25.9		ug/L		104	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	26.5		ug/L		106	72 - 136	2	20
Ethylene Dibromide	25.0	26.9		ug/L		108	70 - 130	2	20
Dibromomethane	25.0	26.4		ug/L		106	70 - 130	3	20
Dichlorodifluoromethane	25.0	20.2		ug/L		81	33 _ 125	0	20
1,1-Dichloroethane	25.0	26.1		ug/L		104	70 - 130	0	20
1,2-Dichloroethane	25.0	26.4		ug/L		106	70 - 126	1	20
1,1-Dichloroethene	25.0	23.0		ug/L		92	64 - 128	0	20
cis-1,2-Dichloroethene	25.0	29.9		ug/L		120	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	68 - 118	1	20
1,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130	0	20

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99301/7

Matrix: Water

Analysis Batch: 99301

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike LCSD LCSI		LCSD				% Rec.		RPD Limit
Analyte	Added	Result	Qualifier Unit		D	% Rec	Limits	RPD	
cis-1,3-Dichloropropene	25.0	26.9		ug/L		108	88 - 137	0	20
trans-1,3-Dichloropropene	25.0	28.1		ug/L		112	83 - 140	1	20
Ethylbenzene	25.0	26.1		ug/L		104	86 - 135	0	20
Hexachlorobutadiene	25.0	24.4		ug/L		98	70 - 130	1	20
2-Hexanone	125	123		ug/L		98	60 - 164	9	20
Isopropylbenzene	25.0	26.7		ug/L		107	70 - 130	0	20
4-Isopropyltoluene	25.0	26.9		ug/L		108	70 - 130	1	20
Methylene Chloride	25.0	28.1		ug/L		112	73 - 147	0	20
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	63 - 165	7	20
Naphthalene	25.0	26.4		ug/L		106	78 ₋ 135	2	20
N-Propylbenzene	25.0	25.9		ug/L		104	70 - 130	2	20
Styrene	25.0	26.5		ug/L		106	70 - 130	1	20
1,1,1,2-Tetrachloroethane	25.0	27.5		ug/L		110	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	28.2		ug/L		113	70 - 130	0	20
Tetrachloroethene	25.0	24.7		ug/L		99	70 - 130	2	20
Toluene	25.0	25.9		ug/L		104	83 - 129	1	20
1,2,3-Trichlorobenzene	25.0	25.7		ug/L		103	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	70 - 130	1	20
1,1,1-Trichloroethane	25.0	27.6		ug/L		110	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	82 - 128	2	20
Trichloroethene	25.0	24.8		ug/L		99	70 - 130	1	20
Trichlorofluoromethane	25.0	24.4		ug/L		98	66 - 132	0	20
1,2,3-Trichloropropane	25.0	26.5		ug/L		106	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	24.5		ug/L		98	42 - 162	1	20
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 132	1	20
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130	2	20
Vinyl acetate	25.0	31.0		ug/L		124	43 - 163	7	20
Vinyl chloride	25.0	23.6		ug/L		94	63 - 125	3	20
m-Xylene & p-Xylene	50.0	53.6		ug/L		107	70 - 142	0	20
o-Xylene	25.0	27.3		ug/L		109	89 - 136	0	20
2,2-Dichloropropane	25.0	27.6		ug/L		110	70 - 140	3	20

LCSD LCSD

Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCSD 720-99301/9

Matrix: Water

-C5-C12

Analysis Batch: 99301

LCSD LCSD Spike % Rec. RPD Analyte Added Result Qualifier Limit Unit D % Rec Limits 500 389 78 62 - 117 Gasoline Range Organics (GRO) ug/L

LCSD LCSD

Surrogate	% Recovery Qualifie	r Limits
4-Bromofluorobenzene	100	67 - 130
1,2-Dichloroethane-d4 (Surr)	106	67 - 130

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-99301/9

Matrix: Water

Analysis Batch: 99301

LCSD LCSD

Surrogate % Recovery Qualifier Limits Toluene-d8 (Surr) 99 70 - 130 Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-99305/1-A

Analysis Batch: 99356

Matrix: Water

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99305

Analysis Batch: 99356								Prep Batter	1: 99305
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Dieldrin	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endrin aldehyde	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endrin	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endrin ketone	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Heptachlor	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Heptachlor epoxide	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
4,4'-DDT	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
4,4'-DDE	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
4,4'-DDD	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endosulfan I	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endosulfan II	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
alpha-BHC	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
beta-BHC	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
gamma-BHC (Lindane)	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
delta-BHC	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Endosulfan sulfate	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Methoxychlor	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
Toxaphene	ND		1.0		ug/L		09/19/11 16:04	09/20/11 16:46	1
Chlordane (technical)	ND		1.0		ug/L		09/19/11 16:04	09/20/11 16:46	1
alpha-Chlordane	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1
gamma-Chlordane	ND		0.060		ug/L		09/19/11 16:04	09/20/11 16:46	1

MB MB

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	60		36 - 112	09/19/11 16:04	09/20/11 16:46	1
DCB Decachlorobiphenyl	50		14 - 103	09/19/11 16:04	09/20/11 16:46	1

Lab Sample ID: LCS 720-99305/2-A

Matrix: Water

Analysis Batch: 99356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99305

	Spike	LCS	LCS		% Rec.	
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits	
Aldrin	0.500	0.254	ug/L	51	44 - 120	
Dieldrin	0.500	0.395	ug/L	79	43 - 120	
Endrin aldehyde	0.500	0.427	ug/L	85	40 - 120	
Endrin	0.500	0.399	ug/L	80	15 _ 138	
Endrin ketone	0.500	0.432	ug/L	86	40 - 120	
Heptachlor	0.500	0.313	ug/L	63	17 _ 128	
Heptachlor epoxide	0.500	0.398	ug/L	80	40 - 120	
4.4'-DDT	0.500	0.378	ug/L	76	46 - 120	

TestAmerica

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

5

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-99305/2-A

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 99356

Analysis Batch: 99356

Spike

LCS LCS

Rec.

	•					
Analyte	Added	Result Qualifier	Unit	D % Rec	Limits	
4,4'-DDE	0.500	0.360	ug/L	72	40 - 120	
4,4'-DDD	0.500	0.394	ug/L	79	40 - 120	
Endosulfan I	0.500	0.414	ug/L	83	40 - 120	
Endosulfan II	0.500	0.428	ug/L	86	40 - 120	
alpha-BHC	0.500	0.350	ug/L	70	40 - 120	
beta-BHC	0.500	0.441	ug/L	88	40 - 120	
gamma-BHC (Lindane)	0.500	0.352	ug/L	70	46 - 121	
delta-BHC	0.500	0.268	ug/L	54	40 - 120	
Endosulfan sulfate	0.500	0.434	ug/L	87	40 - 120	
Methoxychlor	0.500	0.496	ug/L	99	40 - 120	
alpha-Chlordane	0.500	0.386	ug/L	77	40 - 120	
gamma-Chlordane	0.500	0.374	ug/L	75	40 - 120	

 Surrogate
 % Recovery
 Qualifier
 Limits

 Tetrachloro-m-xylene
 58
 36 - 112

 DCB Decachlorobiphenyl
 42
 14 - 103

Lab Sample ID: LCSD 720-99305/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 99356							Prep	Batch:	99305
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Aldrin	0.500	0.282		ug/L		56	44 - 120	10	20
Dieldrin	0.500	0.413		ug/L		83	43 - 120	4	20
Endrin aldehyde	0.500	0.461		ug/L		92	40 - 120	8	20
Endrin	0.500	0.417		ug/L		83	15 - 138	4	20
Endrin ketone	0.500	0.452		ug/L		90	40 - 120	5	20
Heptachlor	0.500	0.339		ug/L		68	17 - 128	8	20
Heptachlor epoxide	0.500	0.418		ug/L		84	40 - 120	5	20
4,4'-DDT	0.500	0.397		ug/L		79	46 - 120	5	20
4,4'-DDE	0.500	0.379		ug/L		76	40 - 120	5	20
4,4'-DDD	0.500	0.413		ug/L		83	40 - 120	5	20
Endosulfan I	0.500	0.435		ug/L		87	40 - 120	5	20
Endosulfan II	0.500	0.449		ug/L		90	40 - 120	5	20
alpha-BHC	0.500	0.380		ug/L		76	40 - 120	8	20
beta-BHC	0.500	0.474		ug/L		95	40 - 120	7	20
gamma-BHC (Lindane)	0.500	0.375		ug/L		75	46 - 121	6	20
delta-BHC	0.500	0.285		ug/L		57	40 - 120	6	20
Endosulfan sulfate	0.500	0.457		ug/L		91	40 - 120	5	20
Methoxychlor	0.500	0.498		ug/L		100	40 - 120	0	20
alpha-Chlordane	0.500	0.407		ug/L		81	40 - 120	5	20
gamma-Chlordane	0.500	0.396		ug/L		79	40 - 120	6	20

	LCSD	LCSD		
Surrogate	% Recovery	Qualifier	Limits	
Tetrachloro-m-xylene	64		36 - 112	
DCB Decachlorobiphenvl	32		14 - 103	

Prep Type: Total/NA

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

3

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-99335/1-A

Matrix: Solid

Analysis Batch: 99356

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 99335

Time Join Date								op = a.c.	
	МВ								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Dieldrin	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endrin aldehyde	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endrin	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endrin ketone	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Heptachlor	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Heptachlor epoxide	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
4,4'-DDT	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
4,4'-DDE	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
4,4'-DDD	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endosulfan I	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endosulfan II	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
alpha-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
beta-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
delta-BHC	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Endosulfan sulfate	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Methoxychlor	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Toxaphene	ND		40		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
Chlordane (technical)	ND		40		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
alpha-Chlordane	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1
gamma-Chlordane	ND		2.0		ug/Kg		09/20/11 08:42	09/20/11 17:51	1

MB MB

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71	34 - 110	09/20/11 08:42	09/20/11 17:51	1
DCB Decachlorohinhenyl	104	21 - 136	09/20/11 08:42	09/20/11 17:51	1

Lab Sample ID: LCS 720-99335/2-A

Matrix: Solid

Analysis Batch: 99356

Client Sample ID:	Lab Control Sample
	Prep Type: Total/NA

Prep Batch: 99335

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Aldrin	16.5	10.2		ug/Kg		62	54 - 120
Dieldrin	16.5	11.4		ug/Kg		69	59 - 120
Endrin aldehyde	16.5	12.7		ug/Kg		77	40 - 120
Endrin	16.5	11.5		ug/Kg		70	53 - 120
Endrin ketone	16.5	13.5		ug/Kg		82	40 - 120
Heptachlor	16.5	10.8		ug/Kg		66	54 - 120
Heptachlor epoxide	16.5	11.6		ug/Kg		71	40 - 120
4,4'-DDT	16.5	11.5		ug/Kg		70	51 - 120
4,4'-DDE	16.5	10.9		ug/Kg		66	40 - 120
4,4'-DDD	16.5	11.7		ug/Kg		71	40 - 120
Endosulfan I	16.5	12.0		ug/Kg		73	40 - 120
Endosulfan II	16.5	12.6		ug/Kg		77	40 - 120
alpha-BHC	16.5	10.9		ug/Kg		66	40 - 120
beta-BHC	16.5	13.3		ug/Kg		81	40 - 120
gamma-BHC (Lindane)	16.5	10.9		ug/Kg		66	50 - 96
delta-BHC	16.5	11.0		ug/Kg		67	40 - 120
Endosulfan sulfate	16.5	13.7		ug/Kg		83	40 - 120

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-99335/2-A

Matrix: Solid

Lab Sample ID: LCSD 720-99335/3-A

Analysis Batch: 99356

Matrix: Solid

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 99335

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Methoxychlor	16.5	14.7		ug/Kg		89	40 - 120	
alpha-Chlordane	16.5	11.6		ug/Kg		70	40 - 120	
gamma-Chlordane	16.5	11.4		ug/Kg		69	40 - 120	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
Tetrachloro-m-xylene	70		34 - 110
DCB Decachlorobiphenyl	86		21 - 136

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 99356							Prep	Batch:	99335
	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Aldrin	16.6	12.0		ug/Kg		72	54 - 120	16	20
Dieldrin	16.6	13.7		ug/Kg		83	59 - 120	18	20
Endrin aldehyde	16.6	15.3		ug/Kg		92	40 - 120	18	20
Endrin	16.6	13.9		ug/Kg		84	53 - 120	18	20
Endrin ketone	16.6	16.1		ug/Kg		97	40 - 120	18	20
Heptachlor	16.6	12.7		ug/Kg		77	54 - 120	16	20
Heptachlor epoxide	16.6	14.2		ug/Kg		85	40 - 120	20	20
4,4'-DDT	16.6	13.5		ug/Kg		81	51 - 120	16	20
4,4'-DDE	16.6	13.3		ug/Kg		80	40 - 120	20	20
4,4'-DDD	16.6	13.9		ug/Kg		84	40 - 120	17	20
Endosulfan I	16.6	14.7		ug/Kg		88	40 - 120	20	20
Endosulfan II	16.6	15.1		ug/Kg		91	40 - 120	18	35
alpha-BHC	16.6	12.9		ug/Kg		78	40 - 120	17	20
beta-BHC	16.6	16.2		ug/Kg		97	40 - 120	19	20
gamma-BHC (Lindane)	16.6	12.8		ug/Kg		77	50 - 96	16	20
delta-BHC	16.6	13.2		ug/Kg		80	40 - 120	18	20
Endosulfan sulfate	16.6	16.2		ug/Kg		97	40 - 120	17	20
Methoxychlor	16.6	17.6		ug/Kg		106	40 - 120	18	20

16.6

16.6

14.2

14.0

LCSD LCSD

MB MB

Surrogate	% Recovery Qualifier	Limits
Tetrachloro-m-xylene	80	34 - 110
DCB Decachlorobiphenyl	104	21 - 136

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-99368/1-A **Matrix: Solid**

Analysis Batch: 99403

alpha-Chlordane

gamma-Chlordane

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99368

40 - 120

40 - 120

20

20

ug/Kg

ug/Kg

Analyte	Result Qualifier	RL	MDL Unit	. D	Prepared	Analyzed	Dil Fac
Antimony	ND	0.50	mg/k	Kg	09/20/11 14:18	09/20/11 20:00	1
Arsenic	ND	1.0	mg/k	Kg	09/20/11 14:18	09/20/11 20:00	1
Barium	ND	0.50	mg/k	Kg	09/20/11 14:18	09/20/11 20:00	1
Beryllium	ND	0.10	mg/k	Kg	09/20/11 14:18	09/20/11 20:00	1

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-99368/1-A

Lab Sample ID: LCS 720-99368/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 99403

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 99368

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.13		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Chromium	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Cobalt	ND		0.20		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Copper	ND		1.5		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Lead	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Molybdenum	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Nickel	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Selenium	ND		1.0		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Silver	ND		0.25		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Thallium	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Vanadium	ND		0.50		mg/Kg		09/20/11 14:18	09/20/11 20:00	1
Zinc	ND		1.5		mg/Kg		09/20/11 14:18	09/20/11 20:00	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99368

Analysis Batch: 99403					Prep Batch: 993
	Spike	LCS	LCS		% Rec.
Analyte	Added	Result	Qualifier Unit	D % Rec	Limits
Antimony	50.0	47.1	mg/Kg	94	80 - 120
Arsenic	50.0	48.6	mg/Kg	97	80 _ 120
Barium	50.0	51.1	mg/Kg	102	80 _ 120
Beryllium	50.0	50.1	mg/Kg	100	80 - 120
Cadmium	50.0	49.3	mg/Kg	99	80 - 120
Chromium	50.0	50.1	mg/Kg	100	80 _ 120
Cobalt	50.0	50.1	mg/Kg	100	80 _ 120
Copper	50.0	49.6	mg/Kg	99	80 - 120
Lead	50.0	49.8	mg/Kg	100	80 - 120
Molybdenum	50.0	50.5	mg/Kg	101	80 - 120
Nickel	50.0	49.9	mg/Kg	100	80 - 120
Selenium	50.0	47.5	mg/Kg	95	80 - 120
Silver	25.0	24.7	mg/Kg	99	80 - 120
Thallium	50.0	49.8	mg/Kg	100	80 - 120
Vanadium	50.0	49.2	mg/Kg	98	80 - 120

50.0

49.1

mg/Kg

Lab Sample ID: LCSD 720-99368/3-A

Matrix: Solid

Zinc

Analysis Batch: 99403

Client Sample ID: La	b Control Sample Dup
	Pron Type: Total/NA

80 - 120

Prep Batch: 99368

	Spike	LCSD	LCSD				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Antimony	50.0	47.4		mg/Kg		95	80 - 120	1	20
Arsenic	50.0	48.3		mg/Kg		97	80 - 120	1	20
Barium	50.0	50.4		mg/Kg		101	80 - 120	1	20
Beryllium	50.0	49.5		mg/Kg		99	80 - 120	1	20
Cadmium	50.0	48.8		mg/Kg		98	80 - 120	1	20
Chromium	50.0	49.7		mg/Kg		99	80 - 120	1	20
Cobalt	50.0	49.6		mg/Kg		99	80 - 120	1	20
Copper	50.0	49.1		mg/Kg		98	80 - 120	1	20
Lead	50.0	49.2		mg/Kg		98	80 - 120	1	20
Molybdenum	50.0	50.0		mg/Kg		100	80 - 120	1	20

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 720-99368/3-A

Matrix: Solid

Analysis Batch: 99403

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 99368

LCSD LCSD Spike RPD Result Qualifier Added Unit D % Rec Limits RPD Limit 50.0 49.2 mg/Kg 98 80 - 120 20 50.0 47.1 mg/Kg 94 80 - 120 20 25.0 24 5 80 120 20 mg/Kg 98 49.2 20

Thallium 50.0 mg/Kg 98 80 - 120 Vanadium 50.0 48.7 mg/Kg 97 80 - 120 20 Zinc 50.0 48.6 mg/Kg 97 80 - 120 20

Lab Sample ID: LCSSRM 720-99368/7-A

Matrix: Solid

Analyte

Selenium

Nickel

Silver

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 99368

Analysis Batch: 99403 LCSSRM LCSSRM Spike % Rec. Analyte Added Result Qualifier Unit Limits % Rec Antimony 105 61.2 mg/Kg 58 11 - 101 79.4 74.5 Arsenic mg/Kg 94 69 _ 119 Barium 391 342 87 61 - 117 mg/Kg Beryllium 279 304 92 56 - 102 mg/Kg Cadmium 48.3 42.0 87 67 - 118 mg/Kg 67 _ 121 Chromium 171 158 92 mg/Kg Cobalt 59.2 53.7 mg/Kg 91 64 - 133 68 - 126 Copper 327 307 94 mg/Kg Lead 181 158 mg/Kg 87 62 - 113 156 92 62 - 128 Molybdenum 144 mg/Kg Nickel 76.0 66.9 mg/Kg 88 65 - 117Selenium 76.9 68.9 mg/Kg 90 63 - 126 Silver 27.4 51 - 130 29.1 mg/Kg 94 Thallium 85 64 - 124 192 164 mg/Kg Vanadium 213 197 93 67 - 123mg/Kg

256

229

mg/Kg

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-99327/1-A

Matrix: Solid

Zinc

Analysis Batch: 99394

Client Sample ID: Method Blank

62 - 110

89

Prep Type: Total/NA

Prep Batch: 99327

Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed 09/19/11 21:32 Mercury ND 0.010 mg/Kg 09/20/11 17:12

Lab Sample ID: LCS 720-99327/2-A

Matrix: Solid

Analysis Batch: 99394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 99327

LCS LCS Spike % Rec. Analyte Added Result Qualifier Limits Unit D % Rec 80 - 120 Mercury 0.833 0.776 mg/Kg 93

MR MR

QC Sample Results

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 720-99327/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Total/NA
Analysis Batch: 99394

Prep Batch: 99327

LCSD LCSD RPD Spike % Rec. Analyte Limit Added Result Qualifier % Rec Limits RPD Unit Mercury 0.833 0.803 96 80 - 120 3 20 mg/Kg

4

6

9

11

12

4 /

QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

GC/MS VOA

Analysis Batch: 99228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	8260B/CA_LUFT	99283
LCS 720-99283/16-A	Lab Control Sample	Total/NA	Solid	MS 8260B/CA_LUFT	99283
LCS 720-99283/2-A	Lab Control Sample	Total/NA	Solid	MS 8260B/CA_LUFT	99283
LCSD 720-99283/17-A	Lab Control Sample Dup	Total/NA	Solid	MS 8260B/CA_LUFT	99283
LCSD 720-99283/3-A	Lab Control Sample Dup	Total/NA	Solid	MS 8260B/CA LUFT	99283
MB 720-99283/1-A	Method Blank	Total/NA	Solid	MS 8260B/CA LUFT	99283
				MS	

Prep Batch: 99283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	5035	<u> </u>
LCS 720-99283/16-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99283/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99283/17-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99283/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99283/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 99301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep B	3atch
720-37521-6	ACC-7 (WATER)	Total/NA	Water	8260B/CA_LUFT	
				MS	
720-37521-12	ACC-8 (WATER)	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99301/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCS 720-99301/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99301/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
LCSD 720-99301/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
				MS	
MB 720-99301/5	Method Blank	Total/NA	Water	8260B/CA_LUFT	
				MS	

Analysis Batch: 99386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-4	ACC-7 (38.5-40)	Total/NA	Solid	8260B	99396
720-37521-7	ACC-8 (5-6.5)	Total/NA	Solid	8260B	99396
720-37521-11	ACC-8 (43.5-45)	Total/NA	Solid	8260B	99396
LCS 720-99396/2-A	Lab Control Sample	Total/NA	Solid	8260B	99396
LCS 720-99396/4-A	Lab Control Sample	Total/NA	Solid	8260B	99396
LCSD 720-99396/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99396
LCSD 720-99396/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B	99396
MB 720-99396/1-A	Method Blank	Total/NA	Solid	8260B	99396

Prep Batch: 99396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-4	ACC-7 (38.5-40)	Total/NA	Solid	5035	
720-37521-7	ACC-8 (5-6.5)	Total/NA	Solid	5035	
720-37521-11	ACC-8 (43.5-45)	Total/NA	Solid	5035	

TestAmerica San Francisco 09/23/2011

QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

GC/MS VOA (Continued)

Prep Batch: 99396 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-99396/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-99396/4-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-99396/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-99396/5-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 720-99396/1-A	Method Blank	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 99305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-6	ACC-7 (WATER)	Total/NA	Water	3510C	
LCS 720-99305/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-99305/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-99305/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 99335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	3546	<u> </u>
LCS 720-99335/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-99335/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-99335/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 99356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-99305/2-A	Lab Control Sample	Total/NA	Water	8081A	99305
LCS 720-99335/2-A	Lab Control Sample	Total/NA	Solid	8081A	99335
LCSD 720-99305/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	99305
LCSD 720-99335/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	99335
MB 720-99305/1-A	Method Blank	Total/NA	Water	8081A	99305
MB 720-99335/1-A	Method Blank	Total/NA	Solid	8081A	99335

Analysis Batch: 99435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	8081A	99335

Analysis Batch: 99501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-6	ACC-7 (WATER)	Total/NA	Water	8081A	99305

Metals

Prep Batch: 99327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch	
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	7471A	
LCS 720-99327/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 720-99327/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
MB 720-99327/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 99368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	3050B	
LCS 720-99368/2-A	Lab Control Sample	Total/NA	Solid	3050B	

TestAmerica San Francisco 09/23/2011

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QC Association Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Metals (Continued)

Prep Batch: 99368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-99368/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 720-99368/7-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 720-99368/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 99394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	7471A	99327
LCS 720-99327/2-A	Lab Control Sample	Total/NA	Solid	7471A	99327
LCSD 720-99327/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	99327
MB 720-99327/1-A	Method Blank	Total/NA	Solid	7471A	99327

Analysis Batch: 99403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37521-1	ACC-7 (13.5-15)	Total/NA	Solid	6010B	99368
LCS 720-99368/2-A	Lab Control Sample	Total/NA	Solid	6010B	99368
LCSD 720-99368/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	99368
LCSSRM 720-99368/7-A	Lab Control Sample	Total/NA	Solid	6010B	99368
MB 720-99368/1-A	Method Blank	Total/NA	Solid	6010B	99368

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Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Client Sample ID: ACC-7 (13.5-15)

Date Collected: 09/16/11 08:10 Date Received: 09/16/11 14:08 Lab Sample ID: 720-37521-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99283	09/16/11 15:20	JZ	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		1	99228	09/17/11 18:20	AC	TAL SF
Total/NA	Prep	3546			99335	09/20/11 08:42	AM	TAL SF
Total/NA	Analysis	8081A		1	99435	09/22/11 03:45	WR	TAL SF
Total/NA	Prep	7471A			99327	09/20/11 14:35	SK	TAL SF
Total/NA	Analysis	7471A		1	99394	09/20/11 17:46	BA	TAL SF
Total/NA	Prep	3050B			99368	09/20/11 15:07	SK	TAL SF
Total/NA	Analysis	6010B		4	99403	09/20/11 20:34	BA	TAL SF

Client Sample ID: ACC-7 (38.5-40)

Date Collected: 09/16/11 08:40 Date Received: 09/16/11 14:08 Lab Sample ID: 720-37521-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99396	09/16/11 15:20	PGM	TAL SF
Total/NA	Analysis	8260B		1	99386	09/21/11 04:38	AC	TAL SF

Client Sample ID: ACC-7 (WATER)

Date Collected: 09/16/11 09:05

Date Received: 09/16/11 14:08

Lab Samp	le ID:	720-37	′521-6
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Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS			99301	09/20/11 05:32	AC	TAL SF
Total/NA	Prep	3510C			99305	09/19/11 16:04	RU	TAL SF
Total/NA	Analysis	8081A		1	99501	09/22/11 15:18	EC	TAL SF

Client Sample ID: ACC-8 (5-6.5)

Date Collected: 09/16/11 11:55

Date Received: 09/16/11 14:08

ab S	Samp	le ID	: 720)-37	521-7	•
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Lab Sample ID: 720-37521-11

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99396	09/16/11 15:20	PGM	TAL SF
Total/NA	Analysis	8260B		1	99386	09/21/11 05:06	AC	TAL SF

Client Sample ID: ACC-8 (43.5-45)

Date Collected: 09/16/11 13:17

Date Received: 09/16/11 14:08

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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total/NA	Prep	5035			99396	09/16/11 15:20	PGM	TAL SF
Total/NA	Analysis	8260B		1	99386	09/21/11 05:35	AC	TAL SF

Lab Chronicle

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Client Sample ID: ACC-8 (WATER)

Lab Sample ID: 720-37521-12 Date Collected: 09/16/11 13:40 Matrix: Water

Date Received: 09/16/11 14:08

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab	
Total/NA	Analysis	8260B/CA_LUFTMS		1	99301	09/20/11 01:16	AC	TAL SF	_

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

TestAmerica Job ID: 720-37521-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
8081A	Organochlorine Pesticides (GC)	SW846	TAL SF
6010B	Metals (ICP)	SW846	TAL SF
7471A	Mercury (CVAA)	SW846	TAL SF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Matrix

Solid

Solid

Water

Solid

Solid

Water

Client: ACC Environmental Consultants Project/Site: Ladd Ave., Livermore

Lab Sample ID

720-37521-1

720-37521-4

720-37521-6

720-37521-7

720-37521-11

720-37521-12

Client Sample ID

ACC-7 (13.5-15)

ACC-7 (38.5-40)

ACC-7 (WATER)

ACC-8 (43.5-45)

ACC-8 (WATER)

ACC-8 (5-6.5)

TestAmerica Job ID: 720-37521-1

Collected	Received
09/16/11 08:10	09/16/11 14:08
09/16/11 08:40	09/16/11 14:08
09/16/11 09:05	09/16/11 14:08
09/16/11 11:55	09/16/11 14:08

09/16/11 13:17

09/16/11 13:40

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09/16/11 14:08

09/16/11 14:08

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San Francisco

1220 Quarry Lane

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Pleasanton, CA 94566						
phone 925.484.1919 fax 925.600.3002						TestAmerica Laboratories, Inc.
Client Contact	Project Manager: Julia Siudyla		te Contact: Julia			COC No:
ACC Environmental Consultatns	Tel/Fax: 510-773-0752		ab Contact: D	MPIE Carri	er:	of COCs
7977 Capwell Drive, Suite 100	Analysis Turnaround	Time				Job No. 3054-103.01
Oakland, CA	Calendar (C) or Work Days (W)			` - -	4 ' " "	1
(510) 638-8400 x110 Phone 15 i udy a @	TAT if different from Below	sday				
(510) 638-8404 FAX ACCENU. COM	2 weeks	/				SDG No.
Project Name: LVJUSD Maintenance Yard	l week				·	
Site: 2900 Ladd Avenue, Livermore, CA	2 days	- 8	992	ا ا ا ا ا		
P O # 3054-103.01	l day		TPHs-8051B BTEX/MtBE-8260B VOCs-8260B Perirides-8081A	60103		
		5	TPHg-8051B BTEX/MtBE- VOCs-8260B	[17-6]		
•	Sample Sample Sample	Matrix # of Cout.		CAM		- i
Sample Identification	Date Time Type		E 8 × 6	2 3		Sample Specific Notes:
ACC-7" (13.5-15)	9-16-11 8:16	5.4	XXXX			
ACC7 (18.5-20)	9-16-11 8:15	5. 4				
ACC-7 (28,5-30)	9-16-11 8:20	5.4				s :
Acc-7 (385-40)	4-16-11 8:40	5.4	χ×			
A(1-7 (48,5-50)	9-18-11 9:00	5-1			<u> </u>	
ACC-7 (Water)	9-18-11 9:05	W-5	λχγ	l l		
ACC-8 (5-6.5)	9-18-11 11:55	5 4.	xx			
ACC 8 (13.5-15)	9-15-11 12:49	5 4-			У	
ALLE (23.5-25)	9-16-11 12:53	54			×	
ACC 8 (33.5-35)	9-18-11/306	\$ 4			The second secon	
ACC & (43.5-45)	9-16-11 13:17	5 4.	××			
Acce water	9-16-11 13:40	WY	ХX			
Preservation Used: 1 (Ice) 2= (IC), 3= H2SO4; 4=HNO3; 5=NaOH; 6	= Other MeOH					
Possible Hazard Identification		9450112 181 (0154.	Sample Dispo		d if samples are retained long By Lab Archive For	· · · · · · · · · · · · · · · · · · ·
	Poison B Onknown .	(213.	Return I	o Client Disposal i	By Lab ATCTIVE For_	Months
Special Instructions/QC Requirements & Comments:						
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Relinquished by:	Company:	Date/Time: 9/16 2:086	Received by:	lre H	Company A. S.F.	Date/Time: 911 - 1408
Relinquished by:	Company:	Date/Time:	Received by:		Company:	Date/Jime:
Relinquished by:	Company:	Date/Time:	Received by:		Company:	Date/Time:
	1		1			

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: ACC Environmental Consultants

Job Number: 720-37521-1

Login Number: 37521 List Source: TestAmerica San Francisco

List Number: 1 Creator: Hoang, Julie

Creator: Hoang, Julie		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	SEE NCM
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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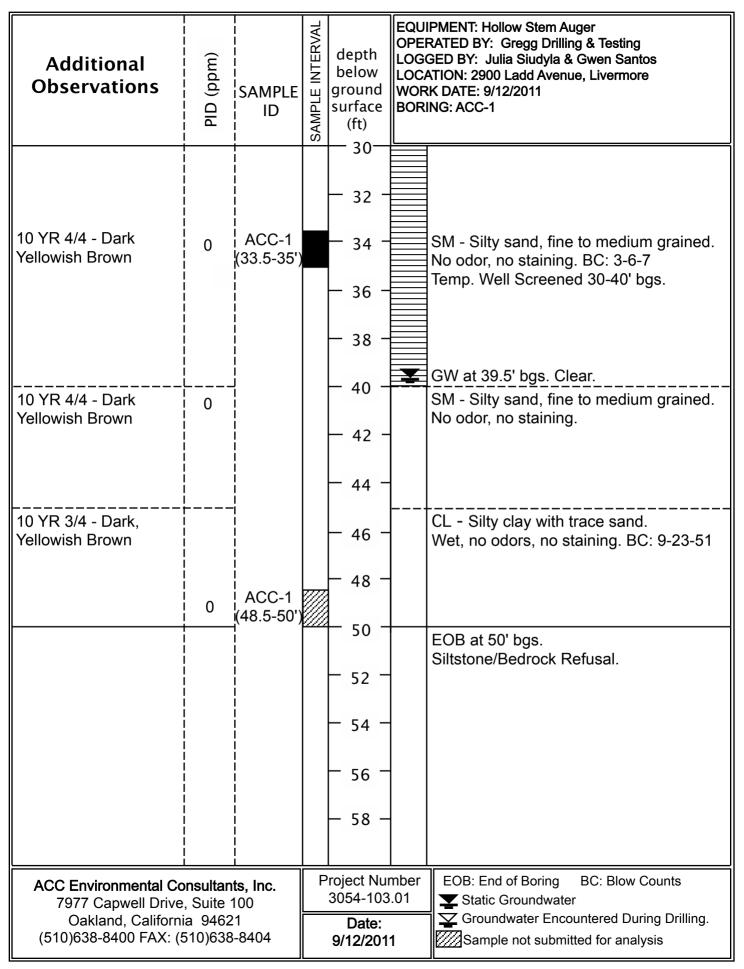
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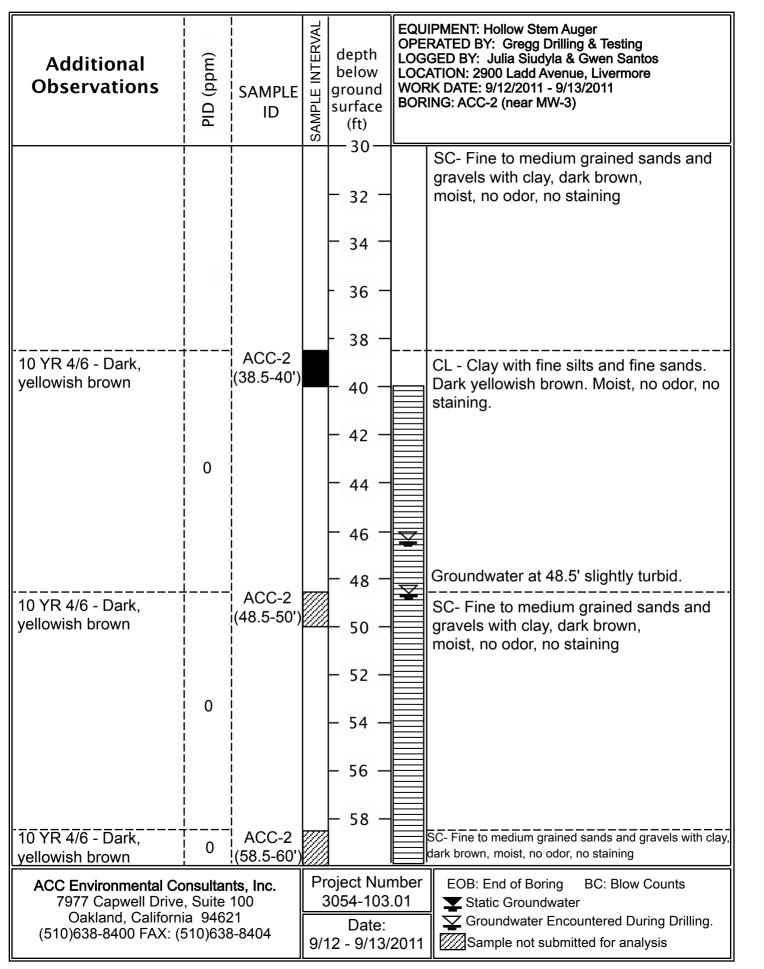
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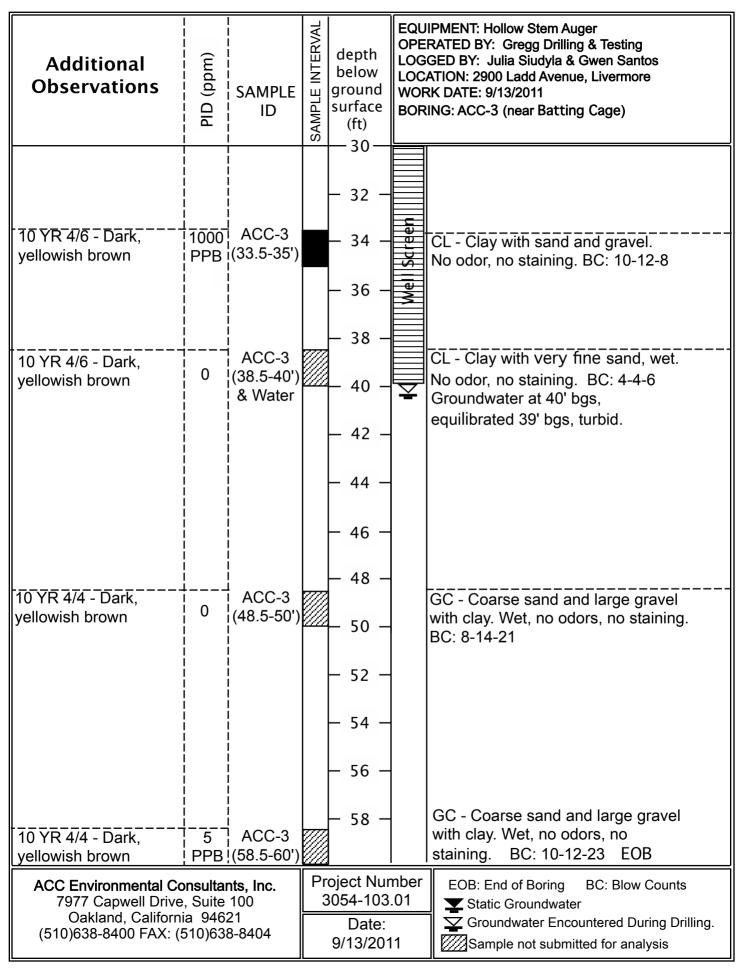
Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	OPER LOGO LOCA WOR	PMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore K DATE: 9/12/2011 NG: ACC-1
10 YR 4/3 - Brown	0			— 0 — — 2 — — 4 —		GC - Clayey gravel with fine/medium grained sand. Dry, no odors, no staining.
10 YR 3/4 - Dark, Yellowish Brown	0	ACC-1 (5-6.5')		- 6 - - 8 - - 10 -		GC - Clayey gravel with fine/medium grained sand. Dry, no odors, no staining. BC: 16-18-22
10 YR 3/4 - Dark, Yellowish Brown	0	ACC-1 (13.5-15')		- 14 - - 16 - - 18 -		GC - Clayey gravel with fine grained sand. Moist, no odors, no staining. BC: 9-20-25
10 YR 3/2 - Very Dark Grayish Brown	0	ACC-1 (23.5-25')		- 22 - - 24 - - 26 - - 28 -		CL - Clay with medium to large grained sand and gravel. Moist to wet, no odors, no staining.
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404			roject Nu 3054-103 Date: 9/12/201	3.01	EOB: End of Boring BC: Blow Counts Static Groundwater Groundwater Encountered During Drilling. Sample not submitted for analysis	



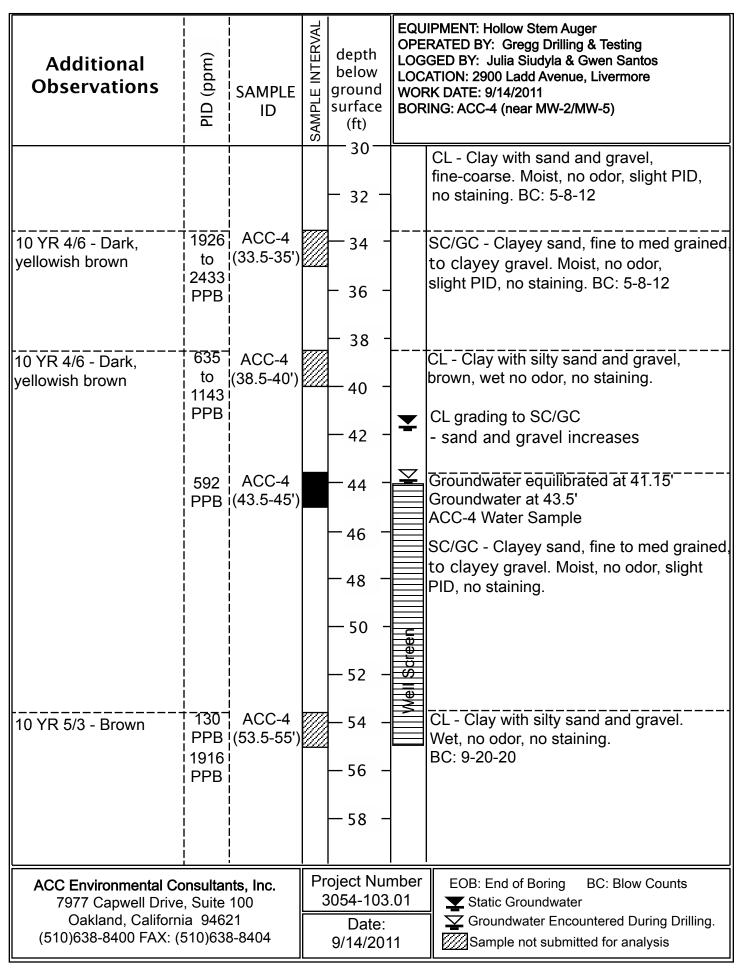
Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Hollow Stem Auger OPERATED BY: Gregg Drilling & Testing LOGGED BY: Julia Siudyla & Gwen Santos LOCATION: 2900 Ladd Avenue, Livermore WORK DATE: 9/12/2011 - 9/13/2011 BORING: ACC-2 (near MW-3)
10 YR 3/3 - Dark Brown	 0 	 		— 2 — — 4 —	SC- Fine to medium grained sands and gravels with clay, dark brown, moist, no odor, no staining
10 YR 3/4 (8') - Dark, Yellowish Brown	0	ACC-2 (5-6.5')		- 6 - - 8 - - 10 - - 12 -	GC - Clayey gravels with fine/medium grained sand. Moist, no odors, no staining.
10 YR 3/4 - Dark, Yellowish Brown	0	No Recovery No Sample I I I I I I I I I I		— 14 — — 16 — — 18 —	SC- Fine to medium grained sands and gravels with clay, dark brown, moist, no odor, no staining
10 YR 3/4 - Dark, Yellowish Brown	0	ACC-2 (18.5-20')		— 20 - — 22 - — 24 - — 26 -	CL - Clay with sand and gravel, fine/larger. No odor, no staining. BC: 3-8-12
10 YR 3/4 - Dark Yellowish Brown	0	ACC-2 (28.5-30')			SC- Fine to medium grained sands and gravels with clay, dark brown,moist, no odor, no staining. BC: 18-23-27
ACC Environmental Co 7977 Capwell Drive Oakland, Californ (510)638-8400 FAX: (5	, Suite ia 946	100 21		roject Nui 3054-103 Date: /12-9/13/2	.01 Static Groundwater Groundwater Encountered During Drilling.



Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	OPEI LOGO LOCA WOR	IPMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore EK DATE: 9/13/2011 ING: ACC-3 (near Batting Cage)
10 YR 3/2 - Very dark, greyish brown	0			— 0 — — 2 — — 4 —		Asphalt CL - Clay with fine sand and gravels Fine/medium sand and gravels. Moist, no odors, no staining.
	0	ACC-3 (8.5-10')		- 6 8 10 12 14 16 18 -	-	SC - Clay with fine sands and gravels but more sand and gravel than clays. Large gravel. BC:34-31-19
10 YR 4/2 - Dark, greyish brown	331 731 PPB	ACC-3 (18.5-20')		— 20 - — 22 -		SC - Fine to medium grained sand and gravel with clay. Slight gas odor. BC: 14-12-15
10 YR 4/2 - Dark, greyish brown	28 PPM 458 PPB	ACC-3 (23.5-25')		- 24 - - 26 - - 28 -		SC - Fine to medium grained sand and gravel with clay. Gasoilne odor. Moist/Wet odor. BC: 6-15-21
10 YR 3/3 - Dark brown	 16 PPM	ACC-3 (28.5-30')		20		SW - Sand with trace clay, fine/medium. Gas odor, greyish staining. BC: 8-21-22
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404		ll .	roject Nui 3054-103 Date: 9/13/201	mber .01	EOB: End of Boring BC: Blow Counts Static Groundwater Groundwater Encountered During Drilling. Sample not submitted for analysis	

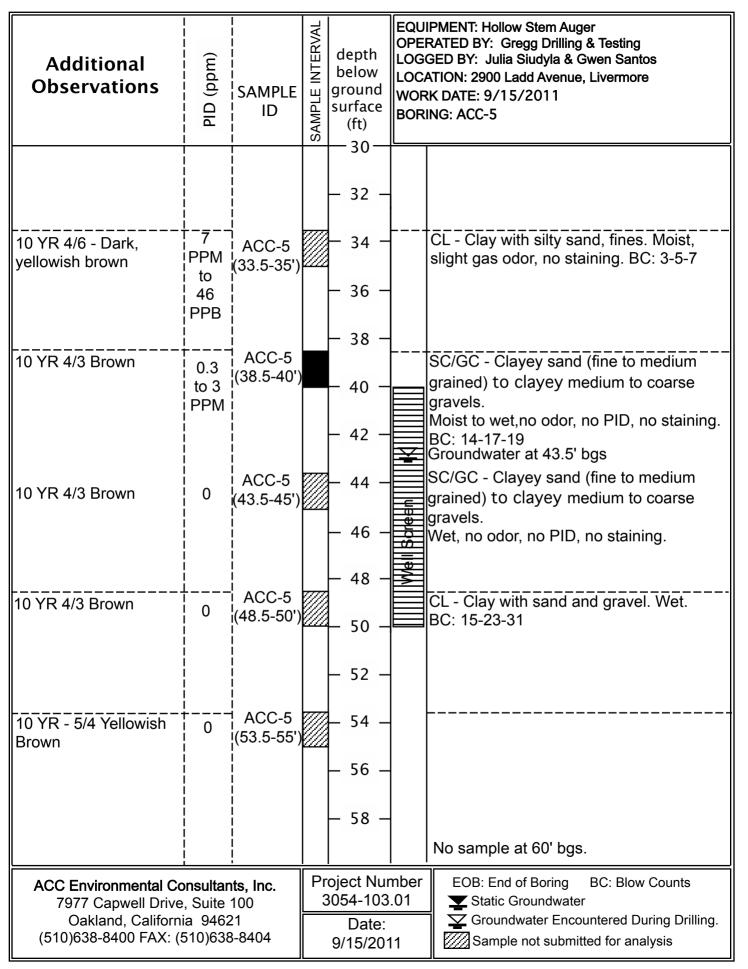


Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Hollow Stem Auger OPERATED BY: Gregg Drilling & Testing LOGGED BY: Julia Siudyla & Gwen Santos LOCATION: 2900 Ladd Avenue, Livermore WORK DATE: 9/14/2011 BORING: ACC-4 (near MW-2/MW-5)
10 YR 3/2 - Very dark, greyish brown	0			— 2 — — 4 —	SC/GC - Clayey sand to clayey gravel. Dry, no odors, no staining. BC:5/50", 50/5", 50/5" Sampler full of gravel, no soil recovery.
No sample tubes, full of rocks, no soil recovery.	0	ACC-4 (5-6.5')		— 6 — — 8 —	
10 YR 4/4 - Dark, Yellowish Brown	0	ACC-4 (8.5-10')		- 10 - - 12 -	SC/GC - Clayey sand, fine to med grained, to clayey gravel. Moist, no odor, no staining. BC: 19-21-25
10 YR 4/4 - Dark, Yellowish Brown with grey staining	800 PPM 1281 PPM 927 PPM	ACC-4 (13.5-15')		- 14 - - 16 - - 18 -	SC/GC - Clayey sand, fine to med grained to clayey gravel. Moist, strong gasoline odor. High PID. BC: 11-12-19
10 YR 5/2 - Greyish brown	33-42 PPM	ACC-4 (18.5-20')		- 20 - - 22 -	SC/GC - Clayey sand, fine to med grained to clayey gravel. Slight gas odor,grey staining. BC: 12-14-18
 10 YR 5/3 - Brown	9762 PPB to 15 PPM	ACC-4 (23.5-25')		- 24 - - 26 - - 28 -	CL - Clay with fine/medium sands and gravel. Moist/wet, gas odor. BC: 9-21-22
10 YR 5/3 - Brown	-54 PPM	ACC-4 (28.5-30')			CL - Clay, brown with fine sands and gravel. Moist/wet, gas odor. BC: 17-18-39
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404				oject Nur 3054-103. Date: 9/14/201	01 Static Groundwater ☐ Groundwater Encountered During Drilling.



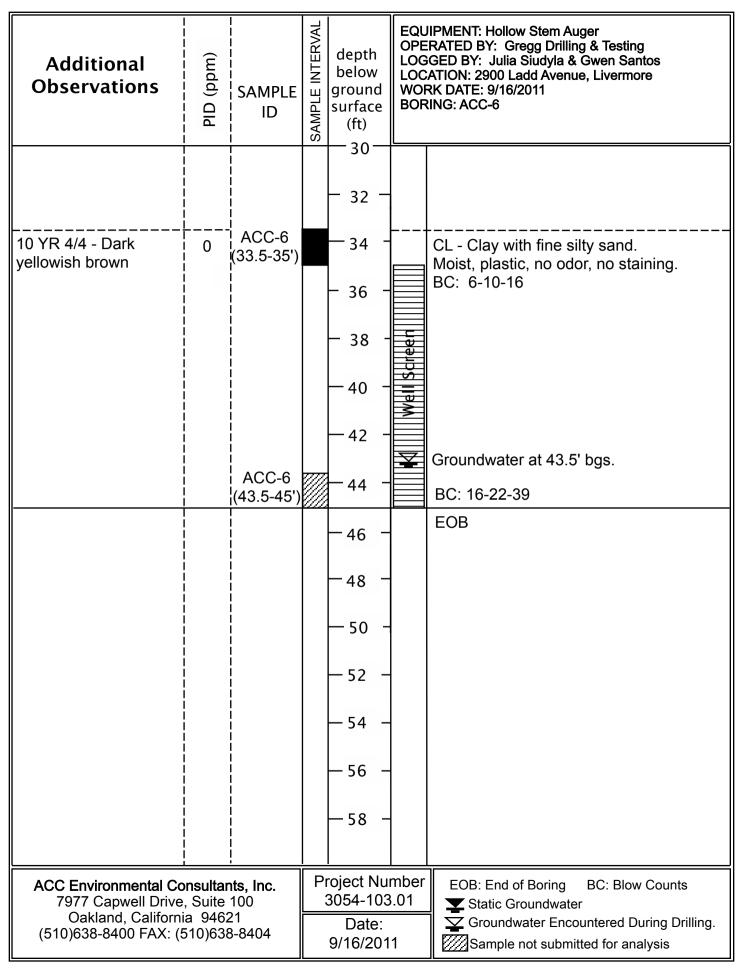
Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	OPEI LOG LOC WOR	PMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore K DATE: 9/14/2011 ING: ACC-4 (near MW-2/MW-5)
	566 PPB	ACC-4 (63.5-65')	vs	- 60 - 62 - 64 - 66 - 68 - 70 - 72 - 74 - 76 - 78 - 80 - 82 - 82 - 82 - 82 - 82 - 82 - 8		GC - Coarse Gravel - Grey/Brown with silty clay. BC: 8-14-24 EOB
ACC Environmental Co	onsult	ants, Inc.	Pi	— 84 — — 86 — — 88 —	mber	EOB: End of Boring BC: Blow Counts
7977 Capwell Drive Oakland, Californ	ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404			3054-103 Date: 9/14/201	.01	Sample not submitted for analysis

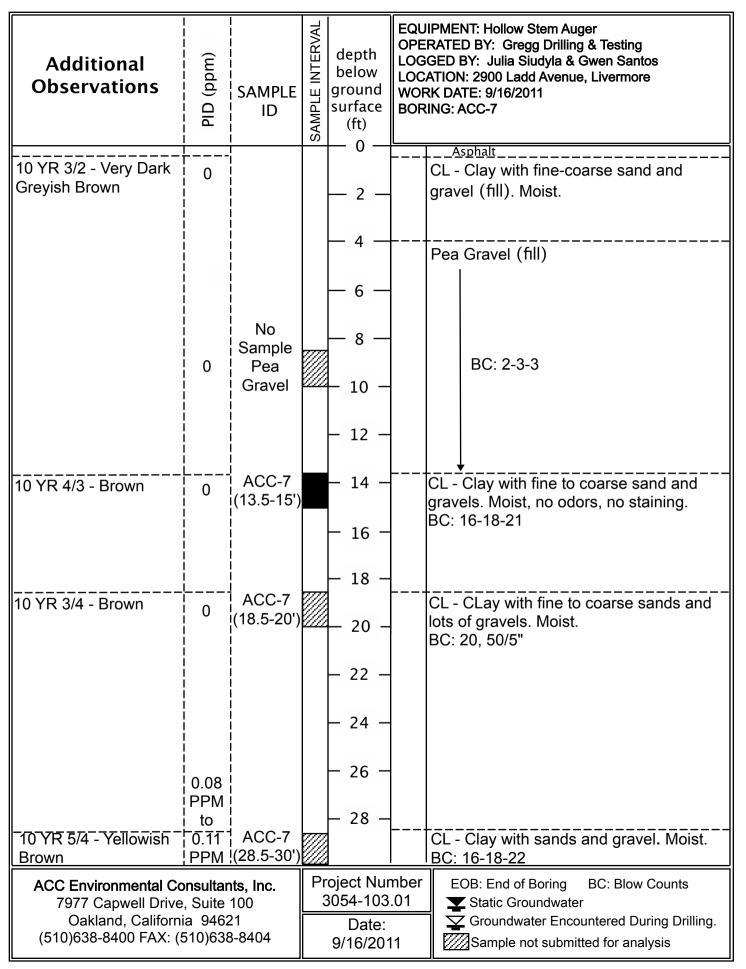
Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Hollow Stem Auger OPERATED BY: Gregg Drilling & Testing LOGGED BY: Julia Siudyla & Gwen Santos LOCATION: 2900 Ladd Avenue, Livermore WORK DATE: 9/15/2011 BORING: ACC-5
10 YR 4/2 - Dark Greyish Brown	0			_ 2 _ _ 4 _	SC - Clayey sand (fine to medium grained) with gravels. Dry, no odors, no PID no staining. BC: 50/5"
10 YR 4/3 - Brown	0	ACC-5 (5-6.5')		- 6 - - 8 -	SC - Clayey sand (fine to medium grained) with gravels. Dry, no odors, no PID no staining.
10 YR 4/2 - Dark Greyish Brown	0	ACC-5 (8.5-10')		— 10 — — 12 —	SC - Clayey sand (fine to medium grained) with gravels. Moist, no odor, no PID, no staining. BC:17-21-23
	 	ACC-5		— 14 — — 16 — — 18 —	CL - Clay with sand and gravel, fine to
TO TIX 3/3 - DIOWIT		(18.5-20') 		— 20 — — 22 —	coarse. Moist, gas odor, greyish staining.
	PPM 3 PPM 48	ACC-5 (23.5-25') 		— 24 — — 26 —	SC - Clayey sand (fine to medium grained) with gravels. Moist, no odor, no staining. BC: 4-12-22
10 YR 5/4 - Yellowish Brown	PPM 1 1 PPM	 ACC-5 (28.5-30')		— 28 —	CL - Clay with fine sand and coarse gravel. Moist, slight gas odor, no staining.
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404			roject Nur 3054-103 Date: 9/15/201	01 Static Groundwater	

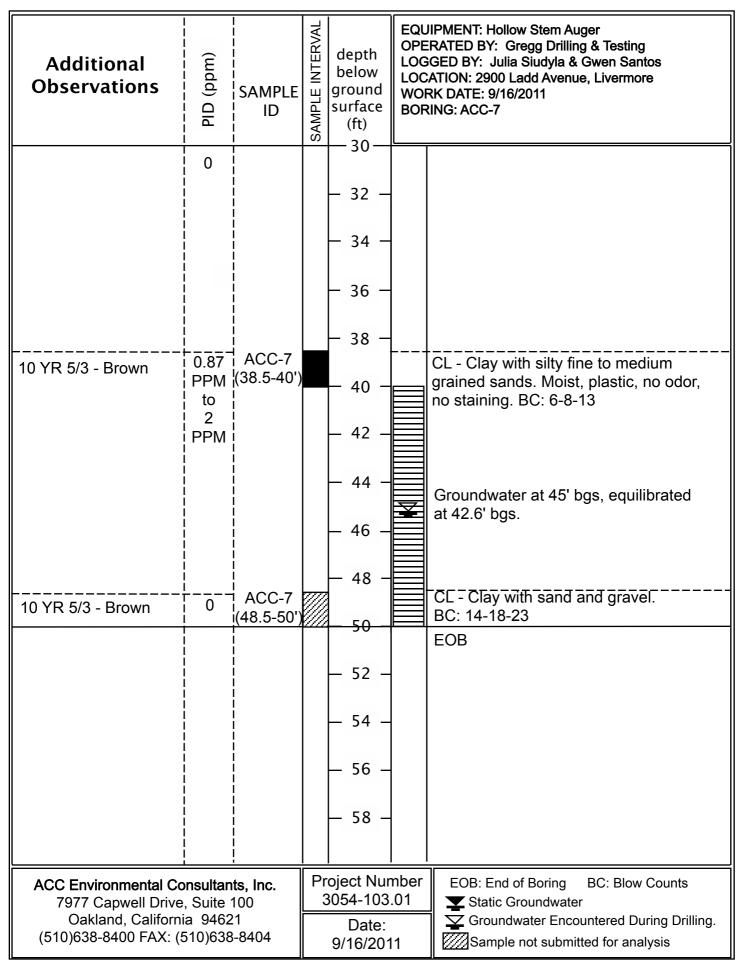


Additional Observations	PID (ppm)	SAMPLE	SAMPLE INTERVAL	depth below ground surface (ft)	LOCA WOR	IPMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore RK DATE: 9/15/2011 ING: ACC-5
		ACC-5		- 62 - - 64 -		SC/GC - Clayey sand (fine to medium grained) with medium to coarse gravels. Wet, no odor, no PID, no staining.
		(63.5-65')		- 66 -		No recovery, no sample. 65' bgs EOB
	 	 		─ 68 - ─ 70 -		
	 	 		— 72 - — 74 -		
		 		- 76 - - 78 -		
	 	 		80 - 82 -		
	 	 		84 86		
	 	 		— 88 –		
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404		Project Number 3054-103.01 Date: 9/15/2011		.01	EOB: End of Boring BC: Blow Counts Static Groundwater Groundwater Encountered During Drilling. Sample not submitted for analysis	

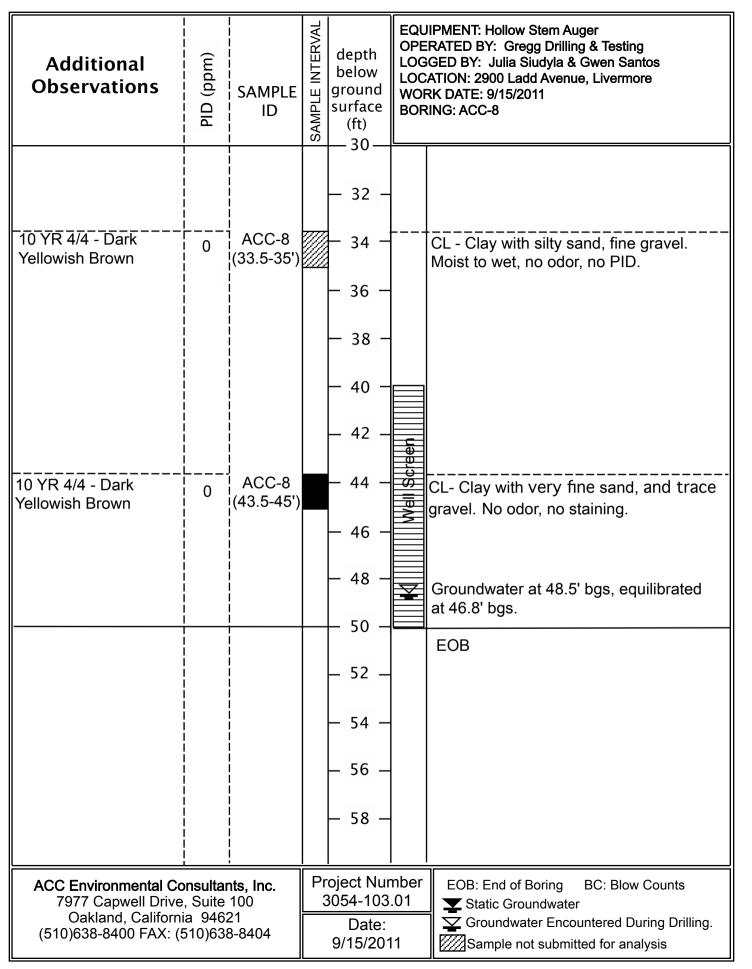
Additional Observations	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	OPE LOG LOC WOF	IIPMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore RK DATE: 9/16/2011 RING: ACC-6
				— 0 — — 2 — — 4 —		SM - Very fine silty sands, likely fill materials with trace coarse gravels. Very dry.
10 YR 3/4 - Very dark, greyish brown	0	ACC-6 (5-6.5')		- 6 - - 8 - - 10 - - 12 -		GC - Clay gravel with sands fine to coarse. Dry. BC: 50/5"
10 YR 4/3 - Brown	0	ACC-6 (13.5-15')		- 14 - - 16 - - 18 - - 20 - - 22 -		GC - Clay gravel with sands fine to coarse. Moist, no odor, no staining.
10 YR 4/4 - Dark yellowish brown	0	ACC-6 (23.5-25')		- 24 - - 26 - - 28 -		GC - Clay gravel with sands fine to coarse No odor, no staining. BC: 17-32-33
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404		Project Number 3054-103.01 Date: 9/16/2011		.01	EOB: End of Boring BC: Blow Counts Static Groundwater Groundwater Encountered During Drilling. Sample not submitted for analysis	







Additional Observations	PID (ppm)	SAMPLE	SAMPLE INTERVAL	depth below ground surface (ft)	OPE LOG LOC WOF	IPMENT: Hollow Stem Auger RATED BY: Gregg Drilling & Testing GED BY: Julia Siudyla & Gwen Santos ATION: 2900 Ladd Avenue, Livermore RK DATE: 9/15/2011 ING: ACC-8
10 YR 3/2 - Very Dark Greyish Brown	 0 1	 		— 2 — — 4 —		AsphaltCL - Clay, brown, trace fine sand, small amounts of gravel. Moist, no odor, no staining.
10 YR 3/2 - Very Dark Greyish Brown	0	ACC-8 (5-6.5')		- 6 - - 8 - - 10 -		CL - Clay, brown, trace fine sand and gravel. No odor, no staining. BC: 2-8-12
10 YR 4/3 - Brown	0	ACC-8 (13.5-15')		- 12 - - 14 - - 16 - - 18 -		CL - Clay with fine to coarse sands and gravels. Moist, no odors, no staining. BC: 42, 50/4"
 10 YR 4/3 - Brown	0	ACC-8 (23.5-25')		 20 - 22 - 24 - 26 - 28 - 		GC - Clayey gravel with fine to coarse sands. Moist-wet. BC: 18-13
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404		ll .	Project Number 3054-103.01 Date: 9/15/2011		EOB: End of Boring BC: Blow Counts Static Groundwater Groundwater Encountered During Drilling. Sample not submitted for analysis	





Technical Approach

Engagement Model

COLUMBIA's business model is to build a long term partner relationship with our clients to meet mutual business goals. We do this by providing unparalleled technical expertise and project support to help ensure budget protection for our clients. Our extensive experience encompasses providing high quality, cost effective, high resolution vertical profiling site characterizations in support of source delineations and effective remedial designs. As you review our proposal please keep in mind that it is backed by more direct sensing experience, equipment and talent than any other company in the world. As a result, we can back our services with a 100% Performance Guarantee.

High resolution vertical profiling is an interactive approach using state-of-the-art high resolution tools, real time qualitative data, and 2D/3D mapping to enable an adaptive investigation strategy. By adaptive we mean the ability to change tools and technology during the investigation as results dictate to obtain the best available data set in a more cost-effective approach than traditional methods. A combination of high resolution tools will be used to understand and map the site geology, hydrology, geochemistry, and contaminant distribution. Only sufficient data necessary to meet the project objectives will be obtained using each technology, and technology can and will be changed in the field when it is determined to be no longer useful in meeting those objectives. Throughout the data collection effort, real time decision making will be supporting using 2D/3D mapping tools and a secure, interactive website available to the entire technical team.

Mobilization

- In order to complete the direct sensing survey, COLUMBIA normally relies on the client
 to arrange for site access with property owner/manager, including movement of cars
 and other vehicles for unrestricted access and movement around the property during
 working hours. No COLUMBIA equipment will be left onsite overnight unless
 appropriate arrangements are made.
- Public utility clearance will be arranged by Client through the appropriate public utility identification system. In addition, as public utility identification systems do not typically mark on private property, COLUMBIA recommends for the arrangement of a private utility company to mark utilities, scaled utility drawings, or use of air-knife technology for utility clearance. If using air-knife technology, COLUMBIA recommends clearing an eight (8) inch boring to accommodate multiple sensors or sampling equipment runs within the same cleared hole. COLUMBIA is not responsible for any damage incurred to unmarked utilities.



COLUMBIA anticipates that the Client will obtain all necessary permits for conducting the site investigation, unless otherwise specified.

authorization Upon to proceed, **COLUMBIA** will mobilize one direct sensing van and direct push rig (if necessary) and associated operators to the site. With multiple direct sensing units throughout the country COLUMBIA is usually able to meet Client's requested field schedule based on lead time after authorization and prior commitments. COLUMBIA's service partner will mobilize a



suitably sized Geoprobe DPT rig to the site, if COLUMBIA is providing this service instead of the Client. The Geoprobe service partner will provide a state licensed driller if required.

COLUMBIA's fleet includes several Dodge Sprinter vans equipped with all necessary tooling to conduct direct sensing in the field.



- On board generator for electrical power.
- Client "office" with work space, computer, large flat-panel LCD screen and Internet access.
- Dual rod racks to permit switching between two MIP probes, or between MIP and LIF/UVOST®, to minimize downtime.
- Standard 150 foot MIP/EC trunklines (200 foot MIP trunklines

available) and 120 foot LIF/UVOST® fiber cable to permit operation at a distance from the direct push rig location.



 COLUMBIA and its Geoprobe service partner on site personnel will have current HAZWOPER and the necessary 8 Hour Updates, LPS training, API WorkSafe training, and First Aid and CPR training. We maintain a Drug-Free Workplace, participating in the CH2M HILL drug testing consortium for random testing.

Conduct High Resolution Vertical Profiling

- The geological and hydrologic structure of the subsurface can be delineated using EC (Electrical Conductivity) which is integrated with all direct sensing tools, and optionally using HPT (Hydraulic Profiling Tool) to indicate the location of any permeable zones.
- Vertical contaminant profiling will be conducted by using direct sensing tools (MIP and/or LIF/UVOST®). Borings will be advanced as specified in the Scope of Work to the desired depth. It may not be possible to achieve the depths required at every location due to the nature of the subsurface geology.
- If proposed in the Scope of Work, or included optionally in our Cost Estimate, chemical analysis can be conducted onsite with a mobile laboratory.
- Borehole abandonment will be provided by the Client provided Geoprobe driller.
- COLUMBIA will geo-reference all direct sensing locations.

Provide Real Time Data Delivery

Employ Real Time Data Delivery in 2D/3D. All high resolution data will be presented in both its direct instrument outputs and 2D/3D map format via a secure website immediately upon processing in the field. This real time support will provide the technical team with decision making information and enable them to shift technologies, locations, and depth of the data collection in a cost-effective manner.

COLUMBIA will provide a Final Report upon completion of all direct sensing data in the field within five (5) business days. The report will include a description of direct sensing equipment, performance tests, investigation methods, log interpretation, correlation to laboratory analysis, if sample data provided.

COLUMBIA can optionally provide its real time 2D/3D visualization package which includes all of the above plus the following elements:

- All 2D/3D visualizations are available on the secure website for up to one year after the field event.
- The Final Report includes client-selected 2D/3D high resolution graphics.





• An interactive Internet Webinar with Client to discuss and review the direct sensing data and the 2D/3D visualizations.

Schedule

• COLUMBIA has 7 direct sensing systems available and therefore can accommodate multiple projects simultaneously.





Subsurface Characterization Using Membrane Interface Probe (MIP) and Soil Conductivity (SC) Technologies Livermore MIP 2900 Ladd Avenue Livermore, California

PREPARED FOR

ACC Environmental Consultants 7977 Capwell Drive Oakland, California

November 30, 2011

PREPARED BY

COLUMBIA Technologies, LLC 1448 South Rolling Rd. Baltimore, Maryland 21227 410-536-9911

www.columbiatechnologies.com

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APPENDICES

Appendix A: MIP Logs (Individual Scale)
Appendix B: MIP Logs (Collective Scale)

Introduction

ACC Environmental Consultants (ACC) contracted COLUMBIA Technologies, LLC (COLUMBIA) to conduct an investigation of subsurface contamination at the Livermore MIP site, located in Livermore, California. This investigation involved delineating the depth and horizontal extent of total volatile organic compound (VOC) contamination distribution, including dissolved phase, vapor phase and sorbed phase, using Membrane Interface Probe (MIP) technology and characterizing soil electrical conductivity using Soil Conductivity (SC) technology.

The investigation was conducted September 28, 2011, and consisted of 3 MIP/SC locations to depths ranging from 10 feet to 62 feet below ground surface (bgs). A Geoprobe[®] Direct Push Technology (DPT) drilling rig was used to advance the locations.

Objectives

The objectives of the MIP/SC investigation were to:

• Delineate in high resolution the vertical and horizontal extent of the total VOC contamination distribution, including dissolved phase, vapor phase and sorbed phase, throughout the investigation area as well as detailed information concerning soil electrical conductivity properties.

MIP/SC Equipment Description

The MIP/SC probe is approximately 12-inches (30 cm) in length and 1.5-inches (3.8 cm) in diameter. The probe is driven into the ground at the nominal rate of one foot per minute using a DPT rig.

Soil conductivity, the inverse of soil resistivity, is measured using a dipole arrangement. In this process, an alternating electrical current is transmitted through the soil from the center, isolated pin of the probe. This current is then passed back to the probe body. The voltage response of the imposed current to the soil is measured across these same two points. Conductivity is measured in Siemens/meter, and due to the low conductivity of earth materials, the SC probe uses milliSiemens/meter (mS/m). The probe is reasonably accurate in the range of 5 to 400 mS/m. In general, at a given location, lower conductivity values are generally characteristic of larger particles such as sands, while higher conductivities are characteristic of finer sized particles such as silts and clays.

The MIP portion of the probe was developed and patented by Geoprobe Systems, Inc. The operating principle is based on heating the soil and/or water around a semi-permeable polymer membrane to 121°C, which allows VOCs to partition across this membrane. The MIP can be used in saturated or unsaturated soils, as water does not pass through the membrane. Nitrogen is used as an inert carrier gas, and travels from a surface supply down a transfer tubing which sweeps across the back of the membrane and returns any captured VOCs to the installed detectors at the surface. It takes approximately 37 seconds for the nitrogen gas stream to travel through 100 feet of inert tubing and reach the detectors.

COLUMBIA utilizes three detectors: a Photo Ionization Detector (PID), a Flame Ionization Detector (FID) and an Electron Capture Detector (ECD), mounted on a laboratory grade Shimadzu Model 14A gas chromatograph. The output signal from the detectors is captured by a MIP data logging system installed on a MIP Field Computer or laptop computer. Conductivity, speed, detector data and temperature are displayed continuously in real time during each push of the probe.

The PID detector consists of a special UV lamp mounted on a thermostatically controlled, low volume, flow-through cell. The temperature is adjustable from ambient temperature to 250°C. The 10.2 electron volt (eV) UV lamp emits energy at a wavelength of 120 nanometers, which is sufficient to ionize most aromatics (benzene, toluene, xylene, etc.) and many other molecules (e.g. H₂S, hexane, ethanol) whose ionization potential is below 10.2 eV. The PID also emits a lower response for chlorinated compounds such as TCE and PCE. Methanol and water, which have ionization potentials greater than 10.2 eV, do not respond on the PID. Detection limits for aromatics are in the low picogram range of the detector. Since the PID is non-destructive, it is often run first in series with other detectors for multiple analyses from a single injection. Use of the PID is mandated in several EPA methods (8021, TO-14 etc.) because of its sensitivity and selectivity.

The most commonly used GC detector is the FID, which responds linearly over several orders of magnitude from its minimum detectable quantity of about 100 picograms. The FID response is very stable from day to day. This detector responds to any molecule with a carbon-hydrogen bond, but poorly to compounds, such as H₂S, CCl₄, or NH₃. The carrier gas effluent from the GC column is mixed with hydrogen and burned. Hydrogen supports a flame and ionizes the

analyte molecules. A collector electrode attracts the negative ions to the electrometer amplifier, producing an analog signal, which is directed to the data system input.

The ECD detector consists of a sealed stainless steel cylinder containing radioactive Nickel-63. The Nickel-63 emits beta particles (electrons), which collide with the carrier gas molecules, ionizing them in the process. This forms a stable cloud of free electrons in the ECD cell. When electro-negative compounds (especially chlorinated, fluorinated or brominated molecules), such as carbon tetrachloride or TCE, enter the cell, they immediately combine with the free electrons, temporarily reducing the number remaining in the electron cloud. The detector electronics, which maintain a constant current of about 1 nanoampere through the electron cloud, are forced to pulse at a faster rate to compensate for the decreased number of free electrons. The pulse rate is converted to an analog output, which is transmitted to the data system.

MIP System Performance Test

As a quality control check, the MIP system response is evaluated prior to and upon completion of each MIP location. An aqueous phase performance test is performed using specific compounds designed to evaluate the sensitivity of the particular probe, transfer line and detector suite to be used. The resulting values are recorded and compared to predetermined values.

Investigation Methods

A total of 3 MIP/SC locations were completed at the Livermore MIP site. Each location was selected by ACC's representative onsite, and the termination depth of each location was also determined by ACC's representative onsite. Immediately upon completion of each location, the dataset is wirelessly delivered to **COLUMBIA's** remote servers for Quality Assurance/Quality Control (QA/QC) review and upload to a password secure website using Columbia's patented *SmartData Solutions*® technology. The results from each location are shown in Appendices A and B.

MIP/SC Log Interpretation

Each MIP/SC log includes six separate graphs of data. The first graph displays the temperature of the probe as it is advanced in the subsurface. This graph can be useful to determine where groundwater is encountered. The next three graphs are measures of chemical detector response: ECD, FID, and PID, measured in microvolts (uV). These graphs are a linear

scale, and give relative concentrations of contamination. The fifth graph is the rate of penetration (speed of the probe) and is measured in feet/min. This information can be used to determine how resistant the subsurface is to the direct push and/or percussion. The last graph is soil electrical conductivity and is measured in mS/m. In general, lower conductivities are indicative of coarser grained particles, such as sands and silty sands, and higher conductivities are indicative of finer grained particles, such as clays and silty clays.

Correlating MIP Results to Sampling or Laboratory Analyses

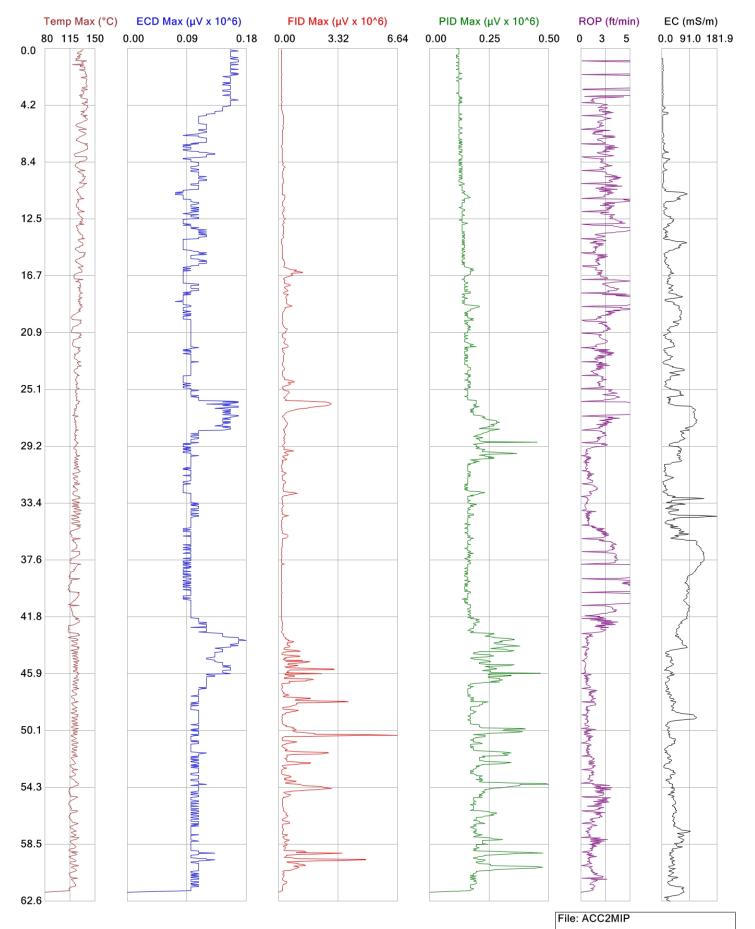
Generalized correlations between MIP response and laboratory sample results can be inferred, but cannot be viewed as a linear comparison. MIP response and laboratory results are collected, analyzed and reported in different units and by different procedures, so correlation is not an exact one-to-one comparison. The MIP process uses a membrane extraction process from a heated zone of varying subsurface matrix of soil, water, and/or vapor. Soil and groundwater results involve the collection of a sample, extraction of a sub-sample at the surface, and then transporting them to a laboratory for further extraction and analysis. These two processes are different by definition.

 $SmartData\ Solutions ^{\circledR}\ is\ a\ registered\ trademark\ of\ COLUMBIA\ Technologies\ LLC.$

Geoprobe® is a registered trademark of Geoprobe Systems, Inc.

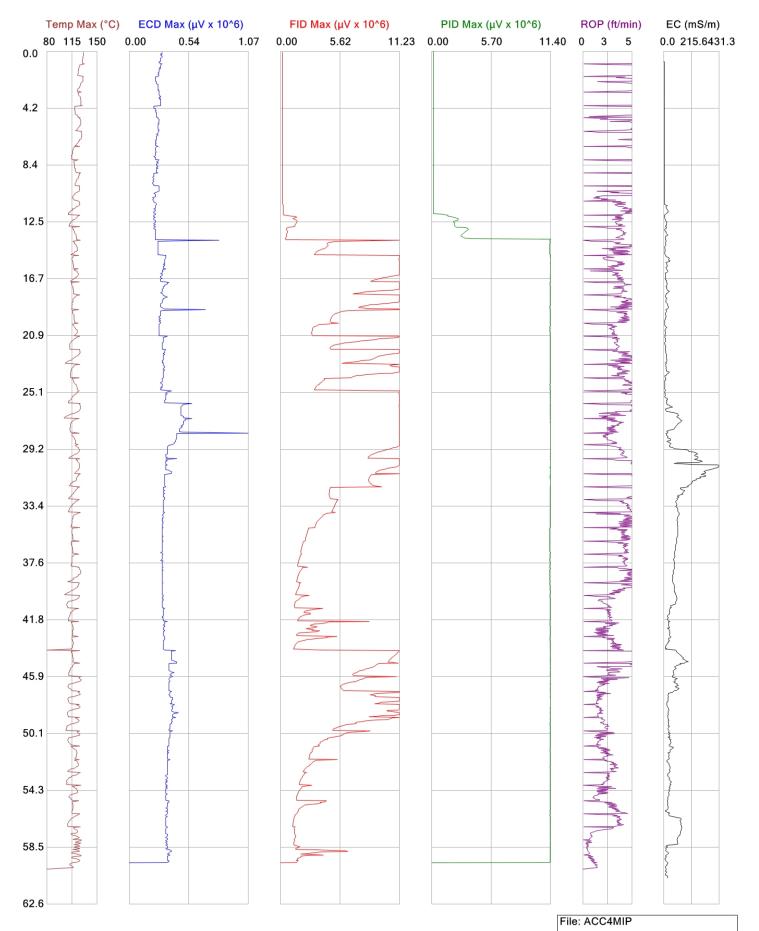
APPENDIX A MIP Logs (Individual Scale)





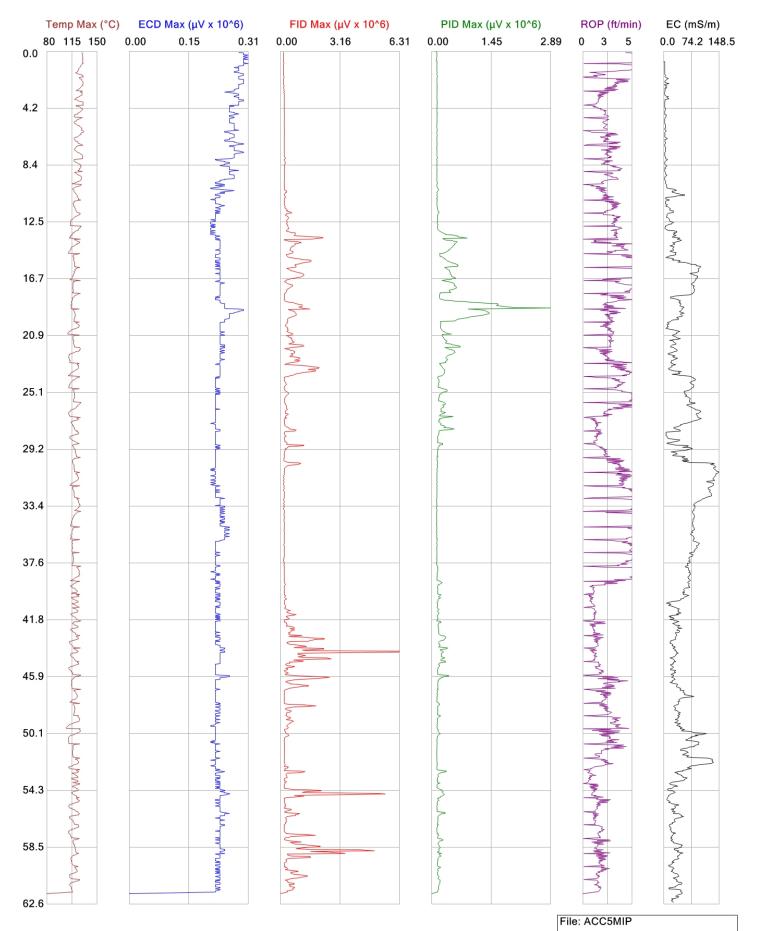


Client: ACC Environmental Consultants	Date: 11/22/2011
Project ID: Livermore MIP	Location:





Client: ACC Environmental Consultants	Date: 11/22/2011
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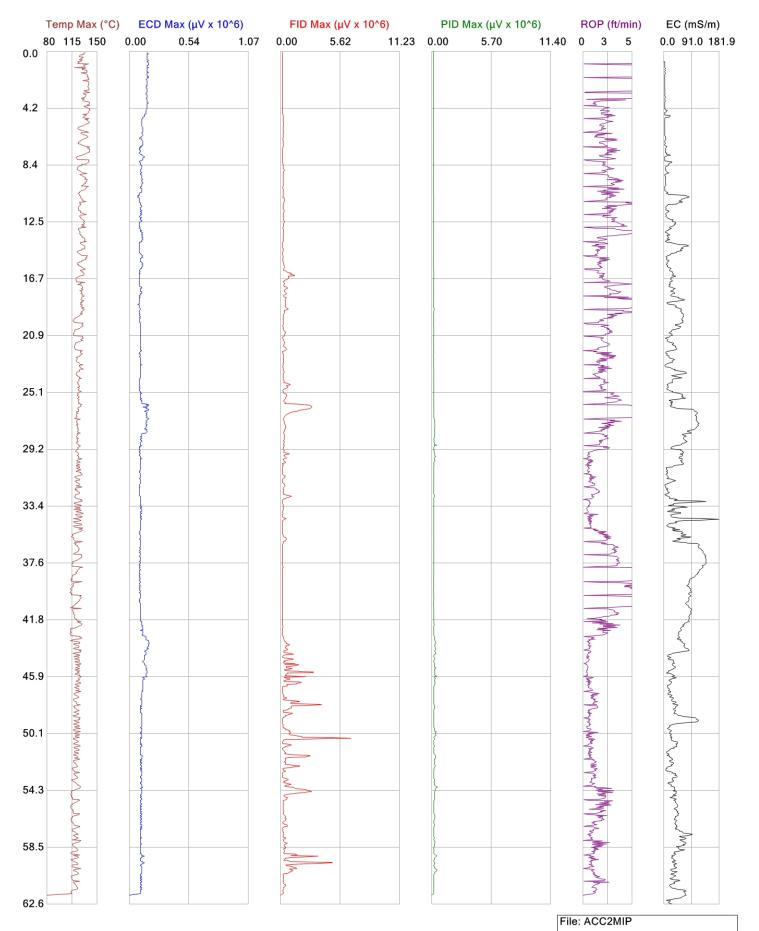




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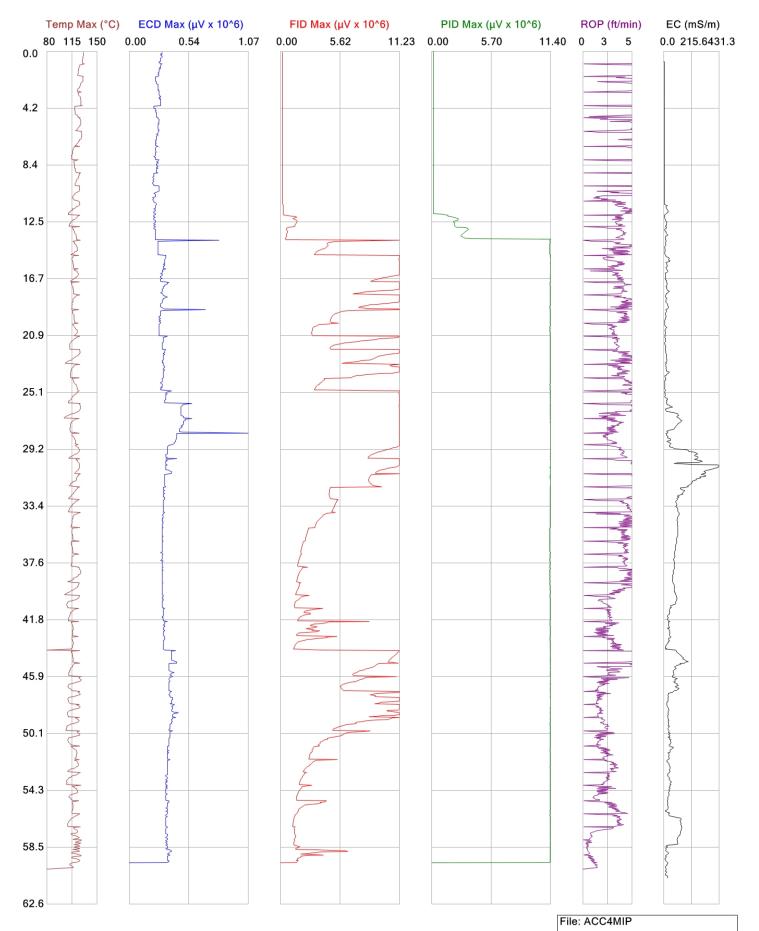
APPENDIX B MIP Logs (Collective Scale)





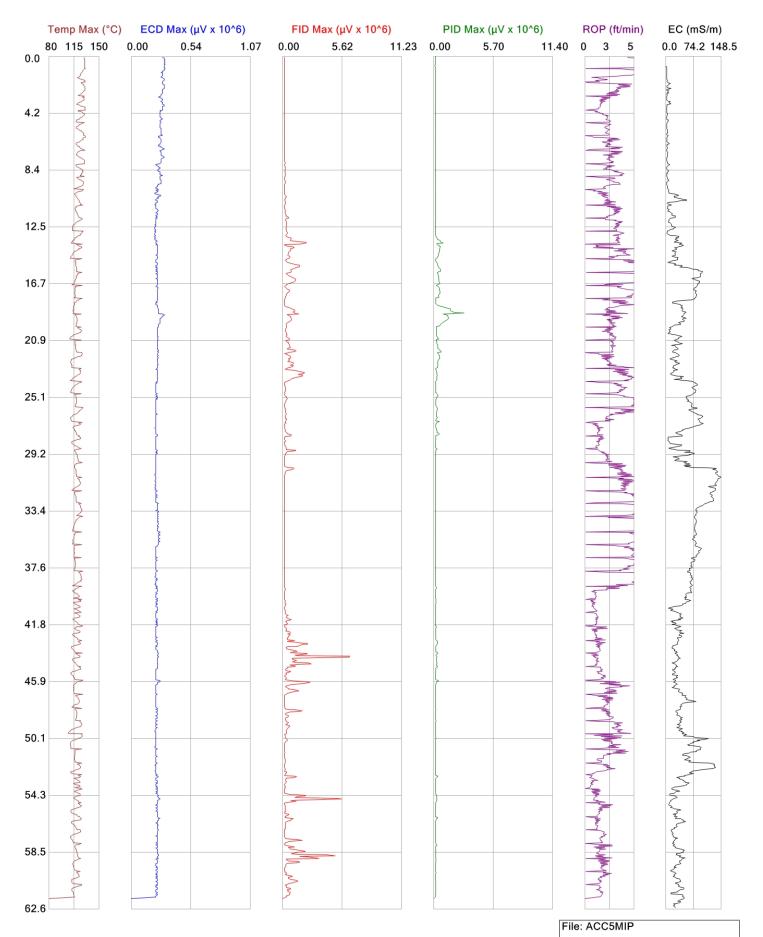


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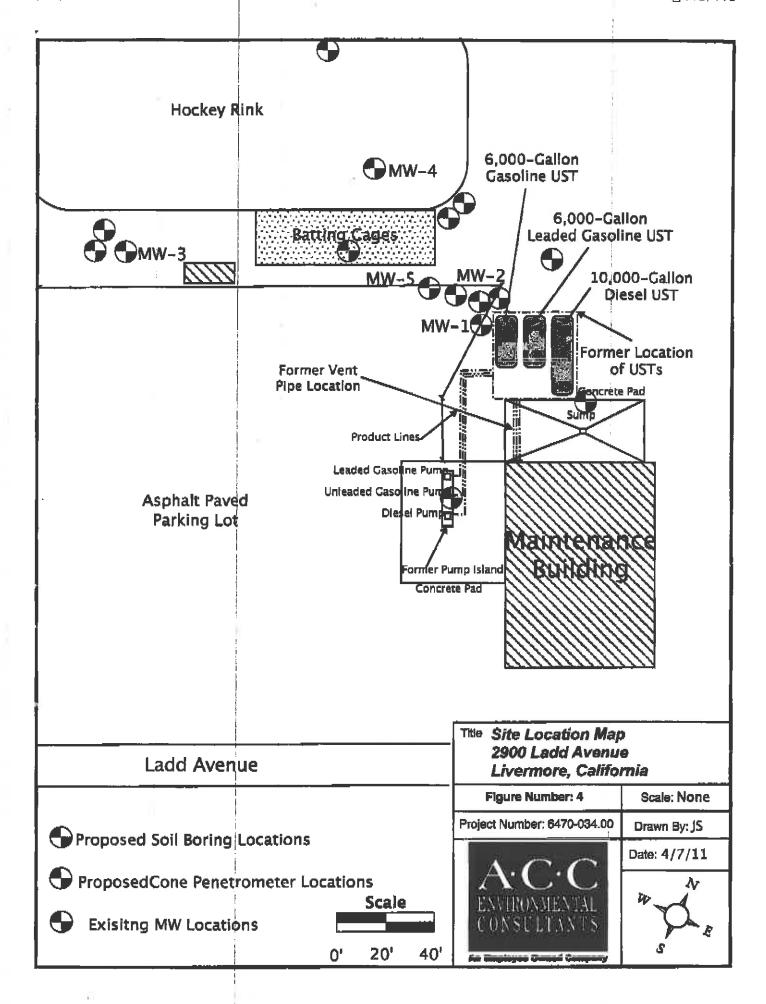
ATTACH SITE PLAN OR SKETCH

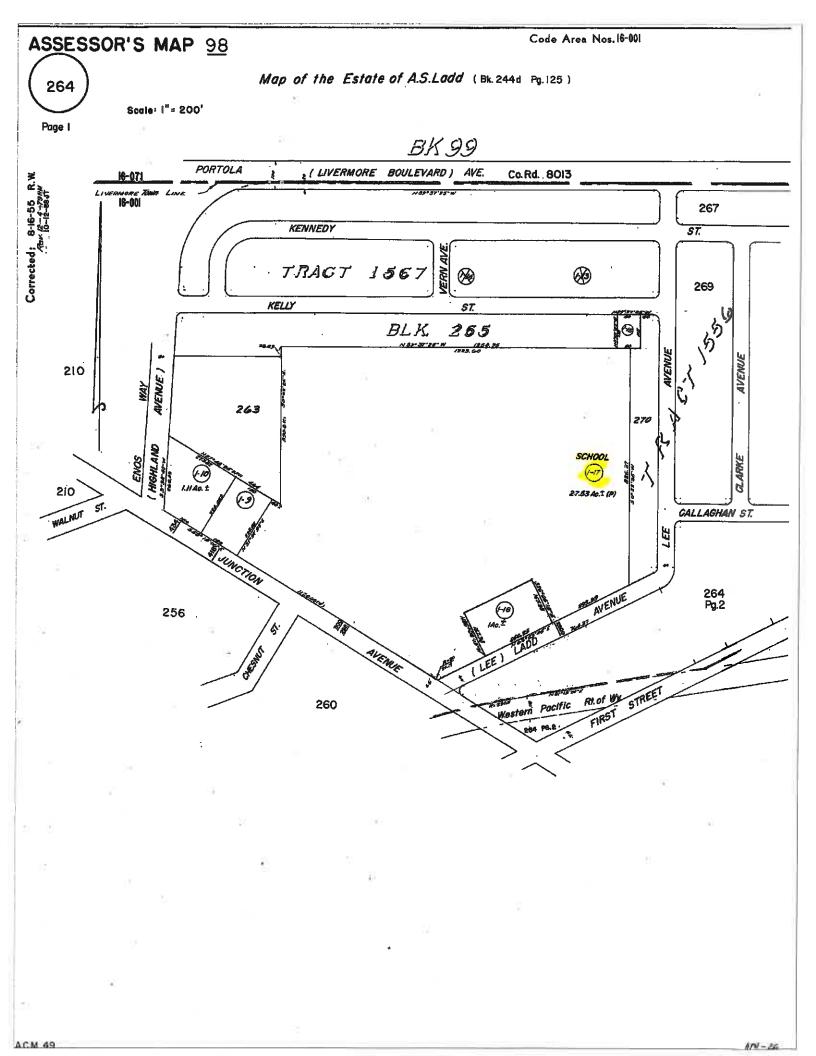
ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306 E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LIVERMORE CA 94551	PERMIT NUMBER 2011095 WELL NUMBER
	APN 098-0264-001-17
Coordinates Source (1006) EAM ft. Accuracy ft. LAT: 27º 41' 13.68° ft. LONG: 174° 45' 50.60° ft. APN 48 - 246-1-11 098 - 2764-001-17	PERMIT CONDITIONS (Circled Permit Requirements Apply) (A) GENERAL
CLIENT Name Liver More Joint & Unified Sc Vool District Address 635 6 Jost Loaden Blw Phone 925-606-3255 City Livermore (A Zip 9456) APPLICANT Name ACC Environmental Consultants Email JSTUCYLL CONSULTANTS Email JSTUCYLL CONSULTANTS City COX I Zip 94621 TYPE OF PROJECT: Well Construction Geotechnical Investigation Well Destruction Contamination Investigation Cathodic Profescion Other PROPOSED WELL USE: Domestic Imagation Municipal Remediation Industrial Groundwater Monitoring	1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date. 2. Submit to Zone 7 within 80 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller. 3. Permit is void if project not begun within 90 days of approval date.
Dewatering Other Other DRILLING METHOD: Mud Rotary Air Rotary Hollow Storn Augor X Cable Tool Direct Push Other X DRILLING COMPANY GREE DOINING TESTING, N.C. DRILLER'S LICENSE NO 485 165	 C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. 3. Grout placed by tremie.
WELL SPECIFICATIONS: N/A- Drill Hole Diameter in. Meximum Casing Diameter in. Depth ft. Surface Seal Depth ft. Number	D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
SOIL BORINGS: Number of Borings 12-15 Meximum Hole Diameter 8 in. Dapth 70 ft.	E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
ESTIMATED STARTING DATE SOF 13.2011 ESTIMATED COMPLETION DATE SOF 19. 2011	F. WELL DESTRUCTION. See attached.
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.	G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soll and water laboratory analysis results.
APPLICANT'S Dete 8-19-11	Approved Wyman Hong Date 9/6/11





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	Livermore, CA 94551	USA		Livermore, CA USA					
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	7. Transporter 2 Company Name					0029865	4		
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	18. Designated Facility Owner or	Operator: Certification of receipt of materials covered by the n	nanifest excent	as noted in Hern 172	STATE OF STA			STEEL STEEL	
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1	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number CACO02675579	1 " 1	Emergency Response Phone 10-552-5181	4. Waste Tra	acking Number	000	1530
	5. Generator's Name and Mailin Livermore Valley John	ng Address nt Unified School Dist.	Ge	merator's Site Address (if different	•	ss)	<u>`</u>	
	555 East Jack Londo Livermore, CA 94551	in Elkd.		LVJUSD-2500 Ladd Av Livermore, CA USA	enue		•	
	Concrator a 1 morte,	06-3390					···	
	6. Transporter 1 Company Nam Bayview Environment		,		U.S. EPA ID N CALOC	lumber 10298854		
	7. Transporter 2 Company Nam		1/2/2	/	U.S. EPA ID N			
	8. Posturated Facility Name and	d Site Address	INTOINA TIUC	nal, Inc.	U.S. EPA ID N	1 000 (7931	32.
	Highway 95, 11 Miles Beatty, NV 89003 U	S. of Beatty				091000		
	600-239-39 Facility's Phone:	343						
	9. Waste Shipping Name	and Description		10. Containers No. Type	11. Total Quantity	42. Unit WL/Vol.		
i ii	1. Non-Hazardous	Waste Solid		- OM	Garanty	P SE		
EMERATO				15	10,500			
GER	Ż.							
	3.	•	-					
	4,							
٧	 Special Handling Instructions Soll with trace organization 	s and Additional Information INICS PROF#	ERG# 172	BV Job#11078		155.1-5		
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	markel and labeled/placarde	S CERTIFICATION: I hereby declare that the con- ed, and are in all respects in proper condition for tr			e by the proper ship medial egulations.	ping name, and		
·₩	Generato s/Offerors Printed/Typ	2 mg/m	Signatu 	" heat	Short	4/	Month 1	Day Year
T.E.	15. triteriational Shipments	Import to U.S.	Export from U.S.	Port of entry/exit:		0		· · · · · · · · · · · · · · · · · · ·
 	Transporter Signature (for export 16. Transporter Acknowledgment			Date leaving U.S.:		<u>-</u>		
TRANSPORTER	Transporter Printed/Typed Nan	TIE	Signatu		-0			Day Year
SNS	PYAN PFI Transporter 2 Printed Typed Itan	7ACSIL	Signatu	re Pataci	F-{			12 /
T.R.	Cub	1) Wight		Corlos D.	ه باله		10.1	2 11.
^	17. Discrepancy 17a. Discrepancy Indication Space	<u>}</u>	<u> </u>		<u>, </u>			
		L_I Quantity	Туре	Residue	Partial Reje	ction	L Ful	i Rejection
ا ج	17b. Alternate Facility (or Genera	alor)		Manifest Reference Number,	U.S. EPA ID N	umber		
CITE	, .							
DESIGNATED FACILITY	Facility's Phone: 17c. Signature of Alternate Facilit	ty (or Generator)				····	Month	Day Year
HANE	AUGZE WALLES FOR U.S.							16di
DESIC								
	Bright of Change Marine	Operator: Certification of receipt of materials cover				and the second	11 -11	
	riniew typeu name		Signatu 	те '	-		Month 	Day Year

		NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number CACQC2675579		1	3. Emergency Respor	se Phone	4. Waste T	racking N	umber	204500
	5.	. Generator's Name and Malli	ng Address		<u> </u>	510-552-5161 Generator's Site Addre	es (if differen	t than mailing adde	oce)	U	001533
		Ligarmore Valley John 585 East Jack Long;	7. 5 %.			[V/JUSD-290			caal		
		Lhrermore, CA, 9455 enerator's Phone: 925-5	LUSA		,	Thermore C	4 <u>US</u> 4				
	6.	Transporter 1 Company Nan	ne					U.S. EPA ID	Montas		
2.00	_	Bayview Environment							002559;	<u>Sa</u>	
		Transporter 2 Company Nam			74.		· · · · · · ·	U.S. EPA ID			
	8.	Designated Facility Name an	WIRDHMENTI d Site Address	L INTERI	JATTON	JAL, INC	£+	U.S. EPA ID	00	21793	383
		Highway 95, 11 Miles Beatty, NV 69003 U	i S. of Beatry SA	ş.					Mullioer 3001000	20	
	Fa	acility's Phone: 000-239-39	143								
		9. Waste Shipping Name	•			10. Con No.	lainers Type	11. Total Quantity	12. Unit WL/Vol.		-
		1. Non-Hazardous	Waste Solid			1	" DM	-	p	\$455.55	
SENERATO						117		13,600			
SEN		2		, , , , , , , , , , , , , , , , , , , 			-			Alexander	
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	13	Special Handling Instructions	and Addition 11.4.								
		i. Soll with trace organ	Tics PROF#	∮	RG# 172	E/\ 100#	11078				
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		. ,	P# 07.012.E	3043205	9.			(17)	(5)	ر•	. 8
	1.A	· · · · · · · · · · · · · · · · · · ·		,							
		marked and labeled/placander	CERTIFICATION: I hereby declare d, and are in all respects in proper co	that the contents of this co andition for transport accord	onsignment are ding to applicab	fully and accurately des demotegrational and reti	cribed above	by the proper ship	ping name	, and are classif	fied, packaged,
¥	Gen	erapits/Officion's Printed/Type	ed Name		Signa	tule		\sim		Month	Day Year
IL L	15.	International Shipments	Import to U.S.			Must		My	4	$=$ \downarrow $_{0}$	11-411
¥.	Trai	sporter Signature (for exports	aniv)-	L_] }	Export from U.S	Port of en		<u> </u>	/ -		
TRANSPORTER	Tran	Transporter Acknowledgment isporter 1 Printed/Typed Nariu	of Receipt of Materials		Signal						
SPO		RYAN PAT	PACSIL		Signal 	70 - 71 A	1	<i>f</i>		Month	Day Year
E E	Tran	sporter 2 Printed/Typed Name	`		Signal	ture /	del			Month	Day Year
A		Discrepancy	person)			Juliu	del	son			12-14
	17a.	Discrepancy Indication Space	Quantity	Туре		Residue		Прин			
			•	· ,µv		∟		Partial Rejec	tion	니	Full Rejection
	17b.	Alternate Facility (or Generate	n)			Manifest Reference N	umber:	U.S. EPA ID Nu	ımbar		Day Year
2	_ :				*			0.0. CFA (0 N)	MOG		
		ity's Phone; Signature of Alternate Facility	for Generalori	· · · · · · · · · · · · · · · · · · ·							
Ž.					1					Month I	Day Year
0 0							774.68				
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, {	rinte	d/Typed Name			Signatu		 			Month	Day Year
9-1		C-O 6 10498 (Rev. 9/0	70\	······································				···-	·		
•		10490 (Nev. 9/0	ue _l				DI	ESIGNATED	FACII	LITY TO G	ENERATOR

Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Company Officer or Legal Representative Name

Susan Kinder

Title

Date

1/7/2012

Chief Business Official

PERJURY STATEMENT

Name of Document or Report: Soil and Groundwater Characterization Report/Request for
Low Risk Closure Report
RO# <u>0000188</u>
I declare, under penalty and perjury, that the information and/or recommendations
contained in the above stated document or report is true and correct to the best of my
knowledge.
Signature