January 20, 1999

STID 11241 New R0000159

# PHASE II
# SUBSURFACE INVESTIGATION

response to 12/15/99

3635 13th Avenue
Oakland, California

Project No. 1610

Prepared For

Mr. John Williamson
1511 Wellington Street
Oakland, CA 94602

Prepared By

**All Environmental, Inc.**
901 Moraga Road, Suite C
Lafayette, CA 94549
(800) 801-3224

AEI

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

January 20, 1999

Mr. John Williamson
1511 Wellington Street
Oakland, CA 94602

**Subject:** **Phase II Subsurface Investigation**
3635 13th Avenue, Oakland, California
Project No. 1610

Dear Mr. Williamson:

The following letter report describes the activities and results of the subsurface investigation performed by All Environmental, Inc. (AEI) at the above referenced property (Figure 1: Site Location Map). The investigation included the advancement of nine soil borings. The investigation was performed at the request of the Alameda County Health Services Agency (ACHCSA), following ACHCSA approval of an investigation workplan dated June 5, 1997. The purpose of this investigation was to (1) further delineate the lateral extent of groundwater contamination in the vicinity of MW-2, (2) determine if groundwater contamination has migrated off-site, and (3) determine if an on-site soil source exists in the vicinity of the former gasoline UST excavation.

## I Background

The site is located in a largely residential zone of Oakland approximately 100 yards east of Highway 580, at the west corner of 13th Avenue and Excelsior Avenue (refer to Figures 1-3. The property slopes gently toward the southeast and is currently paved with asphalt. The nearest significant surface water is the Central Reservoir, located approximately ¼-mile to the southeast.

In December 1992, three underground storage tanks (one 250-gallon waste oil, one 500-gallon gasoline, and one 1,000-gallon gasoline) were removed from the site by Aqua Science Engineers, Inc. of San Ramon. The waste oil tank was located in a former building on the southern half of the property, and the gasoline tanks were located on the northern end of the property (Refer to Figure 2). Soil samples collected beneath the former waste oil tank showed concentrations of 8,200 mg/kg Total Oil and Grease (TOG), 290 mg/kg Total Petroleum Hydrocarbons (TPH) as gasoline, and 225 mg/kg total lead. Soil samples collected from beneath the 1,000-gallon gasoline tank indicated maximum concentrations of 27 mg/kg TPH as gasoline and 5.5 mg/kg benzene. Only minor concentrations of TPH as gasoline and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were found in samples collected beneath the 500-gallon gasoline tank (Ref. Underground Storage Tank Removal Final Report, dated January 20, 1993).

In September 1993, AEI removed and disposed of approximately 360 cubic yards of contaminated soil in the vicinity of the former waste oil tank. Sidewall samples collected from this excavation indicated that only minor contaminant concentrations remained in the soil. Therefore the former 250-gallon waste oil tank was not considered to pose a significant threat to the soil or groundwater at the site (Ref. - Contaminated Soil Over-Excavation Final Report, November 18, 1993).

On November 16, 1995, AEI advanced a soil boring at each end of the former dispenser island to depths of 4.5 feet bgs on the west end, and 10 feet bgs on the east. Soil samples were collected beneath the former dispensers at the request of the ACHCSA. Analysis of soil samples collected from the two borings indicated that concentrations of TPH as gasoline and BTEX were below laboratory detection limits (Ref. – Phase II Limited Subsurface Investigation, December 11, 1995).

Three monitoring wells (MW-1 through MW-3) were installed on the site in March 1994 (Soil Boring and Monitoring Well Installation, December 14, 1994). Soil samples collected from each well installation boring at 10'-11' and 15' bgs indicated maximum concentrations of TPH as gasoline at 15 mg/kg and benzene at 0.40 mg/kg. The wells were monitored on a quarterly basis from November 1994 to August 1995, when the ACHCSA approved a change in monitoring frequency to a biannual schedule.

During the most recent groundwater monitoring and sampling episode in June 1997, maximum contaminant concentrations of 26,000 µg/L TPH(g) and 5,300 µg/l benzene were recorded in Well MW-2. Well MW-1 contained 630 µg/L TPH(g) and 25 µg/L benzene. Contaminant concentrations in the sample from well MW-3 were below the detection limit (Semi-Annual Groundwater Monitoring and Sampling Report, July 24, 1997). Please refer to Table 3 for historical groundwater sampling data for all three wells.

**II Investigative Efforts**

AEI performed a subsurface investigation at the property on two separate days: August 15, 1997 and January 21, 1998. A total of nine (9) soil borings (SB1-9) were advanced to depths between 15-25 feet bgs. The borings were generally located at the northern end of the property

On August 15, 1997, AEI advanced borings SB5, SB6, and SB8 approximately 6 feet from the sidewalk in 13$^{th}$ Avenue on August 15, 1997. These borings were advanced using a Geoprobe drill rig. Expanding clays caused refusal to be encountered in the borings planned in the central and northern areas of the property, therefore the three borings were advanced off-site in the downgradient direction, as shown in Figure 2.

On January 21, 1998, six additional borings were advanced using a hollow stem auger. Boring SB1 was advanced in the north-central portion of the property, and SB2 and SB3 were advanced near the eastern property boundary. Borings SB4, SB7 and SB9 were advanced along the

western property boundary. Advancement of borings in the northern end of the property was limited by overhead utilities. The locations of the soil borings are shown on Figure 2.

***Geology and Hydrogeology***

The near surface native soil encountered during this investigation consisted of silty to sandy clays. Refer to Attachment A for detailed logs of the borings.

Groundwater was encountered between 15 and 25 feet bgs during the advancement of the soil borings. Historically, groundwater monitoring shows that the average groundwater level at the site is approximately 13 to 15 feet bgs. The lower depths encountered during this investigation are likely due to slow groundwater recharge from the low permeability of the clays in the boring sidewalls.

According to groundwater monitoring data, groundwater flow is to the southeast, at an average gradient of 0.08 feet per foot, suggesting that the plume of groundwater contamination may be flowing off-site. Please refer to Figures 3 and 4 and Table 3 for monitoring well locations, most recent groundwater contours and most recent monitoring data.

***Soil Sample Collection***

From the Geoprobe drilling rig, soil samples were collected in acrylic liners, from which a six inch sample was chosen from the four foot section. Soil samples were collected at 5-foot intervals beginning at 5 feet bgs.

Soil samples collected using the hollow-stem auger were collected in 2" brass liners. The soil samples were sealed with teflon tape and plastic caps and placed in a cooler with wet ice to await transportation to the laboratory.

***Groundwater Sample Collection***

Groundwater samples were collected from borings SB5, SB6 and SB8 using a Geoprobe "Hydropunch", and from borings SB1, SB3, SB7 and SB9 using a plastic disposable bailer inserted through the hollow-stem auger. Samples were collected in 1-liter amber bottles and 40-mL VOA vials. The groundwater samples were capped so that there was no head space or visible air bubbles within the vials, then placed in a cooler with wet ice to await transportation to the laboratory.

Following sample collection, each boring was backfilled with cement slurry.

***Laboratory Analysis***

On August 15, 1997 and January 22, 1998, the soil and groundwater samples were transported to McCampbell Analytical Inc. (DOHS Certification Number 1644) under chain of custody protocol for analysis.

Soil and groundwater samples were analyzed for total petroleum hydrocarbons as gasoline [TPH(g)], total petroleum hydrocarbons as diesel [TPH(d)], benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE).

Analytical results and chain of custody documents are included as Attachment B.

## III Findings

Petroleum odors and staining were noted in borings SB1, SB2, SB3, SB5, SB6, SB7 and SB8 during the advancement of the soil borings and sample collection. In general, soil staining and odor appeared to be at a maximum between approximately 10 and 15 feet bgs. The soil screening data is presented on the borings logs (Attachment A). Results of analytical testing are summarized in Tables 1 and 2. Also refer to Figures 1-3 for a visual reference.

With the exception of boring SB3, soil samples collected during this investigation revealed low to undetected concentrations of petroleum hydrocarbons and constituents. Significant concentrations of TPH as gasoline (maximum 1,000 mg/kg) were detected at 10 and 15 feet bgs in boring SB3, located southwest of MW2, along the 13$^{th}$ Avenue side of the property.

Significant concentrations of petroleum hydrocarbons and constituents were found in the groundwater samples collected during this investigation. Laboratory notations for samples collected through the hollow-stem auger indicated a high level of sediment content in the sample containers. As a result, the groundwater data from borings SB1, SB3, SB7 and SB9 may be biased toward higher concentrations. However, samples SB5 and SB8 collected using Geoprobe/Hydropunch drilling equipment also indicated the presence of high contaminant concentrations.

Laboratory notations indicate that TPH(d) concentrations detected in both soil and groundwater samples (Borings SB1, SB3, SB5, SB7, SB8, SB9) for this investigation may be aged gasoline. This indication is supported by the fact that diesel was reportedly not stored or dispensed at the property.

## IV Conclusions and Recommendations

Groundwater samples collected and analyzed during this investigation indicate that the petroleum hydrocarbon contaminant plume has migrated off-site to the southeast.

AEI believes that the diesel concentrations detected in soil and groundwater samples are actually aged gasoline due to laboratory chromatogram notations and the fact that diesel was reportedly not stored or dispensed at the site.

Based on the analytical results of the soil samples collected and analyzed during this investigation, it appears that a contaminant source still exists in the soil at the subject site in the vicinity of boring SB3, located approximately 20 feet southwest of the former 500-gallon UST. Based on the results of this and previous investigations, it appears that the on-site soil source is confined to the area in the immediate vicinity of boring SB3. The concentrations of TPH as gasoline found in boring SB3 at 10' bgs (590 mg/kg) and 15' bgs (1,000 mg/kg) appear to be vertically confined: concentrations of TPH as gasoline at 5' bgs (1.6 mg/kg) and 20' bgs (<1.0 mg/kg) were well below the general action level of 100 mg/kg.

AEI recommends the installation of an additional monitoring well across 13th Avenue to the south-southeast to further define and monitor the extent of the impact to groundwater at this site. AEI also recommends continued groundwater monitoring of the existing on-site wells.

## V Report Limitation

This report presents a summary of work completed by All Environmental, Inc. (AEI). The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

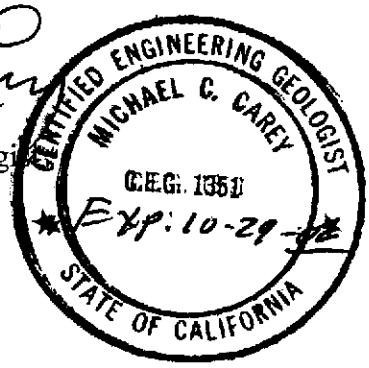
These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

If you have any questions regarding our investigation, please contact me at (925) 283-6000.

Sincerely,

Nick Walchuk
Project Geologist

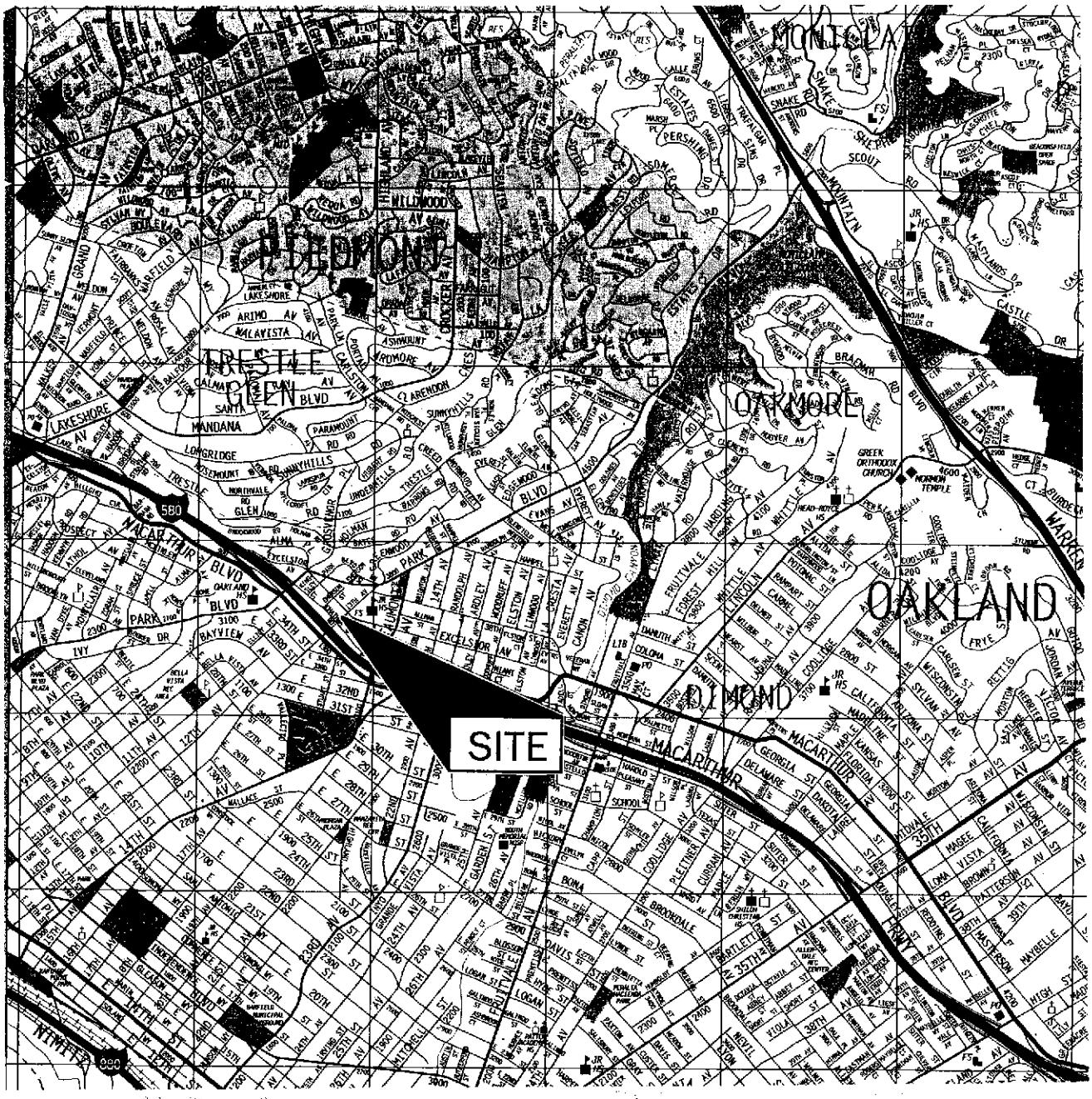
Michael C. Carey
Engineering Geologist
CEG 1351



*Figures*
*Tables*
*Attachment A: Soil Boring Logs*
*Attachment B: Sample Analytical Documentation*

*References:*


- Underground Storage Tank Removal Final Report, dated January 20, 1993. Prepared by Aqua Science Engineers, Inc.
- Contaminated Soil Over-Excavation Final Report, dated November 18, 1993. Prepared by AEI.
- Soil Boring and Monitoring Well Installation Final Report, dated December 14, 1994. Prepared by AEI.
- Phase II Limited Subsurface Investigation, dated December 11, 1995. Prepared by AEI.
- Semi-Annual Groundwater Monitoring and Sampling Report, First Semester, 1997, dated July 24, 1997. Prepared by AEI.




SOURCE:
THOMAS GUIDE/USGS QUAD NAME
1997, 1" : 2400'

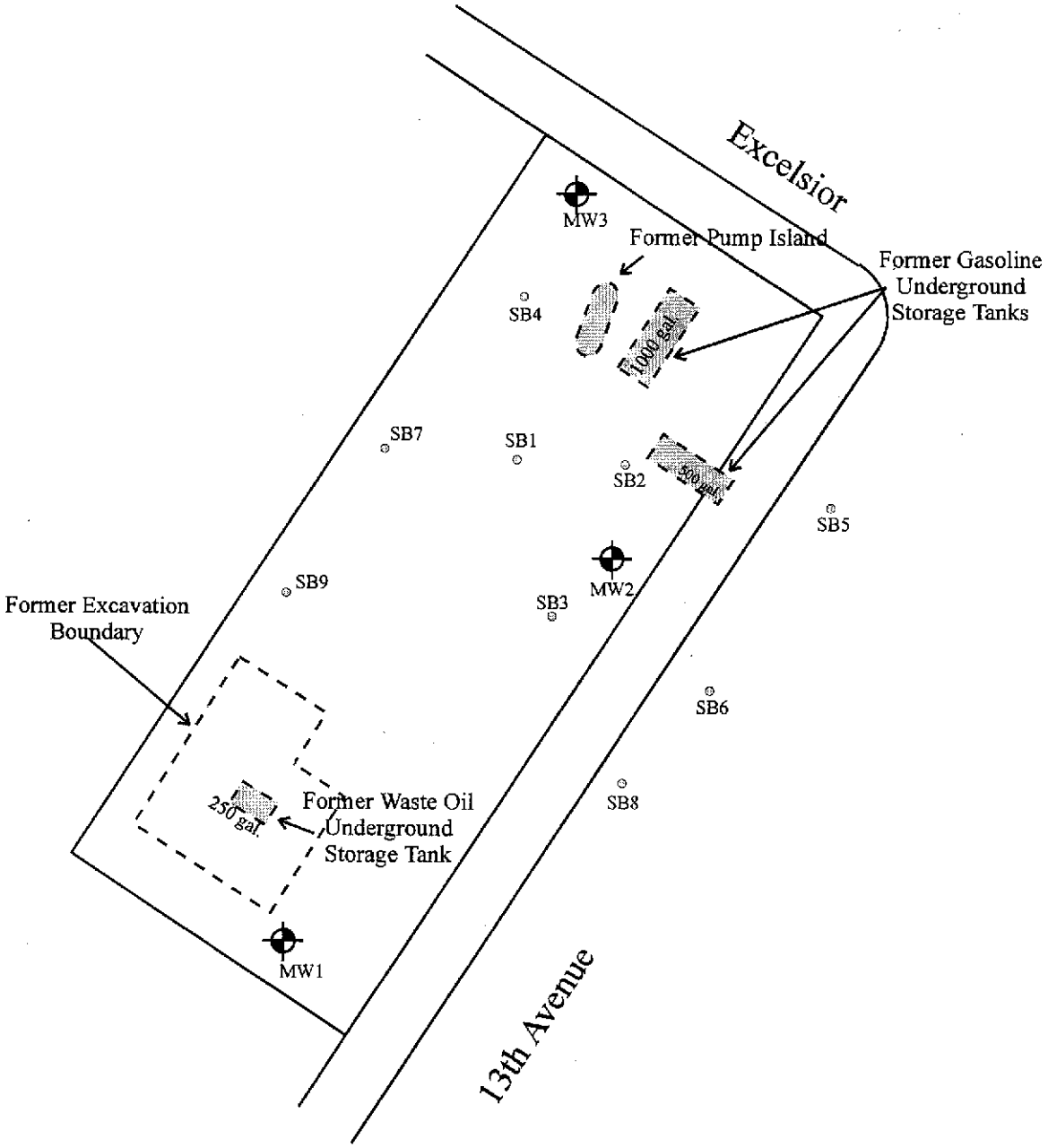
# ALL ENVIRONMENTAL, INC.

901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

## SITE LOCATION MAP

3635 13th AVENUE
OAKLAND, CALIFORNIA

FIGURE 1




N

0 20

Scale, feet

⊙ Soil Boring Location ⊕ Existing Monitoring Well

# ALL ENVIRONMENTAL, INC.

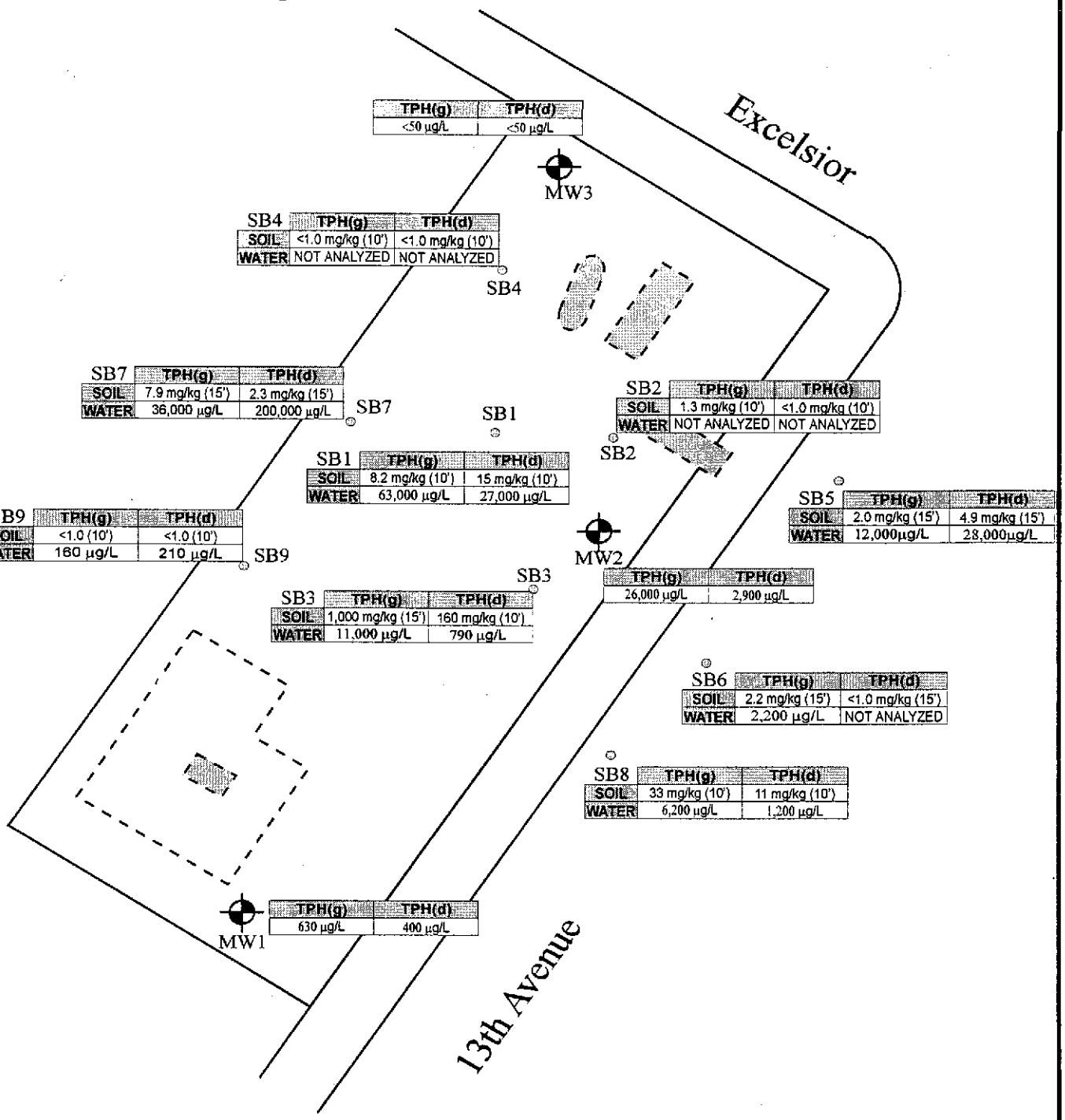
901 MORAGA RD., SUITE C, LAFAYETTE, CALIFORNIA

| | | |
|---|---|---|
| DRAWN BY: B. CAMPBELL | | REVISED BY: N. WALCHUK |
| DATE: 8/13/98 | | APPROVED BY: |

## SITE PLAN

| | |
|---|---|
| 3635 13th Avenue, Oakland | DRAWING NUMBER: FIGURE 2 |

Data from borings SB1, 2, 3, 4, 7, and 9 collected1/21/98
Data from borings SB5, 6 and 8 collected 8/15/97
Most recent groundwater monitoring data collected 6/19/97




N

- Soil Boring Location
- Existing Monitoring Well
- **TPH(g)** Total Petroleum Hydrocarbons as Gasoline
- **TPH(d)** Total Petroleum Hydrocarbons as Diesel
- 8.2 mg/kg (10') Maximum concentration of 8.2 mg/kg in sample collected at 10 feet bgs

# ALL ENVIRONMENTAL, INC.

901 MORAGA RD., SUITE C, LAFAYETTE, CALIFORNIA

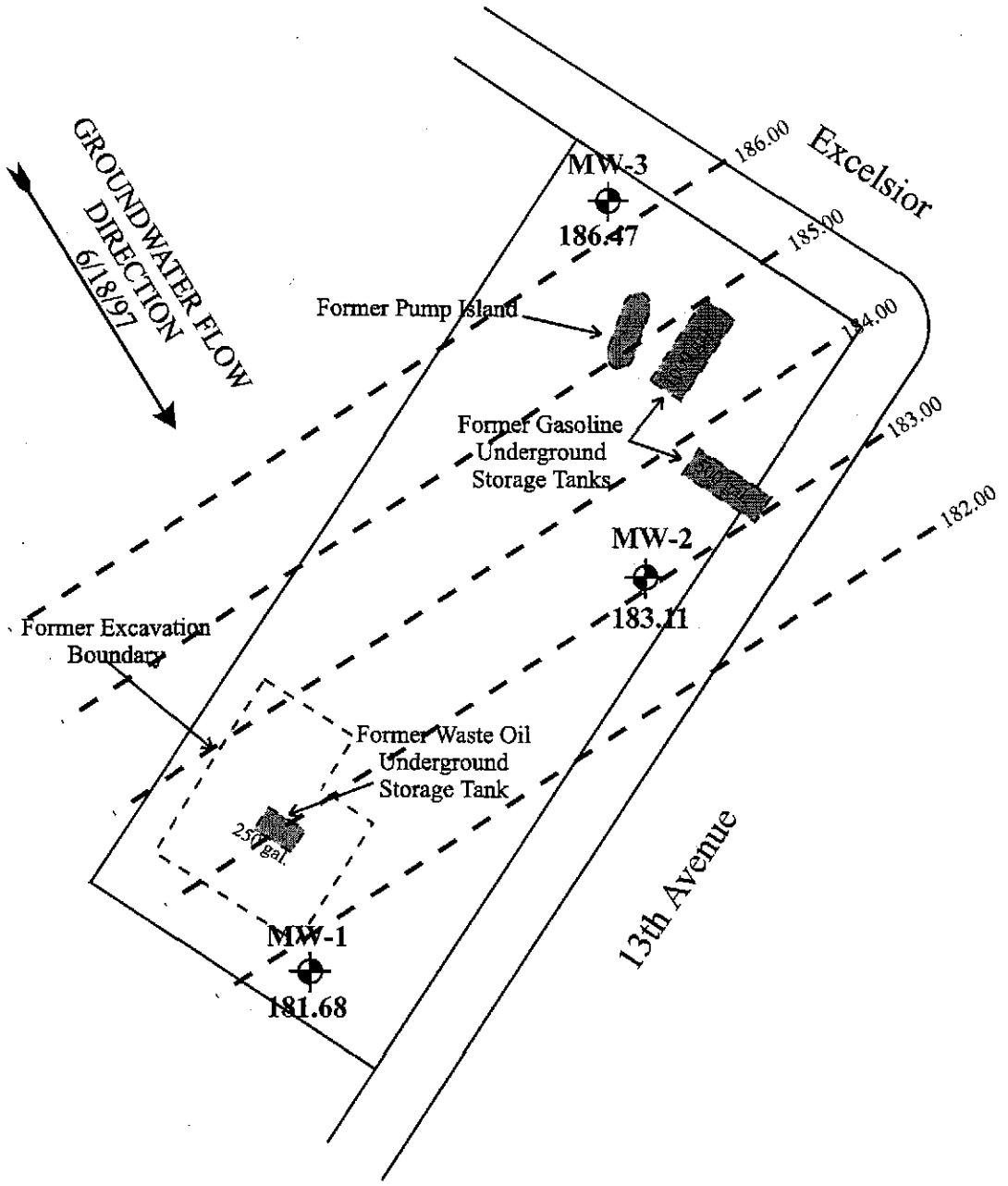
| | | |
|---|---|---|
| DRAWN BY: B. CAMPBELL | | REVISED BY: N. WALCHUK |
| DATE: 8/13/98 | | APPROVED BY: |

## ANALYTICAL DATA

3635 13th Avenue, Oakland

DRAWING NUMBER: FIGURE 3

From:
AEI Semi-Annual Groundwater Monitoring and Sampling Report
First Semester 1997 (report dated 7/24/97)




182.00 — Line of Equal Groundwater Elevation (feet)

MW-1 — Groundwater Monitoring Well (Inst. 3/24/94)

181.15 — Groundwater Elevation (feet)

Note: Well locations and property boundaries surveyed accurately, tank locations approximate.

0 20
Scale, feet

N

ALL ENVIRONMENTAL, INC.
901 MORAGA RD., SUITE C, LAFAYETTE, CALIFORNIA

| | | |
|---|---|---|
| DRAWN BY: B. CAMPBELL | | REVISED BY: N. WALCHUK |
| DATE: 8/13/98 | | APPROVED BY: |

GROUNDWATER MONITORING DATA

| | |
|---|---|
| 3635 13th Avenue, Oakland | DRAWING NUMBER: FIGURE 4 |

**TABLE 1 - Soil Sample Analyses** (SB5,6,8 collected *8/15/97, all others* 1/21/98)

| | SB1-10' | SB2-10' | SB3-5' | SB3-10' | SB3-15' | SB3-20' | SB3-25' | SB4-10' | SB5-15' | SB6-15' | SB7-15' | SB8-10' | SB9-10' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TPH-GASOLINE** (mg/kg) | 8.2 | 1.3 | 1.6 | 590 | 1,000 | <1.0 | <1.0 | <1.0 | 2.0 | 2.2 | 7.9 | 33 | <1.0 |
| **TPH-DIESEL** (mg/kg) | 15 | <1.0 | NA | 160 | NA | NA | NA | <1.0 | 4.9 | <1.0 | 2.3 | 11 | <1.0 |
| **MTBE** (mg/kg) | <0.20 | <0.05 | <0.05 | <6.0 | <10 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.23 | <0.05 |
| **BENZENE** (mg/kg) | 0.17 | 0.061 | 0.048 | 8.6 | 8.3 | 0.006 | <0.005 | <0.005 | 0.080 | 0.058 | <0.005 | 0.25 | <0.005 |
| **TOLUENE** (mg/kg) | 0.031 | 0.016 | 0.044 | 15 | 8.8 | 0.009 | <0.005 | <0.005 | <0.005 | 0.008 | 0.016 | 0.089 | <0.005 |
| **ETHYL BENZENE** (mg/kg) | 0.097 | 0.030 | 0.016 | 10 | 15 | <0.005 | <0.005 | <0.005 | 0.045 | 0.007 | <0.005 | 0.30 | <0.005 |
| **TOTAL XYLENES** (mg/kg) | 0.069 | 0.014 | 0.046 | 48 | 52 | 0.017 | <0.005 | <0.005 | 0.009 | 0.012 | 0.073 | 0.29 | <0.005 |

mg/kg = milligrams per kilogram (ppm) NA= not analyzed

**TABLE 2 - Groundwater Sample Analyses** (SB5,6,8 collected 8/15/97, all others 1/21/98)

| | SB1 | SB3 | SB5 | SB6 | SB7 | SB8 | SB9 |
|---|---|---|---|---|---|---|---|
| **TPH-GASOLINE** (ug/L) | 63,000 | 11,000 | 12,000 | 2,200 | 36,000 | 6,200 | 160 |
| **TPH-DIESEL** (ug/L) | 27,000 | 790 | 28,000 | NA | 200,000 | 1,200 | 210 |
| **MTBE** (ug/L) | <200 | <100 | <330 | <28 | <1,100 | <92 | 22 |
| **BENZENE** (ug/L) | 2,600 | 1,700 | 200 | 330 | 2,200 | 430 | 6.2 |
| **TOLUENE** (ug/L) | 1,100 | 840 | 14 | 4.7 | 550 | 22 | 8.1 |
| **ETHYL BENZENE** (ug/L) | 1,700 | 330 | 280 | 49 | 850 | 150 | 4.2 |
| **TOTAL XYLENES** (ug/L) | 3,600 | 1,100 | 28 | 14 | 1,700 | 170 | 17 |

ug/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)

**TABLE 3 – Groundwater Monitoring Data**

| WELL | DATE | TPH(g) (ug/L) | TPH(d) (ug/L) | MTBE (ug/L) | BENZENE (ug/L) | TOLUENE (ug/L) | ETHYL BENZENE (ug/L) | TOTAL XYLENES (ug/L) |
|---|---|---|---|---|---|---|---|---|
| MW1 | 11/22/94 | 210 | <50 | NA | <0.5 | <0.5 | <0.5 | 2.3 |
| | 2/23/95 | 140 | <50 | NA | <0.5 | <0.5 | 0.6 | 1.5 |
| | 5/24/95 | <50 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 8/18/95 | 2,800 | <50 | NA | 25 | 6.2 | 22 | 30 |
| | 2/7/96 | <50 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/6/96 | <50 | <50 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 |
| | 6/19/97 | 630 | 400 | 15 | 25 | 9.7 | 100 | 14 |
| MW2 | 11/22/94 | 11,000 | <50 | NA | 35 | 21 | 7.2 | 50 |
| | 2/23/95 | 4,000 | <50 | NA | <0.5 | <0.5 | 2.5 | 5.7 |
| | 5/24/95 | 8,600 | <50 | NA | 95 | 37 | 37 | 70 |
| | 8/18/95 | 7,200 | <50 | NA | 73 | 21 | 21 | 71 |
| | 2/7/96 | 11,000 | <50 | NA | 17 | 9.3 | 9.3 | 25 |
| | 9/6/96 | 15,000 | 1,900 | <0.05 | 4,300 | 920 | 460 | 1,600 |
| | 6/19/97 | 26,000 | 2,900 | <200 | 5,300 | 1,500 | 0910 | 3,200 |
| MW3 | 11/22/94 | 200 | <50 | NA | <0.5 | <0.5 | <0.5 | 2 |
| | 2/23/95 | 1,500 | <50 | NA | 6.6 | 6.4 | 4.2 | 13 |
| | 5/24/95 | 710 | <50 | NA | 2.5 | 3.2 | 3.1 | 16 |
| | 8/18/95 | 310 | <50 | NA | 3.1 | 2.1 | 2.2 | 11 |
| | 2/7/96 | 400 | <50 | NA | 1.4 | 2.5 | 2.2 | 7 |
| | 9/6/96 | <50 | <50 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 |
| | 6/19/97 | <50 | <50 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 |

ug/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)
NA = Not Analyzed

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB1 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 15' |
| BORING LOCATION: North-Central Area of Lot | DEPTH TO WATER: 14.5' |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 1 | | ASPHALT SURFACE | | | | |
| 2 | | | | | | |
| 3 | | Silty Sandy Clay | | | 9 | 11:20 |
| 4 | | Mottled brown/black | | | 10 | OVM = 0 ppm |
| 5 | | Dark yellowish orange 10YR 6/6 | S-1 | | 13 | |
| 6 | | moderate plasticity | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Silty Sandy Clay | | | 8 | |
| 10 | | Olive gray 5Y 3/2 | S-2 | | 11 | Strong odor |
| 11 | | moderate-low plasticity | | | 14 | OVM = 316 ppm |
| 12 | | | | | | |
| 13 | | | | | | Strong odor |
| 14 | | Silty Sandy Clay | | | 7 | |
| 15 | | Olive gray 5Y 3/2 | S-3 | | 8 | ▼ Groundwater Sample |
| | | moderate-low plasticity | | | 11 | Collected |
| | | BORING TERMINATED | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
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| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB2 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 20' |
| BORING LOCATION: 15' NW of MW2 (NE end of property) | DEPTH TO WATER: 20' |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| | | ASPHALT SURFACE | | | | |
| 3 | | Stiff Clay<br>light born mottles<br>Olive gray 5Y 3/2 | S-1 | | 9<br>11<br>13 | 12:30<br>OVM = 0 ppm |
| 9 | | Stiff Clay<br>Light olive gray 5Y 5/2 | S-2 | | 9<br>10<br>16 | Slight odor<br>OVM = 44 ppm |
| 14 | | Silty Clay<br>moderate yellowish-brown 10 YR 5/4<br>low plasticity | S-3 | | 10<br>11<br>14 | no odor<br>OVM = 1.5 ppm |
| 19 | | Sandy Clay<br>grayish orange 10 YR 7/4<br>low plasticity | S-4 | | 12<br>14<br>15 | no odor<br>OVM = 0.1 ppm<br>▼ |
| 20 | | BORING TERMINATED | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB3 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 25' |
| BORING LOCATION: Central, 6' from eastern driveway entrance | DEPTH TO WATER: 23.5' |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 1 | | ASPHALT SURFACE | | | | |
| 2 | | | | | | |
| 3 | | Silty Sandy Clay | | | 9 | 13:35 |
| 4 | | moderate yellowish-brown 10 YR 5/4 | | | 10 | moderate odor |
| 5 | | | S-1 | | 12 | OVM = 179 ppm |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Silty Clay | | | 8 | |
| 10 | | Light olive gray 5Y 5/2 | S-2 | | 10<br>12 | moderate odor<br>OVM = 316 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | moderate odor |
| 14 | | Silty Sandy Clay<br>Light olive gray 5Y 5/2 | | | 12<br>13 | OVM = 255 ppm |
| 15 | | low plasticity | S-3 | | 15 | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | no odor |
| 19 | | Clayey Silty Sand<br>dark yellowish orange 10 YR 6/6 | | | 12<br>13 | OVM = 7 ppm |
| 20 | | | S-4 | | 14 | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | ▼ Groundwater Sample Collected |
| 24 | | Clayey Silty Sand<br>dark yellowish orange 10 YR 6/6 | | | 9<br>10 | no odor |
| 25 | | | S-5 | | 10 | OVM = 3 ppm |
| | | BORING TERMINATED | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB4 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 25' |
| BORING LOCATION: 20' south of MW3(NW corner of property) | DEPTH TO WATER: 25' |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 1 | | ASPHALT SURFACE | | | | |
| 2 | | | | | | |
| 3 | | Silty Clay | | | 12 | 10:10 |
| 4 | | yellowish gray 5Y 7/2 | | | 14 | no odor |
| 5 | | low plasticity | S-1 | | 18 | OVM = 0.0 ppm |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Sandy Clay | | | 17 | |
| 10 | | dark yellowish orange 10YR 6/6 | S-2 | | 18 | no odor |
| 11 | | Some coares pebbles | | | 22 | OVM = 0.0 ppm |
| 12 | | no plasticity | | | | |
| 13 | | | | | | |
| 14 | | Silty Sandy Clay | | | 10 | no odor |
| 15 | | Moderate yellowish brown 10YR 4/2 | S-3 | | 11 | OVM = 0.0 ppm |
| 16 | | | | | 17 | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | 6 | no odor |
| 20 | | Silty Clay | S-4 | | 9 | OVM = 0.0 ppm |
| 21 | | Moderate yellowish brown 10YR 4/2 | | | 13 | |
| 22 | | | | | | |
| 23 | | | | | | no odor |
| 24 | | Clayey Sand | S-5 | | 6 | OVM = 0.0 ppm |
| 25 | | dark yellowish orange 10 YR 6/6 | | | 9 | |
| 26 | | BORING TERMINATED | | | 12 | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB5 |
| DATE(S): 8/15/97 | TOTAL DEPTH: 20' |
| BORING LOCATION: IN PARKING LANE OF 13TH AVENUE | DEPTH TO WATER: 20' |
| DRILLING CONTRACTOR: GREGG DRILLING | LOGGED BY: B. CAMPBELL |
| DRILLING EQUIPMENT: GEOPROBE | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 0 | | ASPHALT SURFACE | | | | |
| 1 | | | | | | |
| 2 | | Silty Clay<br>Pale olive w/ greenish gray mottling<br>Moderate plasticity | | | | |
| 3 | | | | | | 9:30<br>slight odor<br>OVM = 1ppm |
| 4 | | | S-1 | | | |
| 5 | | Sandy Clay<br>Pale olive w/ greenish gray mottling<br>No plasticity | | | | |
| 6 | | | S-2 | | | 9:34<br>slight odor<br>OVM = 16 ppm |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | Sandy Clay<br>Pale olive w/ greenish gray mottling<br>Moderate plasticity | | | | |
| 11 | | | S-3 | | | 9:40<br>slight odor<br>OVM = 35 ppm |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | Clay<br>Pale olive w/ greenish gray mottling<br>Moderate plasticity | | | | |
| 16 | | | S-4 | | | 10:00<br>slight odor<br>OVM = 143 ppm |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | Silty Clay<br>Moderate plasticity | | | | 10:30<br>▼ slight odor<br>OVM = 50 ppm |
| 20 | | | S-5 | | | |
| | | BORING TERMINATED | | | | Groundwater Sample Collected |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB6 |
| DATE(S): 8/15/97 | TOTAL DEPTH: 20' |
| BORING LOCATION: | DEPTH TO WATER: 18' |
| DRILLING CONTRACTOR: GREGG DRILLING | LOGGED BY: B. CAMPBELL |
| DRILLING EQUIPMENT: GEOPROBE | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 1 | | ASPHALT SURFACE | | | | |
| 2 | | Silty Clay<br>Pale olive w/ greenish gray mottling<br>Stiff | | | | |
| 3 | | | | | | 11:10<br>slight odor<br>OVM =01ppm |
| 4 | | | S-1 | | | |
| 5 | | Silty Clay<br>Pale olive w/ greenish gray mottling<br>No plasticity | | | | |
| 6 | | | S-2 | | | 11:15<br>slight odor<br>OVM = 0 ppm |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Silty Clay<br>Pale olive w/ greenish gray mottling<br>No plasticity | | | | |
| 10 | | | | | | |
| 11 | | | S-3 | | | 11:23<br>slight odor<br>OVM = 5 ppm |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | Sandy Clay<br>Pale olive w/ greenish gray mottling<br>Moderate plasticity | | | | |
| 16 | | | S-4 | | | 11:50<br>slight odor<br>OVM = 31 ppm |
| 17 | | | | | | |
| 18 | | BORING TERMINATED | | | | |
| 19 | | | | | | Groundwater Sample Collected |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB7 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 21' |
| BORING LOCATION: Central western border of property | DEPTH TO WATER: 18.5 |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | Stiff Clay | | | 12 | 08:45 |
| 4 | | moderate brownish orange 10 YR 5/4 | | | 14 | no odor |
| 5 | | | S-1 | | 18 | OVM = 0.0 ppm |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Stiff Clay | | | 14 | |
| 10 | | moderate brownish orange 10 YR 5/4<br>some green mottling | S-2 | | 15<br>22 | no odor<br>OVM = 0.0 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | moderate odor |
| 14 | | Silty Clay | | | 9 | OVM = 64 ppm |
| 15 | | Olive gray 5Y 3/2<br>moderate plasticity | S-3 | | 11<br>14 | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | ▼ Groundwater Sample Collected |
| 19 | | | | | 9 | |
| 20 | | Silty Sand<br>Olive gray 5Y 3/2 | S-4 | | 10<br>14 | strong odor<br>OVM = 106 ppm |
| 21 | | BORING TERMINATED | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB8 |
| DATE(S): 8/15/97 | TOTAL DEPTH: 16' |
| BORING LOCATION: IN PARKING LANE OF 13TH AVENUE | DEPTH TO WATER: 16' |
| DRILLING CONTRACTOR: GREGG DRILLING | LOGGED BY: B. CAMPBELL |
| DRILLING EQUIPMENT: GEOPROBE | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| 0 | | ASPHALT SURFACE | | | | |
| 1–4 | | Silty Clay<br>Pale olive<br>Moderate plasticity | S-1 | | | 12:50<br>OVM = 0 ppm |
| 5–7 | | Silty Clay<br>Pale olive<br>No plasticity | S-2 | | | 12:56<br>OVM = 12 ppm |
| 8–12 | | Silty Clay<br>Pale olive<br>No plasticity | S-3 | | | 13:40slight odor<br>OVM = 0 ppm |
| 13–14 | | | | | | No recovery for soil sample |
| 15 | | | | | | ▼ Groundwater Sample Collected |
| 16 | | BORING TERMINATED | | | | |
| 17–30 | | | | | | |

ALL ENVIRONMENTAL, INC.

| | |
|---|---|
| PROJECT: WILLIAMSON - OAKLAND | LOG OF BOREHOLE: SB9 |
| DATE(S): 1/21/98 | TOTAL DEPTH: 25' |
| BORING LOCATION: South-western property boundary | DEPTH TO WATER: 24' |
| DRILLING CONTRACTOR: ADVANCE DRILLING | LOGGED BY: N. WALCHUK |
| DRILLING EQUIPMENT: HOLLOW STEM AUGER | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | |
|---|---|---|---|---|---|---|
| | | ASPHALT SURFACE | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | Sandy Clay | | | 7 | 15:25 |
| 4 | | moderate yellowish brown 10YR 5/4 | | | 8 | no odor |
| 5 | | low plasticity | S-1 | | 9 | OVM = 0.0 ppm |
| 6 | | gray-green mottling | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | Silty Clay | | | 8 | |
| 10 | | moderate yellowish brown 10YR 5/4 | S-2 | | 8<br>10 | no odor<br>OVM = 0.0 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | no odor |
| 14 | | Silty Clay | | | 7 | OVM = 0.0 ppm |
| 15 | | moderate yellowish brown 10YR 5/4 | S-3 | | 8<br>9 | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | no odor |
| 19 | | | | | 6 | OVM = 0.0 ppm |
| 20 | | Silty Clay<br>moderate yellowish brown 10YR 5/4 | S-4 | | 9<br>10 | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | no odor |
| 24 | | Clayey Sand<br>moderate yellowish brown 10YR 5/4 | S-5 | | 6<br>8 | OVM = 0.0 ppm |
| 25 | | | | | 10 | ▼ Groundwater Sample Collected |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |

ALL ENVIRONMENTAL, INC.

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: #1610; Williamson | Date Sampled: 01/21/98 |
| | | Date Received: 01/22/98 |
| | Client Contact: Nick Walchuck | Date Extracted: 02/12/98 |
| | Client P.O: | Date Analyzed: 02/12/98 |

02/20/98

Dear Nick:

Enclosed are:

1). the results of 4 samples from your **#1610; Williamson** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

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Telephone : 510-798-1620 Fax : 510-798-1622
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| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610; Williamson | Date Sampled: 01/21/98 |
| 3364 Mt. Diablo Blvd. | | Date Received: 01/22/98 |
| Lafayette, CA 94549 | Client Contact: Nick Walchuck | Date Extracted: 02/12-02/17/98 |
| | Client P.O: | Date Analyzed: 02/12-02/17/98 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*. with Methyl tert-Butyl Ether* & BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Recovery Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 85147 | SB3-5' | S | 1.6,a | ND | 0.048 | 0.044 | 0.016 | 0.046 | 100 |
| 85149 | SB3-15' | S | 1000,a | ND<10 | 8.3 | 8.8 | 15 | 52 | 117# |
| 85150 | SB3-20' | S | ND | ND | 0.006 | 0.009 | ND | 0.017 | 105 |
| 85151 | SB3-25' | S | ND | ND | ND | ND | ND | ND | 95 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/12/98 Matrix: SOIL

| Analyte | Concentration (mg/kg) Sample (#80339) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.916 | 1.862 | 2.03 | 94 | 92 | 2.9 |
| Benzene | 0.000 | 0.170 | 0.172 | 0.2 | 85 | 86 | 1.2 |
| Toluene | 0.000 | 0.188 | 0.188 | 0.2 | 94 | 94 | 0.0 |
| Ethylbenzene | 0.000 | 0.170 | 0.170 | 0.2 | 85 | 85 | 0.0 |
| Xylenes | 0.000 | 0.518 | 0.516 | 0.6 | 86 | 86 | 0.4 |
| TPH(diesel) | 0 | 295 | 286 | 300 | 98 | 95 | 2.9 |
| TRPH (oil and grease) | 0.0 | 17.3 | 19.5 | 20.8 | 83 | 94 | 12.0 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/17/98 Matrix: SOIL

| Analyte | Concentration (mg/kg) Sample (#80331) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 2.086 | 1.913 | 2.03 | 103 | 94 | 8.7 |
| Benzene | 0.000 | 0.170 | 0.170 | 0.2 | 85 | 85 | 0.0 |
| Toluene | 0.000 | 0.184 | 0.182 | 0.2 | 92 | 91 | 1.1 |
| Ethylbenzene | 0.000 | 0.174 | 0.172 | 0.2 | 87 | 86 | 1.2 |
| Xylenes | 0.000 | 0.514 | 0.516 | 0.6 | 86 | 86 | 0.4 |
| TPH(diesel) | 0 | 296 | 310 | 300 | 99 | 103 | 4.7 |
| TRPH (oil and grease) | 0.0 | 36.2 | 32.4 | 30 | 121 | 108 | 11.1 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

# Chain of Custody

ALL ENVIRONMENTAL, INC.
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

DATE: 1/22/98 PAGE: 1 OF: 3

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AEI PROJECT MANAGER: NICK WALCHUK
PROJECT NAME: WILLIAMSON
PROJECT NUMBER: 1610
TOTAL # OF CONTAINERS: 12
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030,8015) w/ BTEX and MTBE 8/12 per Nick - 5 day | TPH-Diesel (EPA 3510/3550,8015) | TOTAL OIL & GREASE (EPA 5520 E&F) | VOLATILE HALOCARBONS (EPA 601 or 8010) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | TOTAL LEAD (AA) (EPA 7420) | LUFT Metals (EPA 7190,7190,7420,7580,7950) | STLC CAM 17 (EPA 1310/6010) | RCI | HOLD | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB1 - 5' | 1/21/98 | 11:20 | Soil | | | | | | | | | H 85140 | X | 1 |
| " - 10' | | 11:30 | | X | X | | | | | | | RUN 85141 | | 1 |
| " - 15' | | 11:45 | | | | | | | | | | H 85142 | X | 1 |
| SB2 - 4.5' | | 12:30 | | | | | | | | | | H 85143 | X | 1 |
| " - 10' | | 12:40 | | X | X | | | | | | | RUN 85144 | | 1 |
| " - 15' | | 12:50 | | | | | | | | | | H 85145 | | 1 |
| " - 20' | | 13:00 | | | | | | | | | | H 85146 | X | 1 |
| SB3 - 5' | | 13:35 | | X | | | | | | | | H 85147 | X | 1 |
| " - 10' | | 13:50 | | X | X | | | | | | | RUN 85148 | | 1 |
| " - 15' | | 14:05 | | X | | | | | | | | C 85149 | X | 1 |
| " - 20' | | 14:20 | | X | | | | | | | | C 85150 | X | 1 |
| " - 25' | | 14:45 | | X | | | | | | | | C 85151 | | 1 |

VOAs | O&G | METALS | OTHER

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION APPROPRIATE CONTAINERS ✓

ANALYTICAL LAB: McCampbell
ADDRESS:
PHONE: ( ) - FAX: ( ) -
INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature | Signature | Signature | Signature |
| NICK WALCHUK | JAMES FOSS | JAMES FOSS | H. RICCA |
| Printed Name | Printed Name | Printed Name | Printed Name |
| AEI | AERO | AERO | MAI |
| Company | Company | Company | Company |
| Time 11:30 Date 1/22 | Time 11:30 Date 1-22 | Time 11:49 Date 1-22 | Time 11:49 Date 1/22/98 |

Add-a per Nick

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: #1610; Williamson | Date Sampled: 01/21/98 |
| | | Date Received: 01/22/98 |
| | Client Contact: Nick Walchuck | Date Extracted: 01/22/98 |
| | Client P.O: | Date Analyzed: 01/22/98 |

01/29/98

Dear Nick:

Enclosed are:

1). the results of **10** samples from your **#1610; Williamson** project.

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610: Williamson | Date Sampled: 01/21/98 |
| 3364 Mt. Diablo Blvd. | | Date Received: 01/22/98 |
| Lafayette, CA 94549 | Client Contact: Nick Walchuck | Date Extracted: 01/22-01/28/98 |
| | Client P.O: | Date Analyzed: 01/22-01/28/98 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Recovery Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 85141 | SB1-10' | S | 8.2,a | ND<0.20 | 0.17 | 0.031 | 0.097 | 0.069 | 108# |
| 85144 | SB2-10' | S | 1.3,a | ND | 0.061 | 0.016 | 0.030 | 0.014 | 108# |
| 85148 | SB3-10' | S | 590,a | ND<6.0 | 8.6 | 15 | 10 | 48 | 108# |
| 85153 | SB4-10' | S | ND | ND | ND | ND | ND | ND | 99 |
| 85159 | SB7-15' | S | 7.9,b | ND | ND | 0.016 | ND | 0.073 | 108 |
| 85162 | SB9-10' | S | ND | ND | ND | ND | ND | ND | 102 |
| 85166 | SB1 | W | 63,000,a,i | ND<200 | 2600 | 1100 | 1700 | 3600 | 101 |
| 85167 | SB3 | W | 11,000,a,i | ND<100 | 1700 | 840 | 330 | 1100 | 100 |
| 85168 | SB7 | W | 36,000,a,h,i | ND<1100 | 2200 | 550 | 850 | 1700 | 101 |
| 85169 | SB9 | W | 160,a,i | 22 | 6.2 | 8.1 | 4.2 | 17 | 100 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: #1610; Williamson | Date Sampled: 01/21/98 |
| | | Date Received: 01/22/98 |
| | Client Contact: Nick Walchuck | Date Extracted: 01/22-01/23/98 |
| | Client P.O: | Date Analyzed: 01/22-01/23/98 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)^ | % Recovery Surrogate |
|---|---|---|---|---|
| 85141 | SB1-10' | S | 15,d,b | 104 |
| 85144 | SB2-10' | S | ND | 99 |
| 85148 | SB3-10' | S | 160,d | 103 |
| 85153 | SB4-10' | S | ND | 100 |
| 85159 | SB7-15' | S | 2.3,d | 101 |
| 85162 | SB9-10' | S | ND | 101 |
| 85166 | SB1 | W | 27,000,d,i | 105 |
| 85167 | SB3 | W | 790,d,i | 108 |
| 85168 | SB7 | W | 200,000,d,h,i | 106 |
| 85169 | SB9 | W | 210,e,i | 104 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

^The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/22/98 Matrix: WATER

| Analyte | Concentration (mg/L) Sample (#84746) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 113.2 | 120.5 | 100.0 | 113.2 | 120.5 | 6.2 |
| Benzene | 0.0 | 11.2 | 10.5 | 10.0 | 112.0 | 105.0 | 6.5 |
| Toluene | 0.0 | 11.6 | 11.0 | 10.0 | 116.0 | 110.0 | 5.3 |
| Ethyl Benzene | 0.0 | 11.2 | 10.9 | 10.0 | 112.0 | 109.0 | 2.7 |
| Xylenes | 0.0 | 32.6 | 31.4 | 30.0 | 108.7 | 104.7 | 3.7 |
| TPH(diesel) | 0 | 139 | 130 | 150 | 93 | 87 | 6.5 |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/23/98 Matrix: WATER

| Analyte | Concentration (mg/L) Sample (#85080) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 97.1 | 99.5 | 100.0 | 97.1 | 99.5 | 2.4 |
| Benzene | 0.0 | 10.2 | 10.9 | 10.0 | 102.0 | 109.0 | 6.6 |
| Toluene | 0.0 | 10.3 | 10.4 | 10.0 | 103.0 | 104.0 | 1.0 |
| Ethyl Benzene | 0.0 | 10.4 | 10.5 | 10.0 | 104.0 | 105.0 | 1.0 |
| Xylenes | 0.0 | 31.5 | 31.8 | 30.0 | 105.0 | 106.0 | 0.9 |
| TPH(diesel) | 0 | 148 | 154 | 150 | 99 | 103 | 4.1 |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/28/98 Matrix: WATER

| Analyte | Concentration (mg/L) Sample (#85136) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 110.2 | 118.4 | 100.0 | 110.2 | 118.4 | 7.2 |
| Benzene | 0.0 | 9.7 | 9.7 | 10.0 | 97.0 | 97.0 | 0.0 |
| Toluene | 0.0 | 10.4 | 10.4 | 10.0 | 104.0 | 104.0 | 0.0 |
| Ethyl Benzene | 0.0 | 9.9 | 9.9 | 10.0 | 99.0 | 99.0 | 0.0 |
| Xylenes | 0.0 | 29.5 | 29.5 | 30.0 | 98.3 | 98.3 | 0.0 |
| TPH(diesel) | 0 | 150 | 145 | 150 | 100 | 96 | 3.8 |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/22/98 Matrix: SOIL

| Analyte | Concentration (mg/kg) Sample (#79450) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.840 | 1.829 | 2.03 | 91 | 90 | 0.6 |
| Benzene | 0.000 | 0.192 | 0.194 | 0.2 | 96 | 97 | 1.0 |
| Toluene | 0.000 | 0.196 | 0.200 | 0.2 | 98 | 100 | 2.0 |
| Ethylbenzene | 0.000 | 0.194 | 0.198 | 0.2 | 97 | 99 | 2.0 |
| Xylenes | 0.000 | 0.584 | 0.602 | 0.6 | 97 | 100 | 3.0 |
| TPH(diesel) | 0 | 293 | 286 | 300 | 98 | 95 | 2.4 |
| TRPH (oil and grease) | 0.0 | 33.1 | 30.0 | 30 | 110 | 100 | 9.8 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/23/98 Matrix: SOIL

| Analyte | Concentration (mg/kg) Sample (#79450) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.869 | 1.882 | 2.03 | 92 | 93 | 0.7 |
| Benzene | 0.000 | 0.164 | 0.168 | 0.2 | 82 | 84 | 2.4 |
| Toluene | 0.000 | 0.186 | 0.190 | 0.2 | 93 | 95 | 2.1 |
| Ethylbenzene | 0.000 | 0.174 | 0.178 | 0.2 | 87 | 89 | 2.3 |
| Xylenes | 0.000 | 0.534 | 0.538 | 0.6 | 89 | 90 | 0.7 |
| TPH(diesel) | 0 | 293 | 286 | 300 | 98 | 95 | 2.4 |
| TRPH (oil and grease) | 0.0 | 21.3 | 21.1 | 20.8 | 102 | 101 | 0.9 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/28/98 Matrix: SOIL

| Analyte | Concentration (mg/kg) Sample (#79436) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 2.036 | 2.271 | 2.03 | 100 | 112 | 10.9 |
| Benzene | 0.000 | 0.162 | 0.186 | 0.2 | 81 | 93 | 13.8 |
| Toluene | 0.000 | 0.192 | 0.194 | 0.2 | 96 | 97 | 1.0 |
| Ethylbenzene | 0.000 | 0.180 | 0.192 | 0.2 | 90 | 96 | 6.5 |
| Xylenes | 0.000 | 0.542 | 0.586 | 0.6 | 90 | 98 | 7.8 |
| TPH(diesel) | 0 | 300 | 302 | 300 | 100 | 101 | 0.6 |
| TRPH (oil and grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

# Chain of Custody

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

DATE: 1/22/98 PAGE: 2 OF: 3

10333

AEI PROJECT MANAGER: NICK WALCHUK
PROJECT NAME: Williamson
PROJECT NUMBER: 1610
TOTAL # OF CONTAINERS: 14
RECD. GOOD COND./COLD:
1/21/98

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030,8015) w/ BTEX and MTBE (EPA 602,8020) | TPH-Diesel (EPA 3510/3550,8015) | TOTAL OIL & GREASE (EPA 5520 E&F) | VOLATILE HALOCARBONS (EPA 601 or 8010) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | TOTAL LEAD (AA) (EPA 7420) | LUFT Metals (EPA 7190,7190,7420,7920,7950) | STLC CAM 17 (EPA 1310/6010) | RCI | HOLD | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB4 - 5' | ~~1/20~~ | 10:10 | Soil | X | X | | | | | | | | 85152 | 1 |
| " - 10' | ~~1/20~~ | 10:20 | | | | | | | | | | | RUN 85153 | 1 |
| " - 15' | ~~1/20~~ | 10:30 | | | | | | | | | | | 85154 | 1 |
| " - 20' | 1/21/98 | 10:40 | | | | | | | | | | | X 85155 | 1 |
| " - 23.5' | | 10:50 | | | | | | | | | | | 85156 | 1 |
| SB7 - 5' | | 08:45 | | | | | | | | | | | X 85157 | 1 |
| " - 10' | | 09:00 | | X | X | | | | | | | | X 85158 | 1 |
| " - 15' | | 09:10 | | | | | | | | | | | X 85159 | 1 |
| " - 21.5' | | 09:40 | | | | | | | | | | | RUN 85160 | 1 |
| SB9 - 5' | | 15:25 | | X | X | | | | | | | | X 85161 | 1 |
| " - 10' | | 15:35 | | | | | | | | | | | 85162 | 1 |
| " - 15' | | 15:40 | | | | | | | | | | | X 85163 | 1 |
| " - 20' | | 15:50 | | | | | | | | | | | X 85164 | 1 |
| " - 25' | V | 16:00 | V | | | | | | | | | | 85165 | 1 |

ANALYTICAL LAB: McCampbell
ADDRESS:
PHONE: ( ) - FAX: ( ) -

INSTRUCTIONS/COMMENTS:
VOAs O&G METALS OTHER
PRESERVATION APPROPRIATE

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature | Signature | Signature | Signature |
| NICK WALCHUK | JAMES FIELD | JAMES FIELD | H. RICCA |
| Printed Name | Printed Name | Printed Name | Printed Name |
| AEI | AERO | AERO | MAT |
| Company | Company | Company | Company |
| Time 16:30 Date 1/22 | Time 11:30 Date 1-22 | Time 11:49 Date 1-22 | Time 11:49 Date 1/22/98 |

# Chain of Custody

ALL ENVIRONMENTAL, INC.
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

DATE: 1/22/98 PAGE: 3 OF: 3

10333

AEI PROJECT MANAGER: NICK WALCHUK
PROJECT NAME: Williamson
PROJECT NUMBER: 1610
TOTAL # OF CONTAINERS: 12
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030.8015) w/ BTEX and MTBE (EPA 602.8020) | TPH-Diesel (EPA 3510/3550.8015) | TOTAL OIL & GREASE (EPA 5520 E&F) | VOLATILE HALOCARBONS (EPA 601 or 8010) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | TOTAL LEAD (AA) (EPA 7420) | LUFT Metals (EPA 7190, 7190, 7420, 7520, 7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY, CORROSIVITY, IGNITABILITY (Title 22, CCR 66261.21-3) | | | HOLD | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10+ SB1 | 1/21/98 | 11:50 | water | X | X | | | | | | | | | | | 3 |
| 10+ SB3 | ↓ | 14:35 | ↓ | X | X | | | | | | | | | | | 3 |
| 10+ SB7 | | 09:30 | | X | X | | | | | | | | | | | 3 |
| 10+ SB9 | | 16:05 | | X | X | | | | | | | | | | | 3 |

85166
85167
85168
85169

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE ✓ | VOAS ✓ | O&G | METALS | OTHER
CONTAINERS ✓

ANALYTICAL LAB: McCampbell
ADDRESS:
PHONE: ( ) - FAX: ( ) -

INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature: Nick Walchuk | Signature: James Fields | Signature: James Fields | Signature: Heidi Rica |
| Printed Name: NICK WALCHUK | Printed Name: JAMES FIELD | Printed Name: JAMES FIELD | Printed Name: H. RICCA |
| Company: AEI | Company: AERO | Company: AERO | Company: MAI |
| Time: 11:30 Date: 1/22 | Time: 11:30 Date: 1-22 | Time: 11:49 Date: 1-22 | Time: 11:49 Date: 1/22/98 |

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: #1610; Williamson | Date Sampled: 08/15/97<br>Date Received: 08/15/97 |
| | Client Contact: Bryan Campbell | Date Extracted: 08/15/97 |
| | Client P.O: | Date Analyzed: 08/15/97 |

08/22/97

Dear Bryan:

Enclosed are:

1). the results of **3** samples from your **#1610; Williamson** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610; Williamson | Date Sampled: 08/15/97 |
| 3364 Mt. Diablo Blvd. | | Date Received: 08/15/97 |
| Lafayette, CA 94549 | Client Contact: Bryan Campbell | Date Extracted: 08/18/97 |
| | Client P.O: | Date Analyzed: 08/18-08/19/97 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Recovery Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 79841 | SB-5,15' | S | 2.0,a | ND | 0.080 | ND | 0.045 | 0.009 | 97 |
| 79846 | SB-6,15' | S | 2.2,a | ND | 0.058 | 0.008 | 0.007 | 0.012 | 99 |
| 79849 | SB-8,10' | S | 33,a | ND<0.23 | 0.25 | 0.089 | 0.30 | 0.29 | 96 |
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| | | | | | | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610; Williamson | Date Sampled: 08/15/97 |
| 3364 Mt. Diablo Blvd. | | Date Received: 08/15/97 |
| Lafayette, CA 94549 | Client Contact: Bryan Campbell | Date Extracted: 08/18/97 |
| | Client P.O: | Date Analyzed: 08/18/97 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)+ | % Recovery Surrogate |
|---|---|---|---|---|
| 79841 | SB-5,15' | S | 4.9,d,b | 107 |
| 79846 | SB-6,15' | S | ND | 107 |
| 79849 | SB-8,10' | S | 11,d,b | 107 |
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| | | | | |
| | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/18/97 Matrix: Soil

| Analyte | Concentration (mg/kg) Sample (#75867) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.965 | 1.958 | 2.03 | 97 | 96 | 0.4 |
| Benzene | 0.000 | 0.166 | 0.162 | 0.2 | 83 | 81 | 2.4 |
| Toluene | 0.000 | 0.178 | 0.174 | 0.2 | 89 | 87 | 2.3 |
| Ethylbenzene | 0.000 | 0.172 | 0.170 | 0.2 | 86 | 85 | 1.2 |
| Xylenes | 0.000 | 0.510 | 0.514 | 0.6 | 85 | 86 | 0.8 |
| TPH(diesel) | 0 | 320 | 315 | 300 | 107 | 105 | 1.6 |
| TRPH (oil and grease) | 0.0 | 24.4 | 24.3 | 23.7 | 103 | 103 | 0.4 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

# Chain of Custody

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

9265XALE182

DATE: 8/15/97 PAGE: 1 OF: 2

AEI PROJECT MANAGER: Bryan Campbell
PROJECT NAME: Williamson
PROJECT NUMBER: 1610
SIGNATURE:
TOTAL # OF CONTAINERS: 12
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030.8015) | TPH-Gasoline (EPA 5030.8015) w/ BTEX and MTBE (EPA 602.8020) | TPH-Diesel (EPA 3510/3550.8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602.8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7130,7190,7420,7520,7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY, CORROSIVITY, IGNITABILITY (Title 22, CCR 66261.21) | H 79838 H 79839 H 79840 79841 H 79842 H 79843 79844 H 79845 79846 H 79847 H 79848 79849 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-5, 3' | 8/15/97 | 9:30am | Soil | | | | | | | | | | | | 1 |
| SB-5, 5' | | 9:34am | | | | | | | | | | | | | 1 |
| SB-5, 10' | | 9:40am | | | | | | | | | | | | | 1 |
| SB-5, 15' | | 10:00am | | | X | X | | | | | | | | | 1 |
| SB-5, 20' | | 10:30am | | | | | | | | | | | | | 1 |
| SB-6, 3' | | 11:10am | | | | | | | | | | | | | 1 |
| SB-6, 5' | | 11:15am | | | | | | | | | | | | | 1 |
| SB-6, 10' | | 11:23am | | | | | | | | | | | | | 1 |
| SB-6, 15' | | 11:50am | | | X | X | | | | | | | | | 1 |
| SB-8, 3' | | 12:50am | | | | | | | | | | | | | 1 |
| SB-8, 5' | | 12:56am | | | | | | | | | | | | | 1 |
| SB-8, 10' | | 1:15pm | | | X | X | | | | | | | | | 1 |

ICE/® ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION APPROPRIATE ✓

VOAS | O&G | METALS | OTHER

ANALYTICAL LAB: McCampbell Analytical, Inc.
ADDRESS:
PHONE: ( ) - FAX: ( )
INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature | Signature | Signature | Signature |
| Bryan Campbell | Jenny Milenic | | |
| Printed Name | Printed Name | Printed Name | Printed Name |
| AEI | AEI MAI | | |
| Company | Company | Company | Company |
| Time 5:05p Date 8/15/97 | Time 505 Date 8/15/97 | Time Date | Time Date |

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610; Williamson | Date Sampled: 08/15/97 |
| 3364 Mt. Diablo Blvd. | | Date Received: 08/15/97 |
| Lafayette, CA 94549 | Client Contact: Bryan Cambpell | Date Extracted: 08/18-08/19/97 |
| | Client P.O: | Date Analyzed: 08/18-08/19/97 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Recovery Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 79835 | SB-5 | W | 12,000,a,h | ND<330 | 200 | 14 | 280 | 28 | 106 |
| 79836 | SB-6 | W | 2200,a,i | ND<28 | 330 | 4.7 | 49 | 14 | 105 |
| 79837 | SB-8 | W | 6200,a | ND<92 | 430 | 22 | 150 | 170 | 102 |
| | | | | | | | | | |
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| | | | | | | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 510-798-1620 Fax : 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: #1610; Williamson | Date Sampled: 08/15/97 |
| 3364 Mt. Diablo Blvd. | | Date Received: 08/15/97 |
| Lafayette, CA 94549 | Client Contact: Bryan Cambpell | Date Extracted: 08/19/97 |
| | Client P.O: | Date Analyzed: 08/19/97 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)~ | % Recovery Surrogate |
|---|---|---|---|---|
| 79835 | SB-5 | W | 28,000,d,h | 104 |
| 79837 | SB-8 | W | 1200,d | 102 |
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| | | | | |
| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

~The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/18/97 Matrix: Water

| Analyte | Concentration (mg/L) Sample #(79693) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 101.8 | 105.8 | 100.0 | 101.8 | 105.8 | 3.8 |
| Benzene | 0.0 | 9.6 | 9.3 | 10.0 | 96.0 | 93.0 | 3.2 |
| Toluene | 0.0 | 10.4 | 10.2 | 10.0 | 104.0 | 102.0 | 1.9 |
| Ethyl Benzene | 0.0 | 11.0 | 11.0 | 10.0 | 110.0 | 110.0 | 0.0 |
| Xylenes | 0.0 | 33.1 | 33.2 | 30.0 | 110.3 | 110.7 | 0.3 |
| TPH (diesel) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/19/97 Matrix: Water

| Analyte | Concentration (mg/L) Sample #(79810) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 102.9 | 103.5 | 100.0 | 102.9 | 103.5 | 0.6 |
| Benzene | 0.0 | 9.6 | 9.5 | 10.0 | 96.0 | 95.0 | 1.0 |
| Toluene | 0.0 | 10.3 | 10.3 | 10.0 | 103.0 | 103.0 | 0.0 |
| Ethyl Benzene | 0.0 | 11.1 | 11.1 | 10.0 | 111.0 | 111.0 | 0.0 |
| Xylenes | 0.0 | 33.3 | 33.3 | 30.0 | 111.0 | 111.0 | 0.0 |
| TPH (diesel) | 0 | 163 | 162 | 150 | 109 | 108 | 0.3 |
| TRPH (oil & grease) | 0 | 20.6 | 20.5 | 20.8 | 99 | 99 | 0.5 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

# Chain of Custody

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

9264 X AL E181

DATE: 8/15/97 PAGE: 2 OF: 2

AEI PROJECT MANAGER: Bryan Campbell
PROJECT NAME: Ruth Williamson
PROJECT NUMBER: 1a10
SIGNATURE: [signature]
TOTAL # OF CONTAINERS: 7
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030.8015) | TPH-Gasoline (EPA 5030.8015) w/ BTEX and MTBE (EPA 602.8020) | TPH-Diesel (EPA 3510/3550.8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602.8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7190,7190,7420,7520,7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY, CORROSIVITY, IGNITABILITY (Title 22, CCR 66261.21-3) | | | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (x) SB-5 | 8/15/97 | | Water | | X | X | | | | | | | | | | 3 |
| (x) SB-6 | ↓ | | ↓ | | X | ~~X~~ fuel | | | | | | | | | | 1 |
| (x) SB-8 | | | | | X | X | | | | | | | | | | 3 |

79836
79836
79837

ICE/® ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

VOAS | O&G | METALS | OTHER

| ANALYTICAL LAB: | RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|---|
| McCampbell Analytical Inc. | [signature] | Jenny Mylenic | | |
| ADDRESS: | Signature | Signature | Signature | Signature |
| | Bryan Campbell | Jenny Mylenic | | |
| PHONE: ( ) - FAX: ( ) - | Printed Name | Printed Name | Printed Name | Printed Name |
| | AEI | MAI | | |
| INSTRUCTIONS/COMMENTS: | Company | Company | Company | Company |
| | Time 5:05pm Date 8/15/97 | Time 505 Date 8/15/97 | Time Date | Time Date |

# Chain of Custody

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

DATE: 8/15/97 PAGE: 1 OF: 2

AEI PROJECT MANAGER: Bryan Campbell
PROJECT NAME: Williamson
PROJECT NUMBER: 610
SIGNATURE:
TOTAL # OF CONTAINERS: 12
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030/8015) | TPH-Gasoline (EPA 5030/8015) w/ BTEX and MTBE (EPA 602/8020) | TPH-Diesel (EPA 3510/3550/8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602/8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7130, 7190, 7420, 7520, 7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY, CORROSIVITY, IGNITABILITY (Title 22, CCR 66261.21-3) | | | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-5, 3' | 8/15/97 | 9:30am | Soil | | | | | | | | | | | | | 1 |
| SB-5, 5' | | 9:34am | | | | | | | | | | | | | | 1 |
| SB-5, 10' | | 9:40am | | | | | | | | | | | | | | 1 |
| SB-5, 15' | | 10:00am | | | X | X | | | | | | | | | | 1 |
| SB-5, 20' | | 10:30am | | | | | | | | | | | | | | 1 |
| SB-6, 3' | | 11:10am | | | | | | | | | | | | | | 1 |
| SB-6, 5' | | 11:15am | | | | | | | | | | | | | | 1 |
| SB-6, 10' | | 11:23am | | | | | | | | | | | | | | 1 |
| SB-6, 15' | | 11:50am | | | X | X | | | | | | | | | | 1 |
| SB-8, 3' | | 12:50am | | | | | | | | | | | | | | 1 |
| SB-8, 5' | | 12:56am | | | | | | | | | | | | | | 1 |
| SB-8, 10' | | 1:15pm | | | X | X | | | | | | | | | | 1 |

ICE/® ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION APPROPRIATE ✓

| | VOAS | O&G | METALS | OTHER |
|---|---|---|---|---|
| PRESERVATION: | | | | |
| CONTAINERS | ✓ | | | |

ANALYTICAL LAB: McCampbell Analytical, Inc.
ADDRESS:
PHONE: ( ) - FAX: ( ) -

INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature | Signature | Signature | Signature |
| Bryan Campbell | Jenny Milenic | | |
| Printed Name | Jenny Milenic | Printed Name | Printed Name |
| AEI | ~~AEI~~ MAI | Company | Company |
| Company | Company | Time Date | Time Date |
| Time 5:05p Date 8/15/97 | Time 505 Date 8/15/97 | | |

# Chain of Custody

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

DATE: 8/15/97 PAGE: 2 OF: 2

AEI PROJECT MANAGER: Bryan Campbell
PROJECT NAME: Hotel Williamson
PROJECT NUMBER: 1410
SIGNATURE: [signature]
TOTAL # OF CONTAINERS: 7
RECD. GOOD COND./COLD:

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030/8015) | TPH-Gasoline (EPA 5030/8015) w/ BTEX and MTBE (EPA 602/8020) | TPH-Diesel (EPA 3510/3550/8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602/8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7130,7190,7420,7520,7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY, CORROSIVITY, IGNITABILITY (Title 22, CCR 66261.21-3) | | | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-5 | 8/15/97 | | Water | | X | X | | | | | | | | | | 3 |
| SB-6 | ↓ | | ↓ | | X | ~~X~~ Pure | | | | | | | | | | 1 |
| SB-8 | | | | | X | X | | | | | | | | | | 3 |

ICE/0° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE CONTAINERS ✓ VOAS | O&G | METALS | OTHER

ANALYTICAL LAB: McCampbell Analytical Inc.
ADDRESS:
PHONE: ( ) FAX: ( )

INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature: [signature] | Signature: [signature] | Signature: | Signature: |
| Printed Name: Bryan Campbell | Printed Name: Jenny Milenic | Printed Name: | Printed Name: |
| Company: AEI | Company: MAI | Company: | Company: |
| Time: 5:05 pm Date: 8/15/97 | Time: 505 Date: 8/15/97 | Time: Date: | Time: Date: |