



**AEI**  
CONSULTANTS

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ENVIRONMENTAL & ENGINEERING SERVICES

[www.aeiconsultants.com](http://www.aeiconsultants.com)

December 17, 2007

Mr. Jerry Wickham, P.G.  
Hazardous material Specialist  
Alameda Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

**RECEIVED**

3:00 pm, Dec 18, 2007

Alameda County  
Environmental Health

**Subject: Request for Work Plan to Address Technical Comments  
Fuel Leak Case RO0000018, GeoTracker Global ID T0600100262  
Carnation Dairy Property  
1310 14<sup>th</sup> St. Oakland, CA 94607**

Dear Mr. Wickham:

Attached is a copy of the report summarizing the tank removal activities by Encinal and their response to your request for a workplan to address Technical Comments 11 through 14 of your September 28, 2007 letter.

AEI and Encinal 14<sup>th</sup> Street, LLC believe that all of the known releases in the area of the site not covered by the Nestlé deed restricted area has been remediated to acceptable levels and in many cases to below Residential/Drinking water standards. Something in excess of 1,500 cubic yards of impacted soil and around 40,000 gallons of water has been removed from the several excavations. As soon as the water and excavated soil currently stored on site has been disposed, site a tank removal report summarizing all onsite activities will be prepared and submitted to the Oakland Fire Department. Encinal is anxious to move ahead with development of the non-deed restricted area as soon as the linkage with that portion of the site can be dealt with.

If you have any questions I can be reached at 925-944-2899, extension 122.

Sincerely,  
**AEI Consultants**

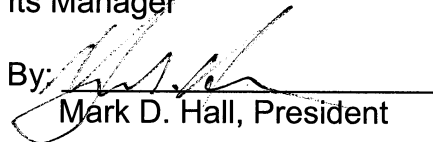
Robert F. Flory, P.G.  
Senior Geologist/Project Manager



I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report are true and correct to the best of my knowledge.

Encinal 14<sup>th</sup> Street, LLC,  
a California limited liability company

By: Encinal, Inc., a California corporation  
Its Manager

By:   
Mark D. Hall, President

December 14, 2007

**Request for Workplan  
To  
Address Technical Comments**

1310 14th Street  
Oakland, California

Project No. 273474

Prepared For

Encinal 14th Street, LLC  
1855 Olympic Blvd.  
Walnut Creek, CA 94596

Prepared By

**AEI Consultants**  
2500 Camino Diablo  
Walnut Creek, CA 94597  
(925) 944-2899

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December 14, 2007

Mr. Jerry Wickham, P.G.  
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**Subject: Request for Work Plan to Address Technical Comments  
Fuel Leak Case RO0000018, GeoTracker Global ID T0600100262**  
Carnation Dairy Property  
1310 14<sup>th</sup> St. Oakland, CA 94607

Dear Mr. Wickham:

AEI Consultants (AEI) has prepared this report at the request of Encinal 14<sup>th</sup> Street, LLC (Encinal). AEI has been retained by Encinal to provide environmental engineering and consulting services relating to the property known as the Carnation Dairy Property located at 1310 14<sup>th</sup> St. Oakland, CA 94607.

In a directive letter dated September 28, 2007 addressed to Mr. Michael Desso, Nestlé USA, Inc (Nestlé) and Mr. Mark Hall, Encinal 14<sup>th</sup> Street, LLC Alameda county Environmental Health (ACEH) summarized a review of the fuel leak file for the above referenced site. The directive included fourteen (14) Technical Comments. Technical comments 1 through 10 were directed at the northwestern portion of the site being remediated by Nestlé. EMC will be responding separately to these Technical Requests on behalf of Nestlé. This document is limited to Technical Comments 11 through 14 which concern the balance of the site owned by Encinal.

## BACKGROUND

The subject property (hereafter referred to as the “site” or “property”) is located at 1310 14<sup>th</sup> Street in Oakland, California (Figure 1: Site Location Map). The site is located an industrial area of Oakland. The site occupies the area between 16<sup>th</sup> and 14<sup>th</sup> Streets (International Drive) on the north and south, respectively and Poplar Street and Mandela Parkway on the east and west, respectively. The site, which is a former Carnation manufacturing facility, is currently vacant. Several large unused buildings were recently removed from the eastern and southeastern portion of the site. The site has been occupied by dairy operations since prior to 1950. More complete historical information can be found in the 2004 Lowney and Associates (Lowney) *Phase I Environmental Site Assessment and Soil and groundwater Quality Evaluation Report* (Lowney Phase I).

The Lowney Phase I identified the two abandoned in-place USTs located adjacent to the boiler room. The Lowney report documented the presence of Total Petroleum Hydrocarbons as gasoline (TPH-g), Total Petroleum Hydrocarbons as diesel (TPH-d), and Total Petroleum Hydrocarbons as motor oil (TPH-mo) at the north end of the USTs previously abandoned in place.

Two previous drilling events were carried out by AEI in 2005 in the area at the north end of the abandoned USTs along the south edge of the former loading dock. Analysis of groundwater samples from the AEI borings found TPH-g, TPH-d, and TPH-mo at concentrations up to 1,700 µg/L, 9,900 µg/L, and 38,000 µg/L, respectively. The laboratory also reported light non-aqueous liquid (LNAPL) or free product in the groundwater samples from borings SB-7 and SB-9. Tables and figures from the final 2005 investigation are included in Appendix A.

## **RESPONSE TO TECHNICAL COMMENTS**

### **11. Abandoned in Place USTs**

AEI removed the two previously abandoned USTs (Tank 4 and Tank 5 – Figure 2) under City of Oakland Fire Department permits and supervision. Concurrent with the UST removal, AEI excavated all adjacent impacted soil (source area) to groundwater and dewatered the excavation several times. The area excavated included the area previously identified as impacted as well as additional impacted soil as shown on Figure 2. Maximum hydrocarbon concentration reported in sidewall samples from the tank removal and associated excavations for THP-g, TPH-d (C10-23) and Total Petroleum Oil and Grease (POG), were <50 mg/kg, 11 mg/kg, <50 mg/kg, respectively. This is below the San Francisco Bay Regional Water Quality Control Board (RWQCB) strictest cleanup standard for soil greater than 3 meters bgs (Table C-1 – Interim Final – Nov. 2007).

Analysis of the groundwater sample collected from the excavation reported THP-g, TPH-bo, TPH-d, and POG at concentrations of <50 µg/L, 210 µg/L, 120 µg/L, and <5.0 mg/L, respectively. The difference between the TPH-bo and TPH-d results indicates residual fuel or motor oil range (C-23+) hydrocarbons can be considered to be present at a concentration of 90 µg/L. Analysis of the water sample for Volatile Organic Compounds (VOCs) by method SW 8260B reported all analytes as non detectable. All analytes except diesel are below the RWQCB Drinking water ESL of 100 µg/L (Table F-1a – Interim Final – Nov. 2007). The reported diesel concentration is far below the non drinking water ESL of 2,500 µg/L (Table F-1b – Interim Final – Nov. 2007) and is almost half the risk based goal for drinking water of 210 µg/L (Table F-3 – Interim Final – Nov. 2007).

The removal of the two USTs, over excavation, and the dewatering of the excavation has reduced the hydrocarbons in the soil and groundwater in this area to below acceptable levels for the current use and proposed future use. AEI believes no further action in regard to these two USTs is warranted in this portion of the site.

## **12. Former Gasoline UST near EB-11**

A data review has found a notation on a 1911-1912 Sanborn Map which has a circular symbol labeled “110 GAL.” GASOLINE? “DRUM IN GROUND”. The location of the “drum” on the 1912 Sanborn Map is shown behind (east) of a building labeled “AUTO”, not at the west edge of the recently removed building as shown on Lowney figure 2. This places boring EB-11 to the northwest of the “drum” location, directly down the gradient of the “drum”.

The purpose of Lowney boring EB-11 was to evaluate potential impact from releases from storage of gasoline at that location in the early 1900s. Analysis of soil and groundwater samples from boring EB-11 reported no gasoline or BTEX present in either the soil or groundwater. Diesel was reported in the groundwater at a concentration of 74 µg/L, which is below the Drinking Water ESL (Table F-1a – Interim Final – Nov. 2007). Copies of the Sanborn Map and Lowney Figure 2 are attached in Appendix B.

Based on this information, AEI believes no further action is required to evaluate possible historic hydrocarbon releases from this fuel storage prior to the construction of the operation of the site as a dairy processing facility.

## **13. Vinyl Chloride in Groundwater**

The Lowney investigation in 2004 reported dichlorobenzene and vinyl chloride along with gasoline, diesel and oil range hydrocarbon contamination in groundwater samples from borings EB-14 and EB-15 which were located adjacent to the two USTs abandoned in place. The removal of these two USTs and subsequent excavation resulted in the removal of both borings (see Figure 2). Groundwater sample from this excavation reported no dichlorobenzene or vinyl chloride at a detection limit of 0.5 µg/L.

No dichlorobenzene, vinyl chloride, or any other VOCs were detected in groundwater; therefore no further action is warranted with regard to the historic detection of VOCs at this location of the site.

## **14. Petroleum Hydrocarbons Detected in Boring EB-20**

The ACEH directive refers to detection of TPH as motor oil reported in a “soil sample” reported in the 2004 Lowney Associates Report. Review of the Lowney report finds that the sample in question is referred to by Lowney as “suspected insulating material” between layers of concrete at the location of boring EB-20 in a room identified as a “former cold storage room”. This is consistent with the blocks of a rigid, shiny, black, foam material observed below the floor slab and above the lower foundation slab at that location observed by Robert F. Flory, AEI Professional Geologist during a walk through of the site during the initial phase of building demolition. This material and the underlying slab(s) were removed and disposed of by the demolition contractor. All of the insulation material and concrete slabs above and below the insulating material have been removed.

AEI believes no further action is warranted in regard to the previous analysis of building insulation materials at that location.

## **USTs DISCOVERED DURING BUILDING DEMOLITION**

Three previous unidentified USTs were uncovered during the recent building demolition on the subject site. Two of the tanks, Tank 1 (T-1) and Tank 2 (T-2) were located beneath the building in lot 5 (Figure 2). The third tank, Tank 3 (T-3) was uncovered west of the previously abandoned in place USTs (T-4 and T-5).

### **Tank 1 – 1,500 Gallon Bunker Oil**

Tank 1 (T-1) was an approximately 1,300 gallon vertical axis UST which was discovered beneath the building. The top of the tank was in an underground vault and the lower half was below the current groundwater level of approximately 12 feet bgs. T-1 contained a heavy black residual fuel or Bunker Fuel. During demolition of the buildings, T-1 was breached during removal of the overlying slab and an estimated 50 gallons of fuel was released. AEI immediately responded to the site, emptied the tank and removed as much of the released material as was practical prior to the removal of the UST.

T-1 was removed under the supervision of the Oakland Fire department. The side wall samples collected during the removal of T-1 reported normal background levels of metals and no other analytes except for 2.1 mg/kg xylenes in one sample indicating that the soil impacted by the release when T-1 was discovered had been removed to below the most restrictive ESLs. The tank was examined at the time of removal and was determined to be intact with no evidence of leaks except for the damage in the top of the tank, which was incurred at the time the tank was discovered

During removal of T-1 a small quantity of hydrocarbons (Bunker oil) was observed on the surface of the water in the excavation. The excavation was dewatered until the groundwater appeared clean. Analysis of a groundwater sample collected on November 13, 2007 following the removal of T-1 reported TPH-g, TPH-bo, TPH-d, and POG at concentrations of 130 µg/L, 2,100 µg/L, 1,700 µg/L, and 7,900 µg/L, respectively indicating some bunker fuel was still present on the surface of the water in the excavation. After dewatering the excavation several times a second groundwater sample was collected on December 12, 2007. Analysis of this sample reported TPH-g, TPH-bo, and TPH-d at concentrations of ND<50 µg/L, ND<250 µg/L, and ND<50 µg/L, respectively. This water sample demonstrates that the bunker fuel released on to the surface of groundwater when the tank was initially encountered has been removed to non detectable levels and that the no impacted soil or groundwater remains at the T-1 location.

AEI believes no further action is warranted at the site of this previously unidentified tank.



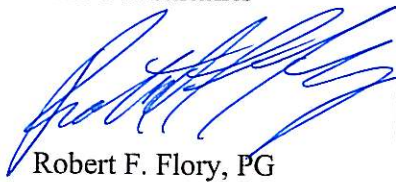
AEI also believes that no further action is needed in regard to the three USTs (T-1, T-2, and T-3) uncovered during the recent building demolition as contaminants identified during their removal have been either totally removed or reduced to below the applicable RWQCB ESLs.

AEI finds no evidence of the presence in the eastern half and southwestern quarter of the subject site of contaminants above the applicable RWQCB ESLs. AEI believes that no further action is warranted with respect to the entire property outside of deed restricted northwestern portion of the site where Nestlé and ECM are currently active.

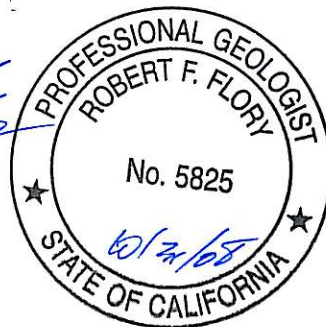
AEI requests written confirmation on behalf of Encinal that no further action is required on their portion of the site and the pending case affects only the deed restricted northwest portion of the site.

If any additional information is required or have any questions regarding this review, please contact the undersigned at (925) 944-2899, ext. 122.

Sincerely,  
**AEI Consultants**



Robert F. Flory, PG  
Senior Geologist



### **Tank 2 – 750 Gallon**

Tank 2 (T-2) was a 750 gallon horizontal axis UST located immediately north of T-1, the top of which was buried at approximately 4 feet bgs. The tank was dry and no record is available of what was stored in it. One soil sample was collected from a depth of approximately 7 feet bgs below T-2. No hydrocarbons or VOCs were at or above reporting limits. Analysis for metals reported no metals above normal back ground levels. On this basis, it appears no releases have occurred from T-2.

No further action is warranted at the site of this previously unidentified tank.

### **Tank 3 – 750 Gallon Gasoline**

Tank 3 (T-3) was an approximately 750 gallon horizontal axis tank located just west of Lot 10 in the open area of the site. No previous records of the UST or its contents have been located to date.

Analysis of the soil sample was collected immediately below T-3 reported TPH-g and TPH-d at concentrations of 5,400 mg/kg and 1,400 mg/kg, respectively. The area was over excavated to remove all obviously stained soil to below the groundwater (12' bgs) and the excavation was dewatered several times. Analysis of soil samples from the excavations 4 side walls reported no detectable concentrations of TPH-g, TPH-d, or MBTEX. Analysis of the groundwater sample collected from the excavation following over excavation reported TPH-g and TPH-d at concentrations of 85 µg/L and 92 µg/L, respectively. These concentrations are below the RWQCB Drinking Water ESL of 100 µg/L (Table F-1a – Interim Final – Nov. 2007). No MTBE or BTEX were reported in groundwater sample TW.

No further action is warranted at the site of this previously unidentified tank.

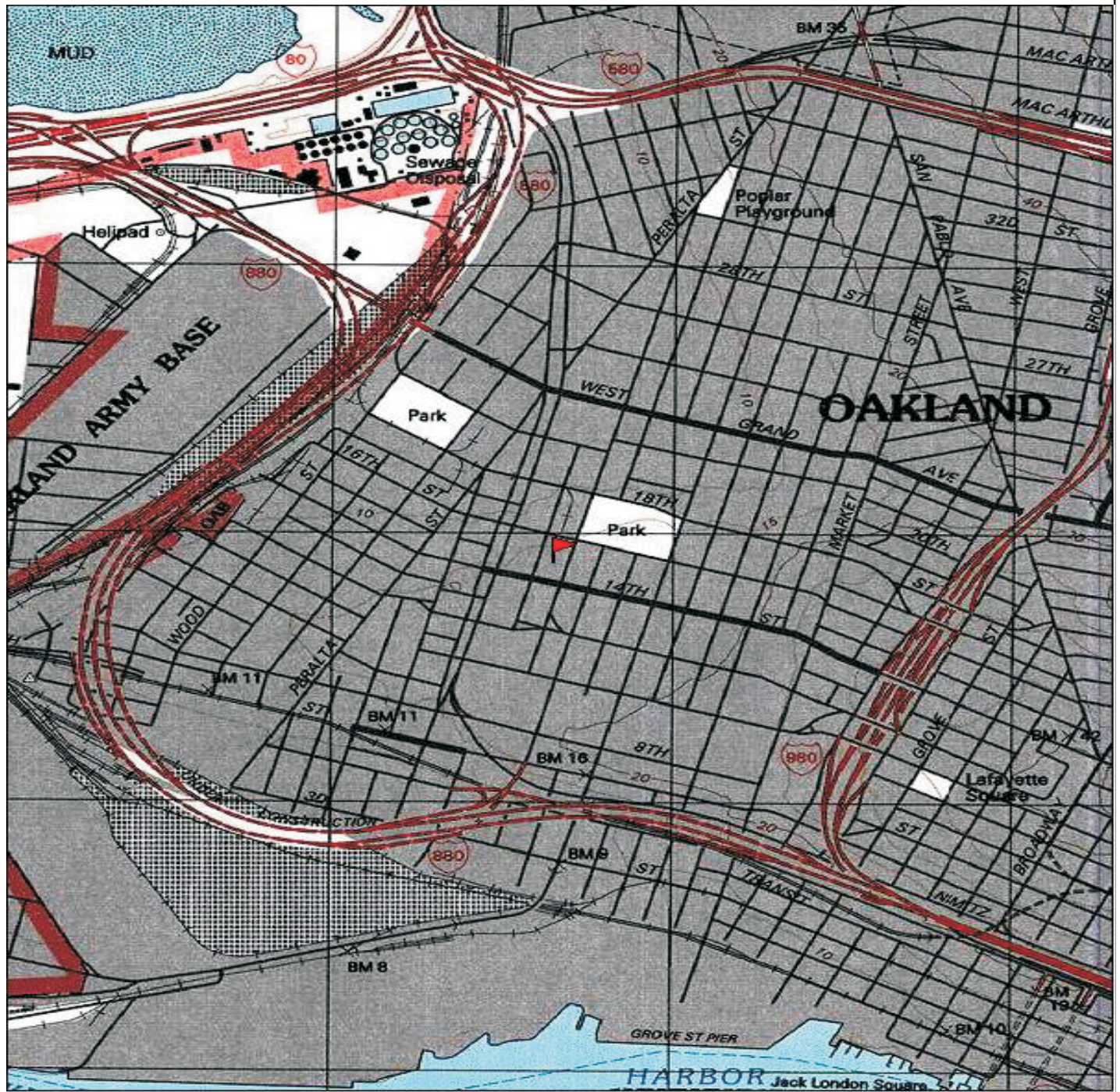
## **SUMMARY**

Based on the data presented, all hydrocarbon and VOCs identified in the soil under the eastern half of the site have been excavated to significantly below regional Water Quality Control Board (RWQCB) ESLs for residential, commercial or industrial sites.

The remaining hydrocarbon concentrations reported in the groundwater are significantly below RWQCB nondrinking water ESLs (Table F-1b – November 2007) and below the risk based screening level for groundwater (Table F-3 – Interim Final – Nov. 2007).

AEI believes no further action is necessary in regard to items 11 through 14 of the September 28, 2007 directive letter as all contaminants referenced in the directive letter have been either totally removed or reduced to below the applicable RWQCB ESLs.

## **FIGURES**



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

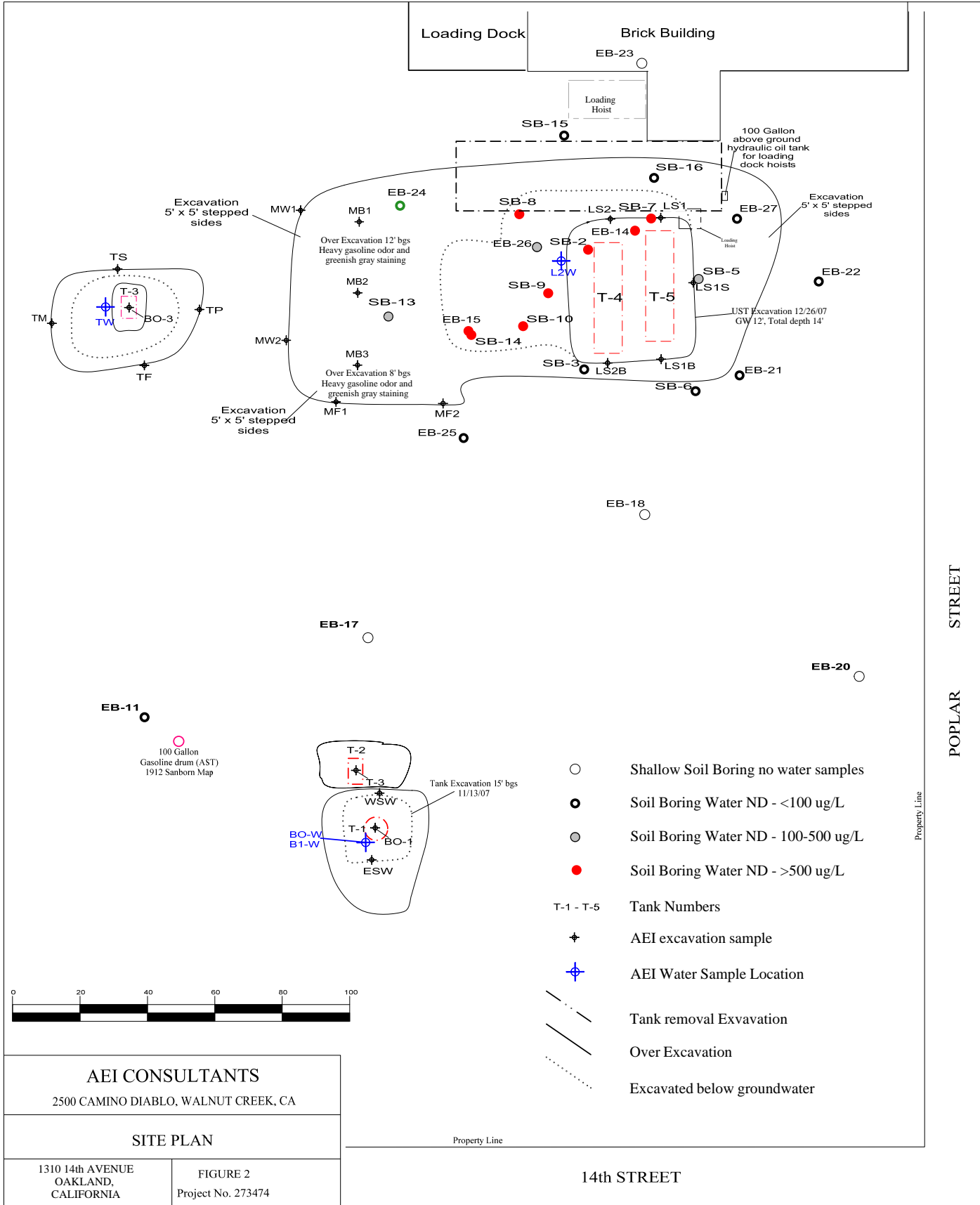
## AEI CONSULTANTS

2500 Camino Diablo, Walnut Creek, CA 94597

## SITE LOCATION PLAN

1310 14th Street  
Oakland, California

**FIGURE 1**  
Job No: 273474



## **TABLES**

**Table 1: Soil Analytical Data  
Former Carnation Site, 1310 14th Street Oakland, CA**

Sample ID	Date	TPH-g	TPH-bo	TPH-d	POG	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	Comments
		Method 8015				Method 8021B/8260					
		mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
ESW	11/13/07	<1.0	----	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-1 S sidewall sample per OFD
WSW	11/13/07	<1.0	----	<1.0	<50	<0.05	<0.005	<0.005	<0.005	2.1	T-1 N sidewall sample per OFD
BO-2	11/13/07	<1.0	----	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-2 Bottom sample per OFD
TW	12/10/07	5,400	----	1,400	<50	<10	<1.0	<1.0	<1.0	<1.0	T-3 bottom sample per OFD pre-excavation
TF	12/10/07	<1.0	----	<1.0	----	<0.05	<0.005	<0.005	<0.005	<0.005	T-3 S wall sample following excavation per OFD
TP	12/10/07	<1.0	----	<1.0	----	<0.05	<0.005	<0.005	<0.005	<0.005	T-3 E sidewall sample following excavation per OFD
TS	12/10/07	<1.0	----	<1.0	----	<0.05	<0.005	<0.005	<0.005	<0.005	T-3 N sidewall sample following excavation per OFD
TM	12/10/07	<1.0	----	<1.0	----	<0.05	<0.005	<0.005	<0.005	<0.005	T-3 W sidewall sample following excavation per OFD
LS1	11/26/07	<50	<50	11	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-4 N sidewall samples tank excavation per OFD
LS1S	11/26/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-4 E sidewall samples tank excavation per OFD
LS1B	11/26/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-4 S sidewall samples tank excavation per OFD
LS2	11/26/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-5 sidewall samples at ends of excavation per OFD
LS2B	11/26/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	T-5 sidewall samples at ends of excavation per OFD
MW1	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	West wall, North sample EB-15 excavation per OFD
MW2	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	West wall, South sample EB-15 excavation per OFD
MF1	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	South wall, West sample EB-15 excavation per OFD
MF2	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	South wall, East sample EB-15 excavation per OFD
MB1	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	North bottom sample EB-15 excavation per OFD
MB2	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	Center bottom sample EB-15 excavation per OFD
MB3	11/29/07	<50	<50	<1.0	<50	<0.05	<0.005	<0.005	<0.005	<0.005	South bottom sample EB-15 excavation per OFD

**Table 1: Soil Analytical Data  
Former Carnation Site, 1310 14th Street Oakland, CA**

Sample ID	Date	TPH-g	TPH-bo	TPH-d	POG	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	Comments
		Method 8015				Method 8021B/8260					
		mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Stock Pile Samples											
STK 1234	11/13/07	<1.0	----	19	<50	<0.05	<0.005	<0.005	<0.005	<0.005	Stockpile
STK 5678	11/13/07	610	----	8,700	14,000	<0.05	<0.005	0.83	1.0	5.1	Stockpile
STK 5678a	11/13/07	730	----	370	<50	<0.05	<0.005	<0.005	1.0	2.8	Stockpile
LST1234	11/26/07	ND	<50	22	540	<0.05	<0.005	<0.005	<0.005	<0.005	Stockpile
LSTB1234	11/26/07	ND	<50	6.6	220	<0.05	<0.005	<0.005	<0.005	<0.005	Stockpile
LST5678	11/26/07	1,200	<50	1,200	2,700	<5.0	<0.50	<0.50	3.2	2.4	Stockpile
LSTB5678	11/26/07	380	<50	240	700	<2.5	<0.25	<0.25	1.6	1.1	Stockpile
Soil > 3 meters (9.86 ft)											
Comm/Ind ESL		83	5,000	83	5,000	0.023	0.044	29	3.3	2.3	
Drinking water											

Notes:

\* - Analysis by Method 8260

mg/kg = milligrams per kilogram



**Table 2: Soil Analytical Data - Method 8260**  
**Former Carnation Site, 1310 14th Street Oakland, CA**

Well Number	Date	n-butyl benzene	sec-butyl benzene	Ethyl benzene	isopropyl benzene	isopropyl toluene	Napthalene	n-propyl benzene	Toluene	1,2,4-TMB	1,3,5-TMB	Xylenes	Other Analytes
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
ESW	11/13/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
WSW	11/13/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
BO-2	11/13/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
BO-3	11/13/07	4.7	3.4	1.1	5.7	<33	8.0	7.1	ND	7.0	ND	ND	All ND
LS1	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LS1S	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LS1B	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LS2	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LS2B	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
MW1	11/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
MW2	11/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
MF1	11/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
MF2	11/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
STK 1234	11/13/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
STK 5678	11/13/07	1.0	0.87	ND	1.5	0.34	3.0	1.6	<0.005	<0.005	<0.005	<0.005	All ND
STK 5678a	11/13/07	<0.005	<0.005	<0.005	<0.005	<0.005	10	<0.005	<0.005	2.5	0.60	1.7	All ND
LST1234	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LSTB1234	11/26/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	All ND
LST5678	11/26/07	2.4	0.73	2.2	1.9	<0.10	4.00	2.4	<0.10	<0.10	0.60	0.53	All ND
LSTB5678	11/26/07	0.92	0.4	0.91	0.87	<0.10	2.6	1.2	<0.10	<0.10	0.44	0.27	All ND

Notes:

µg/L = micrograms per liter (parts per billion)

----- = not sampled or not analyzed

ND = not detected

1,2,4-TMB = 1,2,4-trimethylbenzene

1,3,5-TMB = 1,3,5-trimethylbenzene

**Table 3 Soil Analytical Data - Metals**  
**Former Carnation Site, 1310 14th Street Oakland, CA**

Analyte	Sample ID									
	ESW	WSW	BO-2	BO-3	LS1	LS1S	LS1B	LS2	LS2B	MW1
	11/13/07	11/13/07	11/13/07	11/13/07	11/26/07	11/26/07	11/26/07	11/26/07	11/26/07	11/29/07
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic	2.9	2.8	3.8	2.8	2.2	2.9	5.4	1.3	3.1	3.3
Barium	62	72	81	75	79	92	140	86	62	83
Beryllium	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	ND	ND	ND
Cadmium	<0.25	<0.25	<0.25	<0.25	ND	ND	ND	ND	ND	ND
Chromium	47	51	43	42	47	55	61	120	48	45
Cobalt	5.2	6.2	6.4	6.2	7.0	9.8	7.4	4.5	7	6.4
Copper	10	8.6	11	9.2	9.9	12	11	7.9	9.5	7.7
Lead	3.5	3.2	3.6	3.3	3.5	4.6	3.7	4.7	3.4	3.6
Mercury	<0.05	0.052	<0.05	<0.05	<0.05	<0.05	<0.05	0.055	<0.05	<0.05
Molybdenum	<0.5	<0.5	<0.5	<0.5	ND	0.54	ND	ND	ND	ND
Nickel	37	43	46	40	40	41	45	34	41	46
Selenium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	35	36	38	33	35	39	42	26	36	38
Zinc	32	29	29	28	33	37	37	29	30	31

**Table 3 Soil Analytical Data - Metals**  
**Former Carnation Site, 1310 14th Street Oakland, CA**

Analyte	Sample ID									
	MW2	MF1	MF2	LST1234	LSTB1234	LST5678	LSTB5678	STK 1234	STK 5678	STK 5678a
	11/29/07	11/29/07	11/29/07	11/26/07	11/26/07	11/26/07	11/26/07	11/13/07	11/13/07	11/13/07
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic	2.6	3.1	3.3	4.6	3.6	2.8	2.5	1.8	2.5	2.5
Barium	62	72	76	94	74	86	64	48	68	62
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	<0.25	<0.25	<0.25	0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium	43	44	51	42	59	49	44	32	43	46
Cobalt	5.7	6.5	7.3	7.7	5.5	6.6	5.6	3.8	5.3	6.6
Copper	5.4	6.8	7.9	14	12	10	8.4	7.1	9.6	8.1
Lead	2.7	3.2	3.5	95	41	23	6.8	10	34	3.3
Mercury	<0.05	<0.05	<0.05	0.064	0.067	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum	<0.5	<0.5	<0.5	0.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel	36	41	48	30	36	36	38	25	34	36
Selenium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	30	34	37	43	37	36	30	21	30	31
Zinc	24	28	31	80	53	45	28	27	57	55

**Table 4 Groundwater Analytical Data**  
**Former Carnation Site, 1310 14th Street Oakland, CA**

Sample ID	Sample Date	TPH-g	TPH-bo	TPH-d	POG	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes	Tank Excavation
		<i>EPA Method 8015</i>				<i>EPA Method 8021B</i>					
		(µg/L)		(µg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
<b>BO-W</b>	11/13/07	130	2,100	1,700	7.9	<5.0	<0.5	<0.5	<0.5	<0.5	T-1
<b>B1-W</b>	12/12/07	<50	<250	<50	----	----	----	----	----	----	T-1
<b>TW</b>		85	----	92	----	<5.0	<0.5	<0.5	<0.5	<0.5	T-3
<b>L2W</b>	11/27/07	<50	210 (90)	120	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	T-4/T-5

**Notes**

\* = by Method 8260B 8260B

TPH-g = total petroleum hydrocarbons as gasoline - C6-C12

TPH-bo = total petroleum hydrocarbons as bunker oil - C10+

TPH-d = total petroleum hydrocarbons as diesel C10-C23

ND = not detected

MTBE = Methyl tertiary butyl Ether

µg/L = micrograms per liter (parts per billion)

----- = not sampled or not analyzed

**Table 5 Groundwater Analytical Data - Method 8260**  
**Former Carnation Site, 1310 14th Street Oakland, CA**

	Date	n-butyl benzene	sec-butyl benzene	Ethyl benzene	isopropyl benzene	isopropyl toluene	Napthalene	n-propyl benzene	Toluene	1,2,4-TMB	1,3,5-TMB	Xylenes	All Other Analytes
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BO-W	11/13/07	<0.5	<0.5	<0.5	<0.5	<0.5	13	<0.5	0.58	3.0	0.82	1.1	All ND
L2W	11/27/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

Notes:

µg/L = micrograms per liter (parts per billion)

----- = not sampled or not analyzed

ND = not detected

1,2,4-TMB = 1,2,4-trimethylbenzene

1,3,5-TMB = 1,3,5-trimethylbenzene

**Table 6****Water Analytical Data - Metals  
Former Carnation Site, 1310 14th Street Oakland, CA**

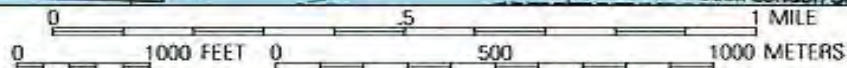
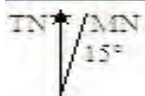
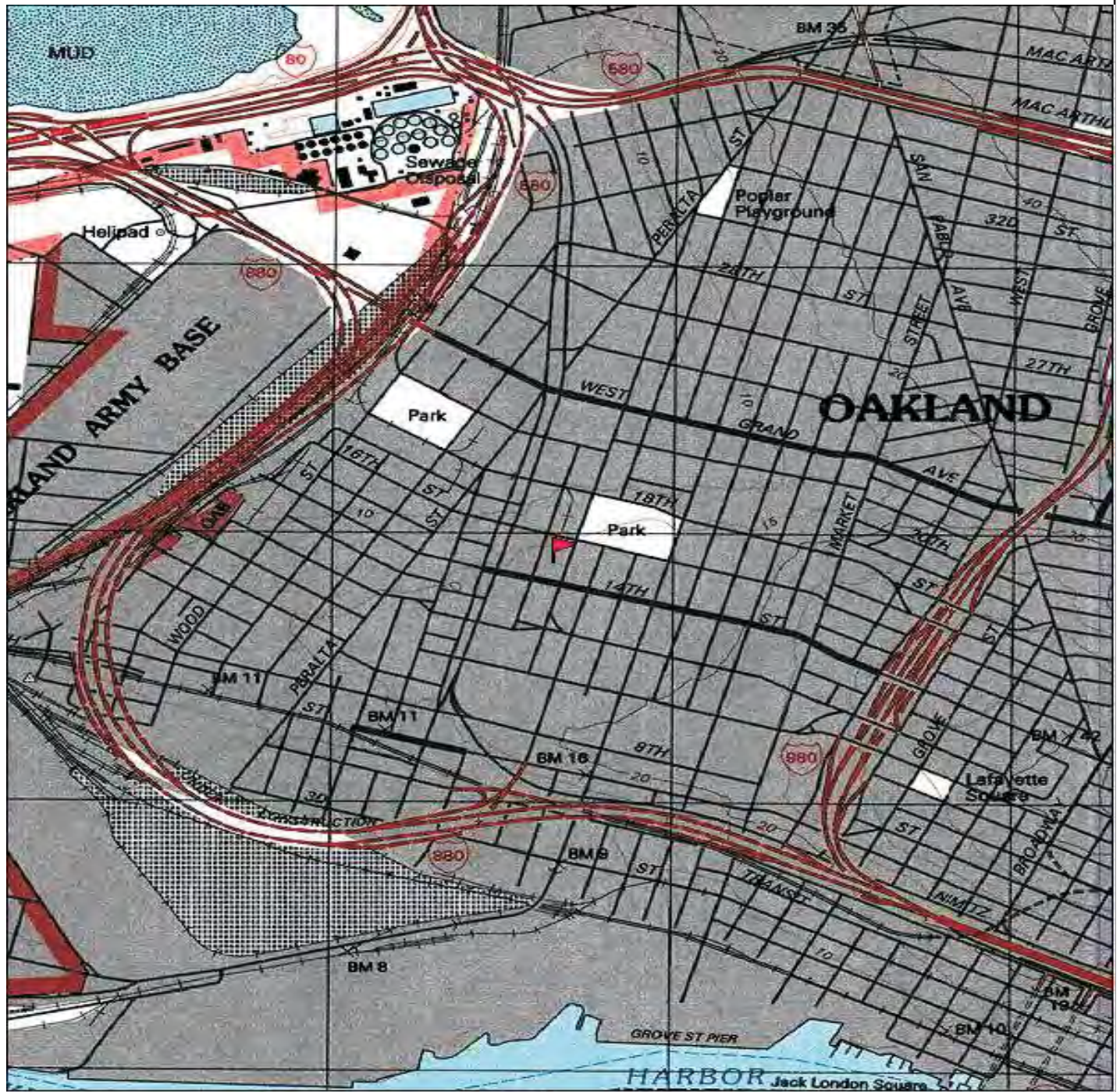
Analyte	Sample ID	
	BO-W	L2W
	11/13/07	11/27/07
	µg/L	
Antimony	<0.5	ND
Arsenic	<0.5	4.1
Barium	130	340
Beryllium	<0.5	ND
Cadmium	<0.25	ND
Chromium (Total)	<0.5	47
Cobalt	4.2	11
Copper	0.78	17
Lead	<0.5	27
Mercury	<0.012	0.47
Molybdenum	<0.5	0.95
Nickel	22.0	55
Selenium	<0.5	0.61
Silver	<0.19	ND
Thallium	<0.5	ND
Vanadium	<0.5	37
Zinc	<5.0	54

## **APPENDIX A**

### **Previous AEI Report Figures and Tables**

## **FIGURES**





Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com topo)

## AEI CONSULTANTS

2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

## SITE LOCATION PLAN

1310 14th Street  
Oakland, California

**FIGURE 1**  
Job No: 115184

16th STREET

Entrance Gate



Building

Canopy

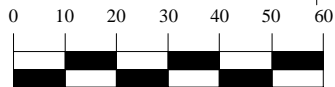
Loading Dock

POPLAR STREET

Building

Building

Building



- Former Well - Anania
- Soil Boring - AEI
- Soil Boring - Lowney
- Proposed Soil Boring

- UST Confirmed with Radar and EM
- UST Possible - poor Radar image area
- Lowney UST Location - no evidence

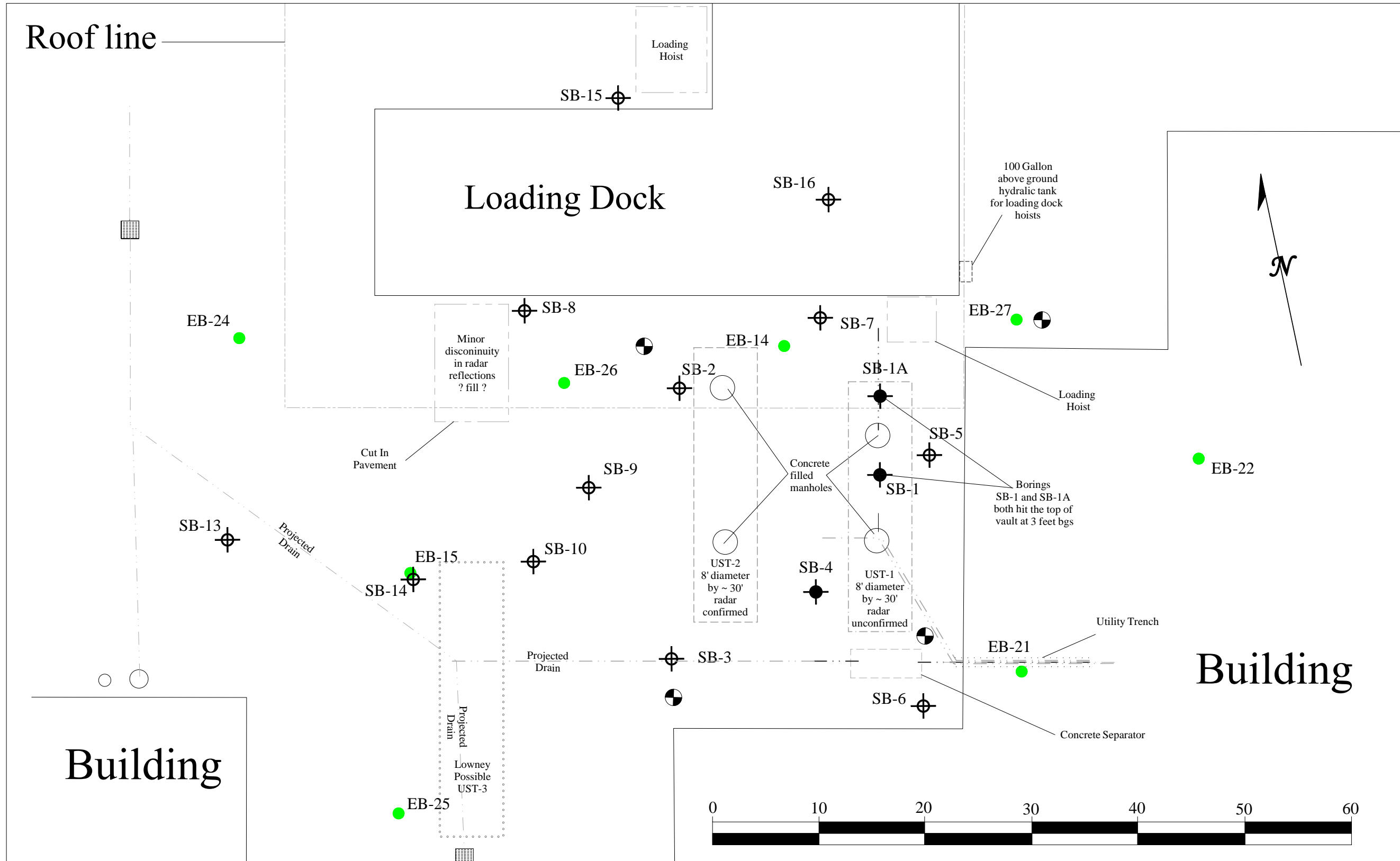
**AEI CONSULTANTS**





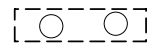
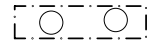

2500 CAMINO DIABLO, SUITE 100, WALNUT CREEK, CA

**SITE PLAN**

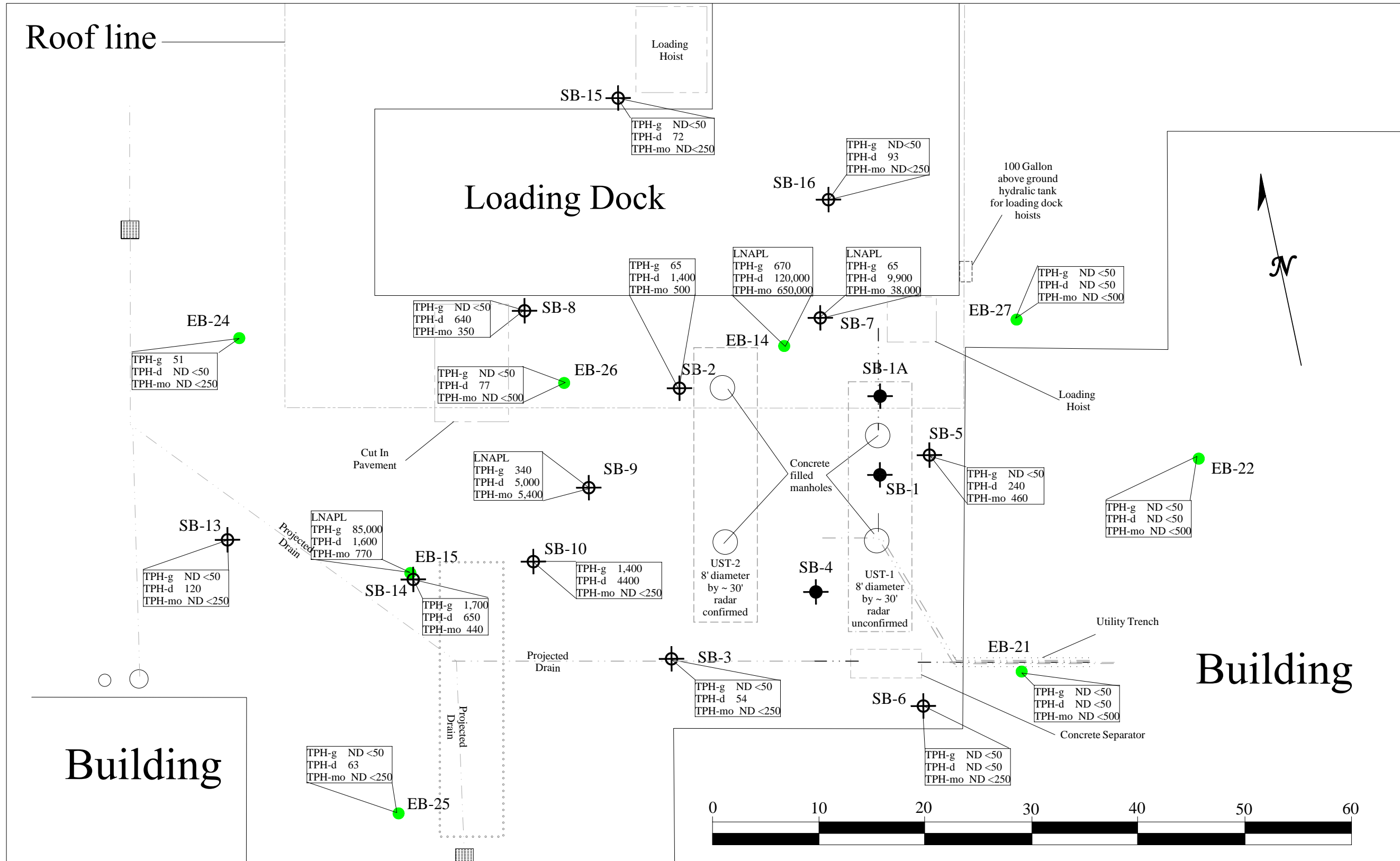
1310 16th AVENUE  
OAKLAND, CALIFORNIA

FIGURE 2  
Project No. 115184



-  Soil boring - AEI
-  Soil boring - shallow refusal - AEI
-  Soil boring - Lowney 2004
-  Former Well - Anania
-  UST Confirmed with Radar and EM
-  UST in vault - poor Radar image area
-  Lowney UST Location - radar no evidence

<b>AEI CONSULTANTS</b>	
2500 CAMINO DIABLO, SUITE 100, WALNUT CREEKI, CA	
<b>Geophysical Survey</b>	
1310 14th STREET OAKLAND, CALIFORNIA	FIGURE 3 Project No. 115184

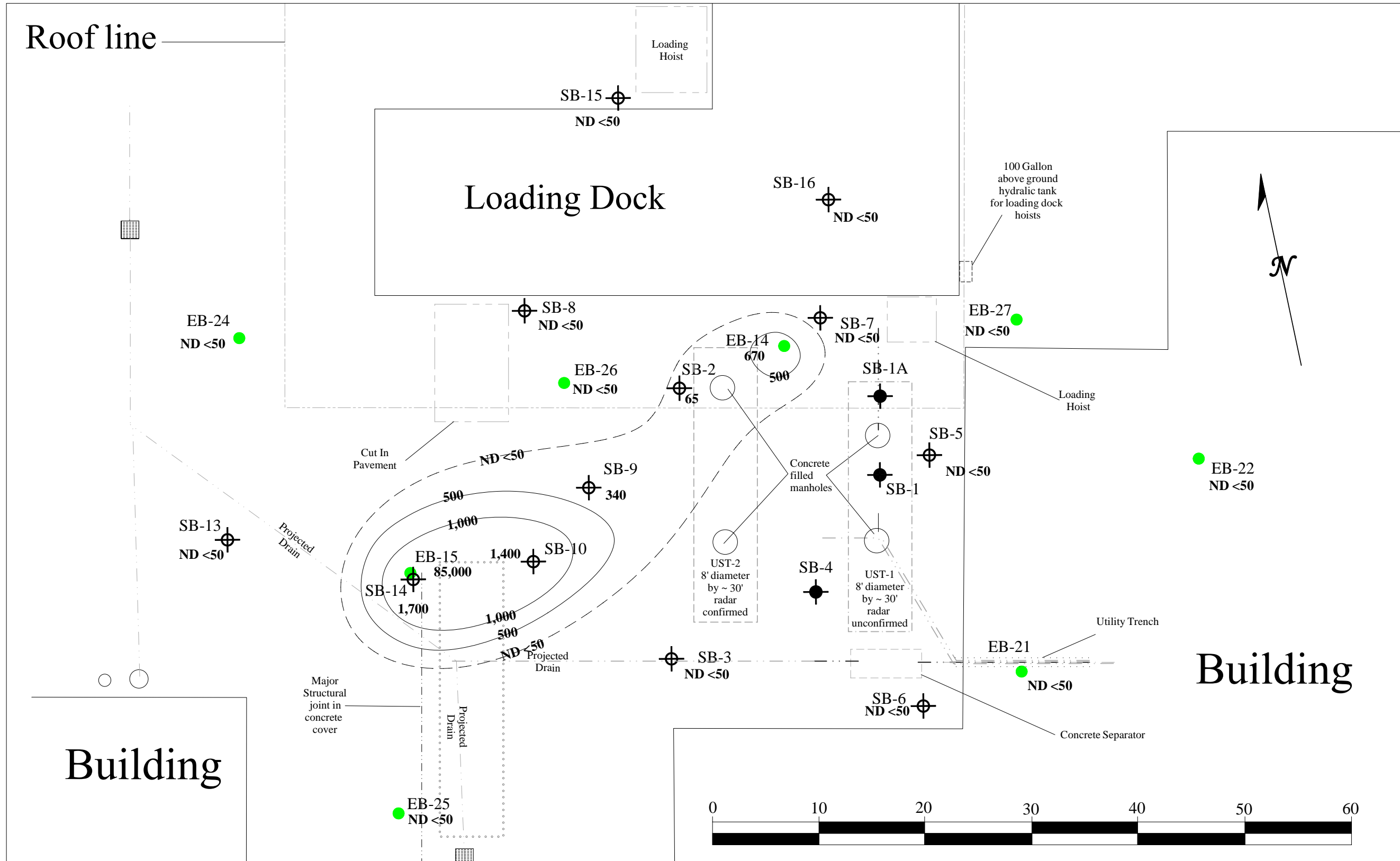





- Soil boring - AEI
- Soil boring - shallow refusal - AEI
- Soil boring - Lowney 2004

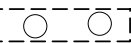
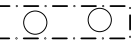

- UST Confirmed with Radar and EM
- UST in vault - poor Radar image area
- Lowney UST Location - radar no evidence

Hydrocarbon Concentrations in micrograms per liter  
 TPH-g ND <50 Total Petroleum Hydrocarbons as gasoline  
 TPH-d 63 Total Petroleum Hydrocarbons as diesel  
 TPH-mo ND <250 Total Petroleum Hydrocarbons as motor oil

<b>AEI CONSULTANTS</b>	
2500 CAMINO DIABLO, SUITE 100, WALNUT CREEKI, CA	
<b>TPH Concentrations in Groundwater</b>	
1310 14th STREET OAKLAND, CALIFORNIA	FIGURE 4 Project No. 115184

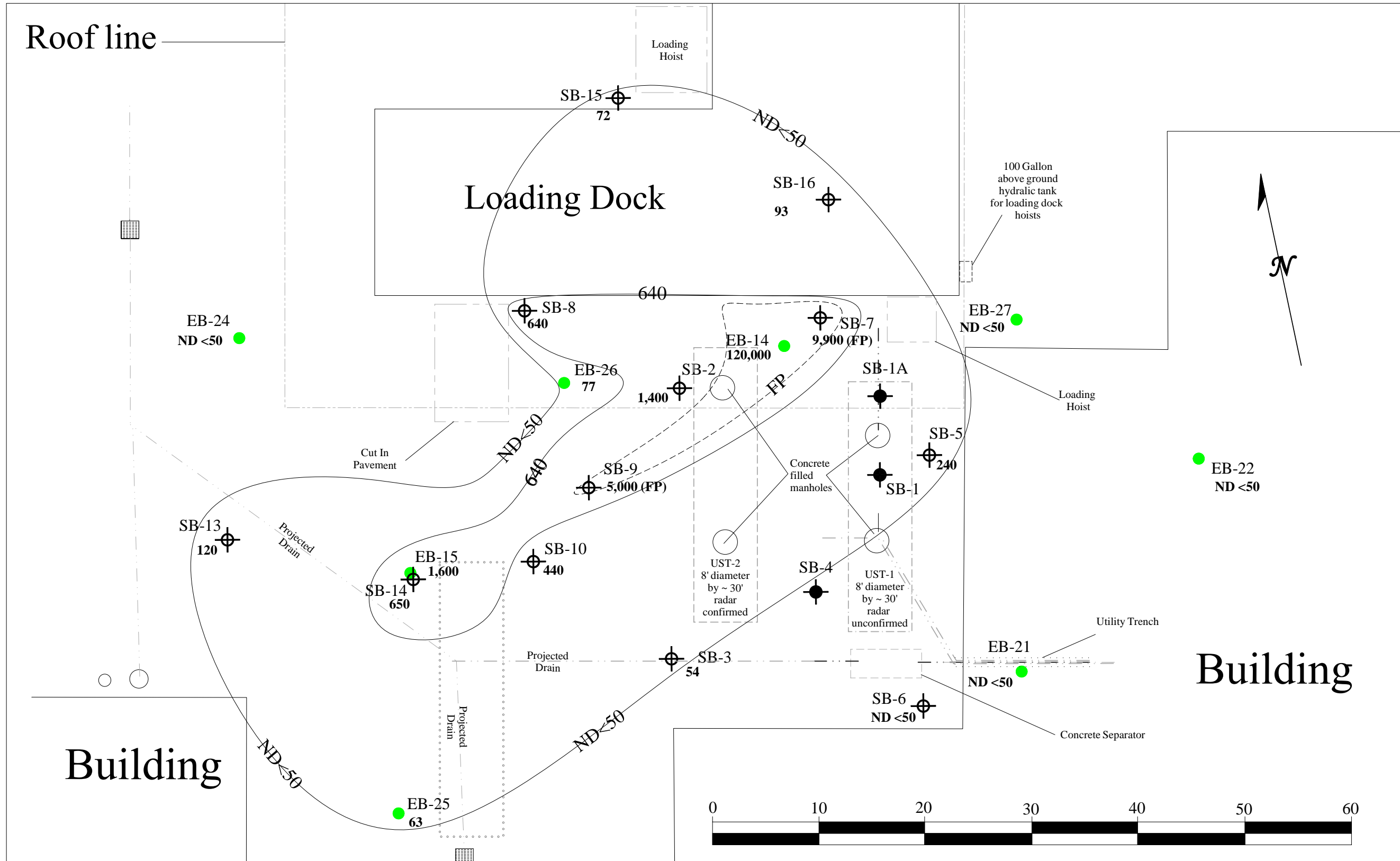


 Soil boring - AEI  
 Soil boring - shallow refusal - AEI  
 Soil boring - Lowney 2004  
**ND <50** Not detected at indicated laboratory detection limit in micrograms per liter  
 400 - TPH-mo RBSL for commercial/industrial sites

 UST Confirmed with Radar and EM  
 UST in vault - poor Radar image area  
 Lowney UST Location - radar no evidence

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, SUITE 100, WALNUT CREEKI, CA  
**TPH-g Concentrations in Groundwater**  
 1310 14th STREET  
 OAKLAND, CALIFORNIA

**FIGURE 5**  
 Project No. 115184

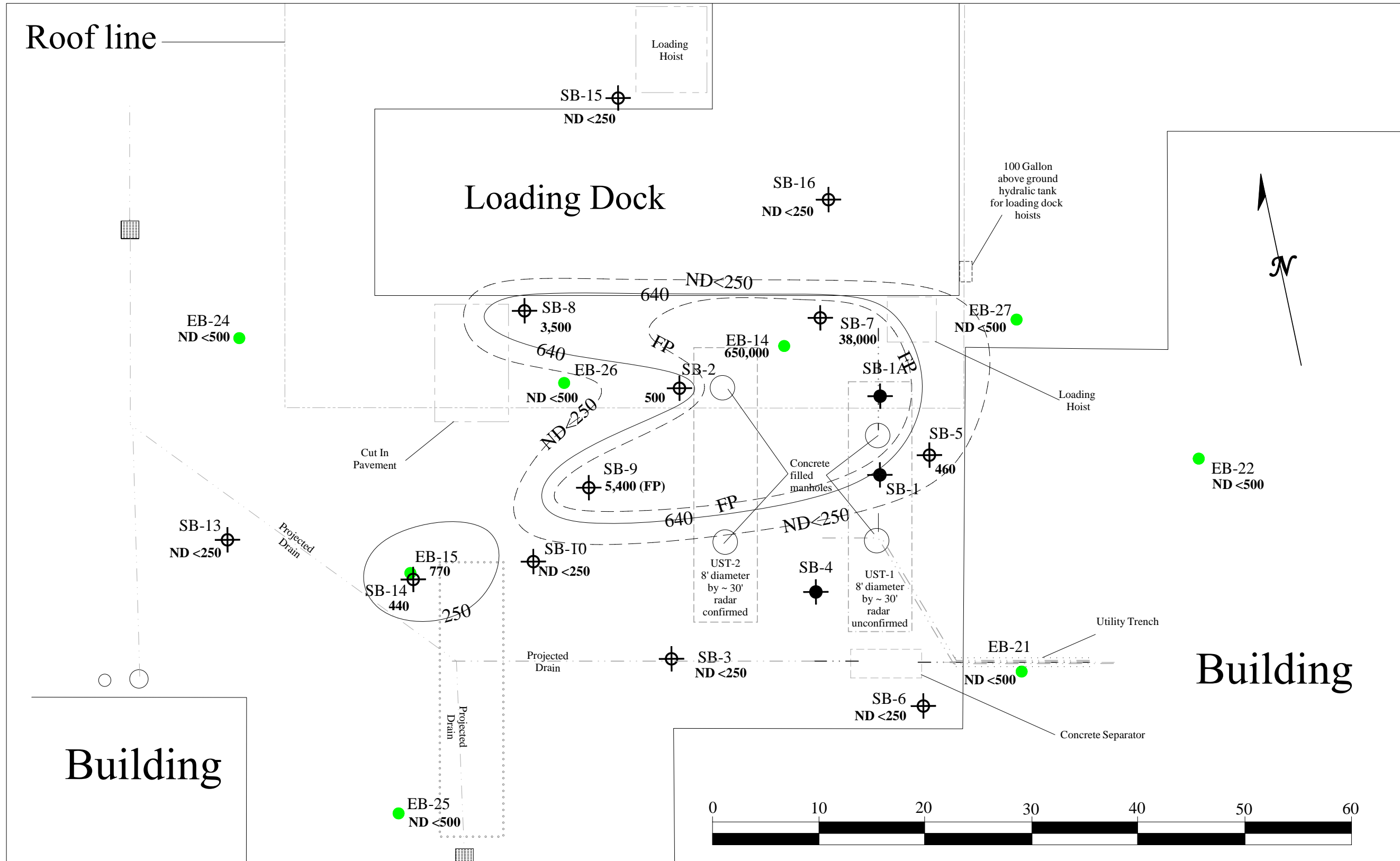


	Soil boring - AEI		UST Confirmed with Radar and EM
	Soil boring - shallow refusal - AEI		UST in vault - poor Radar image area
	Soil boring - Lowney 2004		Lowney UST Location - radar no evidence
ND <50	Not detected at indicated laboratory detection limit in micrograms per liter		
640	TPH-mo RBSL for commercial/industrial sites		

**AEI CONSULTANTS**  
2500 CAMINO DIABLO, SUITE 100, WALNUT CREEKI, CA

**TPH-d Concentrations in Groundwater**

1310 14th STREET OAKLAND, CALIFORNIA	FIGURE 6 Project No. 115184
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<p>⊕ Soil boring - AEI</p> <p>⊖ Soil boring - shallow refusal - AEI</p> <p>● Soil boring - Lowney 2004</p> <p>ND &lt;250 Not detected at indicated laboratory detection limit in micrograms per liter</p> <p>TPH-mo RBSL for commecrial/industrial sites - 640 ug/L</p>	<p>○ UST Confirmed with Radar and EM</p> <p>○ UST in vault - poor Radar image area</p> <p>○ Lowney UST Location - radar no evidence</p>
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<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, SUITE 100, WALNUT CREEKI, CA	
<b>TPH-mo Concentrations in Groundwater</b>	
1310 14th STREET OAKLAND, CALIFORNIA	<b>FIGURE 7</b> Project No. 115184

## **TABLES**



**Table 1: Lowney Soil Analytical Data (2004)**  
**Hall Equities, 1310 14th Street (1310 16th Street) Oakland, CA**

Sample ID	Sampling Date	TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
		mg/kg <i>(EPA method 8015C)</i>	mg/kg <i>(EPA method 8015C)</i>	mg/kg <i>(EPA method 8015C)</i>	mg/kg <i>(EPA method 8021B)</i>	mg/kg <i>(EPA method 8021B)</i>	mg/kg <i>(EPA method 8021B)</i>	mg/kg <i>(EPA method 8021B)</i>	mg/kg <i>(EPA method 8021B)</i>
EB-14	02/10/04	2	<b>3,700</b>	<b>21,000</b>	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
EB-15	02/10/04	<b>610</b>	230	300	ND<0.005	ND<0.005	ND<0.005	0.56	ND<0.005
EB-24	02/17/04	ND<1.0	ND<1.0	ND<50	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
EB-25	02/17/04	ND<1.0	ND<1.0	ND<50	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
EB-26	02/17/04	ND<1.0	ND<1.0	ND<50	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
EB-27	02/17/04	ND<1.0	ND<1.0	ND<50	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
RWQCB RBSL		400	500	1000	5.6	0.38	9.3	1.3	1.5

for commercial/industrial sites, soil less than or equal to 3 meters, groundwater not a potential drinking water source.

values in bold exceed soil RBSL

TPH-g = Total petroleum hydrocarbons as gasoline

TPH-d = Total petroleum hydrocarbons as diesel

TPH-mo = Total petroleum hydrocarbons as motor oil

MTBE = methyl tertiary butyl ether

mg/kg = milligrams per kilogram

RBSL - Risk based screening level

**Table 2: Lowney Groundwater Analytical Data (2004)  
Hall Equities, 1310 14th Street (1310 16th Street) Oakland, CA**

Sample ID	Sampling Date	TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
		µg/L <i>(EPA method 8015C)</i>	µg/L <i>(EPA method 8015C)</i>	µg/L <i>(EPA method 8015C)</i>	µg/L <i>(EPA method 8021B)</i>	µg/L <i>(EPA method 8021B)</i>	µg/L <i>(EPA method 8021B)</i>	µg/L <i>(EPA method 8021B)</i>	µg/L <i>(EPA method 8021B)</i>
EB-14	02/10/04	<b>670</b>	<b>120,000</b>	<b>650,000</b>	ND<0.5	0.74	3.7	1.6	5.8
EB-15	02/10/04	<b>85,000</b>	<b>1,600</b>	<b>770</b>	ND<0.5	<b>350</b>	ND <100	<b>450</b>	ND <200
EB-21	02/12/04	ND<50	ND<50	ND<500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0
EB-22	02/12/04	ND<50	ND<50	ND<500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
EB-24	02/17/04	51	ND<50	ND<500	ND<5.0	0.70	ND<0.5	ND<0.5	ND<0.5
EB-25	02/17/04	ND<50	63	ND<500	ND<5.0	0.70	ND<0.5	ND<0.5	ND<0.5
EB-26	02/17/04	ND<50	77	ND<500	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
EB-27	02/17/04	ND<50	ND<50	ND<500	ND<0.5	ND<0.5	ND<0.5	0.54	ND<0.5
RWQCB RBSL		500	640	640	1800	46	130	290	13

for commercial/industrial sites, groundwater not a potential drinking water source.  
values in bold exceed soil RBSL

- 1 = lighter than water immiscible sheen/product is present
- TPH-g = Total petroleum hydrocarbons as gasoline
- TPH-d = Total petroleum hydrocarbons as diesel
- TPH-mo = Total petroleum hydrocarbons as motor oil
- MTBE = methyl tertiary butyl ether
- µg/L = micrograms per liter (ppb)

**Table 5: Soil Analytical Data**  
**Hall Equities, 1310 14th Street (1310 16th Street) Oakland, CA**

Sample ID	Sampling Date	TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg
		<i>(EPA method 8015C)</i>			<i>(EPA method 8021B)</i>				
SB-1 & SB-1a	09/12/05	Shallow refusal, no soil samples			----	----	----	----	----
SB2-10	09/12/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB3-10	09/12/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-4 & SB-4a	09/12/05	Shallow refusal, no soil samples			----	----	----	----	----
SB5-10	09/12/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB6-10	09/12/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 7-10	09/29/05	ND<1.0	21	130	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 8-10	09/29/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 9-10	09/29/05	7.3	34	40	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 10-10	09/29/05	1.5	ND<1.0	ND<5.0	ND<0.05	0.018	ND<0.005	0.11	0.016
SB-11 - SB-12	Not drilled								
SB13-10	11/18/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 14	No samples held for analysis								
SB15-10	11/18/05	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB 16	Unstable gravel at surface - no soil samples								
RWQCB RBSL		400	500	1000	5.6	0.38	9.3	1.3	1.5

for commercial/industrial sites, soil less than or equal to 3 meters, groundwater not a potential drinking water source.

values in bold exceed soil RBSL

TPH-g = Total petroleum hydrocarbons as gasoline

TPH-d = Total petroleum hydrocarbons as diesel

TPH-mo = Total petroleum hydrocarbons as motor oil

MTBE = methyl tertiary butyl ether

mg/kg = milligrams per kilogram

RBSL - Risk based screening level

**Table 4: Groundwater Analytical Data**  
**Hall Equities, 1310 14th Street (1310 16th Street) Oakland, CA**

Sample ID	Sampling Date	TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		<i>(EPA method 8015C)</i>			<i>(EPA method 8021B)</i>				
SB-1 & SB-1a	09/12/05	Shallow refusal, no water samples			----	----	----	----	----
SB-2-W19	09/12/05	65	<b>1,400</b>	500	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-3-W19	09/12/05	ND<50	54	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-4 & SB-4a	09/12/05	Shallow refusal, no water samples			----	----	----	----	----
SB-5-W19	09/12/05	ND<50	240	460	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-6-W19	09/12/05	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB 7- W	09/29/05	ND<50	<b>9,900<sup>1</sup></b>	<b>38,000</b>	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-8 W	09/29/05	ND<50	640	350	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-9 W	09/29/05	340	<b>5,000<sup>1</sup></b>	<b>5,400</b>	ND<5.0	1.0	ND<0.5	ND<0.5	ND<0.5
SB-10 W	09/29/05	<b>1400</b>	440	ND<250	ND<5.0	23	0.87	130	<b>18</b>
SB-11 - SB-12	Not drilled								
SB13-W-20	11/18/05	ND<50	120	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB14-W-20	11/18/05	<b>1,700</b>	<b>650</b>	440	ND<5.0	37	1.8	67	7.8
SB15-W-20	11/18/05	ND<50	72	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB16-W-20	11/18/05	ND<50	92	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
RWQCB RBSL		500	640	640	1800	46	130	290	13

for commercial/industrial sites, groundwater not a potential drinking water source.

values in bold exceed soil RBSL

1 = lighter than water immiscible sheen/product is present

TPH-g = Total petroleum hydrocarbons as gasoline

TPH-d = Total petroleum hydrocarbons as diesel

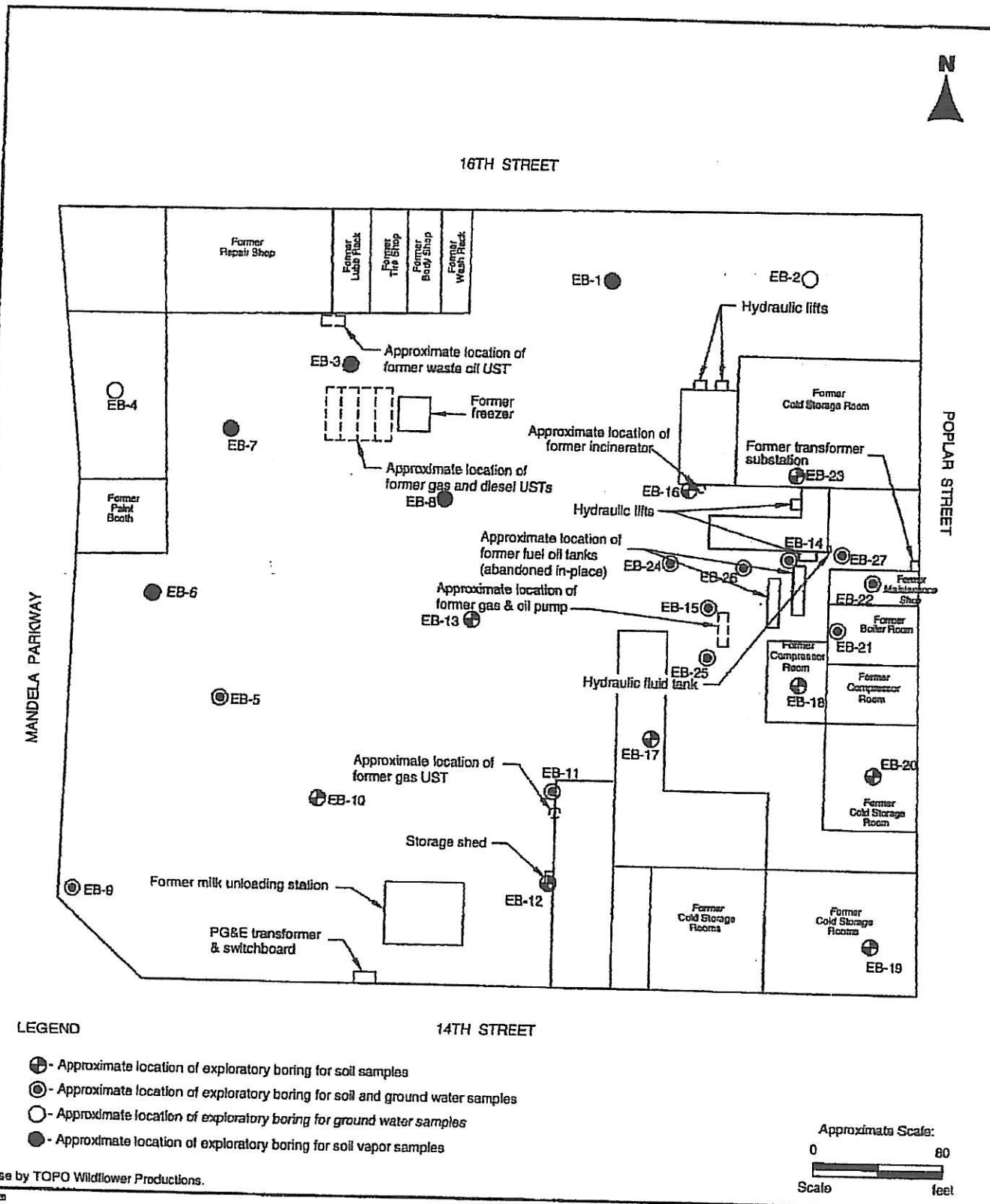
TPH-mo = Total petroleum hydrocarbons as motor oil

MTBE = methyl tertiary butyl ether

µg/L = micrograms per liter (ppb)

## **APPENDIX B**

### **Miscellaneous Maps**



**SITE PLAN**

1310 FOURTEENTH STREET  
Oakland, California

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

**FIGURE 2**  
1950-3E

1911-1912  
Sanborn  
Fire Ins Map

46

58

18TH ST.

GIRLS PLAYGROUNDS

DE FREMERY PARK  
BOYS PLAYGROUNDS

600

599

ASPHALT  
TENNIS COURT



57

16TH ST.

59

KIRKHAM

POPULAR

UNION

MAGNOLIA

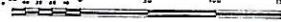
585

586

14TH ST.

72

Scale of Feet.

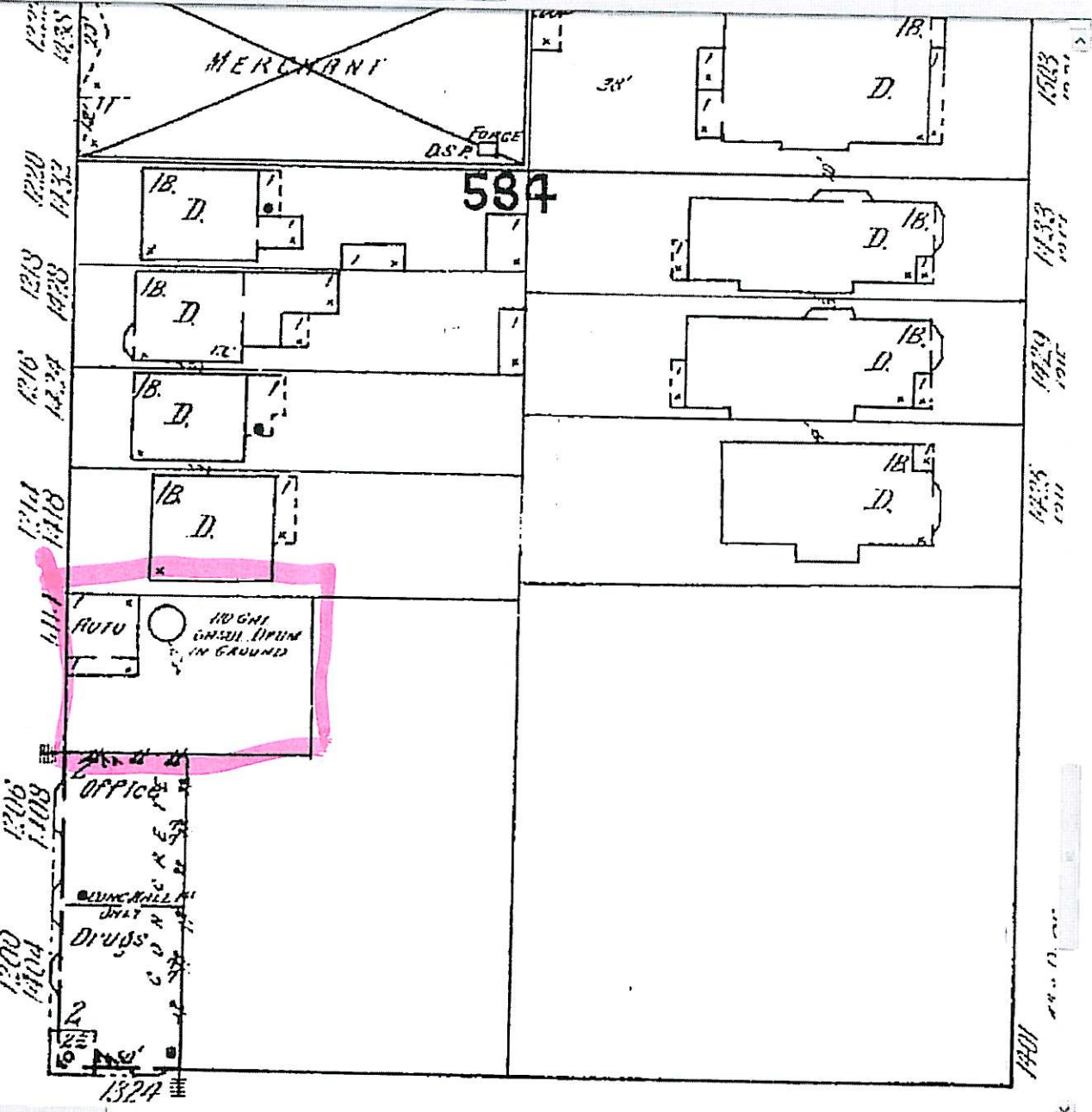


15TH ST.

MERCHANT

584

1911-1912  
Sanborn  
Fire Ins Map



8.50 x 11.00 in

Done



## **APPENDIX C**

### **Laboratory Analyses With Chain of Custody Documentation**



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Reported: 11/20/07
	Client P.O.:	Date Completed: 11/20/07

**WorkOrder: 0711340**

November 20, 2007

Dear Kirby:

Enclosed are:

- 1). the results of **8** analyzed samples from your **#275493; Carnation 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0711340



McCAMPBELL ANALYTICAL, INC.
1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD
TURN AROUND TIME
RUSH 24 HR 48 HR 72 HR 5 DAY
GeoTracker EDF PDF Excel Write On (DW)
Check if sample is effluent and "J" flag is required

Report To: Kirby Fernando Bill To: AEI Consultants
Company: AEI Consultants
2500 Camino Diablo #200, Walnut Creek 94597
E-Mail: kfernando@aeiconsultants.com
Tele: (925) 944-2899 x123 Fax: (925) 944-2895
Project #: 275493 Project Name: Carnation
Project Location: 1310 14th St, Oakland
Sampler Signature: [Signature]

Table with columns: Analysis Request, Other, Comments. Rows include: BTEX & TPH as Gas, TPH as Diesel, Total Petroleum Oil & Grease, Total Petroleum Hydrocarbons, EPA 502.2, EPA 505/608, EPA 608/8082, EPA 507/8141, EPA 515/8151, EPA 524.2, EPA 525.2, EPA 8270 SIM, CAM 17 Metals, LUFT 5 Metals, Lead.

Table with columns: SAMPLE ID, LOCATION/Field Point Name, SAMPLING (Date, Time), # Containers, Type Containers, MATRIX (Water, Soil, Air, Sludge, Other, ICE, HCL, HNO3, Other), METHOD PRESERVED.

Relinquished By: [Signature] Date: 11-13 Time: 6:00 Received By: Enviro-Tech SR.
Relinquished By: Enviro-Tech SR. Date: 11/13 Time: 6:25 Received By: Michael Hernandez.
Relinquished By: [Signature] Date: 11/13 Time: 6:45 Received By: [Signature]

ICE/4.6 COMMENTS:
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB
VOAS O&G METALS OTHER
PRESERVATION pH<2

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711340

ClientID: AEL

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

Report to:		Bill to:	Requested TAT: <b>5 days</b>
Kirby Fernando	Email: kfernando@aeiconsultants.com	Denise Mockel	
AEI Consultants	TEL: (925) 283-6000 FAX: (925) 283-6121	AEI Consultants	Date Received: 11/13/2007
2500 Camino Diablo, Ste. #200	ProjectNo: #275493; Carnation	2500 Camino Diablo, Ste. #200	Date Printed: 11/13/2007
Walnut Creek, CA 94597	PO:	Walnut Creek, CA 94597	
		dmockel@aeiconsultants.com	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0711340-001	BO-2	Soil	11/13/07 12:45:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-002	BO-3	Soil	11/13/07 12:50:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-003	STK 1234	Soil	11/13/07 1:00:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-004	STK 5678	Soil	11/13/07 1:05:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-005	STK B5678	Soil	11/13/07 2:05:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-006	ESW	Soil	11/13/07 2:20:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-007	WSW	Soil	11/13/07 2:25:00	<input type="checkbox"/>		A	A		A			A	A			A
0711340-008	BO-W	Water	11/13/07 2:40:00	<input type="checkbox"/>	E			C		B	F			A	F	

**Test Legend:**

1	5520B_SG_W	2	5520E_SG_S	3	8082A_PCB_S	4	8082A_PCB_W	5	8260B_S
6	8260B_W	7	CAM17MS_DISS	8	CAM17MS_S	9	G-MBTEX_S	10	G-MBTEX_W
11	PRDISSOLVED	12	TPH(D)_S						

Prepared by: Ana Venegas

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 0711340**

**ClientID: AEL**

EDF     Excel     Fax     Email     HardCopy     ThirdParty

<b>Report to:</b> Kirby Fernando AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	<b>Email:</b> kfernando@aeiconsultants.com <b>TEL:</b> (925) 283-6000 <b>FAX:</b> (925) 283-6121 <b>ProjectNo:</b> #275493; Carnation <b>PO:</b>	<b>Bill to:</b> Denise Mockel AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 dmockel@aeiconsultants.com	<b>Requested TAT: 5 days</b>  <b>Date Received: 11/13/2007</b> <b>Date Printed: 11/13/2007</b>
---	---	--	---

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					13	14	15	16	17	18	19	20	21	22	23	24	
0711340-001	BO-2	Soil	11/13/07 12:45:00	<input type="checkbox"/>													
0711340-002	BO-3	Soil	11/13/07 12:50:00	<input type="checkbox"/>													
0711340-003	STK 1234	Soil	11/13/07 1:00:00	<input type="checkbox"/>													
0711340-004	STK 5678	Soil	11/13/07 1:05:00	<input type="checkbox"/>													
0711340-005	STK B5678	Soil	11/13/07 2:05:00	<input type="checkbox"/>													
0711340-006	ESW	Soil	11/13/07 2:20:00	<input type="checkbox"/>													
0711340-007	WSW	Soil	11/13/07 2:25:00	<input type="checkbox"/>													
0711340-008	BO-W	Water	11/13/07 2:40:00	<input type="checkbox"/>	D												

**Test Legend:**

13	TPH(D)_W	14		15		16		17	
18		19		20		21		22	
23		24							

**Prepared by: Ana Venegas**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/13/07 7:42:32 PM**

Project Name: **#275493; Carnation**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0711340** Matrix Soil/Water

Carrier: Michael Hernandez (MAI Courier)

#### Chain of Custody (COC) Information

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes  No  NA
- Shipping container/cooler in good condition? Yes  No
- Samples in proper containers/bottles? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 4.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted:

Date contacted:

Contacted by:

Comments:



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/16/07-11/19/07

### Petroleum Oil & Grease with Silica Gel Clean-Up\*

Analytical methods: SM5520B/F/SM5520E/F

Work Order: 0711340

Lab ID	Client ID	Matrix	POG	DF	% SS
0711340-001A	BO-2	S	ND	1	N/A
0711340-002A	BO-3	S	ND	1	N/A
0711340-003A	STK 1234	S	ND	1	N/A
0711340-004A	STK 5678	S	14,000	1	N/A
0711340-005A	STK B5678	S	ND	1	N/A
0711340-006A	ESW	S	ND	1	N/A
0711340-007A	WSW	S	ND	1	N/A
0711340-008E	BO-W	W	7.9,i	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	5.0	mg/L
	S	50	mg/Kg

\* water samples and all TCLP & SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

DF = dilution factor (may be raised to dilute target analyte or matrix interference).

# surrogate diluted out of range or not applicable to this sample.

g) sample extract repeatedly cleaned up with silica gel until constant IR result achieved; h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) results are reported on a dry weight basis.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07-11/16/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C/SW3550C

Analytical Method: SW8082A

Work Order: 0711340

Lab ID	0711340-001A	0711340-002A	0711340-003A	0711340-004A	Reporting Limit for DF =1	
Client ID	BO-2	BO-3	STK 1234	STK 5678		
Matrix	S	S	S	S		
DF	1	1	1	50		

Compound	Concentration				mg/kg	µg/L
Aroclor1016	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1221	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1232	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1242	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1248	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1254	ND	ND	ND	ND<1.2	0.025	0.5
Aroclor1260	ND	ND	ND	ND<1.2	0.025	0.5
PCBs, total	ND	ND	ND	ND<1.2	0.025	0.5

### Surrogate Recoveries (%)

%SS:	95	121	117	115	
------	----	-----	-----	-----	--

Comments			o	j,o	
----------	--	--	---	-----	--

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07-11/16/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C/SW3550C

Analytical Method: SW8082A

Work Order: 0711340

Lab ID	0711340-005A	0711340-006A	0711340-007A	0711340-008C	Reporting Limit for DF =1	
Client ID	STK B5678	ESW	WSW	BO-W		
Matrix	S	S	S	W		
DF	50	1	1	1		

Compound	Concentration				mg/kg	µg/L
Aroclor1016	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1221	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1232	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1242	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1248	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1254	ND<1.2	ND	ND	ND	0.025	0.5
Aroclor1260	ND<1.2	ND	ND	ND	0.025	0.5
PCBs, total	ND<1.2	ND	ND	ND	0.025	0.5

### Surrogate Recoveries (%)

%SS:	84	105	113	116	
------	----	-----	-----	-----	--

Comments	j			i	
----------	---	--	--	---	--

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-001A
Client ID	BO-2
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	100	%SS2:	98
%SS3:	113		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/15/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-002A
Client ID	BO-3
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<3.3	67	0.05	Acrolein (Propenal)	ND<3.3	67	0.05
Acrylonitrile	ND<1.3	67	0.02	tert-Amyl methyl ether (TAME)	ND<0.33	67	0.005
Benzene	ND<0.33	67	0.005	Bromobenzene	ND<0.33	67	0.005
Bromochloromethane	ND<0.33	67	0.005	Bromodichloromethane	ND<0.33	67	0.005
Bromoforn	ND<0.33	67	0.005	Bromomethane	ND<0.33	67	0.005
2-Butanone (MEK)	ND<1.3	67	0.02	t-Butyl alcohol (TBA)	ND<3.3	67	0.05
n-Butyl benzene	4.7	67	0.005	sec-Butyl benzene	3.4	67	0.005
tert-Butyl benzene	ND<0.33	67	0.005	Carbon Disulfide	ND<0.33	67	0.005
Carbon Tetrachloride	ND<0.33	67	0.005	Chlorobenzene	ND<0.33	67	0.005
Chloroethane	ND<0.33	67	0.005	2-Chloroethyl Vinyl Ether	ND<0.67	67	0.01
Chloroform	ND<0.33	67	0.005	Chloromethane	ND<0.33	67	0.005
2-Chlorotoluene	ND<0.33	67	0.005	4-Chlorotoluene	ND<0.33	67	0.005
Dibromochloromethane	ND<0.33	67	0.005	1,2-Dibromo-3-chloropropane	ND<0.33	67	0.005
1,2-Dibromoethane (EDB)	ND<0.33	67	0.005	Dibromomethane	ND<0.33	67	0.005
1,2-Dichlorobenzene	ND<0.33	67	0.005	1,3-Dichlorobenzene	ND<0.33	67	0.005
1,4-Dichlorobenzene	ND<0.33	67	0.005	Dichlorodifluoromethane	ND<0.33	67	0.005
1,1-Dichloroethane	ND<0.33	67	0.005	1,2-Dichloroethane (1,2-DCA)	ND<0.33	67	0.005
1,1-Dichloroethene	ND<0.33	67	0.005	cis-1,2-Dichloroethene	ND<0.33	67	0.005
trans-1,2-Dichloroethene	ND<0.33	67	0.005	1,2-Dichloropropane	ND<0.33	67	0.005
1,3-Dichloropropane	ND<0.33	67	0.005	2,2-Dichloropropane	ND<0.33	67	0.005
1,1-Dichloropropene	ND<0.33	67	0.005	cis-1,3-Dichloropropene	ND<0.33	67	0.005
trans-1,3-Dichloropropene	ND<0.33	67	0.005	Diisopropyl ether (DIPE)	ND<0.33	67	0.005
Ethylbenzene	1.1	67	0.005	Ethyl tert-butyl ether (ETBE)	ND<0.33	67	0.005
Freon 113	ND<6.7	67	0.1	Hexachlorobutadiene	ND<0.33	67	0.005
Hexachloroethane	ND<0.33	67	0.005	2-Hexanone	ND<0.33	67	0.005
Isopropylbenzene	5.7	67	0.005	4-Isopropyl toluene	ND<0.33	67	0.005
Methyl-t-butyl ether (MTBE)	ND<0.33	67	0.005	Methylene chloride	ND<0.33	67	0.005
4-Methyl-2-pentanone (MIBK)	ND<0.33	67	0.005	Naphthalene	8.0	67	0.005
Nitrobenzene	ND<6.7	67	0.1	n-Propyl benzene	7.1	67	0.005
Styrene	ND<0.33	67	0.005	1,1,1,2-Tetrachloroethane	ND<0.33	67	0.005
1,1,2,2-Tetrachloroethane	ND<0.33	67	0.005	Tetrachloroethene	ND<0.33	67	0.005
Toluene	ND<0.33	67	0.005	1,2,3-Trichlorobenzene	ND<0.33	67	0.005
1,2,4-Trichlorobenzene	ND<0.33	67	0.005	1,1,1-Trichloroethane	ND<0.33	67	0.005
1,1,2-Trichloroethane	ND<0.33	67	0.005	Trichloroethene	ND<0.33	67	0.005
Trichlorofluoromethane	ND<0.33	67	0.005	1,2,3-Trichloropropane	ND<0.33	67	0.005
1,2,4-Trimethylbenzene	7.0	67	0.005	1,3,5-Trimethylbenzene	ND<0.33	67	0.005
Vinyl Chloride	ND<0.33	67	0.005	Xylenes	ND<0.33	67	0.005

#### Surrogate Recoveries (%)

%SS1:	90	%SS2:	106
%SS3:	112		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-003A
Client ID	STK 1234
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	100	%SS2:	100
%SS3:	99		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/15/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-004A
Client ID	STK 5678
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<3.3	67	0.05	Acrolein (Propenal)	ND<3.3	67	0.05
Acrylonitrile	ND<1.3	67	0.02	tert-Amyl methyl ether (TAME)	ND<0.33	67	0.005
Benzene	ND<0.33	67	0.005	Bromobenzene	ND<0.33	67	0.005
Bromochloromethane	ND<0.33	67	0.005	Bromodichloromethane	ND<0.33	67	0.005
Bromoforn	ND<0.33	67	0.005	Bromomethane	ND<0.33	67	0.005
2-Butanone (MEK)	ND<1.3	67	0.02	t-Butyl alcohol (TBA)	ND<3.3	67	0.05
n-Butyl benzene	ND<0.33	67	0.005	sec-Butyl benzene	ND<0.33	67	0.005
tert-Butyl benzene	ND<0.33	67	0.005	Carbon Disulfide	ND<0.33	67	0.005
Carbon Tetrachloride	ND<0.33	67	0.005	Chlorobenzene	ND<0.33	67	0.005
Chloroethane	ND<0.33	67	0.005	2-Chloroethyl Vinyl Ether	ND<0.67	67	0.01
Chloroform	ND<0.33	67	0.005	Chloromethane	ND<0.33	67	0.005
2-Chlorotoluene	ND<0.33	67	0.005	4-Chlorotoluene	ND<0.33	67	0.005
Dibromochloromethane	ND<0.33	67	0.005	1,2-Dibromo-3-chloropropane	ND<0.33	67	0.005
1,2-Dibromoethane (EDB)	ND<0.33	67	0.005	Dibromomethane	ND<0.33	67	0.005
1,2-Dichlorobenzene	ND<0.33	67	0.005	1,3-Dichlorobenzene	ND<0.33	67	0.005
1,4-Dichlorobenzene	ND<0.33	67	0.005	Dichlorodifluoromethane	ND<0.33	67	0.005
1,1-Dichloroethane	ND<0.33	67	0.005	1,2-Dichloroethane (1,2-DCA)	ND<0.33	67	0.005
1,1-Dichloroethene	ND<0.33	67	0.005	cis-1,2-Dichloroethene	ND<0.33	67	0.005
trans-1,2-Dichloroethene	ND<0.33	67	0.005	1,2-Dichloropropane	ND<0.33	67	0.005
1,3-Dichloropropane	ND<0.33	67	0.005	2,2-Dichloropropane	ND<0.33	67	0.005
1,1-Dichloropropene	ND<0.33	67	0.005	cis-1,3-Dichloropropene	ND<0.33	67	0.005
trans-1,3-Dichloropropene	ND<0.33	67	0.005	Diisopropyl ether (DIPE)	ND<0.33	67	0.005
Ethylbenzene	ND<0.33	67	0.005	Ethyl tert-butyl ether (ETBE)	ND<0.33	67	0.005
Freon 113	ND<6.7	67	0.1	Hexachlorobutadiene	ND<0.33	67	0.005
Hexachloroethane	ND<0.33	67	0.005	2-Hexanone	ND<0.33	67	0.005
Isopropylbenzene	ND<0.33	67	0.005	4-Isopropyl toluene	ND<0.33	67	0.005
Methyl-t-butyl ether (MTBE)	ND<0.33	67	0.005	Methylene chloride	ND<0.33	67	0.005
4-Methyl-2-pentanone (MIBK)	ND<0.33	67	0.005	Naphthalene	10	67	0.005
Nitrobenzene	ND<6.7	67	0.1	n-Propyl benzene	ND<0.33	67	0.005
Styrene	ND<0.33	67	0.005	1,1,1,2-Tetrachloroethane	ND<0.33	67	0.005
1,1,2,2-Tetrachloroethane	ND<0.33	67	0.005	Tetrachloroethene	ND<0.33	67	0.005
Toluene	ND<0.33	67	0.005	1,2,3-Trichlorobenzene	ND<0.33	67	0.005
1,2,4-Trichlorobenzene	ND<0.33	67	0.005	1,1,1-Trichloroethane	ND<0.33	67	0.005
1,1,2-Trichloroethane	ND<0.33	67	0.005	Trichloroethene	ND<0.33	67	0.005
Trichlorofluoromethane	ND<0.33	67	0.005	1,2,3-Trichloropropane	ND<0.33	67	0.005
1,2,4-Trimethylbenzene	2.5	67	0.005	1,3,5-Trimethylbenzene	0.60	67	0.005
Vinyl Chloride	ND<0.33	67	0.005	Xylenes	1.7	67	0.005

#### Surrogate Recoveries (%)

%SS1:	102	%SS2:	96
%SS3:	92		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/15/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-005A
Client ID	STK B5678
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1.0	20	0.05	Acrolein (Propenal)	ND<1.0	20	0.05
Acrylonitrile	ND<0.40	20	0.02	tert-Amyl methyl ether (TAME)	ND<0.10	20	0.005
Benzene	ND<0.10	20	0.005	Bromobenzene	ND<0.10	20	0.005
Bromochloromethane	ND<0.10	20	0.005	Bromodichloromethane	ND<0.10	20	0.005
Bromoform	ND<0.10	20	0.005	Bromomethane	ND<0.10	20	0.005
2-Butanone (MEK)	ND<0.40	20	0.02	t-Butyl alcohol (TBA)	ND<1.0	20	0.05
n-Butyl benzene	1.0	20	0.005	sec-Butyl benzene	0.87	20	0.005
tert-Butyl benzene	ND<0.10	20	0.005	Carbon Disulfide	ND<0.10	20	0.005
Carbon Tetrachloride	ND<0.10	20	0.005	Chlorobenzene	ND<0.10	20	0.005
Chloroethane	ND<0.10	20	0.005	2-Chloroethyl Vinyl Ether	ND<0.20	20	0.01
Chloroform	ND<0.10	20	0.005	Chloromethane	ND<0.10	20	0.005
2-Chlorotoluene	ND<0.10	20	0.005	4-Chlorotoluene	ND<0.10	20	0.005
Dibromochloromethane	ND<0.10	20	0.005	1,2-Dibromo-3-chloropropane	ND<0.10	20	0.005
1,2-Dibromoethane (EDB)	ND<0.10	20	0.005	Dibromomethane	ND<0.10	20	0.005
1,2-Dichlorobenzene	ND<0.10	20	0.005	1,3-Dichlorobenzene	ND<0.10	20	0.005
1,4-Dichlorobenzene	ND<0.10	20	0.005	Dichlorodifluoromethane	ND<0.10	20	0.005
1,1-Dichloroethane	ND<0.10	20	0.005	1,2-Dichloroethane (1,2-DCA)	ND<0.10	20	0.005
1,1-Dichloroethene	ND<0.10	20	0.005	cis-1,2-Dichloroethene	ND<0.10	20	0.005
trans-1,2-Dichloroethene	ND<0.10	20	0.005	1,2-Dichloropropane	ND<0.10	20	0.005
1,3-Dichloropropane	ND<0.10	20	0.005	2,2-Dichloropropane	ND<0.10	20	0.005
1,1-Dichloropropene	ND<0.10	20	0.005	cis-1,3-Dichloropropene	ND<0.10	20	0.005
trans-1,3-Dichloropropene	ND<0.10	20	0.005	Diisopropyl ether (DIPE)	ND<0.10	20	0.005
Ethylbenzene	ND<0.10	20	0.005	Ethyl tert-butyl ether (ETBE)	ND<0.10	20	0.005
Freon 113	ND<2.0	20	0.1	Hexachlorobutadiene	ND<0.10	20	0.005
Hexachloroethane	ND<0.10	20	0.005	2-Hexanone	ND<0.10	20	0.005
Isopropylbenzene	1.5	20	0.005	4-Isopropyl toluene	0.34	20	0.005
Methyl-t-butyl ether (MTBE)	ND<0.10	20	0.005	Methylene chloride	ND<0.10	20	0.005
4-Methyl-2-pentanone (MIBK)	ND<0.10	20	0.005	Naphthalene	3.0	20	0.005
Nitrobenzene	ND<2.0	20	0.1	n-Propyl benzene	1.6	20	0.005
Styrene	ND<0.10	20	0.005	1,1,1,2-Tetrachloroethane	ND<0.10	20	0.005
1,1,2,2-Tetrachloroethane	ND<0.10	20	0.005	Tetrachloroethene	ND<0.10	20	0.005
Toluene	ND<0.10	20	0.005	1,2,3-Trichlorobenzene	ND<0.10	20	0.005
1,2,4-Trichlorobenzene	ND<0.10	20	0.005	1,1,1-Trichloroethane	ND<0.10	20	0.005
1,1,2-Trichloroethane	ND<0.10	20	0.005	Trichloroethene	ND<0.10	20	0.005
Trichlorofluoromethane	ND<0.10	20	0.005	1,2,3-Trichloropropane	ND<0.10	20	0.005
1,2,4-Trimethylbenzene	ND<0.10	20	0.005	1,3,5-Trimethylbenzene	ND<0.10	20	0.005
Vinyl Chloride	ND<0.10	20	0.005	Xylenes	ND<0.10	20	0.005

### Surrogate Recoveries (%)

%SS1:	101	%SS2:	87
%SS3:	99		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-006A
Client ID	ESW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	98	%SS2:	98
%SS3:	110		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-007A
Client ID	WSW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	99	%SS2:	97
%SS3:	112		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/15/07
	Client P.O.:	Date Analyzed 11/15/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711340

Lab ID	0711340-008B
Client ID	BO-W
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	13	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	0.58	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	3.0	1.0	0.5	1,3,5-Trimethylbenzene	0.82	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	3.1	1.0	0.5

#### Surrogate Recoveries (%)

%SS1:	110	%SS2:	92
%SS3:	97		

Comments: i

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### CAM / CCR 17 Metals\*

Lab ID	0711340-008F				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	BO-W					
Matrix	W					
Extraction Type	DISS.					
					S	W
					mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0711340

Dilution Factor	1				1	1
Antimony	ND				NA	0.5
Arsenic	ND				NA	0.5
Barium	130				NA	5.0
Beryllium	ND				NA	0.5
Cadmium	ND				NA	0.25
Chromium	ND				NA	0.5
Cobalt	4.2				NA	0.5
Copper	0.78				NA	0.5
Lead	ND				NA	0.5
Mercury	ND				NA	0.012
Molybdenum	ND				NA	0.5
Nickel	22				NA	0.5
Selenium	ND				NA	0.5
Silver	ND				NA	0.19
Thallium	ND				NA	0.5
Vanadium	1.7				NA	0.5
Zinc	ND				NA	5.0
%SS:	N/A					

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### CAM / CCR 17 Metals\*

Lab ID	0711340-001A	0711340-002A	0711340-003A	0711340-004A	Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	BO-2	BO-3	STK 1234	STK 5678		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/Kg	mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711340

Dilution Factor	1	1	1	1	1	1
Antimony	ND	ND	ND	ND	0.5	NA
Arsenic	3.8	2.8	1.8	2.5	0.5	NA
Barium	81	75	48	68	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	ND	0.25	NA
Chromium	43	42	32	43	0.5	NA
Cobalt	6.4	6.2	3.8	5.3	0.5	NA
Copper	11	9.2	7.1	9.6	0.5	NA
Lead	3.6	3.3	10	34	0.5	NA
Mercury	ND	ND	ND	ND	0.05	NA
Molybdenum	ND	ND	ND	ND	0.5	NA
Nickel	46	40	25	34	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	38	33	21	30	0.5	NA
Zinc	29	28	27	57	5.0	NA
%SS:	97	98	75	92		

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



# McC Campbell Analytical, Inc.

"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07

### CAM / CCR 17 Metals\*

Lab ID	0711340-005A	0711340-006A	0711340-007A		Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	STK B5678	ESW	WSW			
Matrix	S	S	S		S	W
Extraction Type	TOTAL	TOTAL	TOTAL		mg/Kg	mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711340

Dilution Factor	1	1	1		1	1
Antimony	ND	ND	ND		0.5	NA
Arsenic	2.5	2.9	2.8		0.5	NA
Barium	62	81	72		5.0	NA
Beryllium	ND	ND	ND		0.5	NA
Cadmium	ND	ND	ND		0.25	NA
Chromium	46	47	51		0.5	NA
Cobalt	6.6	5.2	6.2		0.5	NA
Copper	8.1	10	8.6		0.5	NA
Lead	3.3	3.5	3.2		0.5	NA
Mercury	ND	ND	0.052		0.05	NA
Molybdenum	ND	ND	ND		0.5	NA
Nickel	36	37	43		0.5	NA
Selenium	ND	ND	ND		0.5	NA
Silver	ND	ND	ND		0.5	NA
Thallium	ND	ND	ND		0.5	NA
Vanadium	31	35	36		0.5	NA
Zinc	55	32	29		5.0	NA
%SS:	101	95	116			

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07-11/16/07
	Client P.O.:	Date Analyzed 11/14/07-11/16/07

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0711340

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	BO-2	S	ND	ND	ND	ND	ND	ND	1	94
002A	BO-3	S	5400,g,m	ND<10	ND<1.0	1.9	8.8	15	200	113
003A	STK 1234	S	ND	ND	ND	ND	ND	ND	1	92
004A	STK 5678	S	610,g	ND<5.0	ND<0.50	0.83	1.0	5.1	100	115
005A	STK B5678	S	730,g,m	ND<5.0	ND<0.50	ND<0.50	1.0	2.8	100	74
006A	ESW	S	ND	ND	ND	ND	ND	ND	1	100
007A	WSW	S	ND	ND	ND	ND	ND	ND	1	95
008A	BO-W	W	130,g,i	ND	ND	ND	ND	2.1	1	97

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed 11/14/07-11/17/07

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

Extraction method SW3510C/SW3550C

Analytical methods SW8015C

Work Order: 0711340

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0711340-001A	BO-2	S	ND	1	108
0711340-002A	BO-3	S	1400,n	20	86
0711340-003A	STK 1234	S	19,g,b	1	108
0711340-004A	STK 5678	S	8700,a,g	100	120
0711340-005A	STK B5678	S	370,n	10	100
0711340-006A	ESW	S	ND	1	108
0711340-007A	WSW	S	ND	1	92
0711340-008D	BO-W	W	1700,a,g,i	1	111

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	1.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 11/13/07
		Date Received: 11/13/07
	Client Contact: Kirby Fernando	Date Extracted: 11/13/07
	Client P.O.:	Date Analyzed: 11/16/07

### Diesel (C10-C23) and Oil (C10+) Extractable Hydrocarbons as Diesel and Bunker Oil\*

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0711340

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	DF	% SS
0711340-008D	BO-W	W	1700,a,g,i	2100	1	111

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.



### QC SUMMARY REPORT FOR SM5520B/F

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711340

EPA Method SM5520B/F		Extraction SM5520B/F			BatchID: 31810			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	N/A	100	N/A	N/A	N/A	110	110	0	N/A	N/A	70 - 130	25
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE												

BATCH 31810 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008E	11/13/07 2:40 PM	11/13/07	11/16/07 2:56 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





### QC SUMMARY REPORT FOR SM5520E/F

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

EPA Method SM5520E/F		Extraction SM5520E/F			BatchID: 31817			Spiked Sample ID: 0711245-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	ND	1000	110	107	2.74	104	103	0.909	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31817 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/19/07 5:27 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/19/07 5:32 PM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/19/07 5:37 PM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/19/07 5:42 PM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/19/07 5:47 PM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/19/07 5:52 PM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/19/07 5:57 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

EPA Method SW8082A	Extraction SW3550C			BatchID: 31848			Spiked Sample ID: 0711266-006A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	ND	0.075	97.8	98.5	0.744	106	106	0	70 - 130	20	70 - 130	20
%SS:	105	0.050	95	92	3.11	96	111	14.3	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31848 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/14/07 4:18 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/14/07 5:14 PM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/14/07 6:09 PM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/15/07 6:33 PM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/15/07 7:29 PM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/14/07 9:51 PM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/14/07 10:46 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0711340

EPA Method SW8082A		Extraction SW3510C			BatchID: 31884			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	96.4	97.6	1.15	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	105	103	2.37	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31884 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008C	11/13/07 2:40 PM	11/13/07	11/16/07 8:42 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

EPA Method SW8260B	Extraction SW5030B			BatchID: 31864			Spiked Sample ID: 0711313-005A						
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	98.8	104	4.95	96.7	99.5	2.90	70 - 130	30	70 - 130	30	
Benzene	ND	0.050	111	117	5.84	114	114	0	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	76.1	80	4.99	75.1	78	3.72	70 - 130	30	70 - 130	30	
Chlorobenzene	ND	0.050	113	114	0.803	117	117	0	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	107	106	1.14	109	97.4	11.0	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	89.6	95.1	5.94	89.7	89.2	0.576	70 - 130	30	70 - 130	30	
1,1-Dichloroethene	ND	0.050	111	103	7.96	109	97.8	10.9	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	103	110	6.52	103	105	1.38	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	94.3	99.6	5.42	93.4	92.3	1.19	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	92.3	96.3	4.24	89.8	85.5	4.94	70 - 130	30	70 - 130	30	
Toluene	ND	0.050	97.1	97.6	0.474	101	98	3.28	70 - 130	30	70 - 130	30	
Trichloroethene	ND	0.050	93.7	96.6	2.99	96.2	91.5	5.00	70 - 130	30	70 - 130	30	
%SS1:	95	0.050	100	102	2.06	95	92	3.03	70 - 130	30	70 - 130	30	
%SS2:	98	0.050	86	86	0	87	83	3.58	70 - 130	30	70 - 130	30	
%SS3:	109	0.050	94	93	1.22	91	92	1.92	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31864 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/14/07 1:55 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/15/07 11:44 AM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/14/07 4:54 PM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/15/07 12:33 PM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/15/07 10:58 AM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/14/07 5:42 PM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/14/07 9:02 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711340

Analyte	EPA Method SW8260B			Extraction SW5030B			BatchID: 31883			Spiked Sample ID: 0711343-004B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
tert-Amyl methyl ether (TAME)	ND<250	10	110	116	5.69	98.2	100	1.85	70 - 130	30	70 - 130	30	
Benzene	ND<250	10	109	113	3.42	115	113	2.11	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND<2500	50	89.1	88.1	1.11	76.6	78.7	2.76	70 - 130	30	70 - 130	30	
Chlorobenzene	ND<250	10	121	123	1.80	118	115	1.91	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND<250	10	103	107	3.69	111	112	1.49	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND<250	10	90.3	96.1	6.27	91.1	91.8	0.759	70 - 130	30	70 - 130	30	
1,1-Dichloroethene	ND<250	10	105	115	8.82	112	97	14.6	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND<250	10	106	111	4.74	105	106	1.07	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND<250	10	94.8	100	5.73	95.3	97	1.75	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	14,000	10	NR	NR	NR	93.9	95.1	1.31	70 - 130	30	70 - 130	30	
Toluene	ND<250	10	101	103	2.44	101	100	0.721	70 - 130	30	70 - 130	30	
Trichloroethene	ND<250	10	90.5	95.4	5.25	97.5	96.2	1.29	70 - 130	30	70 - 130	30	
%SS1:	90	10	91	95	4.89	97	98	0.629	70 - 130	30	70 - 130	30	
%SS2:	87	10	91	93	1.28	87	87	0	70 - 130	30	70 - 130	30	
%SS3:	89	10	91	92	1.39	92	93	1.18	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 31883 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008B	11/13/07 2:40 PM	11/15/07	11/15/07 12:45 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711340

EPA Method E200.8	Extraction E200.8			BatchID: 31874			Spiked Sample ID: 0711331-001A			Acceptance Criteria (%)			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	MS / MSD	RPD	LCS/LCSD	RPD	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD					
Antimony	1.2	10	131, F1	112	14.8	105	104	1.12	70 - 130	20	80 - 120	20	
Arsenic	2.0	10	110	111	0.153	102	103	0.0976	70 - 130	20	80 - 120	20	
Barium	93	100	113	114	0.630	109	107	1.86	70 - 130	20	80 - 120	20	
Beryllium	ND	10	88.6	90.7	2.34	107	107	0	70 - 130	20	80 - 120	20	
Cadmium	ND	10	93.4	95	1.73	97.3	96.1	1.29	70 - 130	20	80 - 120	20	
Chromium	ND	10	95.2	95.5	0.369	102	103	1.27	70 - 130	20	80 - 120	20	
Cobalt	ND	10	90.9	93	2.21	100	101	0.793	70 - 130	20	80 - 120	20	
Copper	6.1	10	93.4	94.4	0.647	105	106	1.42	70 - 130	20	80 - 120	20	
Lead	ND	10	101	101	0	95.8	95.3	0.555	70 - 130	20	80 - 120	20	
Mercury	0.023	0.25	101	98.7	1.66	94.8	91.3	3.83	70 - 130	20	80 - 120	20	
Molybdenum	13	10	109	111	1.11	98.5	96.3	2.30	70 - 130	20	80 - 120	20	
Nickel	6.2	10	96.1	96.7	0.380	103	104	0.581	70 - 130	20	80 - 120	20	
Selenium	6.1	10	118	119	0.445	103	103	0	70 - 130	20	80 - 120	20	
Silver	ND	10	92.1	93.1	1.12	98.3	98.2	0.143	70 - 130	20	80 - 120	20	
Thallium	ND	10	101	102	1.28	94.7	95.1	0.421	70 - 130	20	80 - 120	20	
Vanadium	1.8	10	104	104	0	102	104	1.26	70 - 130	20	80 - 120	20	
Zinc	5.6	100	100	100	0	103	104	1.05	70 - 130	20	80 - 120	20	
%SS:	99	750	102	103	0.182	102	101	0.968	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

F1 = MS / MSD outside of acceptance criteria. LCS - LCSD validate prep batch.

#### BATCH 31874 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008F	11/13/07 2:40 PM	11/13/07	11/14/07 7:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR 6020A**

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

EPA Method 6020A		Extraction SW3050B				BatchID: 31846			Spiked Sample ID 0711279-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	50	111	112	1.05	10	105	106	0.284	70 - 130	20	80 - 120	20
Arsenic	4.5	50	99.2	99.9	0.644	10	102	103	1.66	70 - 130	20	80 - 120	20
Barium	84	500	103	103	0	100	108	109	1.11	70 - 130	20	80 - 120	20
Beryllium	ND	50	100	99.6	0.418	10	111	111	0	70 - 130	20	80 - 120	20
Cadmium	ND	50	103	104	0.617	10	108	109	0.832	70 - 130	20	80 - 120	20
Chromium	78	50	86.2	86	0.0825	10	102	106	3.42	70 - 130	20	80 - 120	20
Cobalt	11	50	98.3	97.2	0.855	10	106	108	1.68	70 - 130	20	80 - 120	20
Copper	20	50	94.6	95.4	0.650	10	103	105	1.70	70 - 130	20	80 - 120	20
Lead	20	50	98.4	98.8	0.330	10	107	109	1.82	70 - 130	20	80 - 120	20
Mercury	ND	1.25	97.8	98.5	0.706	0.25	96.7	96.1	0.664	70 - 130	20	80 - 120	20
Molybdenum	ND	50	98.8	99.7	0.860	10	101	102	0.885	70 - 130	20	80 - 120	20
Nickel	50	50	92.6	93	0.186	10	102	104	1.84	70 - 130	20	80 - 120	20
Selenium	ND	50	103	102	0.796	10	106	110	3.25	70 - 130	20	80 - 120	20
Silver	ND	50	99.2	100	1.04	10	109	101	8.10	70 - 130	20	80 - 120	20
Thallium	ND	50	101	101	0	10	106	109	2.78	70 - 130	20	80 - 120	20
Vanadium	66	50	88.9	88.1	0.364	10	102	106	3.74	70 - 130	20	80 - 120	20
Zinc	56	500	102	103	0.528	100	109	110	1.19	70 - 130	20	80 - 120	20
%SS:	107	250	102	101	0.988	250	102	104	2.01	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 31846 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/14/07 6:21 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/14/07 6:35 PM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/14/07 7:07 PM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/14/07 7:15 PM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/14/07 7:22 PM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/14/07 7:29 PM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/14/07 7:37 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

EPA Method SW8015C		Extraction SW3550C			BatchID: 31820			Spiked Sample ID: 0711244-002a				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	18	20	123	87.8	17.9	115	115	0	70 - 130	30	70 - 130	30
%SS:	91	50	90	73	20.7	93	92	0.307	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31820 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/14/07 10:24 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/15/07 7:38 PM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/16/07 12:25 AM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/16/07 1:33 AM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/17/07 1:34 PM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/15/07 1:52 AM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/15/07 2:56 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711340

EPA Method SW8015C		Extraction SW3510C			BatchID: 31863			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	128	119	7.68	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	104	78	28.0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31863 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008D	11/13/07 2:40 PM	11/13/07	11/16/07 4:58 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711340

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 31866			Spiked Sample ID: 0711313-005A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	103	107	4.46	113	105	7.13	70 - 130	30	70 - 130	30
MTBE	ND	0.10	98.8	90.9	8.43	89	90.3	1.37	70 - 130	30	70 - 130	30
Benzene	ND	0.10	97.9	86.8	12.0	88	93.6	6.21	70 - 130	30	70 - 130	30
Toluene	ND	0.10	101	94.1	7.40	93.6	99.2	5.72	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	118	109	7.84	109	116	6.15	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	113	107	6.06	107	113	6.06	70 - 130	30	70 - 130	30
%SS:	92	0.10	101	90	11.2	94	100	6.32	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31866 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-001A	11/13/07 12:45 PM	11/13/07	11/15/07 10:24 PM	0711340-002A	11/13/07 12:50 PM	11/13/07	11/15/07 9:54 PM
0711340-003A	11/13/07 1:00 PM	11/13/07	11/15/07 10:55 PM	0711340-004A	11/13/07 1:05 PM	11/13/07	11/16/07 2:28 AM
0711340-005A	11/13/07 2:05 PM	11/13/07	11/16/07 4:00 AM	0711340-006A	11/13/07 2:20 PM	11/13/07	11/14/07 10:52 PM
0711340-007A	11/13/07 2:25 PM	11/13/07	11/14/07 11:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711340

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 31877			Spiked Sample ID: 0711330-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	85.7	86.2	0.593	86.9	80	8.25	70 - 130	30	70 - 130	30
MTBE	ND	10	96.2	96.4	0.246	93.8	93.6	0.192	70 - 130	30	70 - 130	30
Benzene	ND	10	95.3	95.1	0.161	95.7	91.2	4.84	70 - 130	30	70 - 130	30
Toluene	ND	10	95.5	94.1	1.49	98.1	94.4	3.91	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	96.3	96.6	0.293	98.6	94.4	4.42	70 - 130	30	70 - 130	30
Xylenes	ND	30	95.3	91.7	3.92	92	90.7	1.46	70 - 130	30	70 - 130	30
%SS:	93	10	105	106	1.04	104	101	2.05	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 31877 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711340-008A	11/13/07 2:40 PM	11/15/07	11/15/07 9:31 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Reported: 12/05/07
	Client P.O.:	Date Completed: 12/05/07

**WorkOrder: 0711621**

December 05, 2007

Dear Kirby:

Enclosed are:

- 1). the results of **9** analyzed samples from your **#276000; Carnation 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 or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius, Lab Manager

0711621



**McCAMPBELL ANALYTICAL, INC.**  
 1534 WILLOW PASS ROAD  
 PITTSBURG, CA 94565-1701  
 Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: (877) 252-9262 Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**  
 TURN AROUND TIME  RUSH  24 HR  48 HR  72 HR  5 DAY  
 GeoTracker EDF  PDF  Excel  Write On (DW)   
 Check if sample is effluent and "J" flag is required

Report To: Kirby Fernando Bill To: AEI Consultants  
 Company: AEI Consultants  
 2500 Camino Diablo #200, Walnut Creek 94597  
 E-Mail: [kfernando@aeiconsultants.com](mailto:kfernando@aeiconsultants.com)  
 Tele: (925) 944-2899 x123 Fax: (925) 944-2895  
 Project #: 276000 Project Name: Carnation  
 Project Location: 1510 14th St, Oakland  
 Sampler Signature: [Signature]

Analysis Request		Other	Comments
BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE			Filter Samples for Metals analysis: Yes / No
TPH as Diesel (8015)			
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)			
Total Petroleum Hydrocarbons (418.1)			
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)			
MTBE / BTEX ONLY (EPA 602 / 8021)			
EPA 505/ 608 / 8081 (CI Pesticides)			
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners			
EPA 507 / 8141 (NP Pesticides)			
EPA 515 / 8151 (Acidic CI Herbicides)			
EPA 524.2 / 624 / 8260 (VOCs)			
EPA 525.2 / 625 / 8270 (SVOCs)			
EPA 8270 SIM / 8310 (PAHs / PNAS)			
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)			
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)			
Lead (200.7 / 200.8 / 6010 / 6020)			

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other						
LS1	1st end	11/26	11:26	1	BT	X					X				X	X	X			
LS1S	1st side		11:29	1																
LS1B	1st end B		11:32	1																
LS2	2nd end		11:37	1																
[Redacted]	[Redacted]		[Redacted]	1																
LS2B	2nd end B		11:43	1																
LST1234	clean stk		12:14	4																
LSTB1234	clean stk		12:20	4																
LST5678	dirty stk		12:31	4																
LSTB5678	dirty stk		12:36	4																

Relinquished By: Charles Hunted Date: 11/26 Time: 6:00 Received By: Enviro-Tech SR  
 Relinquished By: Enviro-Tech SR Date: 11/26 Time: 19:00 Received By: [Signature]  
 Relinquished By: [Signature] Date: 11/26/07 Time: 19:20 Received By: [Signature]

ICE/r° No  
 GOOD CONDITION yes  
 HEAD SPACE ABSENT yes  
 DECHLORINATED IN LAB yes  
 APPROPRIATE CONTAINERS yes  
 PRESERVED IN LAB yes  
 COMMENTS:  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711621

ClientID: AEL

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

**Report to:**

Kirby Fernando  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597

Email: kfernando@aeiconsultants.com  
TEL: (925) 283-6000    FAX: (925) 283-6121  
ProjectNo: #276000; Carnation  
PO:

**Bill to:**

Denise Mockel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
dmockel@aeiconsultants.com

**Requested TAT: 5 days**

**Date Received: 11/26/2007**

**Date Printed: 11/27/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0711621-001	LS1	Soil	11/26/07 11:26:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-002	LS1S	Soil	11/26/07 11:29:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-003	LS1B	Soil	11/26/07 11:32:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-004	LS2	Soil	11/26/07 11:37:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-005	LS2B	Soil	11/26/07 11:43:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-006	LST1234	Soil	11/26/07 12:14:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-007	LSTB1234	Soil	11/26/07 12:20:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-008	LST5678	Soil	11/26/07 12:31:00	<input type="checkbox"/>	A	A	A	A	A	A						
0711621-009	LSTB5678	Soil	11/26/07 12:36:00	<input type="checkbox"/>	A	A	A	A	A	A						

**Test Legend:**

1	5520E_SG_S	2	8082A_PCB_S	3	8260B_S	4	CAM17MS_S	5	G-MBTX_S
6	TPH(D)_S	7		8		9		10	
11		12							

**Prepared by: Rosa Venegas**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/26/07 7:29:48 PM**

Project Name: **#276000; Carnation**

Checklist completed and reviewed by: Rosa Venegas

WorkOrder N°: **0711621** Matrix Soil

Carrier: EnviroTech

#### Chain of Custody (COC) Information

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes  No  NA
- Shipping container/cooler in good condition? Yes  No
- Samples in proper containers/bottles? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted:

Date contacted:

Contacted by:

Comments:



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07-12/04/07

## Petroleum Oil & Grease with Silica Gel Clean-Up\*

Analytical methods: SM5520E/F

Work Order: 0711621

Lab ID	Client ID	Matrix	POG	DF	% SS
0711621-001A	LS1	S	ND	1	N/A
0711621-002A	LS1S	S	ND	1	N/A
0711621-003A	LS1B	S	ND	1	N/A
0711621-004A	LS2	S	ND	1	N/A
0711621-005A	LS2B	S	ND	1	N/A
0711621-006A	LST1234	S	540	1	N/A
0711621-007A	LSTB1234	S	220	1	N/A
0711621-008A	LST5678	S	2700	1	N/A
0711621-009A	LSTB5678	S	700	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	50	mg/Kg

\* water samples and all TCLP & SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

DF = dilution factor (may be raised to dilute target analyte or matrix interference).

# surrogate diluted out of range or not applicable to this sample.

g) sample extract repeatedly cleaned up with silica gel until constant IR result achieved; h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) results are reported on a dry weight basis; p) see attached narrative.





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3550C

Analytical Method: SW8082A

Work Order: 0711621

Lab ID	0711621-001A	0711621-002A	0711621-003A	0711621-004A	Reporting Limit for DF =1	
Client ID	LS1	LS1S	LS1B	LS2		
Matrix	S	S	S	S		
DF	1	1	1	1		

Compound	Concentration				mg/kg	ug/L
Aroclor1016	ND	ND	ND	ND	0.025	NA
Aroclor1221	ND	ND	ND	ND	0.025	NA
Aroclor1232	ND	ND	ND	ND	0.025	NA
Aroclor1242	ND	ND	ND	ND	0.025	NA
Aroclor1248	ND	ND	ND	ND	0.025	NA
Aroclor1254	ND	ND	ND	ND	0.025	NA
Aroclor1260	ND	ND	ND	ND	0.025	NA
PCBs, total	ND	ND	ND	ND	0.025	NA

### Surrogate Recoveries (%)

%SS:	115	105	92	103	
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**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3550C

Analytical Method: SW8082A

Work Order: 0711621

Lab ID	0711621-005A	0711621-006A	0711621-007A	0711621-008A	Reporting Limit for DF =1	
Client ID	LS2B	LST1234	LSTB1234	LST5678		
Matrix	S	S	S	S		
DF	1	5	1	20		

Compound	Concentration				mg/kg	ug/L
Aroclor1016	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1221	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1232	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1242	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1248	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1254	ND	ND<0.12	ND	ND<0.50	0.025	NA
Aroclor1260	ND	ND<0.12	ND	ND<0.50	0.025	NA
PCBs, total	ND	ND<0.12	ND	ND<0.50	0.025	NA

### Surrogate Recoveries (%)

%SS:	107	113	101	126	
------	-----	-----	-----	-----	--

Comments		j,o		j,o	
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\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3550C

Analytical Method: SW8082A

Work Order: 0711621

Lab ID	0711621-009A			Reporting Limit for DF =1	
Client ID	LSTB5678				
Matrix	S				
DF	1				S

Compound	Concentration				mg/kg	ug/L
Aroclor1016	ND				0.025	NA
Aroclor1221	ND				0.025	NA
Aroclor1232	ND				0.025	NA
Aroclor1242	ND				0.025	NA
Aroclor1248	ND				0.025	NA
Aroclor1254	ND				0.025	NA
Aroclor1260	ND				0.025	NA
PCBs, total	ND				0.025	NA

### Surrogate Recoveries (%)

%SS:	111			
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### Comments

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-001A
Client ID	LS1
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	103	%SS2:	94
%SS3:	106		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-002A
Client ID	LS1S
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	101	%SS2:	95
%SS3:	107		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-003A
Client ID	LS1B
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	103	%SS2:	95
%SS3:	108		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-004A
Client ID	LS2
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	100	%SS2:	95
%SS3:	107		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-005A
Client ID	LS2B
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	101	%SS2:	95
%SS3:	109		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-006A
Client ID	LST1234
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	99	%SS2:	95
%SS3:	107		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-007A
Client ID	LSTB1234
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	97	%SS2:	95
%SS3:	104		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-008A
Client ID	LST5678
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1.0	20	0.05	Acrolein (Propenal)	ND<1.0	20	0.05
Acrylonitrile	ND<0.40	20	0.02	tert-Amyl methyl ether (TAME)	ND<0.10	20	0.005
Benzene	ND<0.10	20	0.005	Bromobenzene	ND<0.10	20	0.005
Bromochloromethane	ND<0.10	20	0.005	Bromodichloromethane	ND<0.10	20	0.005
Bromoform	ND<0.10	20	0.005	Bromomethane	ND<0.10	20	0.005
2-Butanone (MEK)	ND<0.40	20	0.02	t-Butyl alcohol (TBA)	ND<1.0	20	0.05
n-Butyl benzene	1.4	20	0.005	sec-Butyl benzene	0.73	20	0.005
tert-Butyl benzene	0.27	20	0.005	Carbon Disulfide	ND<0.10	20	0.005
Carbon Tetrachloride	ND<0.10	20	0.005	Chlorobenzene	ND<0.10	20	0.005
Chloroethane	ND<0.10	20	0.005	2-Chloroethyl Vinyl Ether	ND<0.20	20	0.01
Chloroform	ND<0.10	20	0.005	Chloromethane	ND<0.10	20	0.005
2-Chlorotoluene	ND<0.10	20	0.005	4-Chlorotoluene	ND<0.10	20	0.005
Dibromochloromethane	ND<0.10	20	0.005	1,2-Dibromo-3-chloropropane	ND<0.10	20	0.005
1,2-Dibromoethane (EDB)	ND<0.10	20	0.005	Dibromomethane	ND<0.10	20	0.005
1,2-Dichlorobenzene	ND<0.10	20	0.005	1,3-Dichlorobenzene	ND<0.10	20	0.005
1,4-Dichlorobenzene	ND<0.10	20	0.005	Dichlorodifluoromethane	ND<0.10	20	0.005
1,1-Dichloroethane	ND<0.10	20	0.005	1,2-Dichloroethane (1,2-DCA)	ND<0.10	20	0.005
1,1-Dichloroethene	ND<0.10	20	0.005	cis-1,2-Dichloroethene	ND<0.10	20	0.005
trans-1,2-Dichloroethene	ND<0.10	20	0.005	1,2-Dichloropropane	ND<0.10	20	0.005
1,3-Dichloropropane	ND<0.10	20	0.005	2,2-Dichloropropane	ND<0.10	20	0.005
1,1-Dichloropropene	ND<0.10	20	0.005	cis-1,3-Dichloropropene	ND<0.10	20	0.005
trans-1,3-Dichloropropene	ND<0.10	20	0.005	Diisopropyl ether (DIPE)	ND<0.10	20	0.005
Ethylbenzene	2.2	20	0.005	Ethyl tert-butyl ether (ETBE)	ND<0.10	20	0.005
Freon 113	ND<2.0	20	0.1	Hexachlorobutadiene	ND<0.10	20	0.005
Hexachloroethane	ND<0.10	20	0.005	2-Hexanone	ND<0.10	20	0.005
Isopropylbenzene	1.9	20	0.005	4-Isopropyl toluene	ND<0.10	20	0.005
Methyl-t-butyl ether (MTBE)	ND<0.10	20	0.005	Methylene chloride	ND<0.10	20	0.005
4-Methyl-2-pentanone (MIBK)	ND<0.10	20	0.005	Naphthalene	4.0	20	0.005
Nitrobenzene	ND<2.0	20	0.1	n-Propyl benzene	2.4	20	0.005
Styrene	ND<0.10	20	0.005	1,1,1,2-Tetrachloroethane	ND<0.10	20	0.005
1,1,2,2-Tetrachloroethane	ND<0.10	20	0.005	Tetrachloroethene	ND<0.10	20	0.005
Toluene	ND<0.10	20	0.005	1,2,3-Trichlorobenzene	ND<0.10	20	0.005
1,2,4-Trichlorobenzene	ND<0.10	20	0.005	1,1,1-Trichloroethane	ND<0.10	20	0.005
1,1,2-Trichloroethane	ND<0.10	20	0.005	Trichloroethene	ND<0.10	20	0.005
Trichlorofluoromethane	ND<0.10	20	0.005	1,2,3-Trichloropropane	ND<0.10	20	0.005
1,2,4-Trimethylbenzene	2.1	20	0.005	1,3,5-Trimethylbenzene	0.60	20	0.005
Vinyl Chloride	ND<0.10	20	0.005	Xylenes	0.53	20	0.005

### Surrogate Recoveries (%)

%SS1:	101	%SS2:	93
%SS3:	99		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/28/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711621

Lab ID	0711621-009A
Client ID	LSTB5678
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1.0	20	0.05	Acrolein (Propenal)	ND<1.0	20	0.05
Acrylonitrile	ND<0.40	20	0.02	tert-Amyl methyl ether (TAME)	ND<0.10	20	0.005
Benzene	ND<0.10	20	0.005	Bromobenzene	ND<0.10	20	0.005
Bromochloromethane	ND<0.10	20	0.005	Bromodichloromethane	ND<0.10	20	0.005
Bromoform	ND<0.10	20	0.005	Bromomethane	ND<0.10	20	0.005
2-Butanone (MEK)	ND<0.40	20	0.02	t-Butyl alcohol (TBA)	ND<1.0	20	0.05
n-Butyl benzene	0.92	20	0.005	sec-Butyl benzene	0.40	20	0.005
tert-Butyl benzene	0.12	20	0.005	Carbon Disulfide	ND<0.10	20	0.005
Carbon Tetrachloride	ND<0.10	20	0.005	Chlorobenzene	ND<0.10	20	0.005
Chloroethane	ND<0.10	20	0.005	2-Chloroethyl Vinyl Ether	ND<0.20	20	0.01
Chloroform	ND<0.10	20	0.005	Chloromethane	ND<0.10	20	0.005
2-Chlorotoluene	ND<0.10	20	0.005	4-Chlorotoluene	ND<0.10	20	0.005
Dibromochloromethane	ND<0.10	20	0.005	1,2-Dibromo-3-chloropropane	ND<0.10	20	0.005
1,2-Dibromoethane (EDB)	ND<0.10	20	0.005	Dibromomethane	ND<0.10	20	0.005
1,2-Dichlorobenzene	ND<0.10	20	0.005	1,3-Dichlorobenzene	ND<0.10	20	0.005
1,4-Dichlorobenzene	ND<0.10	20	0.005	Dichlorodifluoromethane	ND<0.10	20	0.005
1,1-Dichloroethane	ND<0.10	20	0.005	1,2-Dichloroethane (1,2-DCA)	ND<0.10	20	0.005
1,1-Dichloroethene	ND<0.10	20	0.005	cis-1,2-Dichloroethene	ND<0.10	20	0.005
trans-1,2-Dichloroethene	ND<0.10	20	0.005	1,2-Dichloropropane	ND<0.10	20	0.005
1,3-Dichloropropane	ND<0.10	20	0.005	2,2-Dichloropropane	ND<0.10	20	0.005
1,1-Dichloropropene	ND<0.10	20	0.005	cis-1,3-Dichloropropene	ND<0.10	20	0.005
trans-1,3-Dichloropropene	ND<0.10	20	0.005	Diisopropyl ether (DIPE)	ND<0.10	20	0.005
Ethylbenzene	0.91	20	0.005	Ethyl tert-butyl ether (ETBE)	ND<0.10	20	0.005
Freon 113	ND<2.0	20	0.1	Hexachlorobutadiene	ND<0.10	20	0.005
Hexachloroethane	ND<0.10	20	0.005	2-Hexanone	ND<0.10	20	0.005
Isopropylbenzene	0.87	20	0.005	4-Isopropyl toluene	ND<0.10	20	0.005
Methyl-t-butyl ether (MTBE)	ND<0.10	20	0.005	Methylene chloride	ND<0.10	20	0.005
4-Methyl-2-pentanone (MIBK)	ND<0.10	20	0.005	Naphthalene	2.6	20	0.005
Nitrobenzene	ND<2.0	20	0.1	n-Propyl benzene	1.2	20	0.005
Styrene	ND<0.10	20	0.005	1,1,1,2-Tetrachloroethane	ND<0.10	20	0.005
1,1,2,2-Tetrachloroethane	ND<0.10	20	0.005	Tetrachloroethene	ND<0.10	20	0.005
Toluene	ND<0.10	20	0.005	1,2,3-Trichlorobenzene	ND<0.10	20	0.005
1,2,4-Trichlorobenzene	ND<0.10	20	0.005	1,1,1-Trichloroethane	ND<0.10	20	0.005
1,1,2-Trichloroethane	ND<0.10	20	0.005	Trichloroethene	ND<0.10	20	0.005
Trichlorofluoromethane	ND<0.10	20	0.005	1,2,3-Trichloropropane	ND<0.10	20	0.005
1,2,4-Trimethylbenzene	0.97	20	0.005	1,3,5-Trimethylbenzene	0.44	20	0.005
Vinyl Chloride	ND<0.10	20	0.005	Xylenes	0.27	20	0.005

#### Surrogate Recoveries (%)

%SS1:	101	%SS2:	94
%SS3:	94		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07-12/04/07

### CAM / CCR 17 Metals\*

Lab ID	0711621-001A	0711621-002A	0711621-003A	0711621-004A	Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	LS1	LS1S	LS1B	LS2	S	W
Matrix	S	S	S	S		
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/Kg	mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711621

Dilution Factor	1	1	1	1	1	1
Antimony	ND	ND	ND	ND	0.5	NA
Arsenic	2.2	2.9	5.4	1.3	0.5	NA
Barium	79	92	140	86	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	ND	0.25	NA
Chromium	47	55	61	120	0.5	NA
Cobalt	7.0	9.8	7.4	4.5	0.5	NA
Copper	9.9	12	11	7.9	0.5	NA
Lead	3.5	4.6	3.7	4.7	0.5	NA
Mercury	ND	ND	ND	0.055	0.05	NA
Molybdenum	ND	0.54	ND	ND	0.5	NA
Nickel	40	41	45	34	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	35	39	42	26	0.5	NA
Zinc	33	37	37	29	5.0	NA
%SS:	100	100	99	99		

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07-12/04/07

### CAM / CCR 17 Metals\*

Lab ID	0711621-005A	0711621-006A	0711621-007A	0711621-008A	Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	LS2B	LST1234	LSTB1234	LST5678		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/Kg	mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711621

Dilution Factor	1	1	1	1	1	1
Antimony	ND	0.54	ND	ND	0.5	NA
Arsenic	3.1	4.6	3.6	2.8	0.5	NA
Barium	62	94	74	86	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	0.25	ND	ND	0.25	NA
Chromium	48	42	59	49	0.5	NA
Cobalt	7.0	7.7	5.5	6.6	0.5	NA
Copper	9.5	14	12	10	0.5	NA
Lead	3.4	95	41	23	0.5	NA
Mercury	ND	0.064	0.067	ND	0.05	NA
Molybdenum	ND	0.56	ND	ND	0.5	NA
Nickel	41	30	36	36	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	36	43	37	36	0.5	NA
Zinc	30	80	53	45	5.0	NA
%SS:	102	104	102	107		

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

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WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07-12/04/07

### CAM / CCR 17 Metals\*

Lab ID	0711621-009A				Reporting Limit for DF =1; ND means not detected above the reporting limit
Client ID	LSTB5678				
Matrix	S				S      W
Extraction Type	TOTAL				mg/Kg    mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711621

Dilution Factor	1				1	1
Antimony	ND				0.5	NA
Arsenic	2.5				0.5	NA
Barium	64				5.0	NA
Beryllium	ND				0.5	NA
Cadmium	ND				0.25	NA
Chromium	44				0.5	NA
Cobalt	5.6				0.5	NA
Copper	8.4				0.5	NA
Lead	6.8				0.5	NA
Mercury	ND				0.05	NA
Molybdenum	ND				0.5	NA
Nickel	38				0.5	NA
Selenium	ND				0.5	NA
Silver	ND				0.5	NA
Thallium	ND				0.5	NA
Vanadium	30				0.5	NA
Zinc	28				5.0	NA
%SS:	101					

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

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		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07-11/28/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0711621

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	LS1	S	ND	ND	ND	ND	ND	ND	1	82
002A	LS1S	S	ND	ND	ND	ND	ND	ND	1	84
003A	LS1B	S	ND	ND	ND	ND	ND	ND	1	85
004A	LS2	S	ND	ND	ND	ND	ND	ND	1	86
005A	LS2B	S	ND	ND	ND	ND	ND	ND	1	91
006A	LST1234	S	ND	ND	ND	ND	ND	ND	1	81
007A	LSTB1234	S	ND	ND	ND	ND	ND	ND	1	81
008A	LST5678	S	1200,g,m	ND<5.0	ND<0.50	ND<0.50	3.2	2.4	100	123
009A	LSTB5678	S	380,g,m	ND<2.5	ND<0.25	ND<0.25	1.6	1.1	50	120

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.





# McC Campbell Analytical, Inc.

"When Quality Counts"

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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/26/07
		Date Received: 11/26/07
	Client Contact: Kirby Fernando	Date Extracted: 11/26/07
	Client P.O.:	Date Analyzed 11/27/07-11/28/07

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

Extraction method SW3550C

Analytical methods SW8015C

Work Order: 0711621

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0711621-001A	LS1	S	11,g,b	1	113
0711621-002A	LS1S	S	ND	1	115
0711621-003A	LS1B	S	ND	1	116
0711621-004A	LS2	S	ND	1	100
0711621-005A	LS2B	S	ND	1	100
0711621-006A	LST1234	S	22,g,b	5	110
0711621-007A	LSTB1234	S	6.6,g,b	2	99
0711621-008A	LST5678	S	1200,n,b,g	20	91
0711621-009A	LSTB5678	S	240,n,b,g	2	115

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

Analyte	EPA Method SW8015C		Extraction SW3550C			BatchID: 32069			Spiked Sample ID: 0711598-003A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	74.6	74.9	0.351	89.4	102	13.0	70 - 130	30	70 - 130	30
%SS:	89	50	88	88	0	77	80	3.04	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32069 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/28/07 1:13 AM	0711621-002A	11/26/07 11:29 AM	11/26/07	11/28/07 2:22 AM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/28/07 3:30 AM	0711621-004A	11/26/07 11:37 AM	11/26/07	11/27/07 4:53 PM
0711621-005A	11/26/07 11:43 AM	11/26/07	11/27/07 6:02 PM	0711621-006A	11/26/07 12:14 PM	11/26/07	11/28/07 8:42 PM
0711621-007A	11/26/07 12:20 PM	11/26/07	11/28/07 10:45 PM	0711621-008A	11/26/07 12:31 PM	11/26/07	11/28/07 2:04 AM
0711621-009A	11/26/07 12:36 PM	11/26/07	11/28/07 6:38 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32070			Spiked Sample ID: 0711598-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	0.60	95.9	101	5.07	113	107	5.13	70 - 130	30	70 - 130	30
MTBE	ND	0.10	91.5	84.1	8.37	95.2	98.7	3.68	70 - 130	30	70 - 130	30
Benzene	ND	0.10	90.2	85.7	5.15	99.4	100	0.641	70 - 130	30	70 - 130	30
Toluene	ND	0.10	99.8	96.6	3.07	114	112	0.949	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	96.2	97	0.888	108	109	0.716	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	103	107	3.17	120	120	0	70 - 130	30	70 - 130	30
%SS:	93	0.10	86	83	3.25	94	94	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32070 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/27/07 7:55 PM	0711621-002A	11/26/07 11:29 AM	11/26/07	11/27/07 9:56 PM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/27/07 11:26 PM	0711621-004A	11/26/07 11:37 AM	11/26/07	11/28/07 1:26 AM
0711621-005A	11/26/07 11:43 AM	11/26/07	11/28/07 1:56 AM	0711621-006A	11/26/07 12:14 PM	11/26/07	11/27/07 10:54 PM
0711621-007A	11/26/07 12:20 PM	11/26/07	11/28/07	0711621-008A	11/26/07 12:31 PM	11/26/07	11/28/07 4:14 PM
0711621-009A	11/26/07 12:36 PM	11/26/07	11/28/07 5:45 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

EPA Method SW8260B	Extraction SW5030B			BatchID: 32074			Spiked Sample ID: 0711621-001A						
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	101	106	4.99	109	107	2.15	70 - 130	30	70 - 130	30	
Benzene	ND	0.050	120	126	4.95	130	126	2.43	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	78	79.7	2.07	81.2	82.6	1.74	70 - 130	30	70 - 130	30	
Chlorobenzene	ND	0.050	122	124	1.82	127	122	4.04	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	107	115	7.05	119	114	3.90	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	85.6	92.4	7.71	97.8	97.3	0.514	70 - 130	30	70 - 130	30	
1,1-Dichloroethene	ND	0.050	101	122	19.5	126	130	3.36	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	106	112	5.52	115	112	2.94	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	96.2	104	7.49	106	103	2.51	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	90.6	99.1	8.98	105	101	3.25	70 - 130	30	70 - 130	30	
Toluene	ND	0.050	106	109	2.81	113	109	3.69	70 - 130	30	70 - 130	30	
Trichloroethene	ND	0.050	101	110	7.96	112	111	1.35	70 - 130	30	70 - 130	30	
%SS1:	103	0.050	81	86	5.24	90	90	0	70 - 130	30	70 - 130	30	
%SS2:	94	0.050	84	84	0	85	86	1.06	70 - 130	30	70 - 130	30	
%SS3:	106	0.050	94	94	0	94	94	0	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 32074 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/27/07 9:37 PM	0711621-002A	11/26/07 11:29 AM	11/26/07	11/28/07 12:09 AM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/28/07 12:58 AM	0711621-004A	11/26/07 11:37 AM	11/26/07	11/28/07 1:48 AM
0711621-005A	11/26/07 11:43 AM	11/26/07	11/28/07 2:37 AM	0711621-006A	11/26/07 12:14 PM	11/26/07	11/28/07 3:27 AM
0711621-007A	11/26/07 12:20 PM	11/26/07	11/28/07 4:18 AM	0711621-008A	11/26/07 12:31 PM	11/26/07	11/28/07 2:25 PM
0711621-009A	11/26/07 12:36 PM	11/26/07	11/28/07 3:13 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SM5520E/F

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

EPA Method SM5520E/F		Extraction SM5520E/F				BatchID: 32089			Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	N/A	1000	N/A	N/A	N/A	96.1	97.1	0.967	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32089 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/28/07 9:21 PM	0711621-002A	11/26/07 11:29 AM	11/26/07	11/28/07 9:26 PM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/28/07 9:31 PM	0711621-004A	11/26/07 11:37 AM	11/26/07	11/28/07 9:36 PM
0711621-005A	11/26/07 11:43 AM	11/26/07	11/28/07 9:41 PM	0711621-006A	11/26/07 12:14 PM	11/26/07	11/28/07 9:46 PM
0711621-007A	11/26/07 12:20 PM	11/26/07	11/28/07 9:51 PM	0711621-008A	11/26/07 12:31 PM	11/26/07	11/28/07 9:56 PM
0711621-009A	11/26/07 12:36 PM	11/26/07	12/04/07 3:00 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

EPA Method SW8082A		Extraction SW3550C			BatchID: 32090			Spiked Sample ID: 0711621-008A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	ND<0.50	0.075	NR	NR	NR	120	117	2.04	70 - 130	20	70 - 130	20
%SS:	126	0.050	123	121	0.943	100	97	2.30	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32090 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/28/07 3:25 AM	0711621-002A	11/26/07 11:29 AM	11/26/07	11/28/07 4:20 AM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/28/07 6:11 AM	0711621-004A	11/26/07 11:37 AM	11/26/07	11/28/07 7:07 AM
0711621-005A	11/26/07 11:43 AM	11/26/07	11/28/07 8:04 AM	0711621-006A	11/26/07 12:14 PM	11/26/07	11/28/07 2:14 PM
0711621-007A	11/26/07 12:20 PM	11/26/07	11/28/07 9:56 AM	0711621-008A	11/26/07 12:31 PM	11/26/07	11/28/07 3:08 PM
0711621-009A	11/26/07 12:36 PM	11/26/07	11/28/07 10:52 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR 6020A**

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711621

EPA Method 6020A		Extraction SW3050B				BatchID: 32091			Spiked Sample ID 0711621-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Arsenic	2.2	50	103	104	0.185	10	110	109	0.457	70 - 130	20	80 - 120	20
Barium	79	500	105	107	1.30	100	112	113	0.443	70 - 130	20	80 - 120	20
Beryllium	ND	50	85.4	87.4	2.23	10	98.4	98.6	0.223	70 - 130	20	80 - 120	20
Cadmium	ND	50	102	104	1.82	10	110	110	0	70 - 130	20	80 - 120	20
Chromium	47	50	96.3	100	1.93	10	113	112	0.267	70 - 130	20	80 - 120	20
Cobalt	7.0	50	101	103	2.09	10	115	114	0.963	70 - 130	20	80 - 120	20
Copper	9.9	50	98.5	99.6	0.976	10	110	109	0.457	70 - 130	20	80 - 120	20
Lead	3.5	50	100	102	1.35	10	108	108	0	70 - 130	20	80 - 120	20
Mercury	ND	1.25	93	94.9	2.02	0.25	99	98.4	0.649	70 - 130	20	80 - 120	20
Molybdenum	ND	50	98.9	101	2.29	10	110	111	0.995	70 - 130	20	80 - 120	20
Nickel	40	50	97.3	99.3	1.14	10	109	107	1.66	70 - 130	20	80 - 120	20
Selenium	ND	50	104	105	1.59	10	112	111	0.898	70 - 130	20	80 - 120	20
Silver	ND	50	100	102	1.29	10	108	109	0.460	70 - 130	20	80 - 120	20
Thallium	ND	50	103	105	1.35	10	106	107	0.750	70 - 130	20	80 - 120	20
Vanadium	35	50	99	101	1.29	10	115	113	1.40	70 - 130	20	80 - 120	20
Zinc	33	500	105	106	1.00	100	114	114	0	70 - 130	20	80 - 120	20
%SS:	100	250	100	102	1.70	250	102	103	1.56	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 32091 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711621-001A	11/26/07 11:26 AM	11/26/07	11/27/07 6:50 PM	0711621-002A	1/26/07 11:29 AM	11/26/07	11/27/07 7:13 PM
0711621-003A	11/26/07 11:32 AM	11/26/07	11/27/07 7:21 PM	0711621-004A	1/26/07 11:37 AM	11/26/07	11/27/07 7:28 PM
0711621-004A	11/26/07 11:37 AM	11/26/07	11/27/07 7:38 PM	0711621-005A	1/26/07 11:43 AM	11/26/07	11/27/07 7:35 PM
0711621-006A	11/26/07 12:14 PM	11/26/07	11/27/07 7:43 PM	0711621-007A	11/26/07 12:20 PM	11/26/07	11/27/07 7:50 PM
0711621-008A	11/26/07 12:31 PM	11/26/07	11/27/07 7:57 PM	0711621-009A	11/26/07 12:36 PM	11/26/07	12/04/07 3:22 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte



**McC Campbell Analytical, Inc.**

"When Quality Counts"

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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
		Date Received: 11/27/07
	Client Contact: Kirby Fernando	Date Reported: 12/04/07
	Client P.O.:	Date Completed: 12/04/07

**WorkOrder: 0711634**

December 04, 2007

Dear Kirby:

Enclosed are:

- 1). the results of **1** analyzed sample from your **#276000; Carnation project**,
- 2). a QC report for the above sample
- 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius, Lab Manager





**McCAMPBELL ANALYTICAL, INC.**  
 1534 WILLOW PASS ROAD  
 PITTSBURG, CA 94565-1701 **071634**  
 Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: (877) 252-9262 Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: Kirby Fernando Bill To: AEI Consultants  
 Company: AEI Consultants  
 2500 Camino Diablo #200, Walnut Creek 94597  
 E-Mail: [kfernando@aeiconsultants.com](mailto:kfernando@aeiconsultants.com)  
 Tele: (925) 944-2899 x123 Fax: (925) 944-2895  
 Project #: 276000 Project Name: Carnation  
 Project Location: 1310 14th St, Oakland  
 Sampler Signature: *[Signature]*

**Analysis Request**

Other Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other						
L1W	1st water	11/26	12:44	1		X														
L2W	2nd water	11/27	12:02	7		X														

BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	
TPH as Diesel (8015) / Motor Oil / Diesel Oil	X X X
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	X X X
Total Petroleum Hydrocarbons (418.1)	
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	
MTBE / BTEX ONLY (EPA 602 / 8021)	
EPA 505 / 608 / 8081 (CI Pesticides)	
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	X
EPA 507 / 8141 (NP Pesticides)	
EPA 515 / 8151 (Acidic CI Herbicides)	X
EPA 524.2 / 624 / 8260 (VOCs)	X
EPA 525.2 / 625 / 8270 (SVOCs)	
EPA 8270 SIM / 8310 (PAHs / PNAS)	
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	X
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	X
Lead (200.7 / 200.8 / 6010 / 6020)	X

Filter Samples for Metals analysis: Yes / No  
 Same sample per client

Relinquished By: *[Signature]* Date: 11/27 Time: 2:26pm Received By: *[Signature]*  
 Relinquished By: Date: Time: Received By:  
 Relinquished By: Date: Time: Received By:

ICE/r° 10.2 COMMENTS:  
 GOOD CONDITION ✓  
 HEAD SPACE ABSENT ✓  
 DECHLORINATED IN LAB ✓  
 APPROPRIATE CONTAINERS ✓  
 PRESERVED IN LAB ✓  
 VOAS O&G METALS OTHER  
 PRESERVATION ✓ ✓ pH<2 ✓

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 0711634**

**ClientID: AEL**

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

<b>Report to:</b>		<b>Bill to:</b>	<b>Requested TAT: 5 days</b>
Kirby Fernando	Email: kfernando@aeiconsultants.com	Denise Mockel	
AEI Consultants	TEL: (925) 283-6000 FAX: (925) 283-6121	AEI Consultants	<i>Date Received: 11/27/2007</i>
2500 Camino Diablo, Ste. #200	ProjectNo: #276000; Carnation	2500 Camino Diablo, Ste. #200	<i>Date Printed: 11/27/2007</i>
Walnut Creek, CA 94597	PO:	Walnut Creek, CA 94597	
		dmockel@aeiconsultants.com	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0711634-001	L2W	Water	11/27/07 12:02:00	<input type="checkbox"/>	C	D	E	F	A	B							

**Test Legend:**

1	5520B_SG_W	2	8082A_PCB_W	3	8260B_W	4	CAM17(T)MS_W	5	G-MBTEX_W
6	TPH(DMO)_W	7		8		9		10	
11		12							

**Prepared by: Maria Venegas**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received **11/27/07 2:31:02 PM**

Project Name: **#276000; Carnation**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0711634** Matrix Water

Carrier: Client Drop-In

#### Chain of Custody (COC) Information

- Chain of custody present? Yes  N
- Chain of custody signed when relinquished and received? Yes  N
- Chain of custody agrees with sample labels? Yes  N
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes  N  NA
- Shipping container/cooler in good condition? Yes  N
- Samples in proper containers/bottles? Yes  N
- Sample containers intact? Yes  N
- Sufficient sample volume for indicated test? Yes  N

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  N
- Container/Temp Blank temperature Cooler Temp: 18.2°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  N  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  N  NA

Client contacted:

Date contacted:

Contacted by:

Comments: All Voas had headspace



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
	Client Contact: Kirby Fernando	Date Received: 11/27/07
	Client P.O.:	Date Extracted: 11/27/07
		Date Analyzed: 11/30/07

### Petroleum Oil & Grease with Silica Gel Clean-Up\*

Analytical methods: SM5520B/F

Work Order: 0711634

Lab ID	Client ID	Matrix	POG	DF	% SS
0711634-001C	L2W	W	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	5.0	mg/L
	S	NA	NA

\* water samples and all TCLP & SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

DF = dilution factor (may be raised to dilute target analyte or matrix interference).

# surrogate diluted out of range or not applicable to this sample.

g) sample extract repeatedly cleaned up with silica gel until constant IR result achieved; h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) results are reported on a dry weight basis.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
		Date Received: 11/27/07
	Client Contact: Kirby Fernando	Date Extracted: 11/27/07
	Client P.O.:	Date Analyzed 11/28/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0711634

Lab ID	0711634-001D			Reporting Limit for DF =1	
Client ID	L2W				
Matrix	W				
DF	1				S

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	102			
------	-----	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content; (k) p.p.- is the same as 4,4,-; (l) florisol (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
		Date Received: 11/27/07
	Client Contact: Kirby Fernando	Date Extracted: 11/29/07
	Client P.O.:	Date Analyzed: 11/29/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711634

Lab ID	0711634-001E
Client ID	L2W
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

#### Surrogate Recoveries (%)

%SS1:	103	%SS2:	98
%SS3:	91		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative; q) reported in ppm.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
		Date Received: 11/27/07
	Client Contact: Kirby Fernando	Date Extracted: 11/27/07
	Client P.O.:	Date Analyzed 11/28/07

### CAM / CCR 17 Metals\*

Lab ID	0711634-001F				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	L2W					
Matrix	W					
Extraction Type	TOTAL					
					S	W
					mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0711634

Dilution Factor	1				1	1
Antimony	ND				NA	0.5
Arsenic	4.1				NA	0.5
Barium	340				NA	5.0
Beryllium	ND				NA	0.5
Cadmium	ND				NA	0.25
Chromium	47				NA	0.5
Cobalt	11				NA	0.5
Copper	17				NA	0.5
Lead	27				NA	0.5
Mercury	0.47				NA	0.012
Molybdenum	0.95				NA	0.5
Nickel	55				NA	0.5
Selenium	0.61				NA	0.5
Silver	ND				NA	0.19
Thallium	ND				NA	0.5
Vanadium	37				NA	0.5
Zinc	54				NA	5.0
%SS:	72					

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
		Date Received: 11/27/07
	Client Contact: Kirby Fernando	Date Extracted: 11/28/07
	Client P.O.:	Date Analyzed 11/28/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0711634

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	L2W	W	ND	ND	ND	ND	ND	ND	1	92

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.





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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 11/27/07
	Client Contact: Kirby Fernando	Date Received: 11/27/07
	Client P.O.:	Date Extracted: 11/27/07
		Date Analyzed: 11/28/07

### Diesel (C10-23), Bunker Oil (C10+), and Motor Oil(C18+) Range Extractable Hydrocarbons\*

Extraction method SW3510C

Analytical methods SW8015C

Work Order: 0711634

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	TPH(mo)	DF	% SS
001B	L2W	W	120,b	210	ND	1	119

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	50	250	µg/L
	S	NA	NA	NA	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711634

EPA Method SW8021B/8015Cm	Extraction SW5030B			BatchID: 32102			Spiked Sample ID: 0711643-003A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	102	98.8	3.10	104	102	1.28	70 - 130	30	70 - 130	30
MTBE	ND	10	101	92	9.65	94.8	85.7	10.1	70 - 130	30	70 - 130	30
Benzene	ND	10	89.3	87.3	2.27	87.8	86.2	1.83	70 - 130	30	70 - 130	30
Toluene	ND	10	86	84.3	1.94	85.6	84.7	1.07	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	97.9	97.6	0.310	95.3	95.8	0.502	70 - 130	30	70 - 130	30
Xylenes	ND	30	96.7	93	3.87	91.3	92	0.727	70 - 130	30	70 - 130	30
%SS:	94	10	93	93	0	91	89	2.55	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32102 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001A	11/27/07 12:02 PM	11/28/07	11/28/07 8:01 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



**QC SUMMARY REPORT FOR SM5520B/F**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711634

EPA Method SM5520B/F		Extraction SM5520B/F				BatchID: 32105			Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	N/A	100	N/A	N/A	N/A	99.7	93.6	6.29	N/A	N/A	70 - 130	25
<p>All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE</p>												

BATCH 32105 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001C	11/27/07 12:02 PM	11/27/07	11/30/07 12:15 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711634

EPA Method SW8082A		Extraction SW3510C			BatchID: 32101			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	115	116	0.362	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	100	99	0.552	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32101 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001D	11/27/07 12:02 PM	11/27/07	11/28/07 8:11 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0711634

Analyte	EPA Method SW8260B		Extraction SW5030B			BatchID: 32092			Spiked Sample ID: 0711622-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	104	101	3.15	100	106	5.21	70 - 130	30	70 - 130	30
Benzene	ND	10	120	114	4.67	116	120	3.13	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	82.1	84.5	2.85	83.3	82.7	0.802	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	128	124	3.11	125	122	3.06	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	109	101	7.46	99.3	109	9.20	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	93.4	89.6	4.23	90.7	96.6	6.28	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	103	114	10.3	102	119	15.2	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	111	106	4.54	107	112	4.75	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	100	94.7	5.62	95.4	102	6.44	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	0.54	10	94.5	88	6.73	88.6	97.2	9.19	70 - 130	30	70 - 130	30
Toluene	ND	10	109	103	5.16	104	105	1.28	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	102	97.4	4.83	97.6	105	6.92	70 - 130	30	70 - 130	30
%SS1:	109	10	91	90	2.05	90	95	6.16	70 - 130	30	70 - 130	30
%SS2:	91	10	89	88	1.54	86	89	2.83	70 - 130	30	70 - 130	30
%SS3:	84	10	91	90	0.286	88	89	1.08	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32092 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001E	11/27/07 12:02 PM	11/29/07	11/29/07 11:03 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711634

EPA Method E200.8	Extraction E200.8			BatchID: 32096			Spiked Sample ID: 0711634-001F			Acceptance Criteria (%)			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	MS / MSD	RPD	LCS/LCSD	RPD	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD					
Antimony	ND	10	81.3	80	1.57	114	114	0	70 - 130	20	80 - 120	20	
Arsenic	4.1	10	101	100	0.774	101	103	2.32	70 - 130	20	80 - 120	20	
Barium	340	100	97.6	103	1.14	103	103	0	70 - 130	20	80 - 120	20	
Beryllium	ND	10	74.8	73.2	2.04	98.5	102	3.14	70 - 130	20	80 - 120	20	
Cadmium	ND	10	103	101	1.25	105	105	0	70 - 130	20	80 - 120	20	
Chromium	47	10	84	90.3	1.13	106	107	1.04	70 - 130	20	80 - 120	20	
Cobalt	11	10	75.7	75.5	0.107	111	111	0	70 - 130	20	80 - 120	20	
Copper	17	10	86.7	89.7	1.18	105	105	0	70 - 130	20	80 - 120	20	
Lead	27	10	104	98	1.54	104	103	1.35	70 - 130	20	80 - 120	20	
Mercury	0.47	0.25	102	103	0.399	92.4	94.3	2.06	70 - 130	20	80 - 120	20	
Molybdenum	0.95	10	85.1	81.8	3.53	101	102	0.691	70 - 130	20	80 - 120	20	
Nickel	55	10	84.9	85.4	0.0782	104	103	0.290	70 - 130	20	80 - 120	20	
Selenium	0.61	10	96	94.9	1.08	101	101	0	70 - 130	20	80 - 120	20	
Silver	ND	10	100	98.5	1.55	104	104	0	70 - 130	20	80 - 120	20	
Thallium	ND	10	103	100	2.44	101	100	0.795	70 - 130	20	80 - 120	20	
Zinc	54	100	92.6	92.6	0	102	102	0	70 - 130	20	80 - 120	20	
%SS:	72	750	100	98	1.80	94	94	0	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 32096 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001F	11/27/07 12:02 PM	11/27/07	11/28/07 4:09 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0711634

EPA Method SW8015C		Extraction SW3510C			BatchID: 32104			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	103	103	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	116	116	0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32104 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711634-001B	11/27/07 12:02 PM	11/27/07	11/28/07 7:34 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

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1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Reported: 12/06/07
	Client P.O.:	Date Completed: 12/06/07

**WorkOrder: 0711727**

December 06, 2007

Dear Kirby:

Enclosed are:

- 1). the results of **7** analyzed samples from your **276000; Carnation 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius, Lab Manager



0711727



**McCAMPBELL ANALYTICAL, INC.**  
 1534 WILLOW PASS ROAD  
 PITTSBURG, CA 94565-1701  
 Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: (877) 252-9262 Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**  
**TURN AROUND TIME**       
 RUSH 24 HR 48 HR 72 HR 5 DAY  
 GeoTracker EDF  PDF  Excel  Write On (DW)   
 Check if sample is effluent and "J" flag is required

**Report To:** Kirby Fernando **Bill To:** AEI Consultants  
**Company:** AEI Consultants  
 2500 Camino Diablo #200, Walnut Creek 94597  
**E-Mail:** [kfernando@aeiconsultants.com](mailto:kfernando@aeiconsultants.com)  
**Tele:** (925) 944-2899 x123 **Fax:** (925) 944-2895  
**Project #:** 276000 **Project Name:** Carcanton  
**Project Location:** 1310 17th St, Oakland  
**Sampler Signature:** [Signature]

Analysis Request							Other	Comments									
BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	TPH as Diesel (8015) / Bunker Oil	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCS)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAS)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Filter Samples for Metals analysis: Yes / No	
MB1	Base 1	11/29	11:55	1	BT	X	X	X		X							
MB2	Base 2		12:00	1													
MB3	Base 3		12:05	1													
MW1	Well 1		12:00	1													48hr per K.F
MW2	Well 2		12:15	1													11/30
MFI	Side 1		12:20	1													
MF2	Side 2		12:25	1													

**Relinquished By:** [Signature] **Date:** 11/29 **Time:** 1:45  
**Received By:** [Signature]  
**Relinquished By:** [Signature] **Date:** **Time:**  
**Received By:**  
**Relinquished By:** **Date:** **Time:** **Received By:**

**ICE/t°**  
 GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_  
 COMMENTS:  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711727

ClientID: AEL

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

**Report to:**

Kirby Fernando  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597

Email: kfernando@aeiconsultants.com  
TEL: (925) 283-6000    FAX: (925) 283-6121  
ProjectNo: 276000; Carnation  
PO:

**Bill to:**

Denise Mockel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
dmockel@aeiconsultants.com

**Requested TAT: 5 days**

*Date Received: 11/29/2007*

*Date Printed: 11/30/2007*

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0711727-001	MB1	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-002	MB2	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-003	MB3	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-004	MW1	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-005	MW2	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-006	MF1	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						
0711727-007	MF2	Soil	11/29/2007	<input type="checkbox"/>	A	A	A	A	A	A						

**Test Legend:**

1	5520E_SG_S	2	8082A_PCB_S	3	8260B_S	4	CAM17MS_S	5	G-MBTX_S
6	TPH(D)_S	7		8		9		10	
11		12							

**Prepared by: Elisa Venegas**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **11/29/2007 1:45:00 PM**  
 Project Name: **276000; Carnation** Checklist completed and reviewed by: **Michael Hernandez**  
 WorkOrder N°: **0711727** Matrix Soil Carrier: Client Drop-In

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 4.6°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 12/03/07

### Petroleum Oil & Grease with Silica Gel Clean-Up\*

Analytical methods: SM5520E/F

Work Order: 0711727

Lab ID	Client ID	Matrix	POG	DF	% SS
0711727-001A	MB1	S	ND	1	N/A
0711727-002A	MB2	S	ND	1	N/A
0711727-003A	MB3	S	ND	1	N/A
0711727-004A	MW1	S	ND	1	N/A
0711727-005A	MW2	S	ND	1	N/A
0711727-006A	MF1	S	ND	1	N/A
0711727-007A	MF2	S	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	50	mg/Kg

\* water samples and all TCLP & SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

DF = dilution factor (may be raised to dilute target analyte or matrix interference).

# surrogate diluted out of range or not applicable to this sample.

g) sample extract repeatedly cleaned up with silica gel until constant IR result achieved; h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3550C

Analytical Method: SW8082A

Work Order: 0711727

Lab ID	0711727-001A	0711727-002A	0711727-003A	0711727-004A	Reporting Limit for DF =1	
Client ID	MB1	MB2	MB3	MW1		
Matrix	S	S	S	S		
DF	1	1	1	1		

Compound	Concentration				mg/kg	ug/L
Aroclor1016	ND	ND	ND	ND	0.025	NA
Aroclor1221	ND	ND	ND	ND	0.025	NA
Aroclor1232	ND	ND	ND	ND	0.025	NA
Aroclor1242	ND	ND	ND	ND	0.025	NA
Aroclor1248	ND	ND	ND	ND	0.025	NA
Aroclor1254	ND	ND	ND	ND	0.025	NA
Aroclor1260	ND	ND	ND	ND	0.025	NA
PCBs, total	ND	ND	ND	ND	0.025	NA

### Surrogate Recoveries (%)

%SS:	98	92	98	94	
------	----	----	----	----	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3550C

Analytical Method: SW8082A

Work Order: 0711727

Lab ID	0711727-005A	0711727-006A	0711727-007A		Reporting Limit for DF =1	
Client ID	MW2	MF1	MF2			
Matrix	S	S	S			
DF	1	1	1			

Compound	Concentration				mg/kg	ug/L
	Aroclor1016	ND	ND	ND		0.025
Aroclor1221	ND	ND	ND		0.025	NA
Aroclor1232	ND	ND	ND		0.025	NA
Aroclor1242	ND	ND	ND		0.025	NA
Aroclor1248	ND	ND	ND		0.025	NA
Aroclor1254	ND	ND	ND		0.025	NA
Aroclor1260	ND	ND	ND		0.025	NA
PCBs, total	ND	ND	ND		0.025	NA

### Surrogate Recoveries (%)

%SS:	90	98	95		
------	----	----	----	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content/matrix interference; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (p) see attached narrative; (q) reporting limit raised due to insufficient sample amount; (r) results are reported on a dry weight basis;



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-004A
Client ID	MW1
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	101	%SS2:	97
%SS3:	109		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-005A
Client ID	MW2
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	102	%SS2:	96
%SS3:	107		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-006A
Client ID	MF1
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	101	%SS2:	95
%SS3:	109		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-007A
Client ID	MF2
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	103	%SS2:	95
%SS3:	107		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 12/03/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-001A
Client ID	MB1
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	73	%SS2:	100
%SS3:	93		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 12/03/07

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-002A
Client ID	MB2
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

### Surrogate Recoveries (%)

%SS1:	74	%SS2:	99
%SS3:	93		

### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 12/05/07

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711727

Lab ID	0711727-003A
Client ID	MB3
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.005
1,2-Dibromoethane (EDB)	ND	1.0	0.005	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.005
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

#### Surrogate Recoveries (%)

%SS1:	94	%SS2:	98
%SS3:	111		

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### CAM / CCR 17 Metals\*

Lab ID	0711727-001A	0711727-002A	0711727-003A	0711727-004A	Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	MB1	MB2	MB3	MW1		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/Kg	mg/L

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711727

Dilution Factor	1	1	1	1	1	1
Antimony	ND	ND	ND	ND	0.5	NA
Arsenic	2.8	2.3	2.6	3.3	0.5	NA
Barium	57	49	53	83	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	ND	0.25	NA
Chromium	51	51	40	45	0.5	NA
Cobalt	4.8	4.8	5.2	6.4	0.5	NA
Copper	5.0	5.4	5.3	7.7	0.5	NA
Lead	2.4	2.1	2.6	3.6	0.5	NA
Mercury	ND	ND	ND	ND	0.05	NA
Molybdenum	ND	ND	ND	ND	0.5	NA
Nickel	35	34	34	46	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	33	32	30	38	0.5	NA
Zinc	21	21	22	31	5.0	NA
%SS:	107	102	99	101		

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

### CAM / CCR 17 Metals\*

Lab ID	0711727-005A	0711727-006A	0711727-007A	Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	MW2	MF1	MF2	S	W
Matrix	S	S	S	mg/Kg	mg/L
Extraction Type	TOTAL	TOTAL	TOTAL		

### ICP-MS Metals, Concentration\*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711727

Dilution Factor	1	1	1	1	1
Antimony	ND	ND	ND	0.5	NA
Arsenic	2.6	3.1	3.3	0.5	NA
Barium	62	72	76	5.0	NA
Beryllium	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	0.25	NA
Chromium	43	44	51	0.5	NA
Cobalt	5.7	6.5	7.3	0.5	NA
Copper	5.4	6.8	7.9	0.5	NA
Lead	2.7	3.2	3.5	0.5	NA
Mercury	ND	ND	ND	0.05	NA
Molybdenum	ND	ND	ND	0.5	NA
Nickel	36	41	48	0.5	NA
Selenium	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	0.5	NA
Vanadium	30	34	37	0.5	NA
Zinc	24	28	31	5.0	NA
%SS:	98	103	103		

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 11/30/07

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0711727

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MB1	S	ND	ND	ND	ND	ND	ND	1	87
002A	MB2	S	ND	ND	ND	ND	ND	ND	1	86
003A	MB3	S	ND	ND	ND	ND	ND	ND	1	91
004A	MW1	S	ND	ND	ND	ND	ND	ND	1	85
005A	MW2	S	ND	ND	ND	ND	ND	ND	1	83
006A	MF1	S	ND	ND	ND	ND	ND	ND	1	82
007A	MF2	S	ND	ND	ND	ND	ND	ND	1	84

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.





# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: 276000; Carnation	Date Sampled: 11/29/07
		Date Received: 11/29/07
	Client Contact: Kirby Fernando	Date Extracted: 11/30/07
	Client P.O.:	Date Analyzed 12/01/07

### Diesel Range (C10-C23) Bunker Oil Range (C10+) Extractable Hydrocarbons as Diesel & Bunker Oil\*

Extraction method: SW3550C

Analytical methods: SW8015C

Work Order: 0711727

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	DF	% SS
0711727-001A	MB1	S	ND	ND	1	112
0711727-002A	MB2	S	ND	ND	1	115
0711727-003A	MB3	S	ND	ND	1	115
0711727-004A	MW1	S	ND	ND	1	100
0711727-005A	MW2	S	ND	ND	1	98
0711727-006A	MF1	S	ND	ND	1	99
0711727-007A	MF2	S	ND	ND	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.



### QC SUMMARY REPORT FOR SM5520E/F

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711727

EPA Method SM5520E/F		Extraction SM5520E/F			BatchID: 32190			Spiked Sample ID: 0711727-007A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	ND	1000	103	107	3.50	95.1	89.6	5.99	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32190 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	12/03/07 6:27 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	12/03/07 6:32 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	12/03/07 6:37 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	12/03/07 6:42 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	12/03/07 6:47 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	12/03/07 6:52 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	12/03/07 6:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0711727

EPA Method SW8082A		Extraction SW3550C			BatchID: 32191			Spiked Sample ID: 0711727-007A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	ND	0.075	93.7	95.3	1.63	95.9	96.5	0.632	70 - 130	20	70 - 130	20
%SS:	95	0.050	100	100	0	106	104	1.91	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32191 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	11/30/07 3:44 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	11/30/07 4:44 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	11/30/07 5:41 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	11/30/07 6:39 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	11/30/07 7:36 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	11/30/07 9:32 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	11/30/07 10:29 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711727

EPA Method SW8260B	Extraction SW5030B			BatchID: 32176			Spiked Sample ID: 0711727-001A						
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	105	108	2.72	105	106	0.499	70 - 130	30	70 - 130	30	
Benzene	ND	0.050	119	122	2.76	121	123	2.35	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	83.7	81.3	2.97	80.7	80.4	0.401	70 - 130	30	70 - 130	30	
Chlorobenzene	ND	0.050	126	125	0.775	126	129	2.40	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	111	114	2.47	115	114	0.624	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.2	101	3.28	93.3	97.3	4.12	70 - 130	30	70 - 130	30	
1,1-Dichloroethene	ND	0.050	124	121	2.26	125	122	2.02	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	110	112	1.73	106	109	2.31	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	100	104	3.86	99.2	99.2	0	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	98.3	106	7.59	98.5	96.6	1.91	70 - 130	30	70 - 130	30	
Toluene	ND	0.050	106	104	1.24	116	120	4.01	70 - 130	30	70 - 130	30	
Trichloroethene	ND	0.050	104	110	5.12	109	110	0.856	70 - 130	30	70 - 130	30	
%SS1:	73	0.050	94	98	4.76	92	86	6.80	70 - 130	30	70 - 130	30	
%SS2:	100	0.050	87	88	0.733	91	90	1.10	70 - 130	30	70 - 130	30	
%SS3:	93	0.050	90	89	1.70	91	90	0.917	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 32176 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	12/03/07 2:51 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	12/03/07 3:35 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	12/05/07 4:15 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	11/30/07 6:21 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	11/30/07 7:17 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	11/30/07 8:11 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	11/30/07 9:05 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR 6020A**

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0711727

EPA Method 6020A		Extraction SW3050B				BatchID: 32193			Spiked Sample ID 0711727-007A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	50	103	108	4.22	10	102	104	1.75	70 - 130	20	80 - 120	20
Arsenic	3.3	50	97.7	102	3.58	10	98.5	99.3	0.839	70 - 130	20	80 - 120	20
Barium	76	500	99.1	103	3.69	100	94.4	96.9	2.64	70 - 130	20	80 - 120	20
Beryllium	ND	50	93.4	97.3	4.15	10	101	103	1.57	70 - 130	20	80 - 120	20
Cadmium	ND	50	98.3	103	4.24	10	97.3	100	2.97	70 - 130	20	80 - 120	20
Chromium	51	50	83.4	88.9	2.95	10	94.4	95.6	1.27	70 - 130	20	80 - 120	20
Cobalt	7.3	50	90.2	95.1	4.51	10	94.6	97	2.49	70 - 130	20	80 - 120	20
Copper	7.9	50	101	106	3.96	10	97.6	97.6	0	70 - 130	20	80 - 120	20
Lead	3.5	50	95.1	100	4.72	10	93.4	95.1	1.79	70 - 130	20	80 - 120	20
Mercury	ND	1.25	88.8	92.9	4.32	0.25	89	87.8	1.29	70 - 130	20	80 - 120	20
Molybdenum	ND	50	96.6	101	4.41	10	94.1	96.9	2.93	70 - 130	20	80 - 120	20
Nickel	48	50	98.4	105	3.19	10	100	99.7	0.430	70 - 130	20	80 - 120	20
Selenium	ND	50	95.7	96	0.250	10	98.4	98.2	0.193	70 - 130	20	80 - 120	20
Silver	ND	50	95.5	99.2	3.80	10	95	97.5	2.57	70 - 130	20	80 - 120	20
Thallium	ND	50	97.7	102	4.45	10	94.4	96.6	2.23	70 - 130	20	80 - 120	20
Vanadium	37	50	87.6	92.7	3.10	10	94.9	96.2	1.39	70 - 130	20	80 - 120	20
Zinc	31	500	101	105	4.01	100	103	106	2.78	70 - 130	20	80 - 120	20
%SS:	103	250	97	101	3.88	250	92	94	2.67	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 32193 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	11/30/07 10:11 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	11/30/07 10:19 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	11/30/07 10:26 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	11/30/07 10:33 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	11/30/07 10:41 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	11/30/07 10:48 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	11/30/07 10:56 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711727

Analyte	EPA Method SW8015C			Extraction SW3550C			BatchID: 32187			Spiked Sample ID: 0711717-002A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(d)	11	20	94	90.4	2.46	106	99.2	6.30	70 - 130	30	70 - 130	30	
%SS:	90	50	88	102	14.2	117	106	9.57	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32187 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	12/01/07 6:37 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	12/01/07 7:45 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	12/01/07 8:53 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	12/01/07 3:25 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	12/01/07 4:37 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	12/01/07 5:48 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	12/01/07 6:59 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711727

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32188			Spiked Sample ID: 0711717-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	0.60	87.2	90.1	3.26	83.9	98.4	15.9	70 - 130	30	70 - 130	30
MTBE	ND	0.10	78.2	86.8	10.5	81.3	79.3	2.47	70 - 130	30	70 - 130	30
Benzene	ND	0.10	96.3	97	0.798	93.8	95.2	1.53	70 - 130	30	70 - 130	30
Toluene	ND	0.10	90.4	89.9	0.602	89.7	90.8	1.25	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	102	101	1.21	96.8	98.7	1.96	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	96.3	95.7	0.694	91.7	91.7	0	70 - 130	30	70 - 130	30
%SS:	82	0.10	86	85	0.605	82	84	2.84	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32188 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711727-001A	11/29/07 11:55 AM	11/30/07	11/30/07 5:09 PM	0711727-002A	11/29/07 12:00 PM	11/30/07	11/30/07 6:11 PM
0711727-003A	11/29/07 12:05 PM	11/30/07	11/30/07 7:13 PM	0711727-004A	11/29/07 12:10 PM	11/30/07	11/30/07 2:54 PM
0711727-005A	11/29/07 12:15 PM	11/30/07	11/30/07 3:28 PM	0711727-006A	11/29/07 12:20 PM	11/30/07	11/30/07 4:03 PM
0711727-007A	11/29/07 12:25 PM	11/30/07	11/30/07 4:37 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 12/10/07
		Date Received: 12/10/07
	Client Contact: Kirby Fernando	Date Reported: 12/13/07
	Client P.O.:	Date Completed: 12/13/07

**WorkOrder: 0712272**

December 13, 2007

Dear Kirby:

Enclosed within are:

- 1) The results of the **5** analyzed samples from your project: **#276000; Carnation,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.



0712212



**McCAMPBELL ANALYTICAL, INC.**  
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**CHAIN OF CUSTODY RECORD**  
 TURN AROUND TIME  **RUSH**    5 DAY  
 RUSH 24 HR 48 HR 72 HR 5 DAY  
 GeoTracker EDF  PDF  Excel  Write On (DW)   
 Check if sample is effluent and "J" flag is required

Report To: Kirby Fernando Bill To: AEI Consultants  
 Company: AEI Consultants  
 2500 Camino Diablo #200, Walnut Creek 94597  
 E-Mail: [kfernando@aeiconsultants.com](mailto:kfernando@aeiconsultants.com)  
 Tele: (925) 944-2899 x123 Fax: (925) 944-2895  
 Project #: 276000 Project Name: Carnation  
 Project Location: 1310, 14th St, Oakland  
 Sampler Signature: [Signature]

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other			
TF	14th	12/10	11:04	1	SS	X						X	X				Filter Samples for Metals analysis: Yes / No  48 Hr TAT 12-11-07
TP	Peptan	12/10	11:15	1													
TS	16th		11:25	1													
TM	Mandela		11:31	1													
TW	Water		11:40	3	Amb. VOA	X						X					

Relinquished By: [Signature] Date: 12/10/07 Time: 12:45  
 Received By: ENVIRO-TECH SERVICES AA  
 Relinquished By: ENVIRO-TECH SERVICES AA Date: 12/10/07 Time: 2:45  
 Received By: [Signature]  
 Relinquished By: [Signature] Date: 12/10/07 Time: 3:10  
 Received By: [Signature]

ICE/# 2-4 COMMENTS:  
 GOOD CONDITION yes  
 HEAD SPACE ABSENT yes  
 DECHLORINATED IN LAB yes  
 APPROPRIATE CONTAINERS yes  
 PRESERVED IN LAB yes  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2

CHANGED TO RUSH  
 12-11-07  
 PER FAX / R.F.  
 RUSH 480  
 24 HR RF

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 0712272**

**ClientID: AEL**

EDF     Excel     Fax     Email     HardCopy     ThirdParty

<b>Report to:</b>		<b>Bill to:</b>	<b>Requested TAT: 1 day</b>
Kirby Fernando	Email: kfernando@aeiconsultants.com	Denise Mockel	
AEI Consultants	TEL: (925) 283-6000    FAX: (925) 283-6121	AEI Consultants	<i>Date Received: 12/10/2007</i>
2500 Camino Diablo, Ste. #200	ProjectNo: #276000; Carnation	2500 Camino Diablo, Ste. #200	<i>Date Printed: 12/11/2007</i>
Walnut Creek, CA 94597	PO:	Walnut Creek, CA 94597	
		dmockel@aeiconsultants.com	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0712272-001	TF	Soil	12/10/2007	<input type="checkbox"/>	A		A										
0712272-002	TP	Soil	12/10/2007	<input type="checkbox"/>	A		A										
0712272-003	TS	Soil	12/10/2007	<input type="checkbox"/>	A		A										
0712272-004	TM	Soil	12/10/2007	<input type="checkbox"/>	A		A										
0712272-005	TW	Water	12/10/2007	<input type="checkbox"/>		A		B									

**Test Legend:**

1	G-MBTEX_S	2	G-MBTEX_W	3	TPH(D)_S	4	TPH(D)_W	5	
6		7		8		9		10	
11		12							

**Prepared by: Rosa Venegas**

**Comments:**    Soils turned to 48hr tat per note on 12/11/07

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **12/10/07 4:36:04 PM**

Project Name: **#276000; Carnation**

Checklist completed and reviewed by: Rosa Venegas

WorkOrder N°: **0712272** Matrix Soil/Water

Carrier: EnviroTech

#### Chain of Custody (COC) Information

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes  No  NA
- Shipping container/cooler in good condition? Yes  No
- Samples in proper containers/bottles? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 2.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted:

Date contacted:

Contacted by:

Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 12/10/07
		Date Received: 12/10/07
	Client Contact: Kirby Fernando	Date Extracted: 12/10/07
	Client P.O.:	Date Analyzed 12/10/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0712272

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	TF	S	ND	ND	ND	ND	ND	ND	1	89
002A	TP	S	ND	ND	ND	ND	ND	ND	1	93
003A	TS	S	ND	ND	ND	ND	ND	ND	1	92
004A	TM	S	ND	ND	ND	ND	ND	ND	1	90

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 12/10/07
	Client Contact: Kirby Fernando	Date Received: 12/10/07
	Client P.O.:	Date Extracted: 12/10/07
		Date Analyzed 12/13/07

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

Extraction method SW3550C

Analytical methods SW8015C

Work Order: 0712272

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0712272-001A	TF	S	ND	1	111
0712272-002A	TP	S	ND	1	108
0712272-003A	TS	S	ND	1	98
0712272-004A	TM	S	ND	1	97

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 12/10/07
		Date Received: 12/10/07
	Client Contact: Kirby Fernando	Date Extracted: 12/11/07
	Client P.O.:	Date Analyzed 12/11/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0712272

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
005A	TW	W	85,b	ND	ND	ND	ND	ND	1	105

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #276000; Carnation	Date Sampled: 12/10/07
	Client Contact: Kirby Fernando	Date Received: 12/10/07
	Client P.O.:	Date Analyzed: 12/11/07
		Date Extracted: 12/10/07

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

Extraction method SW3510C

Analytical methods SW8015C

Work Order: 0712272

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0712272-005B	TW	W	92,d	1	88

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712272

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32423			Spiked Sample ID: 0712266-017A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	0.60	113	111	2.24	119	110	7.59	70 - 130	30	70 - 130	30
MTBE	ND	0.10	101	99.5	1.43	105	104	0.981	70 - 130	30	70 - 130	30
Benzene	ND	0.10	90.6	94.2	3.87	98.1	96.1	2.09	70 - 130	30	70 - 130	30
Toluene	ND	0.10	82.8	84.8	2.24	88.5	90.1	1.82	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	94.7	97.1	2.54	96.1	98.1	2.10	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	91.3	92	0.727	91.3	92.3	1.09	70 - 130	30	70 - 130	30
%SS:	70	0.10	86	88	2.58	87	89	2.48	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32423 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712272-001A	12/10/07 11:04 AM	12/10/07	12/10/07 10:00 PM	0712272-002A	12/10/07 11:15 AM	12/10/07	12/10/07 10:30 PM
0712272-003A	12/10/07 11:25 AM	12/10/07	12/10/07 11:01 PM	0712272-004A	12/10/07 11:31 AM	12/10/07	12/10/07 11:32 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.





### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712272

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32414			Spiked Sample ID: 0712251-002A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	107	104	2.36	104	103	1.41	70 - 130	30	70 - 130	30
MTBE	ND	10	94.3	89.2	5.60	94.4	96.7	2.43	70 - 130	30	70 - 130	30
Benzene	ND	10	92	88.7	3.66	91.2	91.7	0.476	70 - 130	30	70 - 130	30
Toluene	ND	10	91.9	88.7	3.59	90.9	91.5	0.724	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	96	92.9	3.29	94.3	95.2	0.898	70 - 130	30	70 - 130	30
Xylenes	ND	30	107	103	3.17	107	107	0	70 - 130	30	70 - 130	30
%SS:	92	10	89	90	1.02	88	90	1.80	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32414 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712272-005A	12/10/07 11:40 AM	12/11/07	12/11/07 10:57 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712272

EPA Method SW8015C		Extraction SW3550C			BatchID: 32399			Spiked Sample ID: 0712230-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	109	108	1.21	107	107	0	70 - 130	30	70 - 130	30
%SS:	100	50	101	100	1.81	117	116	0.592	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32399 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712272-001A	12/10/07 11:04 AM	12/10/07	12/13/07 12:17 PM	0712272-002A	12/10/07 11:15 AM	12/10/07	12/13/07 12:17 PM
0712272-003A	12/10/07 11:25 AM	12/10/07	12/13/07 11:43 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712272

EPA Method SW8015C		Extraction SW3550C			BatchID: 32429			Spiked Sample ID: 0712279-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	7.4	20	115	115	0	109	110	0.395	70 - 130	30	70 - 130	30
%SS:	103	50	120	120	0	118	118	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32429 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712272-004A	12/10/07 11:31 AM	12/10/07	12/13/07 12:55 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712272

EPA Method SW8015C		Extraction SW3510C			BatchID: 32436			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	114	114	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	117	118	0.644	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32436 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712272-005B	12/10/07 11:40 AM	12/10/07	12/11/07 7:56 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 12/12/07
		Date Received: 12/12/07
	Client Contact: Kirby Fernando	Date Reported: 12/13/07
	Client P.O.:	Date Completed: 12/13/07

**WorkOrder: 0712381**

December 13, 2007

Dear Kirby:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#275493; Carnation,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.



# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 0712381**

**ClientID: AEL**

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

<b>Report to:</b>		<b>Bill to:</b>	<b>Requested TAT: 1 day</b>
Kirby Fernando	Email: kfernando@aeiconsultants.com	Denise Mockel	
AEI Consultants	TEL: (928) 944-2899 FAX: (925) 283-6121	AEI Consultants	<i>Date Received: 12/12/2007</i>
2500 Camino Diablo, Ste. #200	ProjectNo: #275493; Carnation	2500 Camino Diablo, Ste. #200	<i>Date Printed: 12/12/2007</i>
Walnut Creek, CA 94597	PO:	Walnut Creek, CA 94597	
		dmockel@aeiconsultants.com	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
0712381-001	B1W	Water	12/12/07 10:34:00	<input type="checkbox"/>	A													

**Test Legend:**

1	G-MBTX_W	2		3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

**Prepared by: Elisa Venegas**

**Comments:** 24hr rush

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



**Sample Receipt Checklist**

Client Name: **AEI Consultants**

Date and Time Received: **12/12/07 6:15:15 PM**

Project Name: **#275493; Carnation**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0712381** Matrix Water

Carrier: Rob Pringle (MAI Courier)

**Chain of Custody (COC) Information**

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

- Custody seals intact on shipping container/cooler? Yes  No  NA
- Shipping container/cooler in good condition? Yes  No
- Samples in proper containers/bottles? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 3.2°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted:

Date contacted:

Contacted by:

Comments:





# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 12/12/07
		Date Received: 12/12/07
	Client Contact: Kirby Fernando	Date Extracted: 12/13/07
	Client P.O.:	Date Analyzed 12/13/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0712381

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	B1W	W	ND	ND	---	---	---	---	1	112

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #275493; Carnation	Date Sampled: 12/12/07
		Date Received: 12/12/07
	Client Contact: Kirby Fernando	Date Extracted: 12/12/07
	Client P.O.:	Date Analyzed 12/13/07

## Diesel (C10-23) and Bunker Oil (C10+) Range Extractable Hydrocarbons as Diesel and Bunker Oil\*

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0712381

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	DF	% SS
0712381-001A	B1W	W	ND	ND	1	107

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0712381

EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32511			Spiked Sample ID: 0712381-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	97	111	13.2	106	95.6	10.2	70 - 130	30	70 - 130	30
MTBE	ND	10	117	103	12.7	106	107	0.411	70 - 130	30	70 - 130	30
Benzene	ND	10	99.1	94.1	5.16	95.9	97.7	1.82	70 - 130	30	70 - 130	30
Toluene	ND	10	89.8	88.8	1.16	88.9	91	2.33	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	97.1	98.3	1.24	98	99.5	1.50	70 - 130	30	70 - 130	30
Xylenes	ND	30	92	96.3	4.60	96.7	100	3.39	70 - 130	30	70 - 130	30
%SS:	112	10	99	96	2.21	96	97	0.838	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32511 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712381-001A	12/12/07 10:34 AM	12/13/07	12/13/07 2:20 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712381

EPA Method SW8015C		Extraction SW3510C			BatchID: 32490			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	114	102	11.0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	128	109	16.5	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 32490 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712381-001A	12/12/07 10:34 AM	12/12/07	12/13/07 2:35 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.