

# THRIFTY OIL CO.

September 1, 2015

O-15 2733

Ms. Adrianna M. Crowl  
State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100  
Sacramento, California 95812-0100

by Certified Mail  
7011 3500 0003 5855 4898

**Re: Former Thrifty Oil Co./Best California Gas Ltd. Station No. 081  
1510 South Garey Avenue  
Pomona, California 91766  
Global ID. T0603792979  
LARWQCB Case No. R-25090**

**Subject: Petition to the State Water Resources Control Board Regarding Designating  
Thrifty Oil Co./Best California Gas, Ltd. as Responsible Party to Perform Site  
Characterization**

Dear Ms. Crowl,

Thrifty Oil Co. (Thrifty) and Best California Gas Ltd. (Best) are submitting this petition to be reviewed by the California State Water Resources Control Board (SWRCB), regarding the designation by the Los Angeles Regional Water Quality Control Board (LARWQCB) of Thrifty/Best as a responsible party (RP) to perform site characterization at the former Thrifty/Best Service Station #081 located at 1510 South Garey Avenue in Pomona, California. The subject property is owned by Best, an affiliate of Thrifty.

In their August 3, 2015 letter co-addressed to Atlantic Richfield Company (ARCO) and Thrifty/Best (**Attachment A**), the LARWQCB stated that they identified ARCO as Responsible Party for this case. However, Thrifty/Best is also named as a RP *due to their ownership of the property*.

In their letter, the LARWQCB approves the June 18, 2015 *Conditional Workplan for Confirmation Soil Boring Installation (Work Plan) (Attachment B)*, which was submitted by ARCO's consultant Stantec Consulting Services, Inc. (Stantec). The June 18, 2015 Work Plan was submitted to comply with requirements in a February 17, 2015 LARWQCB letter (**Attachment C**), which was addressed solely to ARCO. This letter also required ARCO to submit site information which was originally required by the LARWQCB in their letter to ARCO dated May 15, 2009. ARCO was originally identified as primary responsible party for site cleanup in the County of Los Angeles Department of Public Works (LADPW) letter dated December 14, 1999 (**Attachment D**), following the discovery of soil contamination during underground storage tank (UST) removal in April 1998. The August 3, 2015 LARWQCB letter requires that a site assessment report be submitted by November 3, 2015.



We believe that the decision to name Thrifty/Best as a RP only because it is a property owner is arbitrary and unfair, and requests that the SWRCB either remove Thrifty/Best as a RP or to name Thrifty/Best as a Secondary RP.

Additional evidence is presented below which serve to demonstrate that Thrifty/Best should not be named as an additional RP, or if that is not possible, to be named as Secondary RP because Thrifty/Best did not cause the release.

This appeal follows the format published in the SWRCB's Instructions for Filing Water Quality Petitions (Updated June 1, 2015).

1. Name, address, telephone number, and e-mail address of the petitioner:

Thrifty Oil Co. and Best California Gas Ltd.  
Attn: Mr. Barry Berkett  
13116 Imperial Hwy.  
Santa Fe Springs, CA 90670

Phone Number: (562) 921-3581  
E-Mail Address: berkett@thriftyoil.com

2. The action or inaction of the Regional Water Board being petitioned, including a copy of the action being challenged or any refusal to act, if available:

In their August 3, 2015 letter (**Attachment A**), the LARWQCB identified ARCO as the RP for the case, but also named Thrifty/Best as a RP due to their ownership of the site. The LARWQCB letter is requiring implementation of a June 18, 2015 Work Plan and submittal of a site assessment report by November 3, 2015.

3. The date the Regional Water Board acted, or refused to act, or was requested to act:

As described in bullet no. 2 above, the LARWQCB directives were issued in their letter dated August 3, 2015.

4. A statement of the reasons the action or inaction was inappropriate or improper:

In their August 3, 2015 letter, the LARWQCB names Thrifty/Best a RP *due to their ownership of the property*. Thrifty/Best believes it is unfair that it is being required to comply with Regional Board requirements by merely being the owner of the property, with no apparent connection to the documented release at the site. There is no evidence that any significant release occurred while Thrifty/Best operated the site prior to May 1997, while significant hydrocarbon contamination was discovered in soil samples collected during the UST removal in April 1998 during ARCO's operation; a summary of site assessment activities is presented below:

- In May 1995, four soil borings (B-1 through B-4) were drilled, ranging from 20 to 40 feet bgs. Three borings were in the area of the tank pit, while one boring (B-3) was

adjacent to the northern dispenser. Soil samples were collected and analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Methods 8015 and 8020. No hydrocarbons were detected in any of the samples, with the exception of 6.9 milligrams per kilogram (mg/kg) TPHg in sample B-2-10' and trace concentrations of benzene in three samples (up to 0.016 mg/kg in sample B-4-10'). Results are included in a *Site Assessment Report* dated July 7, 1995 (**Attachment E**).

- On May 14, 1997, site operations were transferred from Thrifty/Best to ARCO. At the inception of ARCO's lease, a baselining assessment was performed in July 1997, where nine soil borings (TDD-1 through TDD-9) were drilled and sampled, each to 40 feet bgs. The soil samples were analyzed for TPHg and total petroleum hydrocarbons as diesel (TPHd) using EPA Method 8015 and for BTEX and methyl tert butyl ether (MTBE) using EPA Method 8020. No hydrocarbon constituents were detected in any of the soil boring samples, with the exception of 6.8 mg/kg TPHd in sample TDD-8-40'. The soil sample results included in the *Baselining Subsurface Investigation Report* (Baselining Report) dated December 5, 1997 (**Attachment F**) indicate essentially clean soil conditions at the end of Thrifty/Best's operation of the site.
- On September 12, 1997, two months after performing the July assessment and four months after ARCO's operation at the site, ARCO went back to the site to collect 10 shallow soil gas samples (SG-1 through SG-10), each from approximately 5 feet below grade. The soil gas samples were analyzed for TPHg using EPA Method 8015 and for BTEX and MTBE using EPA Method 8020, with one soil gas sample (SG-3) additionally analyzed for BTEX and MTBE using Method TO-14. Results indicated maximum concentrations of 65,000 milligrams per meter cubed (mg/m<sup>3</sup>) TPHg, 560 mg/m<sup>3</sup> benzene, and 5,200 mg/m<sup>3</sup> MTBE, all in sample SG-3; the MTBE concentration by Method TO-14 in this sample was 6,300 mg/m<sup>3</sup>. The soil vapor results are included in the above-referenced December 5, 1997 Baselining Report.

The highest soil vapor concentrations are in soil vapor points SG-1, SG-3, and SG-4 in the immediate vicinity of the dispensers, where nearby previous borings TDD-1, TDD-2, and TDD-3 contained no detectable hydrocarbons. This would suggest that release(s) occurred in the dispenser area during ARCO's operations, which most likely had occurred within the four months preceding the soil vapor sampling. Even minor releases such as customer fueling incidents or top-off spills could be detected in the shallow soil vapor probes. Furthermore, it has been Thrifty/Best's experience that the SWRCB only considers soil vapor samples as a screening tool, to be confirmed by the actual soil samples. An example of this was for Thrifty Station No. 219, where Thrifty's claim application was deemed ineligible by the SWRCB due to the Fund not accepting the soil vapor sample results (**Attachment G**).

- In April 1998, ARCO removed four USTs, with associated soil sampling performed. A total of 8 soil samples were collected beneath the USTs, and 17 soil samples collected beneath the dispensers and product piping, with samples analyzed for TPHg, BTEX, and MTBE using EPA Methods 8015 and 8020. A maximum

concentration of 1,900 mg/kg TPHg was recorded for tank pit sample EF-8, while the maximum benzene (81 mg/kg) and MTBE (280 mg/kg) were in sample EF-2. The UST removal activities are summarized in a UST Removal Report dated August 13, 1998 (**Attachment H**). The hydrocarbon concentrations in the soil samples collected during the April 1998 UST removal are two to three orders of magnitude higher than previous maximum concentrations in the May 1995 and July 1997 assessments, which likely indicates release(s) occurred during ARCO's nearly one year of operation at the site from May 1997 through April 1998. After reviewing the results of the April 1998 soil sampling associated with the UST removal, the LADPW identified ARCO as primary responsible party for site cleanup in their letter dated December 14, 1999 (**Attachment D**).

With the May 1995 soil sample results, complemented by the July 1997 soil sample results, it is clear that Thrifty/Best did not cause the release that was identified in April 1998 during ARCO's UST removal activities.

5. How the Petitioner is Aggrieved:

Petitioner has been aggrieved by the LARWQCB's actions because they will be subjected to provisions of an arbitrary and unfair finding unsupported by evidence in the record. Further, petitioner will be forced to unnecessarily incur substantial costs for corrective actions of a release that they did not cause or contribute to.

6. The action the petitioner requests the State Water Board to take:

- The petitioner requests that the State Water Board remove Thrifty/Best as a RP for the site, and if this is not possible, to name Thrifty/Best as a Secondary RP. Where one or more responsible parties exist at a UST site, many local agencies distinguish between parties who are primarily responsible and those who are secondary responsible. State Water Board orders have found secondary liability status appropriate where, among other things, the responsible party did not initiate or contribute to the discharge (State Water Board Orders WQ 89-8 [*Arthur Spitzer et al*] and WQ 86-18 [*Vallco Park, Ltd.*]).

7. A statement of points and authorities for any legal issues raised in the petition, including citations to documents or hearing transcripts that are referred to:

- The precedent for Secondary RP status for Thrifty/Best is established in the State Water Resources Control Board Leaking Underground Fuel Tank Guidance Manual, September 2012, as well as State Water Board Orders WQ 89-8 and WQ 86-18.

8. A statement that copies of the petition have been sent to the Regional Water Board and to the discharger, if different from the petitioner.

Copies of the petition has been sent to the following parties:

Mr. Sam Unger  
Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Ste. 200  
Los Angeles, CA 90013

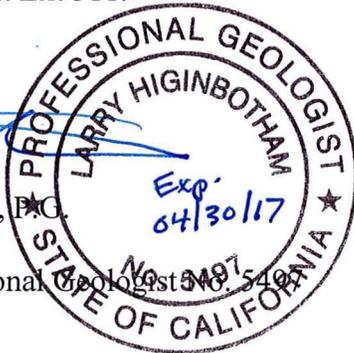
Mr. Kyle Christie  
Atlantic Richfield Company  
4 Centerpointe Drive, Suite 200, LPR-4-221  
La Palma, CA 90623-1066

9. A statement that the issues raised in the petition were presented to the regional board before the regional board acted, or an explanation of why the petitioner could not raise those objections before the regional board.
- Despite the LADPW's identification of ARCO as RP when they transferred the site to the LARWQCB and the LARWQCB's identification of ARCO as the sole RP in the past, the LARWQCB's August 3, 2015 directive letter added Thrifty/Best as RP, due to their ownership of the property, which is completely unexpected.

If you should have any questions or comments regarding this transmittal or require additional information, please contact either Larry Higinbotham at (562) 921-3581, Ext. 325, or Jeff Suryakusuma at Ext 311.

Sincerely,

  
Larry Higinbotham, P.G.  
Project Manager  
California Professional Geologist No. 5499



  
Jeff Suryakusuma, P.E.  
General Manager  
Environmental Affairs

cc: Mr. Sam Unger, Los Angeles Regional Water Quality Control Board  
Mr. Kyle Christie, Atlantic Richfield Company  
Mr. Barry Berkett, Executive Vice President, Thrifty Oil Co.  
File

Attachments:

- Attachment A: LARWQCB letter dated August 3, 2015, naming Thrifty/Best as a RP due to their ownership of the site
- Attachment B: Conditional Workplan for Confirmation Soil Boring Installation dated June 18, 2015
- Attachment C: LARWQCB letter dated February 17, 2015, requiring ARCO to submit Work Plan
- Attachment D: LADPW letter dated December 14, 1999 identifying ARCO as primary RP following discovery of soil contamination during April 1998 UST removal
- Attachment E: Site Assessment Report dated July 7, 1995
- Attachment F: Baseline Subsurface Investigation Report, dated December 22, 1997
- Attachment G: Letter from SWRCB-Cleanup Fund dated December 11, 2013, rejecting claim application for Thrifty Station No. 219, due to use of soil vapor samples
- Attachment H: UST Removal Report dated August 13, 1998

***ATTACHMENT A***



Los Angeles Regional Water Quality Control Board

August 3, 2015

1-152493  
**RECEIVED**  
AUG 06 2015 FILE LH  
**ENVIRONMENTAL**  
SS#081

Mr. Kyle Christie  
Atlantic Richfield Company  
4 Centerpointe Drive, Suite 200, LPR 4-221  
La Palma, CA 90623-1066

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO.: 7012 1640 0000 6294 7308

Mr. Jeff Suryakusuma  
Thrifty Oil Company /  
Best California Gas, LTD  
13116 Imperial Highway  
Santa Fe Springs, CA 90627

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO.: 7008 1830 0004 3359 0957

**DIRECTIVE TO TAKE CORRECTIVE ACTION IN RESPONSE TO UNAUTHORIZED UNDERGROUND STORAGE TANK RELEASE – HEALTH AND SAFETY CODE SECTION 25296.10 AND TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS, SECTIONS 2720-2727**

**WORKPLAN APPROVAL**

**FORMER ARCO # 9553 / THRIFTY #081**

**1510 SOUTH GAREY AVENUE, POMONA**

**(CASE NO.: R-25090) (GLOBAL ID NO.: T0603792979) (PRIORITY B-2)**

Dear Mr. Christie and Mr. Suryakusuma:

Pursuant to Health and Safety Code section 25296.10, Atlantic Richfield Company (ARCO) and Thrifty Oil Company (TOC) / Best California Gas, LTD (BCG) are required to take corrective action (i.e., Preliminary Site Assessment, Soil and Water Investigation, Corrective Action Plan Implementation, and/or Verification Monitoring) to ensure protection of human health, safety, and the environment. Corrective action requirements are set forth in California Code of Regulations (CCR), title 23, sections 2720 through 2727.

ARCO was identified as the responsible party for this case. However, TOC / BCG is also named as a responsible party due to their ownership of the site.

We are in receipt of a technical report titled "Conditional Workplan for Confirmation Soil Boring Installation" (Workplan) dated June 18, 2015, submitted by ARCO's consultant, Stantec Consulting Services, Inc. (SCS). The following are Regional Board staff comments upon reviewing the Workplan.

**Workplan Approval (Per CCR, Title 23, § 2724)**

ARCO proposed in the Workplan to drill two angle soil borings (CB-1 and CB-2) to a maximum depth of approximately 55.0 to 60.0 vertical feet below ground surface (bgs) to access soil conditions near the northern end of the former USTs that were removed in 1998. It is

CHARLES STORGER, CHAIR | SAMUEL UJER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles



anticipated that boring CB-1 will be located approximately 10 feet away from the western edge of the pre-1998 UST excavation and will be drilled at an approximate angle of 16 degrees from vertical. CB-2 will be located approximately 12 feet away from the northern edge of the existing UST complex and will be drilled at an approximate angle of 25 degrees from vertical. Staff has reviewed the Workplan and concurs with implementing it, provided the following conditions are met:

1. Soil samples shall be collected from each boring at a minimum of five-foot intervals, at changes in soil lithology and at areas of obvious contamination for geologic logging. Soil samples must also be preserved per EPA Method 5035 for chemical analysis. All soil samples collected must be field screened for petroleum hydrocarbons using either a Photo Ionization Detector or a Flame Ionization Detector.
2. Soil samples must be analyzed by Cal-LUFT GC/FID or Cal-LUFT GC/MS Method for total petroleum hydrocarbons as gasoline (TPH<sub>G</sub>), total petroleum hydrocarbons as diesel (TPH<sub>D</sub>) when diesel is identified at the site; and by EPA Method 8260B for benzene, toluene, ethylbenzene and xylenes (BTEX), naphthalene, and fuel oxygenate compounds including methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA). Ethanol is also required and shall be analyzed by either method above. The analytical detection limits must conform to the Regional Board General Laboratory Testing Requirements (9/06) ([http://www.waterboards.ca.gov/losangeles/publications\\_forms/forms/ust/lab\\_forms/labreq9-06.pdf](http://www.waterboards.ca.gov/losangeles/publications_forms/forms/ust/lab_forms/labreq9-06.pdf)). All respective analytical methods must be certified by the California Environmental Laboratory Accreditation Program (ELAP). All analytical data must be reported by a California-certified laboratory.
3. If groundwater is encountered, groundwater grab samples must be collected and analyzed by the same laboratory protocol stated above.
4. A technical report detailing the results of this phase of investigation must be submitted to this Regional Board due by **November 3, 2015**. The report must include a scaled site map, boring logs, soil sampling results and isoconcentration maps. Based on the results from this investigation, your technical report must also contain a workplan for additional assessment, if needed.

### Regulatory Requirement for Electronic Submission of Laboratory Data to the GeoTracker Database

On September 30, 2004, the State Water Resources Control Board (SWRCB) adopted the resolution to revise regulations in Chapter 30, Division 3 of Title 23 of California Code of Regulations (CCR), which requires persons to ensure electronic submission of laboratory analytical data (i.e., soil or water chemical analysis) and locational data (i.e., location and elevation of groundwater monitoring wells), to the SWRCB's GeoTracker database. The regulations and other background information are available at <http://geotracker.waterboards.ca.gov>.

In accordance with the above regulations, you are required to submit all laboratory data in the Electronic Deliverable Format to the SWRCB's GeoTracker database for any soil and/or groundwater samples obtained after September 1, 2001. This would include any sampling completed for underground storage tank system removal, site assessment activities, periodic

© 2015 State Water Resources Control Board. All rights reserved.

320 West 4th St., Suite 200, Los Angeles, CA 90013 | [www.waterboards.ca.gov/losangeles](http://www.waterboards.ca.gov/losangeles)

groundwater monitoring, and post cleanup verification sampling. Per the same regulations, you are also required to submit locational data for all groundwater monitoring wells (i.e., latitude, longitude, and elevation survey data) together with groundwater information (i.e., elevation, depth to free product, monitoring well status, etc.) and a site map commencing January 1, 2002. Hard copy paper reports, which must also be electronically uploaded onto GeoTracker, are no longer required to be submitted to Regional Board.

### General Requirements

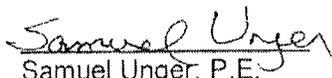
1. The contractor who conducts the environmental work as required in this order shall, at all times, comply with all applicable State laws, rules, regulations, and local ordinances specifically, including but not limited to, environmental, procurement and safety laws, rules, regulations, and ordinances. The contractor shall obtain the services of a Professional Geologist or Engineer, Civil (PG/PE-Civil) to comply with the applicable requirements of the Business and Professions Code, sections 7800 et seq. implementing regulations for geological or engineering analysis and interpretation for this case. All documents prepared for others by the contractor that reflect or rely upon geological or engineering interpretations by the contractor shall be signed or stamped by the PG/PE-Civil indicating her/his responsibility for them as required by the Business and Professions Code.
2. All necessary permits must be obtained from the appropriate agencies prior to the start of work.
3. Prior to commencing any fieldwork, Regional Board staff must be given a minimum of **15 days** advance notice in writing, so that one of our staff may be present.

### Enforcement

Pursuant to section 25299(d) of the Health and Safety Code, any person who violates any corrective action requirement established by, or issued pursuant to, section 25296.10 is liable for a civil penalty of not more than ten thousand dollars (\$10,000) for each underground storage tank for each day of violation since March 17, 2015. A civil penalty may be imposed by civil action pursuant to section 25299(d) (2) or imposed administratively by the Regional Board pursuant to Water Code sections 13323 through 13328. The Regional Board may also request that the Attorney General seek judicial civil liabilities or injunctive relief pursuant to California Water Code sections 13262, 13264, 13304, 13331, 13340 and 13386. The Regional Board reserves its right to take any further enforcement action authorized by law.

If you have any questions regarding this matter, please contact Mr. Errick Llamas at (213) 576-6620 or email him at [ellamas@waterboards.ca.gov](mailto:ellamas@waterboards.ca.gov).

Sincerely,

  
Samuel Unger, P.E.  
Executive Officer

cc: Micah Reich, State Water Resources Control Board, UST Cleanup Fund  
Phuong Ly, Water Replenishment District of Southern California  
Gareth Roberts, Stantec

***ATTACHMENT B***



**Stantec Consulting Services Inc.**  
290 Conejo Ridge Avenue  
Thousand Oaks CA 91361  
Tel: (805) 230-1266  
Fax: (805) 230-1277

June 18, 2015

Attention: Mr. Errick Llamas  
California Regional Water Quality Control Board - Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, California 90013

**RE:            CONDITIONAL WORK PLAN FOR CONFIRMATION SOIL BORING INSTALLATION**

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081  
1510 South Garey Avenue  
Pomona, California  
LARWQCB File No. R-25090

Dear Mr. Llamas:

Stantec Consulting Services Inc. (Stantec), on behalf of Atlantic Richfield Company (ARC), is submitting this *Conditional Work Plan for Confirmation Soil Boring Installation* for the above referenced property located at 1510 South Garey Avenue, Pomona (Site; Figures 1 through 3) in response to the Los Angeles Regional Water Quality Control Board (LARWQCB) letter dated February 17, 2015 (Appendix A). Best California Gas, Ltd., an entity closely associated with Thrifty Oil Company (Thrifty), is the Site property owner. ARCO leased the property from Thrifty and operated a gasoline station at the Site from approximately May 1997 to May 2012. The retail facility is currently being operated by another third party.

ARC and the LARWQCB met on April 10, 2015 to discuss the Site history, hydrocarbon soil impacts and possible assessment activities required for the Site so that the LARWQCB could evaluate the Site for possible "Low-Threat Closure" consideration. ARC provided the following information:

- Hydrocarbon impacts to soil were present at the Site prior to ARCO's commencement of operations at the Site. The Site has been a retail gasoline facility since the mid-1950s and the underground storage tank (UST) removal that ARCO performed in April 1998 removed single-wall USTs that had been in-place since the early 1980s or possibly earlier. ARC's position is that the soil impacts discovered during the April 1998 UST removal are the result of releases that occurred prior to ARCO's commencement of Site operations in May 1997.

Following discussion of the hydrocarbon soil impacts and possible assessment activities, the LARWQCB determined that:

- An investigation which assessed the hydrocarbon impacts in soil at some depth beneath soil sample locations EF-2 and EF-8 would be a sufficient work scope. If non-detect to low concentrations of hydrocarbon impacts were found at depth, then the LARWQCB would agree that the Site was adequately characterized;
- As a result of the presence of existing and historic UST pea gravel backfilled excavations, two angle borings would be necessary to collect the soil samples beneath EF-2 and EF-8



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 2 of 9

and that the sample collection depth would likely be approximately 50 feet below ground surface (bgs); and

- The dispenser island area of the Site was adequately characterized and no further investigation was required for this area.

The LARWQCB agreed that, upon submittal of the work plan for the two borings proposed by ARC, the LARWQCB would name Best California Gas, Ltd. and Thrifty as the Owner (tank owner of pre-1998 steel USTs) under Health and Safety Code section 25296.10 and as additional Responsible Parties for the corrective action at the Site under CCR Title 23, Chapter 16, section 2720 through 2727. This would result in the Site and LARWQCB File No. R-25090 having three Responsible Parties responsible for corrective action at the Site.

This Conditional Work Plan is necessary because:

- Best California Gas is the property owner of the Site and leases the Site to a third party operator;
- ARC will not enter onto the Site to perform the investigative work as Best California Gas & Thrifty are also Responsible Parties for the corrective action at the Site; and
- ARC will contribute toward the cost of the Site investigation (work as described in this Conditional Work Plan) once Best California Gas & Thrifty has entered into an agreement with ARC to participate in investigating the hydrocarbon impacts existing at the Site.

The purpose of this Conditional Work Plan is to propose two confirmation soil borings to evaluate historical soil impacts identified beneath the north end of the former USTs that were owned by Best California Gas & Thrifty and removed by ARC in April 1998. Implementation of this workplan is conditional upon Best California Gas & Thrifty acknowledging joint responsibility for the Site as previous contamination has been documented to exist prior to ARC's lease of the property.

It should be noted that based on building permits available at the Los Angeles County Department of Public Works (LACPDW), the Site has been an operating service station since at least 1955 (Appendix B). Review of historical aerial photographs indicate the station configuration has remained relatively unchanged since at least 1964, suggesting the steel USTs removed in 1998 (or potential older generations of USTs) were located in the same location since at least 1964.

This Conditional Work Plan satisfies ARC's requirement to submit a site assessment work plan to the LARWQCB to define the extent of soil contamination beneath the former USTs of the Site as requested in the LARWQCB letter dated February 17, 2015 and extended in the LARWQCB letter dated May 21, 2015.



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 3 of 9

## PROPOSED SCOPE OF WORK

Stantec proposes the following scope of work:

- Prepare a Health and Safety Plan (HASP) for the proposed drilling activities;
- Utilize Underground Service Alert (USA) and a private underground utility location service to locate and surface mark all subsurface utilities and obstructions at and around the proposed boring locations prior to drilling;
- Drill two angle soil borings (CB-1 and CB-2) to an adjusted vertical depth of approximately 55 to 60 feet bgs to assess soil conditions at the northern end of the former USTs removed in 1998 (Figures 2 through 4);
- Collect a soil sample at an approximate depth of 55 feet beneath the location of sample EF-8 and at an approximate depth of 60 feet beneath the location of sample EF-2. The two soil samples will be submitted to a state-certified laboratory for chemical analyses of petroleum-hydrocarbon constituents and lead scavengers; and
- Generate a technical report detailing the findings of the investigation.

## SITE INFORMATION

### Site Description

The Site is an active gasoline service station owned by Best California Gas, Ltd. ARC leased and operated the Site from approximately May 1997 to May 2012. The station is currently being operated by another third party. The Site layout consists of a station building, two double-walled fiberglass underground storage tanks (USTs), and three dispenser islands (Figure 2).

### Site Background

- On May 12, 1995, Thrifty performed a subsurface assessment at Fast Fuel Station No. 095 as part of a potential property transaction. Four soil borings (B-1 through B-4) were advanced to depths ranging from 20 to 50 feet bgs. Detectable concentrations of total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (collectively BTEX) were identified in soil boring B-1 at 10 feet bgs, located west of the USTs. Soil boring B-4, installed north of the USTs, identified benzene, toluene, and xylene concentrations at 10 and 15 feet bgs. Maximum concentrations of TPHg and BTEX were detected at 6.9 milligrams per kilogram (mg/kg), 0.012 mg/kg, 0.2 mg/kg, 0.007 mg/kg, and 0.36 mg/kg, respectively. Thrifty concluded these concentrations "do not appear to exceed general regulatory clean-up levels and more than likely would not require remedial activities". It is unknown if a report was submitted to a regulatory agency. Historical figures and tables from this phase of work are included in Appendix C.



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 4 of 9

- In May 1997, ARCO entered into a 15 year lease with Thrifty and began operating the existing gasoline retail facility.
- On July 23 and 24, 1997, ARCO conducted a baseline investigation to evaluate potential soil contamination beneath the Site attributable to historical station operations. Nine soil borings (TDD-1 through TDD-9) were drilled to depths of 40 feet bgs. Two soil samples were submitted for laboratory analyses from each boring location. No concentrations of TPHg, total petroleum hydrocarbons as diesel (TPHd), BTEX, or methyl-tertiary-butyl ether (MTBE) were detected in the soil samples. Historical figures and tables from this phase of work are included in Appendix D.
- On September 12, 1997, ten soil gas samples were collected at depths of approximately five feet bgs. Soil gas samples collected at the north side of the USTs (SG-4), along the product piping trench east of the dispenser islands (SG-2 and SG-3), and northern dispenser island area (SG-1) indicated high levels of petroleum hydrocarbons. TPHg was detected at concentrations ranging from 1,100 to 63,000 milligrams per cubic meter (mg/m<sup>3</sup>). Benzene was detected at concentrations ranging from 200 to 560 mg/m<sup>3</sup>. MTBE was detected at concentrations ranging from 340 to 6,300 mg/m<sup>3</sup>. A *Baselining Subsurface Investigation Report* dated December 5, 1997, was issued to Thrifty by Pacific Environmental Group, Inc (PEG, 1997). It does not appear Thrifty submitted the 1997 baseline report to a Responsible Government Agency.
- In April 1998, less than one year after ARCO began operating the Site, four 10,000-gallon single-walled steel USTs were removed from the Site. During removal of the USTs, soil in the northern half of the UST excavation was noted to be visually stained. Soils encountered during the UST removal activities primarily consisted of sand and silty sand from ground surface to a depth of approximately 17 feet bgs.
- On April 10, 1998, eight soil samples (EF-1 through EF-8) were collected from the base of the UST excavation at approximately 13 feet bgs. Maximum TPHg, benzene, and MTBE concentrations of 1,900 mg/kg, 81 mg/kg, and 280 mg/kg were identified in soil at the northern end of the tankpit. Soil samples collected from the southern end of the tankpit excavation were primarily non detectable with the exception of 0.45 mg/kg MTBE detected in one sample. Historical figures and tables from this phase of work are included in Appendix E.
- On April 13 and 14, 1998, the UST cavity was over-excavated to a depth of approximately 17 feet bgs to accommodate installation of two (one 20,000 gallon and one 10,000/10,000 gallon split) larger double-walled fiberglass USTs. A total of 1,176.34 tons of excavated soil generated during UST removal activities was transported off site to American Remedial Technologies (ART) in Lynwood, California, for treatment and recycling. Thrifty coordinated the removal of all soil.
- On April 21, 1998, 12 soil samples were collected beneath the former fuel dispensers (DI-1 through DI-12) and five soil samples were collected beneath the former product piping (PL-1 through PL-5) at depths of approximately three feet bgs. Maximum TPHg, benzene, and MTBE concentrations of 49 mg/kg, 0.6 mg/kg, and 66 mg/kg were identified in soil samples collected beneath the former dispensers. Samples collected beneath the former product



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 5 of 9

lines were all non-detectable for TPHg, BTEX, and MTBE with the exception of 0.21 mg/kg MTBE detected in one sample.

- On May 23, 2012, ARCO's lease terminated and the Site was returned to Thrifty.
- In June 2012, Thrifty conducted a baseline assessment to establish environmental conditions existing at the termination of ARCO's lease. Four soil borings were advanced in the area of the USTs and dispenser islands. No petroleum hydrocarbon constituents were detected in any of the soil samples collected. Groundwater was not encountered during the investigation. Results were documented in the *Baselining Subsurface Investigation Results Report (2012 Baseline)*, issued by SAIC Energy, Environmental and Infrastructure LLC (SAIC) on August 6, 2012, on behalf of TOC. Historical figures and tables from this phase of work are included in Appendix F.
- On June 6, 2013, ARC forwarded the LARWQCB a copy of the 2012 baseline report with a *Request for Low-Threat Case Closure* dated June 6, 2013.
- In a letter dated February 17, 2015, the LARWQCB responded to ARC's closure request and required a workplan to define the extent of soil contamination beneath the USTs along with additional requested information (Attachment A).
- In a letter dated April 2, 2015, ARC provided the Site Information that the LARWQCB had requested in their February 17, 2015 letter to ARC.

#### Site Geology and Hydrogeology

Soil types encountered during previous subsurface investigations generally consisted of alternating layers of sandy silt and silty sand from surface grade to approximately 20 to 25 feet bgs, underlain by sand and silty sand to approximately 40 feet bgs, underlain by clay and silty sand to the total depth explored of 50 feet bgs. Groundwater was not encountered during previous subsurface drilling investigations.



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 6 of 9

## **PROPOSED CONFIRMATION SOIL BORING INSTALLATION**

### Field Activities

Two angled soil borings (CB-1 and CB-2) will be drilled to a depth of approximately 55 to 60 vertical feet bgs using a hollow-stem auger drill rig to assess soil conditions near the northern end of the former USTs that were removed in 1998 (Figures 2 through 4). It is anticipated that boring CB-1, intended to assess soil beneath sample location EF-8, will be located approximately 10 feet away from the western edge of the pre-1998 UST excavation and will be drilled at an approximate angle of 16 degrees from vertical. It is anticipated that the CB-1 soil sample will be obtained at a depth of 55 feet beneath the surface location of sample EF-8. It is anticipated that boring CB-2, intended to assess soil beneath sample location EF-2, will be located approximately 12 feet away from the northern edge of the existing UST complex and will be drilled at an approximate angle of 25 degrees from vertical. It is anticipated that the CB-2 soil sample will be obtained at a depth of 60 feet beneath the surface location of sample EF-2. The 25 degree drilling angle is required to avoid the existing UST complex.

### Soil Sampling

Soil samples will be collected at an approximate depth of 53 feet beneath the location of sample EF-8 and at an approximate depth of 62 feet beneath the location of sample EF-2 (Figure 4). The samples will be collected for subsequent laboratory analyses using an EPA Method 5035 approved sampling device where applicable. The soil samples will be visually classified in accordance with the Unified Soil Classification System. In addition, augured drill cuttings will be monitored for volatile organic vapors by the headspace method using a hand-held photo-ionization detector (PID) or equivalent.

### Laboratory Analyses

The two soil samples will be relinquished to a state-certified analytical laboratory for chemical analysis under strict chain-of-custody procedures. The soil samples will be analyzed for the following analytes and in accordance with the appropriate Environmental Protection Agency (EPA) method:

- Gasoline range (C<sub>4</sub>-C<sub>12</sub>) organics (GRO) and full scan volatile organic compounds (VOCs) including lead scavengers ethylene dibromide (EDB) and ethyl dichloride (EDC) by EPA Method 8260B;
- Tetra-ethyl lead (TEL) by EPA Method 8270; and
- Tetraemethyl lead by EPA MAI-organic lead

### Waste Disposal

Investigative derived waste generated during drilling activities will be placed in labeled, DOT-approved 55-gallon steel drums and stored on-site pending receipt of the analytical results. All waste will be properly disposed/recycled in accordance with all applicable Federal, State, and local regulations.



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 7 of 9

## **REPORT GENERATION**

Following completion of the subsurface investigation, a report will be generated summarizing the results of the investigation.

## **STANDARD LIMITATIONS**

This document was prepared by Stantec for the account of ARC. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation  
Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081  
Page 8 of 9

Should you have any questions regarding the contents of this report, please contact Mr. Gareth Roberts at (805) 230-1266 ext. 9340.

Respectfully Submitted,

**Stantec Consulting Services Inc.**

Prepared by:



Randy T. Couture, CHMM  
Senior Geoscientist

Reviewed by:



Kelly Brown, PG No. 6714  
Principal Geologist

Approved by:



Gareth Roberts, PG No. 7442  
Principal Geologist



**ATTACHED:**

- Figure 1 – Site Location Map
- Figure 2 – Site Map
- Figure 3 – Aerial Site Map
- Figure 4 – Proposed Angle Soil Borings
- Appendix A – Regulatory Correspondence
- Appendix B – Historical Building Permits
- Appendix C – Historical Figures and Tables (1995 Assessment Report)
- Appendix D – Historical Figures and Tables (1997 Baseline Report)
- Appendix E – Historical Figures and Tables (1998 UST Removal Report)
- Appendix F – Historical Figures and Tables (2012 Baseline Report)

cc: Mr. Kyle Christie – BP  
Mr. Chris Panaitescu - Thrifty



June 18, 2015

Conditional Work Plan for Confirmation Soil Boring Installation

Former ARCO Facility No. 9553/ Former Thrifty Oil Co. Station No. 081

Page 9 of 9

## REFERENCES

Thrifty Oil Company (Thrifty), July 7, 1995. *Site Assessment Report*, Fast Fuel Station No. 95, 1510 Garey Avenue, Pomona, CA.

Pacific Environmental Group, Inc. (PEG), December 5, 1997. *Baselining Subsurface Investigation Report*, Thrifty Service Station No. 081, 1510 Garey Avenue, Pomona, CA.

Pinnacle Environmental Solutions, a Division of EMCON (Pinnacle), August 13, 1998. *Underground Storage Tank Removal Report*, Former Thrifty Oil Company Service Station 81, 1510 Garey Avenue, Pomona, CA.

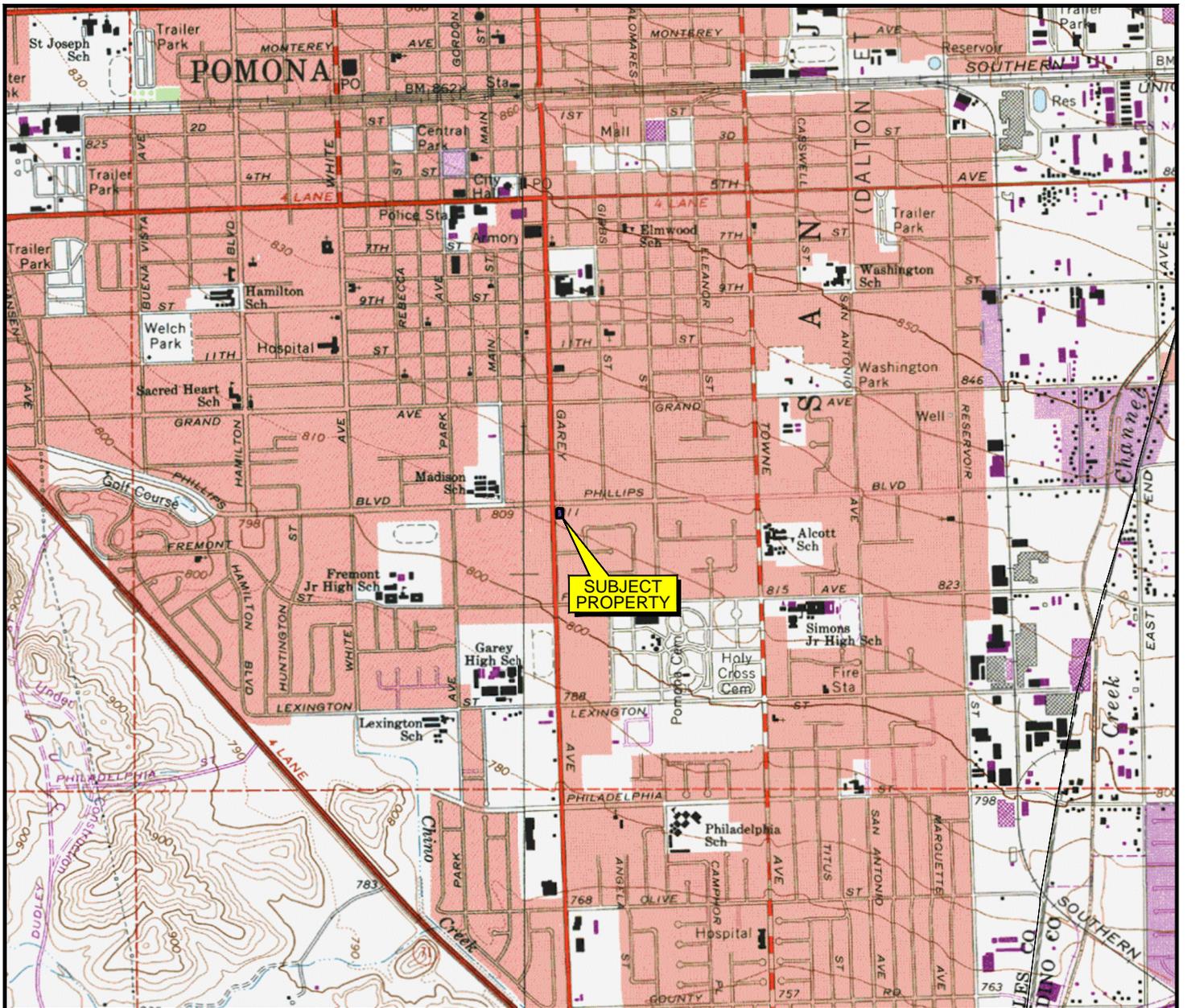
SAIC Energy, Environmental & Infrastructure, LLC (SAIC), August 6, 2012. *Baselining Subsurface Investigation Results Report*, Thrifty Oil. Co. Station #081, 1510 Garey Avenue, Pomona, CA.

Atlantic Richfield Company (ARC), June 6, 2013. *Request for Low Risk Case Closure*, Former ARCO Facility No. 9553/Former Thrifty Oil Co. Station No. 081, 1510 Garey Avenue, Pomona, CA.

Atlantic Richfield Company (ARC), April 2, 2015. *Former ARCO #9553 / Thrifty #08; 1510 South Garey Avenue, Pomona, CA.*



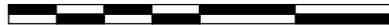
**FIGURES**



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, ONTARIO QUADRANGLE, 1967  
 PHOTOREVISED, 1981  
 SAN DIMAS, 1966  
 PHOTOREVISED, 1981



0 2000 4000



APPROXIMATE SCALE (FEET)



290 Conejo Ridge Avenue  
 Thousand Oaks, CA 91361  
 PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR: Thrifty Oil Company  
 Former ARCO Facility No. 9553 /  
 Thrifty Oil Company Station No. 0081  
 1508 South Garey Avenue  
 Pomona, CA 91766

SITE LOCATION MAP

FIGURE:

1

JOB NUMBER: 185850223

DRAWN BY: R. Roman

CHECKED BY: G. Roberts

APPROVED BY: G. Roberts

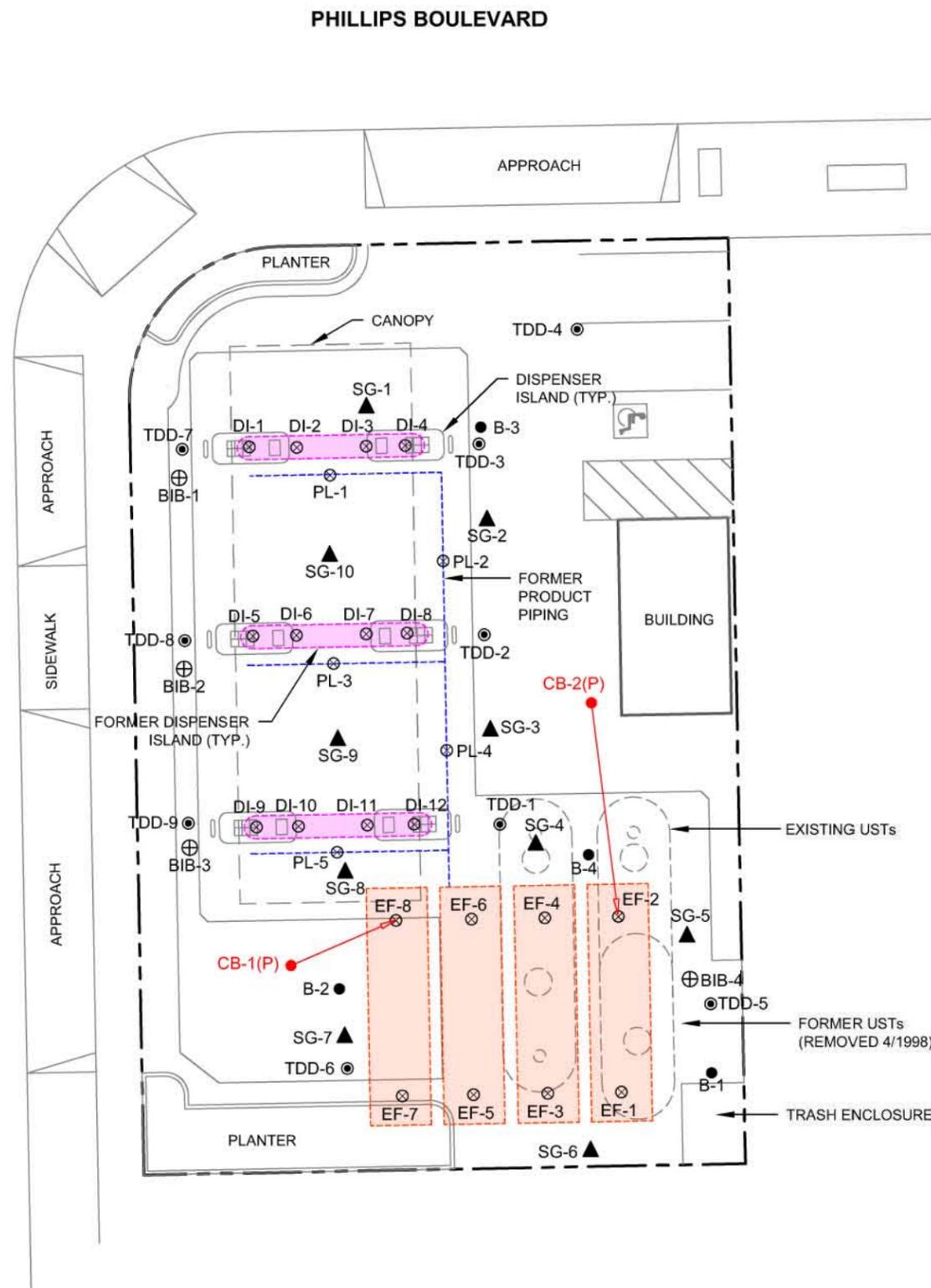
DATE: 05/26/15



**LEGEND**

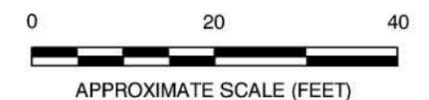
- APPROXIMATE SITE PROPERTY LINE
- TDD-7 ● EXPLORATORY SOIL BORING
- SG-1 ▲ SOIL GAS BORING
- DI-1 ⊗ SOIL SAMPLE (1998)
- BIB-1 ⊕ SOIL BORING (2012, SAIC)
- B-1 ● SOIL BORING
- CB-1(P) ●→ PROPOSED ANGLED CONFIRMATION BORING
- USTs UNDERGROUND STORAGE TANKS
- FORMER UNDERGROUND STORAGE TANKS (4/1998)
- FORMER DISPENSER ISLAND (4/1998)
- FORMER PRODUCT PIPING (4/1998)

GAREY BOULEVARD



**NOTES:**

1. MAP REFERENCE; EMCON, SITE PLAN WITH SAMPLE LOCATIONS, DATED APRIL, 1998. SAIC ENERGY, ENVIRONMENTAL & INFRASTRUCTURE, LLC, CLOSURE REPORT FIGURE, DATED 2012. GOOGLE EARTH PRO AERIAL IMAGE, DATED APRIL, 23, 2014.
2. NAD 83 CALIFORNIA STATE PLANE, ZONE 5 (FT.). NOT A SURVEYED MAP, SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



<p style="font-size: small; margin-top: 5px;">290 Conejo Ridge Avenue Thousand Oaks, CA 91361 PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR: Thrifty Oil Company Former ARCO Facility No. 9553 / Thrifty Oil Company Station No. 0081 1510 South Garey Avenue Pomona, CA 91766		SITE MAP		FIGURE:  2
	JOB NUMBER: 185850223	DRAWN BY: R. Roman	CHECKED BY: G. Roberts	APPROVED BY: G. Roberts	DATE: 05/26/15

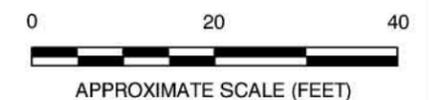


**LEGEND**

- APPROXIMATE SITE PROPERTY LINE
- TDD-7 ● EXPLORATORY SOIL BORING
- SG-1 ▲ SOIL GAS BORING
- DI-1 ⊗ SOIL SAMPLE (1998)
- BIB-1 ⊕ SOIL BORING (2012, SAIC)
- B-1 ● SOIL BORING
- CB-1(P) ●→ PROPOSED ANGLED CONFIRMATION BORING
- USTs UNDERGROUND STORAGE TANKS
- FORMER UNDERGROUND STORAGE TANKS (4/1998)
- FORMER DISPENSER ISLAND (4/1998)
- FORMER PRODUCT PIPING (4/1998)

**NOTES:**

1. MAP REFERENCE; EMCON, SITE PLAN WITH SAMPLE LOCATIONS, DATED APRIL, 1998. SAIC ENERGY, ENVIRONMENTAL & INFRASTRUCTURE, LLC, CLOSURE REPORT FIGURE, DATED 2012. GOOGLE EARTH PRO AERIAL IMAGE, DATED APRIL, 23, 2014.
2. NAD 83 CALIFORNIA STATE PLANE, ZONE 5 (FT.). NOT A SURVEYED MAP, SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



290 Conejo Ridge Avenue  
Thousand Oaks, CA 91361  
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR: Thrifty Oil Company  
Former ARCO Facility No. 9553 /  
Thrifty Oil Company Station No. 0081  
1510 South Garey Avenue  
Pomona, CA 91766

JOB NUMBER: 185850223

DRAWN BY: R. Roman

CHECKED BY: G. Roberts

APPROVED BY: G. Roberts

FIGURE:  
**3**

DATE: 05/26/15

Former ARCD # 9553

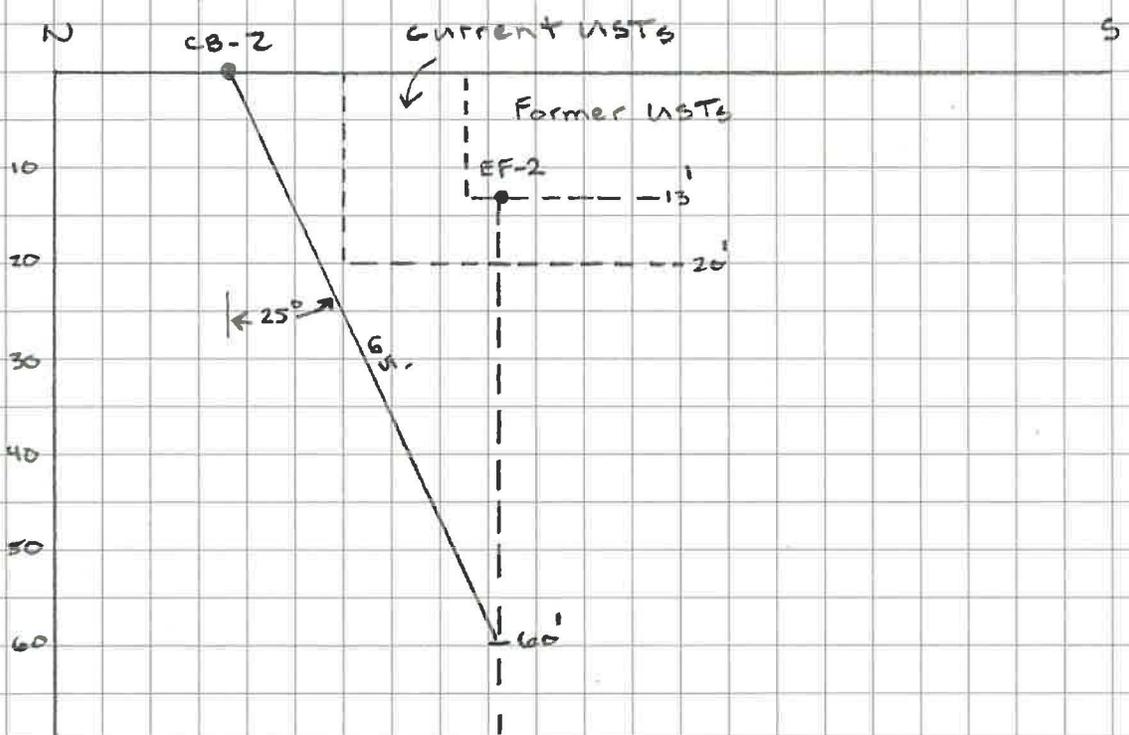
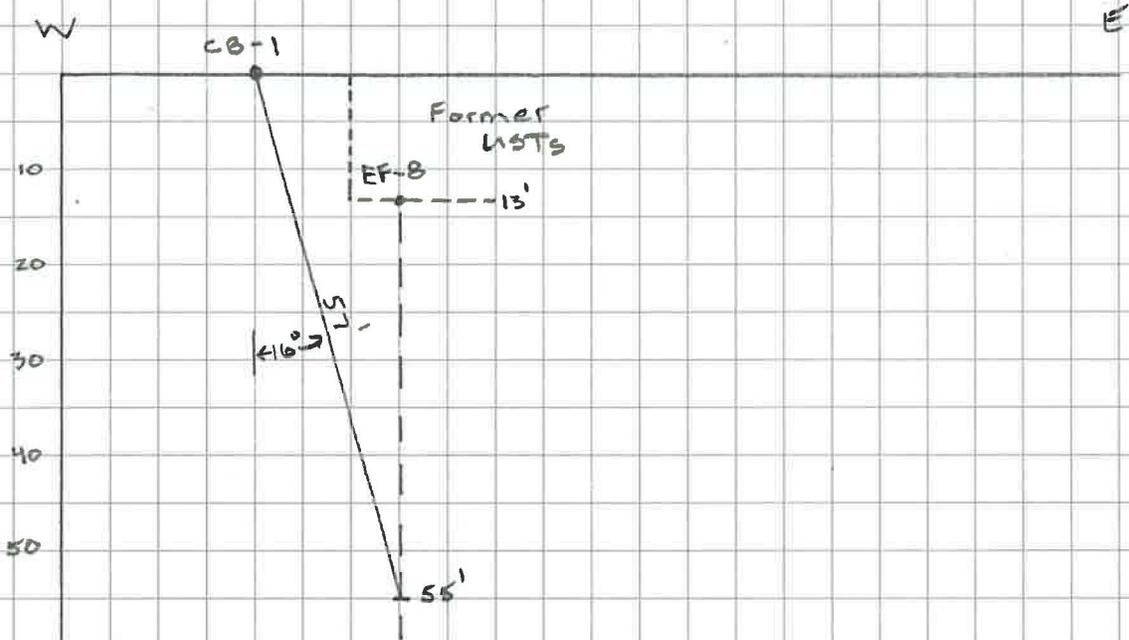


Figure 4



## **Appendix A**

### Regulatory Correspondence



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

**Los Angeles Regional Water Quality Control Board**

May 21, 2015

Mr. Kyle Christie  
Atlantic Richfield Company  
4 Centerpointe Drive, Suite 200, LPR 4-221  
La Palma, CA 90623-1066

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO: 7014 2870 0001 4537 7859

**UNDERGROUND STORAGE TANK PROGRAM -- DIRECTIVE TO TAKE CORRECTIVE ACTION IN RESPONSE TO UNAUTHORIZED UNDERGROUND STORAGE TANK RELEASE – HEALTH AND SAFETY CODE SECTION 25296.10 AND TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS, SECTIONS 2720-2727  
ARCO # 9553  
1510 SOUTH GAREY AVENUE, POMONA, CA.  
(CASE NO.: R-25090) (PRIORITY B-2)**

Dear Mr. Christie:

Correspondence received on behalf of Atlantic Richfield Company (ARCO) dated April 20, 2015, requested an extension to submit a workplan to install a sufficient number of soil borings to define soil contamination beneath the subject site. ARCO requested the Los Angeles Regional Water Quality Control Board (Regional Board) staff to extend the due date for the workplan submittal from March 17, 2015 to June 30, 2015. Since Thrifty Oil Company (TOC) is the current operator and property owner, ARCO needs the additional time to negotiate an access agreement to the property and prepare a workplan.

The extension request is approved. The revised due date to submit the workplan is extended to **June 30, 2015**.

**Enforcement**

Pursuant to section 25299(d) of the Health and Safety Code, any person who violates any corrective action requirement established by, or issued pursuant to, section 25296.10 is liable for a civil penalty of not more than ten thousand dollars (\$10,000) for each underground storage tank for each day of violation since March 17, 2015. A civil penalty may be imposed by civil action pursuant to section 25299(d) (2) or imposed administratively by the Regional Board pursuant to Water Code sections 13323 through 13328. The Regional Board may also request that the Attorney General seek judicial civil liabilities or injunctive relief pursuant to California Water Code sections 13262, 13264, 13304, 13331, 13340 and 13386. The Regional Board reserves its right to take any further enforcement action authorized by law.

If you have any questions on this matter, please contact Mr. Errick Llamas at (213) 576-6620 or [ellamas@waterboards.ca.gov](mailto:ellamas@waterboards.ca.gov).

Sincerely,



Samuel Unger, P.E.  
Executive Officer

cc: Kathy Jundt, State Water Resources Control Board, UST Cleanup Fund  
Gareth Roberts, Stantec Consulting

# Atlantic Richfield Company

**Kyle Christie**  
Lifecycle Strategy Manager

4 Centerpointe Dr., LPR 4-221  
La Palma, CA 90623-1066  
Phone: 714-670-5303  
Fax: 714-670-5195  
E-mail: kyle.christie@bp.com

April 20, 2015

Mr. Errick Llamas  
Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Subject: former ARCO #9553 / Thrifty #081; 1510 South Garey Avenue, Pomona, CA  
Case ID: R-25090

Dear Mr. Llamas:

Thank you for arranging the April 10, 2015 meeting between myself, you and Mr. Kwey of the Regional Board. I appreciate the Regional Board reviewing the information contained in my April 2, 2015 letter concerning the subject site in Pomona. It was very beneficial to discuss the scope of work that the Regional Board believes is necessary to define extent of hydrocarbon impacts at the subject site. It was agreed that the Regional Board will designate Best California Gas (as the property owner) and Thrifty Oil Company (as the owner of the removed USTs) as additional Responsible Parties for the subject Site upon receipt of the workplan.

I will be visiting the Pomona site on Tuesday, April 21, 2015 with an individual experienced in various types of drilling to discuss a preferred method of obtaining the soil information that the Regional Board requested. Obtaining the requested information is challenging because of the presence of operating USTs directly over the area of soil impacts identified in the 1998 UST replacement project.

Please approve an extension of the date to provide the workplan that was requested in the February 17, 2015 Regional Board letter to June 30, 2015. It is my intent to have the workplan issued to you before this date.

Please call me at 714-670-5303 or e-mail me at kyle.christie@bp.com if you have any questions concerning this request.

Sincerely,



Kyle Christie



Los Angeles Regional Water Quality Control Board

February 17, 2015

Mr. John C. Skance  
BP Remediation Management  
Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, CA 94583

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO: 7008 1830 0004 3359 0384

**UNDERGROUND STORAGE TANK PROGRAM – DIRECTIVE TO TAKE CORRECTIVE ACTION IN RESPONSE TO UNAUTHORIZED UNDERGROUND STORAGE TANK RELEASE – HEALTH AND SAFETY CODE SECTION 25296.10 AND TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS, SECTION 2720-2727. FORMER ARCO #9553 / THRIFTY #081 (B-2 PRIORITY) 1510 SOUTH GAREY AVENUE, POMONA, CA. (CASE ID: R-25090)**

Dear Mr. Skance:

The California Regional Water Quality Control Board (Regional Board), Los Angeles Region is the public agency with primary responsibility for the protection of groundwater and surface water quality for all beneficial uses within major portions of Los Angeles and Ventura Counties. As such, the Regional Board is the lead regulatory agency for overseeing corrective action (assessment and/or monitoring activities) and cleanup of releases from leaking underground storage tank (UST) systems at the subject site.

Pursuant to Health and Safety Code section 25296.10, Atlantic Richfield Company (ARCO) is required to take corrective action (i.e., Preliminary Site Assessment, Soil and Water Investigation, Corrective Action Plan Implementation, and Verification Monitoring) to ensure protection of human health, safety and the environment. Corrective action requirements are set forth in California Code of Regulations (CCR), title 23, Chapter 16, sections 2720 through 2727.

We have received your "Request for Low-Threat Case Closure" (Report) dated June 6, 2013, submitted by ARCO, for the subject site. Based upon the Report and other information in the case file, we have the following comments.

**Violation of Health and Safety Code Section 25296.10**

1. In April 1998, four underground storage tanks (USTs) were removed from the site. Seventy-three soil samples were collected at various depths on-site. Maximum concentrations of 1,900 milligrams per kilograms (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 81 mg/kg benzene and 280 mg/kg methyl-tertiary-butyl-ether (MTBE) were reported in the soil samples collected from the UST excavation floor. Based on the assessment data, on March 16, 2009, the County of Los Angeles Department of Public Works referred the case to Regional Board for further investigation.

2. On May 15, 2009, Regional Board staff issued a directive letter (enclosed) to inform you that the Los Angeles County Department of Public Works transferred the case to the Regional Board due to concerns of groundwater impacts from the subject site. The directive letter required additional information regarding the site to be submitted by June 15, 2009. To date we have not received this information. Therefore, the requirements contained in this letter have not been met and you are hereby notified that you are in violation of Health and Safety Code 25296.10.

### Low Threat Closure Review

The case does not meet the State Board's Low Threat Closure Policy (LTCP) for the General Criteria (e): *A site conceptual model that assesses the nature extent and mobility of the release has been developed.*

- A baseline study was conducted by Thrifty in June 2012. However, this study was not conducted under Regional Board oversight and did not contribute to the definition of the existing soil plumes. Therefore, the site conceptual model is incomplete and we cannot grant case closure at this time.

### Requirement to Comply with Health and Safety Code Section 25296.10

In order to facilitate our review of the subject site; you are hereby required to provide the following information:

1. Facility mailing address, contact person's name, phone number, and e-mail address, if any;
2. Your telephone number and e-mail address;
3. A list of all historical and existing USTs, as well as their contents, capacities, dates of use, dates of removal, and a figure showing their location;
4. Contaminant release information (e.g., copy of Site Assessment Report);
5. UST removal and/or repair information (include tank size and contents, removal and/or repair date);
6. Tank disposal documentation, as well as soil disposal documentation (if any);
7. Copies of all previous site assessment and/or remediation report(s), if any;:
8. Reports of all previous soil and groundwater sample analytical results, if any;
9. Name, telephone number, and e-mail address of your environmental consultant, if any;
10. Copies of all correspondence regarding environmental assessment for the subject Site;
11. Current site use;
12. Property Owner Information:

Pursuant to the California Health and Safety Code Section 25296.20(a) and Division 7 of the Porter Cologne Water Quality Control Act under Assembly Bill 681 (AB 681), the Regional Board is required to notify all current fee title holders for the subject site or sites impacted by releases from underground storage tanks prior to considering corrective action and cleanup or case closure. If corrective action data from the site indicate that release(s) from the underground storage tank systems have impacted offsite property, we are also required to notify offsite property owners. Therefore, you are required to provide to this Regional Board the name, mailing address, and phone number for any

record fee title holders for the subject site, as well as any offsite property (ies) impacted by releases from the subject site, together with a copy of county record of current ownership (grant trust deed), available from the County Recorder's Office, for each property affected. Or, you can complete this Regional Board's "Certification Declaration for Compliance with Fee Title Holder Notification Requirements" (see [www.waterboards.ca.gov/losangeles/publications\\_forms/forms/ust/ab681\\_form.pdf](http://www.waterboards.ca.gov/losangeles/publications_forms/forms/ust/ab681_form.pdf)).

Copies of future technical reports shall also be sent directly to any other property owner(s) impacted by contamination from the Site. You are also responsible to provide new contact information if the property owner(s) changes. The new owner shall comply with the requirement stated above.

The above requested information is due to this Regional Board by **March 17, 2015**.

#### **Requirement for a Workplan (Per CCR title 23, §2725)**

You are required to develop a workplan to install a sufficient number of soil borings to define the extent of soil contamination beneath the USTs. The workplan, with a site map depicting the proposed soil boring locations, and a Health and Safety Plan is due to the Regional Board by **March 17, 2015**.

#### **Electronic Submittal Required for Correspondence and Reports to the Regional Board**

Effective November 1, 2011, the Regional Board implemented a Paperless Office system. For all parties who upload electronic documents to the GeoTracker Database, it is no longer necessary to email a copy of these documents to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov) or submit hard copies to our office. The Regional Board will no longer accept documents (submitted by either hard copy or email) already uploaded to GeoTracker.

#### **General Requirements**

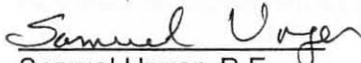
1. The contractor who conducts the environmental work as required in this order shall, at all times, comply with all applicable State laws, rules, regulations, and local ordinances specifically, including but not limited to, environmental, procurement and safety laws, rules, regulations, and ordinances. The contractor shall obtain the services of a Professional Geologist or Engineer, Civil (PG/PE-Civil) to comply with the applicable requirements of the Business and Professions Code, sections 7800 et seq. implementing regulations for geological or engineering analysis and interpretation for this case. All documents prepared for others by the contractor that reflect or rely upon geological or engineering interpretations by the contractor shall be signed or stamped by the PG/PE-Civil indicating her/his responsibility for them as required by the Business and Professions Code.
2. All necessary permits must be obtained from the appropriate agencies, such as the State Department of Health Services and the City of Los Angeles, prior to the start of work.
3. Prior to commencing any fieldwork, Regional Board staff must be given a minimum of **15 days** advance notice in writing, so that one of our staff may be present.

**Enforcement**

Pursuant to section 25299(d) of the Health and Safety Code, any person who violates any corrective action requirement established by, or issued pursuant to, section 25296.10 is liable for a civil penalty of not more than ten thousand dollars (\$10,000) for each underground storage tank for each day of violation. A civil penalty may be imposed by civil action pursuant to section 25299(d)(2) or imposed administratively by the Regional Board pursuant to Water Code sections 13323 through 13328. The Regional Board may also request that the Attorney General seek judicial civil liabilities or injunctive relief pursuant to California Water Code sections 13262, 13264, 13304, 13331, 13340 and 13386. The Regional Board reserves its right to take any further enforcement action authorized by law.

If you have any questions on this matter, please contact Mr. Errick Llamas at (213) 576-6620 or [ellamas@waterboards.ca.gov](mailto:ellamas@waterboards.ca.gov).

Sincerely,

  
Samuel Unger, P.E.  
Executive Officer

Enclosure: Regional Board Staff Letter dated May 15, 2009;  
Leaking UST Program Certification Declaration for Compliance with Fee Title  
Holder Notification Requirements (Assembly Bill 681)

cc: Kathy Jundt, Underground Storage Tank Cleanup Fund  
State Water Resources Control Board  
Richard Lavin, Los Angeles County Department of Public Health,  
Environmental Health Drinking Water Program  
Chris Panaitescu, Thrifty Oil Company  
Gareth Roberts, Stantec

## **Appendix B**

Historical Building Permits



BUILDING PERMIT

Date: 12/06/2012

PERMIT # B12-1076

Issued by: MONICA

PC#/VAULT#



Bldg. Address 1510 S. GAREY AV.

Lot Blk. Tract ALTER

Applicant JONES COVY GROUP Phone (909) 972-7581

Mailing 9595 LUCUS RANCH RD. 100

Address RANCHO CUCAMAN, CA 91730

PLANNING USE ONLY

Approved By: JTB

Owner THRIFTY OIL Phone (909) 972-7581

Mailing 9595 LUCUS RANCH RD. 100

Address RANCHO CUCAMAN, CA 91730

Date: 12-6-12

Contractor JONES COVY GROUP Phone (909) 972-7581

Mailing 9595 LUCUS RANCH RD. 100

Address RANCHO CUCAMAN, CA 91730

CONTR 804431

BUS LIC#

Type Const

Occ Group

Use Zone

Code 24

Arch/Engr State Reg#

Mailing

Address

Sq. Ft. Size @ Stories @ Units @ Bedrooms @ VALUATION \$ 12,000.00

DESCRIPTION OF WORK F E E S

REMOVE/REPLACE EXSISTING FUEL DISPENSERIES

DEV. TAX \$ .00

SMIP 26 (R) \$ .00

SMIP 27 (C) \$ 2.52

PLAN CHECK \$ .00

PERMIT \$ 99.00

TRAFFIC SIG \$ .00

PARKS \$ .00

ROAD/HWY \$ .00

PUBLIC SAF. \$ .00

OTHER \$ .00

BL JOB FEE \$ 29.70

PENALTY \$ .00

ISSUANCE \$ 25.00

MPGS \$ 3.33

ANALYSIS \$ 1.33

PROF DEV \$ .00

TOTAL \$ 161.88

Length: Width: Area:

This is a BUILDING PERMIT when properly validated is not transferable. It will expire if work is not started or is abandoned for more than 180 days. All work must be inspected and approved before placing concrete, or concealing framing, electrical, plumbing, or mechanical work. A final inspection and Certificate of Occupancy must be obtained prior to occupancy.

PLANS APPROVED BY:

Wall/fence shall not prevent access to any utility structure, meter or other facility. Interfering utility may be relocated or fence/wall modified to avoid utility. CONTACT UTILITY.

PROJECT COMMENTS:

\*\* U.B.C SECC 310.9.1 SMOKE DETECTORS REQUIRED ON ALL DWELLING PERMITS WITH A VALUATION GREATER THAN \$1000

I AGREE TO COMPLY: SIGNATURE:

\*\* CALL FOR ALL INSPECTIONS 24 HOURS IN ADVANCE \*\*

\*\* I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

FINAL INSPECTION DATE INSPECTOR'S SIGNATURE
License Class A, B, HAZ License No. 804431
Date 12/6/12 Contractor's Signature

VALIDATION CITY OF POMONA

12/06/2012 14:57:04 YN 3261

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations: sion of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

Date: 12/6/12

I have and will maintain workers' compensation insurance as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Applicant's Signature: [Signature]

Carrier: GRANITE STATE Policy Number: WC9970790

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation provi-

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors License Law for the following reason (Sec. 7031.5 Business and Professions Code: any city or county which requires a Permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for

File # 01752-025090

## UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

<b>EMERGENCY</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<b>HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<b>FOR LOCAL AGENCY USE ONLY</b> I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE. SIGNED: <u>[Signature]</u> DATE: <b>NOV 22 1999</b>	
<b>REPORT DATE</b> 11/22/99		<b>CASE #</b>			
<b>REPORTED BY</b>	<b>NAME OF INDIVIDUAL FILING REPORT</b> ANOUSH HOUSEPIANS		<b>PHONE</b> (626) 458-3516		<b>SIGNATURE</b> <u>[Signature]</u>
	<b>REPRESENTING</b> <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER		<b>COMPANY OR AGENCY NAME</b> LA COUNTY DEPARTMENT OF PUBLIC WORKS		
	<b>ADDRESS</b> 900 S. FREMONT AVE    ALHAMBRA    CA    91803				
<b>RESPONSIBLE PARTY</b>	<b>NAME</b> Arco Products Co <input type="checkbox"/> UNKNOWN		<b>CONTACT PERSON</b>		<b>PHONE</b> (562) 404-5300
	<b>ADDRESS</b> P.O. Box 6038    Artesia    CA    90702				
<b>SITE LOCATION</b>	<b>FACILITY NAME (IF APPLICABLE)</b> Arco Products #09553		<b>OPERATOR</b>		<b>PHONE</b> (909) 620-9626
	<b>ADDRESS</b> 1510 S. GAREY AVE    Pomona    LA    91766		<b>CROSS STREET</b> Phillips Blvd.		
<b>IMPLEMENTING AGENCIES</b>	<b>LOCAL AGENCY</b> LA COUNTY DEPARTMENT OF PUBLIC WORKS		<b>CONTACT PERSON</b> CARL SJOBERG		<b>PHONE</b> (626) 458-3539
	<b>REGIONAL BOARD</b> LA RWQCB		<b>CONTACT PERSON</b> DAVE BACHAROWSKI		<b>PHONE</b> (213) 576-6620
<b>SUBSTANCES INVOLVED</b>	<b>(1) NAME</b> GAS		<b>QUANTITY LOST (GALLONS)</b> <input type="checkbox"/> UNKNOWN		
	<b>(2)</b>		<input type="checkbox"/> UNKNOWN		
<b>DISCOVERY/ABATEMENT</b>	<b>DATE DISCOVERED</b> 04/08/98		<b>HOW DISCOVERED</b> <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER		
	<b>DATE DISCHARGE BEGAN</b> <input checked="" type="checkbox"/> UNKNOWN		<b>METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)</b> <input checked="" type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER		
	<b>HAS DISCHARGE BEEN STOPPED?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO    IF YES, DATE: 04/08/98				
<b>SOURCE/ CAUSE</b>	<b>SOURCE OF DISCHARGE</b> <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		<b>CAUSE(S)</b> <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER		
	<b>CHECK ONE ONLY</b> <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
<b>CURRENT STATUS</b>	<b>CHECK ONE ONLY</b> <input checked="" type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY				
	<b>CHECK APPROPRIATE ACTION(S)</b> <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> OTHER (OT)				
	<b>COMMENTS</b>				



**APPLICATION FOR CLOSURE**  
**HAZARDOUS MATERIAL UNDERGROUND STORAGE**  
 COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS  
 ENVIRONMENTAL PROGRAMS DIVISION  
 900 SOUTH FREMONT AVENUE  
 ALHAMBRA, CA 91803-1331  
 (626) 458-3517

DPW USE ONLY

App. No. 197056  
 Site File 11752-25090 R/G OK  
 Fee \$ 281  
 Check  Cash

*Extended on 3/25/98  
 Expires 8/18/98  
 Rami Iqbal  
 3/25/98*

TANK OWNER: Contact Name: THIRTY OIL CO Phone: 310 923 9876  
 Mailing Address: 10,006 LAKEWOOD BLVD City: DOWNSEY State: CA Zip: 90240

FACILITY/SITE: Occupant Name: ARCO FAC # 9553 Phone: (909) 620-9626  
 Site Address: 1510 GARREY AVE. City: POMONA State: CA Zip: 91768 91766  
 Mailing Address: P.O. Box 6038 City: ARTESIA State: CA Zip: 90702  
 Contact Person: JUDY MASON Title: ENVIRONMENTAL

CONTRACTOR [ ] OWNER/OPERATOR AS CONTRACTOR [ ]  
 Contractor Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
 State License No.: \_\_\_\_\_ Class: \_\_\_\_\_  
 Hazardous Substance Removal Certified YES [ ] NO [ ]

CLOSURE REQUESTED: Closure of tanks shall be in compliance with Title 23, Division 3, Chapter 16, California Code of Regulations and Chapter 6.7, Health & Safety Code, Article 7, Sections 2670 through 2672

PERMANENT, TANK REMOVAL (See Section 2672(b))  
 How many underground storage tanks will remain after this closure? 3 NEW  
 PERMANENT, CLOSURE IN PLACE (See Section 2672(c)) - Attach Justification Statement  
 TEMPORARY, (See Section 2671)  
 Other: \_\_\_\_\_

PLOT PLAN ATTACHED  Showing existing tanks product piping & dispenser island. EXISTING HMUSP PERMIT NO.: \_\_\_\_\_

TANK DESCRIPTION:

TANKS NO.	TANK ID NO. (DPW USE ONLY)	CAPACITY GALLONS	MATERIALS STORED (PAST/PRESENT)	CLOSURE APPLICATION FEE
1		10,000	GASOLINE	\$232.00
2		10,000	GASOLINE	258.00
3		10,000	GASOLINE	338.00
4		10,000	GASOLINE	391.00
5				444.00
6 (+ ATTACH LIST)				\$179.00 + \$53.00/TANK =

Has an authorized release ever occurred at this site? [ ] YES [ ] NO  
 Have structural repair ever been made to these tanks? [ ] YES [ ] NO  
 Will new underground tanks be installed after closure?  YES [ ] NO  
 Will any wells, including monitoring wells, be abandoned? [ ] YES [ ] NO

**NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED, MAY BE HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH AND SAFETY CODE, FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.**

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature: [Signature] Date: 7/29/97  
 (Print Name) JEFF VAN RIPAN Phone: 914 985 1891  
 Owner  Operator [ ] Contractor [ ]

TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS

PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE, PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS [ ], THIS AUTHORIZATION EXPIRES 180 DAYS FROM THE DATE BELOW.  
 HARRY W. STONE By: [Signature] Date: 8-18-97  
 Director of Public Works



*Ex/extended on  
3/25/98  
Expires  
8/26/98  
Rene J. [unclear]  
3/25/98*

NO NOT WRITE IN THIS SPACE <b>RECEIVED</b> AUG 13 1997 DEPARTMENT OF PUBLIC WORKS ENVIRONMENTAL PROGRAM	APPLICATION # 197057
	DPW USE ONLY FILE # 11752-25090 R/C CODE <u>CK</u> HMUSP # <u>197055</u> SURCHARGE YES <input type="checkbox"/> NO <input type="checkbox"/> HMUSP REQ YES <input type="checkbox"/> NO <input type="checkbox"/> TGP _____ TGC _____

- NEW CONSTRUCTION PLAN CLEARANCE
- PERMIT ADDENDUM
- PIPING REPLACEMENT REVIEW

**APPLICATION FOR NEW CONSTRUCTION**  
 \*\* See instructions on back of this form \*\*

**A** OWNER INFORMATION

OWNER/FACILITY NAME ARCO FAE #19553  
 MAILING ADDRESS P.O. Box 6038  
 CITY ARTEDIA STATE CA ZIP 90702 6038  
 FACILITY ADDRESS 1510 CAREY AVE, Pomona, CA 91766

**B** COMPLETE FOLLOWING:

No. Of Existing Tanks at site: 4  
 No. Of Tanks to be installed: 3  
 No. Of Tanks to be removed: 4  
 (SEPARATE CLOSURE PERMIT REQUIRED)  
 Net Tanks at site: 3

**C** NEW CONSTRUCTION PLAN CLEARANCE APPLICATIONS MUST BE ACCOMPANIED BY:

- State Underground Storage tank Permit Application Form A & Form B for each tank to be installed or piping replacement.
- Four (4) sets of construction plans and specifications.

NUMBER OF TANKS:

- 1
- 2
- 3
- 4
- 5
- 6 OR MORE

PLAN CLEARANCE FEE:

- \$232.00
- \$285.00
- \$338.00
- \$391.00
- \$444.00
- \$179.00 + \$53.00 PER TANK

\$ 397.00

New construction plan a clearance fee. Enter amount provided.

**MAKE CHECKS PAYABLE TO: "LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS"**

**D** SYSTEM MODIFICATION OR CHANGE PROPOSED: Remove 4 U/G STORAGE TANKS, Piping & Disp. Replace w/ 3 U/G STORAGE TANKS, Piping & Disp.

**E** ADDENDUM APPLICATIONS MUST BE ACCOMPANIED BY:

- State underground storage tank permit application Form B for each tank modified or changed.
- Four (4) sets of construction plans, specifications, and/or explanation of modifications or changes.
- Permit Addendum Fee of \$158.00

\$ \_\_\_\_\_

**F** APPLICANT OR REPRESENTATIVES:

Signature [Signature] Title PROSPECT ENGINEER  
 Print Name JOE VAN LIPON Date 7/29/97

Contractors shall furnish State Contractors License No. \_\_\_\_\_ Class \_\_\_\_\_



k45

UNDERGRND FLAM LIQ. TANK REMVL Date: 10/03/1997

PERMIT # FP-97-116

ISSUED BY: PAULA

PC# PC0188-97-00

Address 1510 S. GAREY AV.

Owner ARCO Mailing 1510 S. GAREY AV. Address POMONA, CA 99999

Phone (909) -

Contractor R D BUILDERS INC Mailing 1320 S. SIMPSON CR. Address ANAHEIM, CA 92880-6

Phone (714) 533-1331

BUS. LIC# CONTR. LIC# 445832

VALUATION: \$20,000.00

FLOOR AREA: CONSULT. HOURS: 0.00 SPEC. DUTY HOURS: 0.00 MICROFILM PAGES: 0

Table with 2 columns: Fee Name and Amount. Includes PERMIT FEE (\$207.00), PLAN CHECK FEE (\$0.00), BL JOB FEE (\$207.00), ISSUANCE FEE (\$10.00), CONSULT. FEE (\$0.00), SPEC. DUTY FEE (\$0.00), OTHER (\$0.00), MICROFILM (\$0.00), PENALTY (\$0.00), TOTAL (\$424.00)

This is an Installation/Removal Permit when properly validated, and is not transferable. It will expire if work is abandoned for more than 180 days.

All work must be inspected and approved and this Permit validated prior to occupancy and clearance of connection of utilities.

VALIDATION

CONTACT MICHAEL REDFERN PHONE (714) 533-1331

CITY OF POMONA 10/03/1997 11:30:39 AM PERM 7 CD FP97116 424.00 Please Conserve Water

74292

INSPECTOR'S SIGNATURE INSPECTION DATE:

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class A 1423 (C) 15-10 C-8 License No. 445832 Date 10-3-97 Contractor's Signature

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations: sions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

Date: 10-3-97

I have and will maintain workers' compensation insurance as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Applicant's Signature:

Carrier: NWC 121429-03 Policy Number: NWC 121429-03

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors License Law for the following reason (Sec. 7031.5 Business and Professions Code: any city or county which requires a Permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for

1510 S. Garey APPLICATION FOR BUILDING PERMIT

FOR APPLICANT TO FILL IN				ENGINEERING REQUIREMENTS	
JOB ADDRESS <b>S.E.C. GAREY &amp; PHILLIPS AVES.</b>				(*)	
OWNER <b>WALT SCHMIDT</b>		TEL. NO.		FORMORELY - STATION REPAIR SERV.	
MAIL ADDRESS		CITY			
CONTRACTOR <b>MILTIMORE INC.</b>		TEL. NO. <b>583-1865</b>			
MAIL ADDRESS <b>8221 WILCOX AV.</b>		CITY <b>BELL</b>			
STATE LICENSE NO. <b>70383(*)</b>		CITY TAX NO.			
ARCHITECT OR ENG. <b>RELIANT ENG.</b>		TEL. NO. <b>EX. 29114</b>			
ADDRESS <b>2333 W. WHITTIER</b>		CITY <b>WHITTIER</b>			
PROPERTY LEGAL DESCRIPTION				INSPECTION RECORD	
LOT NO.	BLK.	TRACT			
DESCRIPTION OF BLDG. USE AND WORK					
USE OF BLDG. <b>SERV. STN. ISLAND CANOPY</b>					
<b>25' x 73' GULL WING TYPE</b>					
<input checked="" type="checkbox"/> NEW	<input type="checkbox"/> ADD	<input type="checkbox"/> ALTER	<input type="checkbox"/> REPAIR	<input type="checkbox"/> DEMOLISH	
SO. FT. SIZE <b>1825</b>	NO. OF ROOMS	NO. OF STORIES <b>1</b>	NO. OF FAMILIES		
VALUATION \$ <b>1500.00</b>		P.F. \$ <b>900</b>	P.C. \$ <b>450</b>	TOTAL \$	
<p>I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City Ordinances and State Laws regulating building construction.</p> <p>I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner so as to become subject to the workman's compensation laws of California.</p>				APPROVALS	
SIGNATURE OF PERMITTEE <b>J. P. Richards</b>		FOR <b>MILTIMORE INC.</b>		DATE	INSPECTOR'S SIG.
TYPE OF CONST.	OCC. GROUP	USE ZONE	FIRE ZONE	FOUNDATION: LOCATION FORMS, MATERIALS	<b>9-25-59</b> <b>ERRA</b>
				FRAME: FIRE STOPS, BRACING, BOLTS	
				FURNACE: LOCATION, GAS VENT, DUCTS	
				LATH, INT.	
				LATH, EXT.	
				HOUSE NUMBER CORRECT AND POSTED	
				FINAL	

DEPT. OF BLDG. & SAFETY  
By **J.P. 8-31-59**  CK  M.O.  CASH No. **3768**

This is a Building Permit When Properly Filled Out, Signed and Validated.

#450 Plan check Fee Paid 8/24/59

Application for  
**Commercial Construction Permit**  
DEPARTMENT OF BUILDING AND SAFETY  
CITY OF POMONA

Job Add. 1510 S. Garey Ave

Zone Classification No. R-2

Variance  
No. 677  
Por. N.W. 1/4  
LEGAL DESCRIPTION  
Lot No. 4 Block No. 233 Tract Pomona

OWNER John B. Hall

Address 2106 W. Orange Grove  
Builder or CONTRACTOR Owner 9-3744

Address \_\_\_\_\_

Plans by John G Snyder

Title Arch. Chino

DESCRIPTION OF BUILDING

OCCUPANCY Service Station

Type of CONSTRUCTION Concrete Blocks

Dimensions 12 x 24 No. Stories 1

Type of Roof Flat - Built-up cover

Heating 3 Islands - 6 Pumps  
2 - 10000 Gal Tanks

Valuation of Work \$ 7000<sup>00</sup> Fee \$ 18<sup>00</sup>

Signature of Applicant John B. Hall

By \_\_\_\_\_

Issued PERMIT NO. 28538 Date 4-26-55

Issued by R

Application for  
**Commercial Construction Permit**  
DEPARTMENT OF BUILDING AND SAFETY  
CITY OF POMONA

Job Add. 1510 S. Garey Ave

Zone Classification No. \_\_\_\_\_

Por NW 1/4  
LEGAL DESCRIPTION  
Lot No. \_\_\_\_\_ Block No. 233 Tract Pomona

OWNER John B. Hall

Address \_\_\_\_\_  
Builder or CONTRACTOR Owner

Address \_\_\_\_\_

Plans by \_\_\_\_\_

Title \_\_\_\_\_

DESCRIPTION OF BUILDING

OCCUPANCY Service Station

Type of CONSTRUCTION \_\_\_\_\_

Dimensions \_\_\_\_\_ No. Stories \_\_\_\_\_

Type of Roof Lube Canopy

Heating 24 x 24 -  
Steel Posts - and Cover

Valuation of Work \$ 1000<sup>00</sup> Fee \$ 6<sup>00</sup>

Signature of Applicant John B. Hall

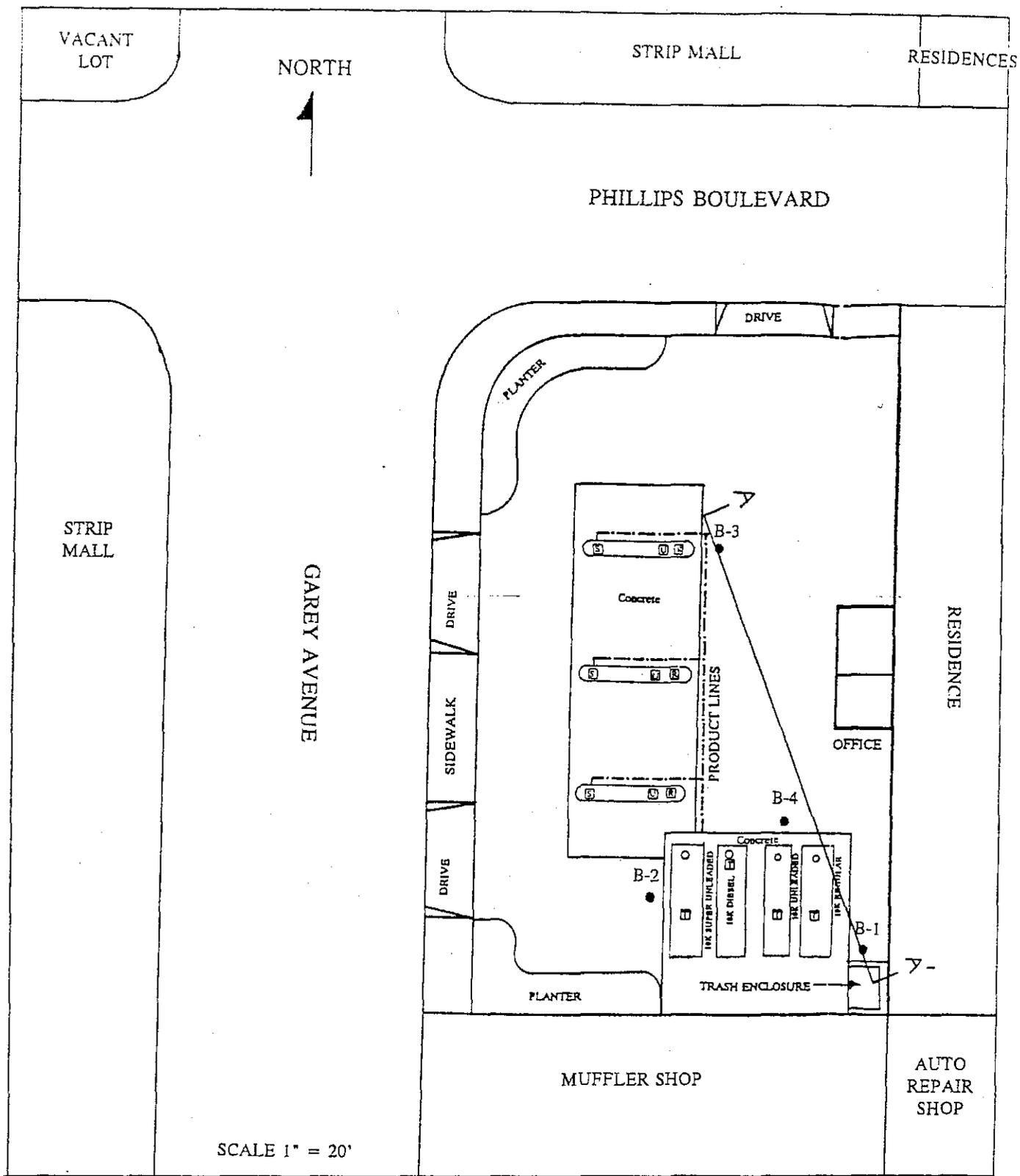
By \_\_\_\_\_

Issued PERMIT NO. 28791 Date 6-20-55

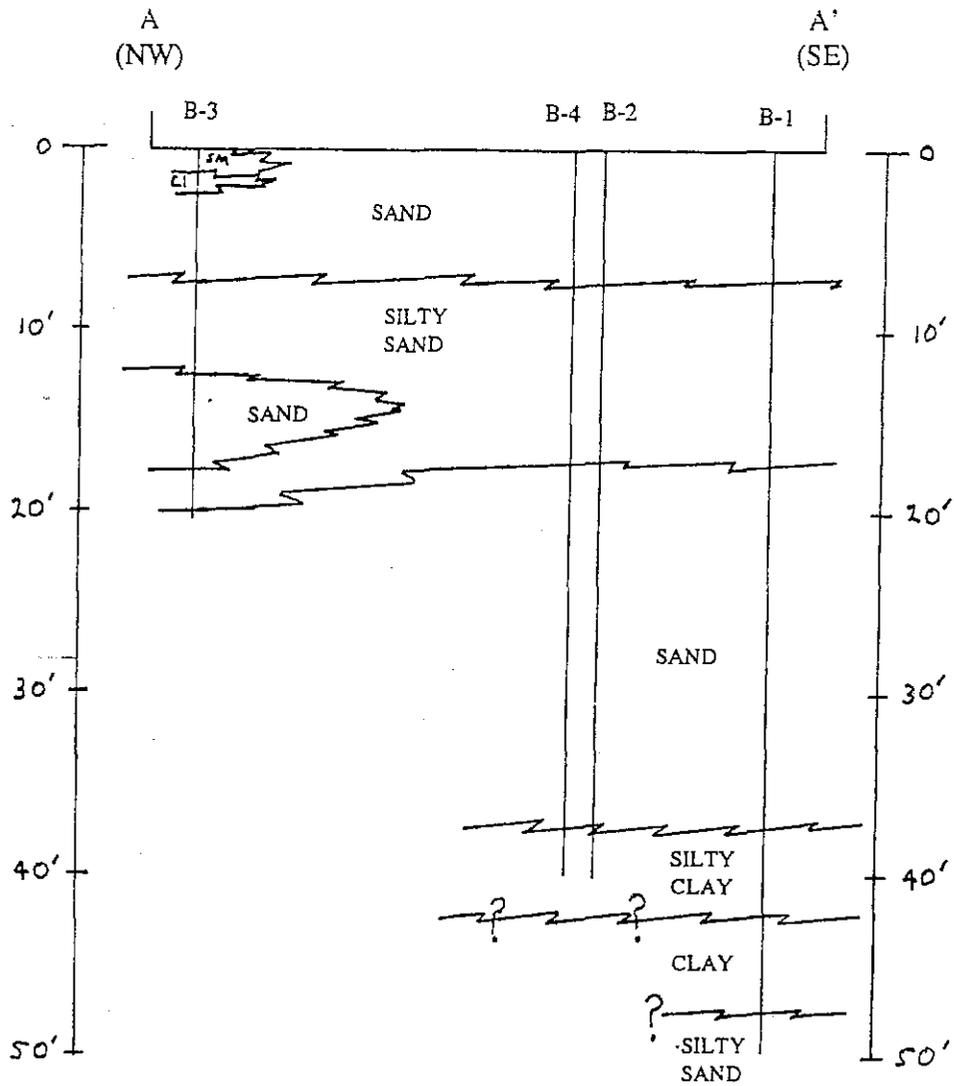
Issued by H.R.

## **Appendix C**

Historical Figures and Tables (1995 Assessment Report)



**FIGURE 2**  
**PLOT PLAN**  
**FAST FUEL STATION No. 095**  
 1510 Garey Avenue  
 Pomona, California



HORIZONTAL SCALE  
1 inch = 20 feet

FIGURE 3  
GENERALIZED GEOLOGIC CROSS SECTION A - A'  
FAST FUEL STATION No. 095  
1510 Garey Avenue  
Pomona, California

MUS000045721

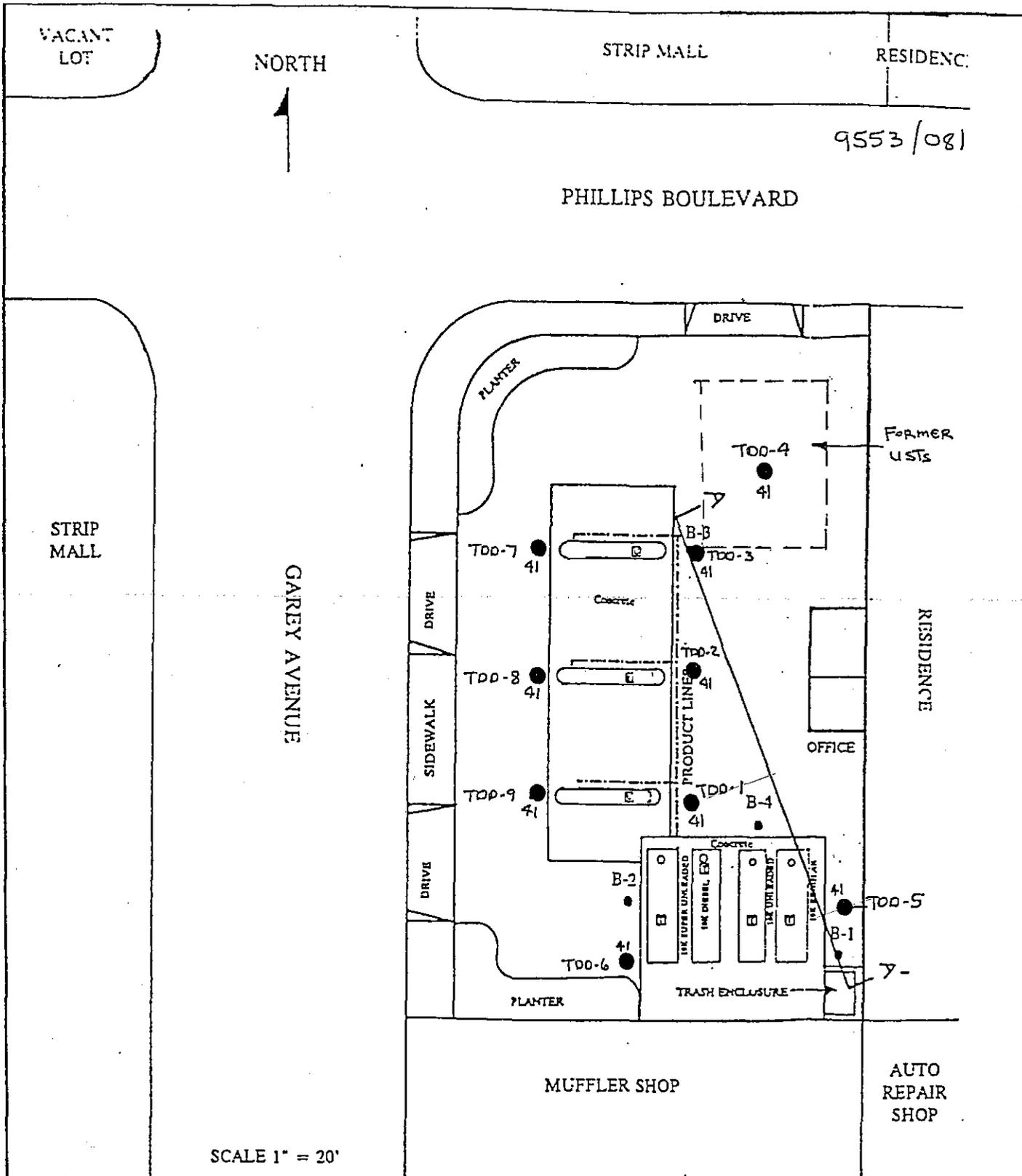
**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
 (Concentrations Reported in mg/kg)

BORING No.	TPH	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES
SAMPLED 5/12/95					
B-1-10	ND	ND	ND	ND	ND
B-1-20	ND	ND	ND	ND	ND
B-1-30	ND	ND	ND	ND	ND
B-1-40	ND	ND	ND	ND	ND
B-2-10	6.9	0.009	0.024	0.007	0.36
B-2-20	ND	ND	ND	ND	ND
B-2-30	ND	ND	ND	ND	ND
B-2-40	ND	ND	ND	ND	ND
B-3-5	ND	ND	ND	ND	ND
B-3-10	ND	ND	ND	ND	ND
B-3-15	ND	ND	ND	ND	ND
B-3-20	ND	ND	ND	ND	ND
B-4-10	ND	0.016	0.023	ND	0.025
B-4-15	ND	0.012	0.02	ND	0.021
B-4-25	ND	ND	ND	ND	ND
B-4-30	ND	ND	ND	ND	ND
B-4-40	ND	ND	ND	ND	ND

MUS000045723

## **Appendix D**

Historical Figures and Tables (1997 Baseline Report)



9553/081

SCALE 1" = 20'

Thrifty No. 081

**PLOT PLAN**

1510 Garey Avenue  
Pomona, California

40 ● Boring and depth

VACANT LOT

NORTH

STRIP MALL

RESIDENCE

9553/081

PHILLIPS BOULEVARD

STRIP MALL

GAREY AVENUE

DRIVE

SIDEWALK

DRIVE

PLASTER

DRIVE

FORMER  
LISTS

SG-1

B-B

CONCRETE  
SG-10

SG-2

SG-9

SG-3

OFFICE

RESIDENCE

SG-8

SG-4

B-4

B-2

CONCRETE  
THE SUPER UNLEADED  
THE DIESEL EPO  
THE UNLEADED  
THE DIESEL  
THE UNLEADED

SG-5

B-1

SG-10  
Soil Gas  
Sample Location

TRASH ENCLOSURE

PLASTER

SG-6

MUFFLER SHOP

AUTO  
REPAIR  
SHOP

SCALE 1" = 20'

Thrifty No. 081

PLOT PLAN

1510 Garey Avenue  
Pomona, California



TABLE 1  
 ANALYTICAL SUMMARY - SOIL SAMPLES  
 Thrifty #081  
 1510 GAREY AVE.  
 POMONA, CALIFORNIA

Sample I.D.		TPHg	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TPHd
	Sampled	Concentration (mg/Kg)						
TDD-1-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-1-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-2-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-2-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-3-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-3-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-4-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-4-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-5-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-5-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-6-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-6-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-7-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-7-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-8-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-8-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	6.8
TDD-9-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-9-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0

DEL MAR ANALYTICAL (ELAP #1855)

Mary Ann Linsel  
Project Manager



The data contained on the certified reports are reviewed for accuracy and completeness and should take precedence over this summary table. This report shall not be reproduced, except in full, without written permission.

V7071368.PEG





## **Appendix E**

Historical Figures and Tables (1998 UST Removal Report)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date	Sample	TPH (1)			Ethyl-	Total	MTBE(2)	Laboratory
	Sampled	Depth	Gasoline	Benzene (2)	Toluene(2)	benzene(2)	Xylenes(2)		
		(Feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
<b><u>Stockpiles</u></b>									
SP-1	4/9/98	--	2.1	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.030	0.12	Del Mar (A)
SP-2	4/9/98	--	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.11	Del Mar (A)
SP-3	4/9/98	--	36	0.040	ND (<0.005)	0.068	0.69	0.15	Del Mar (A)
SP-4	4/9/98	--	2.7	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.060	0.12	Del Mar (A)
SP-5	4/9/98	--	3300	11	98	44	370	30	Del Mar (A)
SP-6	4/9/98	--	1200	1.6	23	13	120	6.5	Del Mar (A)
SP-7	4/9/98	--	5900	15	250	12	690	20	Del Mar (A)
SP-8	4/9/98	--	3900	11	93	41	340	22	Del Mar (A)
SP-9	4/9/98	--	5800	19	240	100	640	31	Del Mar (A)
SP-10	4/9/98	--	2300	3.2	39	23	160	8.1	Del Mar (A)
SP-11	4/9/98	--	420	0.33	ND (<0.025)	0.53	17	4.6	Del Mar (A)
SP-12	4/9/98	--	130	0.3	ND (<0.010)	0.14	3.5	5.5	Del Mar (A)
SP-13	4/9/98	--	480	1.2	15	7.2	58	13	Del Mar (A)
SP-14	4/9/98	--	5700	17	190	77	580	61	Del Mar (A)
SP-15	4/9/98	--	2600	5.6	74	36	280	17	Del Mar (A)
SP-16	4/9/98	--	5200	22	220	73	560	110	Del Mar (A)
SP-17	4/13/98	--	560	0.3	6.8	5	49	2	Del Mar (A)
SP-18	4/13/98	--	800	0.9	18	10	82	3.4	Del Mar (A)
SP-19	4/13/98	--	1300	1.2	25	20	140	3.8	Del Mar (A)
SP-20	4/13/98	--	1200	2	37	23	160	30	Del Mar (A)
SP-21	4/13/98	--	380	0.3	5.7	5.8	44	5.5	Del Mar (A)
SP-22	4/13/98	--	540	0.46	9.9	8.7	64	5.1	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)		Toluene(2) (mg/kg)	Ethyl-benzene(2) (mg/kg)	Total Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)					
SP-23	4/13/98	--	390	0.45	10	6.8	54	7.8	Del Mar (A)
SP-24	4/13/98	--	3500	4.6	140	65	410	13	Del Mar (A)
SP-25	4/13/98	--	310	0.048	6.2	4.3	34	3.2	Del Mar (A)
SP-26	4/13/98	--	380	0.13	3.7	3.8	32	3	Del Mar (A)
SP-27	4/13/98	--	1000	0.94	19	14	100	1.9	Del Mar (A)
SP-28	4/13/98	--	100	0.097	2.3	1.1	9.5	1.3	Del Mar (A)
SP-29	4/13/98	--	850	0.75	22	12	90	3.3	Del Mar (A)
SP-30	4/13/98	--	1100	1.4	35	16	130	5.7	Del Mar (A)
SP-31	4/14/98	--	250	0.065	3.1	3.6	25	3.6	Del Mar (A)
SP-32	4/14/98	--	33	0.007	0.074	0.1	1.2	1.6	Del Mar (A)
SP-33	4/14/98	--	15	ND (<0.005)	0.3	0.048	0.42	0.97	Del Mar (A)
SP-34	4/14/98	--	13	ND (<0.005)	0.04	0.05	0.51	1.1	Del Mar (A)
SP-35	4/14/98	--	7.9	ND (<0.005)	0.019	0.028	0.24	0.56	Del Mar (A)
SP-36	4/14/98	--	47	0.015	0.17	0.3	2.7	1.3	Del Mar (A)
SP-37	4/14/98	--	320	0.16	4.1	4.3	33	4.9	Del Mar (A)
SP-38	4/14/98	--	940	0.81	18	15	110	7.3	Del Mar (A)
SP-39	4/14/98	--	160	0.05	1.2	1.6	13	3.9	Del Mar (A)
SP-40	4/14/98	--	54	0.02	0.38	0.39	3.5	1.6	Del Mar (A)
SP-41	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.23	Del Mar (A)
SP-42	4/24/98	--	150	0.02	ND (<0.005)	0.39	13	5.5	Del Mar (A)
SP-43	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-44	4/24/98	--	1.3	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-45	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-46	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2) (mg/kg)	Total Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)				
SP-47	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.13	Del Mar (A)
SP-48	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
<b><u>UST Excavation Floor</u></b>									
EF-1	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-2	4/10/98	13	1100	81	570	200	1300	280	Del Mar (A)
EF-3	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.45	Del Mar (A)
EF-4	4/10/98	13	940	46	400	150	1000	81	Del Mar (A)
EF-5	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-6	4/10/98	13	720	0.9	17	13	85	2.3	Del Mar (A)
EF-7	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-8	4/10/98	13	1900	3.7	59	36	170	3.2	Del Mar (A)
<b><u>Dispenser Island/ Product Piping</u></b>									
DI-1	4/21/98	3	40	0.6	3.1	0.5	8.7	41	Del Mar (A)
DI-2	4/21/98	3	ND (<1.0)	ND (<0.005)	0.008	ND (<0.005)	0.034	2	Del Mar (A)
DI-3	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.055	0.67	Del Mar (A)
DI-4	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.1	Del Mar (A)
DI-5	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.32	Del Mar (A)
DI-6	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.04	Del Mar (A)
DI-7	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
DI-8	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
DI-9	4/21/98	3	49	0.6	6.2	0.11	5.1	66	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2)	Total Xylenes(2)	MTBE(2)	Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)				
DI-10	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
DI-11	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.06	Del Mar (A)
DI-12	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
PL-1	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.21	Del Mar (A)
PL-2	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-3	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-4	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-5	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)

**Notes:**

Del Mar = Del Mar Analytical

ND = Not detected; detection limit shown in parenthesis.

-- = Not applicable.

TPH = Total Petroleum Hydrocarbons as gasoline.

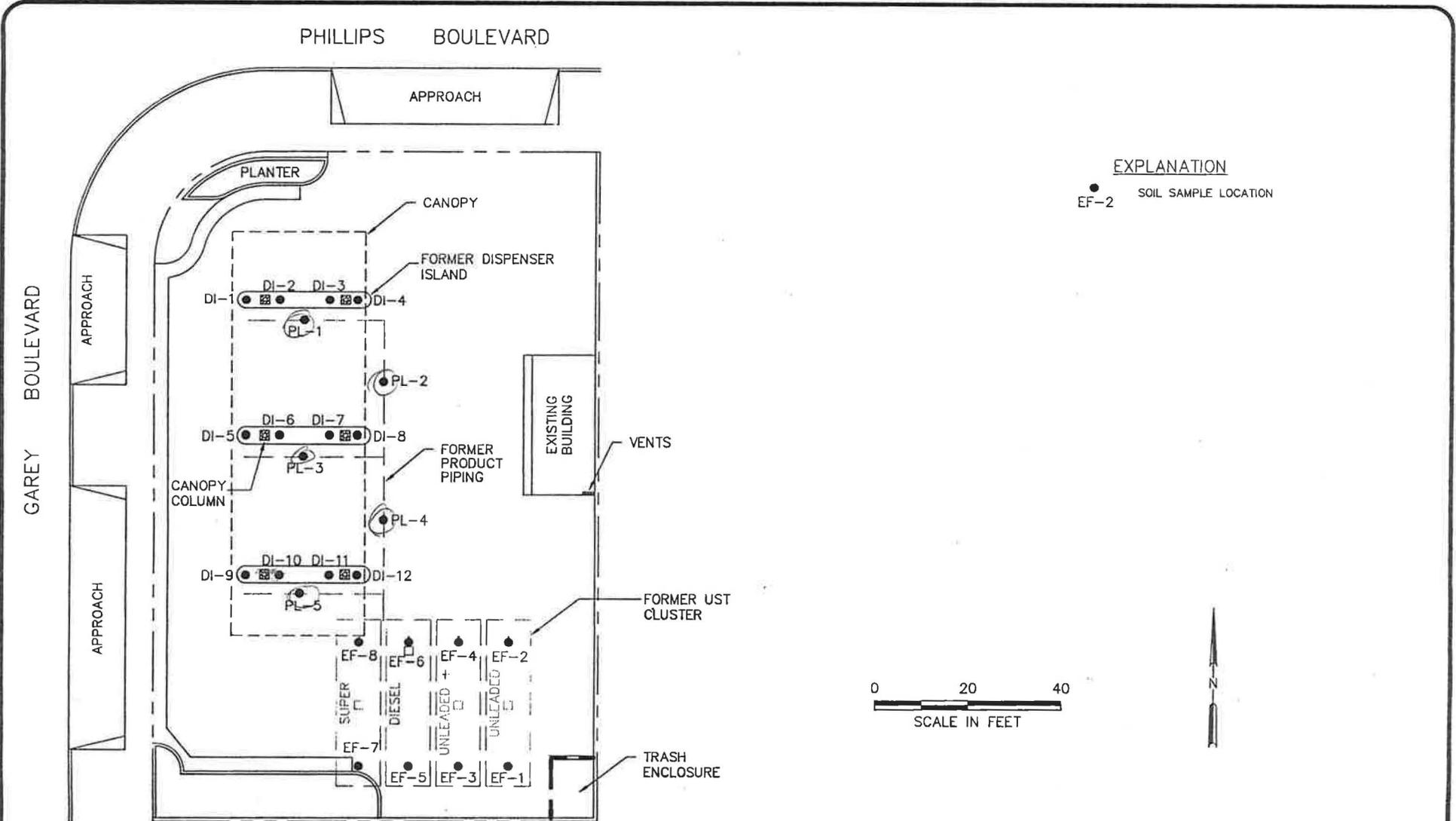
MTBE = methyl tert butyl ether.

(1) Analyzed using modified EPA Method 8015.

(2) Analyzed using EPA Method 8020.

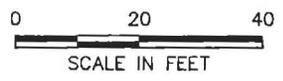
(A) See appendix for Certified Analytical Reports.

EA-AUSO\_VELJO1/CAD/DAD MA-100018553\SAMPLOC.dwg Xref: NORTH, 11/17/88  
 Scale: 1" = 1' DwgScale: 1" = 20' Date: 5/1/88 Time: 10:56 AM Operator: EPAK



**EXPLANATION**

● SOIL SAMPLE LOCATION  
 EF-2



DATE	
DWN	KK
APP	
REV	
PROJECT NO.	20805-532.001

**FIGURE 1**  
 FORMER THRIFTY OIL COMPANY  
 SERVICE STATION #81  
 1510 GAREY AVENUE  
 POMONA, CALIFORNIA  
**SITE PLAN W/ SAMPLE LOCATIONS**

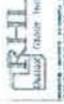
## **Appendix F**

Historical Figures and Tables (2012 Baseline Report)

**TABLE 1**  
**SOIL ANALYTICAL DATA - BASELINING INVESTIGATION**  
**THRIFTY OIL STN # 081 - Pomona, CA**

SAMPLE ID	TPH g (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	XYLENES (mg/kg)	MTBE (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)
Sample Date = 06/19/2012										
BIB-1-5	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-1-10	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-1-15	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-1-20	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-1-25	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-1-30	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-5	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-10	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-15	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-20	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-25	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-2-30	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
Sample Date = 06/20/2012										
BIB-3-5	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-3-10	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-3-15	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-3-20	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-3-25	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-3-30	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-10	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-15	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-20	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-25	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-30	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-35	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088
BIB-4-40	<0.018	<0.00018	<0.00024	<0.00021	<0.0004	<0.00019	<0.0002	<0.0003	<0.0001	<0.0088

NOTE: TPHg and TPHd analyzed by EPA Method 8015  
 BTEX and Oxygenates analyzed by EPA Method 8260  
 " - " = Not Available



TOC  
081



- COMPLIANCE NOTES**
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  3. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  4. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  5. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  6. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  7. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  8. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  9. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
  10. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).
- SCOPE OF WORK**
1. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  2. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  3. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  4. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  5. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  6. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  7. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  8. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  9. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.
  10. REMOVE EXISTING CONCRETE SLAB AND REINFORCEMENT IN THE AREA OF THE EXISTING STRUCTURE.

2012 Baseline Investigation				10/25/12
Boring ID	Total depth (ft)	Sampling Interval (ft)	First sample (ft)	Comments
BIB-1	30	5	5	
BIB-2	30	5	5	
BIB-3	30	5	5	
BIB-4	40	5	10	
BIB-5	40	5	10	

**GENERAL NOTE**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

3. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

4. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

5. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

6. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

7. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

8. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

9. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

10. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES ORDINANCES AND THE CALIFORNIA REGULATORY AGENCIES (CARB, SDG&E, AND CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS) AND THE FEDERAL REGULATORY AGENCIES (EPA, OSHA, AND DOT).

**EXISTING CORE WALL LEGEND**

1. EXISTING CORE WALL

2. EXISTING CORE WALL

3. EXISTING CORE WALL

4. EXISTING CORE WALL

5. EXISTING CORE WALL

6. EXISTING CORE WALL

7. EXISTING CORE WALL

8. EXISTING CORE WALL

9. EXISTING CORE WALL

10. EXISTING CORE WALL

**COPIES**

1. 1 COPY TO THE CITY OF LOS ANGELES

2. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

3. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

4. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

5. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

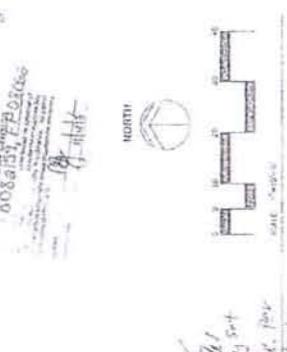
6. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

7. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

8. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

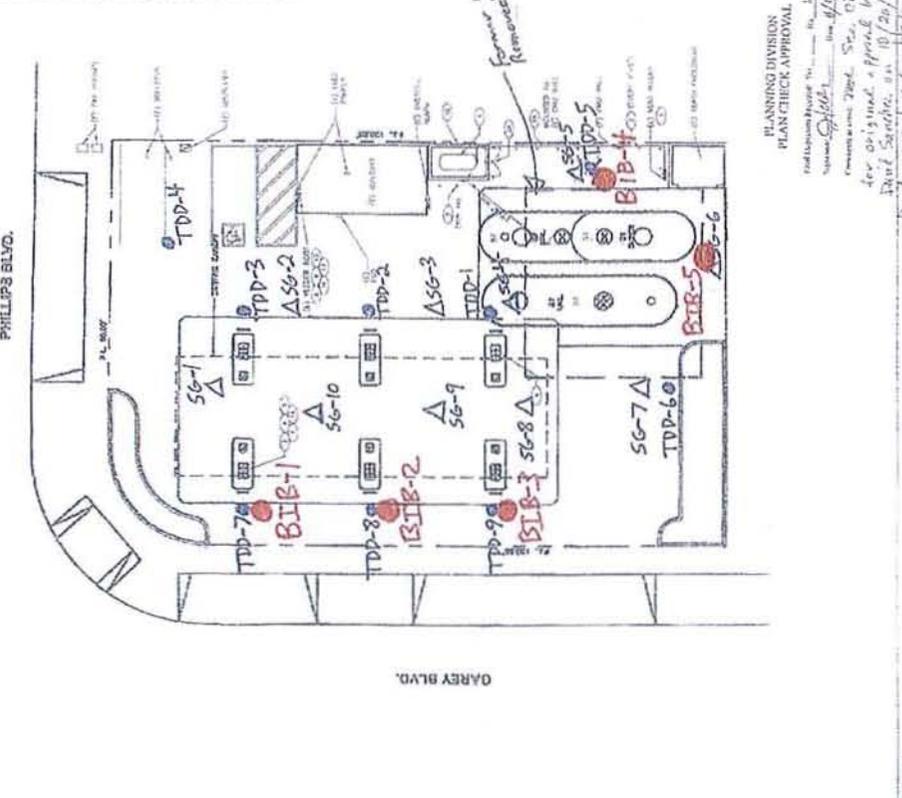
9. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

10. 1 COPY TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS



**JOB SET**

DO NOT REMOVE FROM JOB SITE



**PLANNING DIVISION PLAN CHECK APPROVAL**

APPROVED BY: [Signature]

DATE: 10/25/12

FOR ORIGINAL APPROVAL BY: Paul Sargent, on 10/25/12, for [Signature]

Ready approval is for [Signature]

Project location is [Signature]

***ATTACHMENT C***

Los Angeles Regional Water Quality Control Board

February 17, 2015

Mr. John C. Skance  
BP Remediation Management  
Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, CA 94583

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO: 7008 1830 0004 3359 0384

**UNDERGROUND STORAGE TANK PROGRAM – DIRECTIVE TO TAKE CORRECTIVE ACTION IN RESPONSE TO UNAUTHORIZED UNDERGROUND STORAGE TANK RELEASE – HEALTH AND SAFETY CODE SECTION 25296.10 AND TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS, SECTION 2720-2727. FORMER ARCO #9553 / THRIFTY #081 (B-2 PRIORITY) 1510 SOUTH GAREY AVENUE, POMONA, CA. (CASE ID: R-25090)**

Dear Mr. Skance:

The California Regional Water Quality Control Board (Regional Board), Los Angeles Region, is the public agency with primary responsibility for the protection of groundwater and surface water quality for all beneficial uses within major portions of Los Angeles and Ventura Counties. As such, the Regional Board is the lead regulatory agency for overseeing corrective action (assessment and/or monitoring activities) and cleanup of releases from leaking underground storage tank (UST) systems at the subject site.

Pursuant to Health and Safety Code section 25296.10, Atlantic Richfield Company (ARCO) is required to take corrective action (i.e., Preliminary Site Assessment, Soil and Water Investigation, Corrective Action Plan Implementation, and Verification Monitoring) to ensure protection of human health, safety and the environment. Corrective action requirements are set forth in California Code of Regulations (CCR), title 23, Chapter 16, sections 2720 through 2727.

We have received your "Request for Low-Threat Case Closure" (Report) dated June 6, 2013, submitted by ARCO, for the subject site. Based upon the Report and other information in the case file, we have the following comments.

**Violation of Health and Safety Code Section 25296.10**

1. In April 1998, four underground storage tanks (USTs) were removed from the site. Seventy-three soil samples were collected at various depths on-site. Maximum concentrations of 1,900 milligrams per kilograms (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 81 mg/kg benzene and 280 mg/kg methyl-tertiary-butyl-ether (MTBE) were reported in the soil samples collected from the UST excavation floor. Based on the assessment data, on March 16, 2009, the County of Los Angeles Department of Public Works referred the case to Regional Board for further investigation.

2. On May 15, 2009, Regional Board staff issued a directive letter (enclosed) to inform you that the Los Angeles County Department of Public Works transferred the case to the Regional Board due to concerns of groundwater impacts from the subject site. The directive letter required additional information regarding the site to be submitted by June 15, 2009. To date we have not received this information. Therefore, the requirements contained in this letter have not been met and you are hereby notified that you are in violation of Health and Safety Code 25296.10.

### Low Threat Closure Review

The case does not meet the State Board's Low Threat Closure Policy (LTCP) for the General Criteria (e): *A site conceptual model that assesses the nature extent and mobility of the release has been developed.*

- A baseline study was conducted by Thrifty in June 2012. However, this study was not conducted under Regional Board oversight and did not contribute to the definition of the existing soil plumes. Therefore, the site conceptual model is incomplete and we cannot grant case closure at this time.

### Requirement to Comply with Health and Safety Code Section 25296.10

In order to facilitate our review of the subject site; you are hereby required to provide the following information:

1. Facility mailing address, contact person's name, phone number, and e-mail address, if any;
2. Your telephone number and e-mail address;
3. A list of all historical and existing USTs, as well as their contents, capacities, dates of use, dates of removal, and a figure showing their location;
4. Contaminant release information (e.g., copy of Site Assessment Report);
5. UST removal and/or repair information (include tank size and contents, removal and/or repair date);
6. Tank disposal documentation, as well as soil disposal documentation (if any);
7. Copies of all previous site assessment and/or remediation report(s), if any;:
8. Reports of all previous soil and groundwater sample analytical results, if any;
9. Name, telephone number, and e-mail address of your environmental consultant, if any;
10. Copies of all correspondence regarding environmental assessment for the subject Site;
11. Current site use;
12. Property Owner Information:

Pursuant to the California Health and Safety Code Section 25296.20(a) and Division 7 of the Porter Cologne Water Quality Control Act under Assembly Bill 681 (AB 681), the Regional Board is required to notify all current fee title holders for the subject site or sites impacted by releases from underground storage tanks prior to considering corrective action and cleanup or case closure. If corrective action data from the site indicate that release(s) from the underground storage tank systems have impacted offsite property, we are also required to notify offsite property owners. Therefore, you are required to provide to this Regional Board the name, mailing address, and phone number for any

record fee title holders for the subject site, as well as any offsite property (ies) impacted by releases from the subject site, together with a copy of county record of current ownership (grant trust deed), available from the County Recorder's Office, for each property affected. Or, you can complete this Regional Board's "Certification Declaration for Compliance with Fee Title Holder Notification Requirements" (see [www.waterboards.ca.gov/losangeles/publications\\_forms/forms/ust/ab681\\_form.pdf](http://www.waterboards.ca.gov/losangeles/publications_forms/forms/ust/ab681_form.pdf)).

Copies of future technical reports shall also be sent directly to any other property owner(s) impacted by contamination from the Site. You are also responsible to provide new contact information if the property owner(s) changes. The new owner shall comply with the requirement stated above.

The above requested information is due to this Regional Board by **March 17, 2015**.

#### **Requirement for a Workplan (Per CCR title 23, §2725)**

You are required to develop a workplan to install a sufficient number of soil borings to define the extent of soil contamination beneath the USTs. The workplan, with a site map depicting the proposed soil boring locations, and a Health and Safety Plan is due to the Regional Board by **March 17, 2015**.

#### **Electronic Submittal Required for Correspondence and Reports to the Regional Board**

Effective November 1, 2011, the Regional Board implemented a Paperless Office system. For all parties who upload electronic documents to the GeoTracker Database, it is no longer necessary to email a copy of these documents to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov) or submit hard copies to our office. The Regional Board will no longer accept documents (submitted by either hard copy or email) already uploaded to GeoTracker.

#### **General Requirements**

1. The contractor who conducts the environmental work as required in this order shall, at all times, comply with all applicable State laws, rules, regulations, and local ordinances specifically, including but not limited to, environmental, procurement and safety laws, rules, regulations, and ordinances. The contractor shall obtain the services of a Professional Geologist or Engineer, Civil (PG/PE-Civil) to comply with the applicable requirements of the Business and Professions Code, sections 7800 et seq. implementing regulations for geological or engineering analysis and interpretation for this case. All documents prepared for others by the contractor that reflect or rely upon geological or engineering interpretations by the contractor shall be signed or stamped by the PG/PE-Civil indicating her/his responsibility for them as required by the Business and Professions Code.
2. All necessary permits must be obtained from the appropriate agencies, such as the State Department of Health Services and the City of Los Angeles, prior to the start of work.
3. Prior to commencing any fieldwork, Regional Board staff must be given a minimum of **15 days** advance notice in writing, so that one of our staff may be present.

**Enforcement**

Pursuant to section 25299(d) of the Health and Safety Code, any person who violates any corrective action requirement established by, or issued pursuant to, section 25296.10 is liable for a civil penalty of not more than ten thousand dollars (\$10,000) for each underground storage tank for each day of violation. A civil penalty may be imposed by civil action pursuant to section 25299(d)(2) or imposed administratively by the Regional Board pursuant to Water Code sections 13323 through 13328. The Regional Board may also request that the Attorney General seek judicial civil liabilities or injunctive relief pursuant to California Water Code sections 13262, 13264, 13304, 13331, 13340 and 13386. The Regional Board reserves its right to take any further enforcement action authorized by law.

If you have any questions on this matter, please contact Mr. Errick Llamas at (213) 576-6620 or [ellamas@waterboards.ca.gov](mailto:ellamas@waterboards.ca.gov).

Sincerely,

  
Samuel Unger, P.E.  
Executive Officer

Enclosure: Regional Board Staff Letter dated May 15, 2009;  
Leaking UST Program Certification Declaration for Compliance with Fee Title  
Holder Notification Requirements (Assembly Bill 681)

cc: Kathy Jundt, Underground Storage Tank Cleanup Fund  
State Water Resources Control Board  
Richard Lavin, Los Angeles County Department of Public Health,  
Environmental Health Drinking Water Program  
Chris Panaitescu, Thrifty Oil Company  
Gareth Roberts, Stantec

***ATTACHMENT D***



HARRY W. STONE, Director

TOC #081  
**COUNTY OF LOS ANGELES**  
**DEPARTMENT OF PUBLIC WORKS**

900 SOUTH FREMONT AVENUE  
ALHAMBRA, CALIFORNIA 91803-1331  
Telephone: (626) 458-5100

1.00455  
**RECEIVED**  
JAN 26 2000  
**ENVIRONMENTAL**

File v

ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE  
REFER TO FILE **EP-1**  
**011752-025090**

December 14, 1999

Arco Products Co.  
P.O. Box 5077  
Buena Park, CA 90622-5077

Dear Ladies and Gentlemen:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE TANKS  
NEW LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS  
1510 S. GAREY AVE., POMONA (6K)**

This letter is to inform you of new legislative requirements pertaining to cleanup and closure of sites where an unauthorized release of hazardous substance, including petroleum, has occurred from an underground storage tank (UST). Section 25297.15(a) of Chapter 6.7 of the Health & Safety Code requires the primary or active responsible party to notify all current record owners of fee title to the site of: 1) a site cleanup proposal, 2) a site closure proposal, 3) a local agency intention to make a determination that no further action is required, and 4) a local agency intention to make a closure letter. Section 25297.15(b) requires the local agency to take all reasonable steps to accommodate responsible landowner' participation in the cleanup or site closure process and to consider their input and recommendations.

For purposes of implementing these sections, you have been identified as the primary or active responsible party. Please provide to this agency, within 20 days of receipt of this notice, a complete mailing list of all current record owners of fee title to the site. You may use the enclosed list of landowners form (sample letter 2) to comply with this requirement. If the list of current record owners of fee title to the site changes, you must notify the local agency of the change within 20 calendar days from when you are notified of the change.

If you are the sole landowner, please indicate that on the landowner list form. The following notice requirements do not apply to responsible parties who are the sole landowner for the site.

Arco Products Co.  
December 14, 1999  
Page 2

In accordance with Section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, you must certify to the local agency that all current record owners of fee title to the site have been informed of the proposed action before the local agency may do any of the following:

- 1) consider a cleanup proposal (corrective action plan)
- 2) consider a site closure proposal
- 3) make a determination that no further action is required
- 4) issue a closure letter

You may use the enclosed notice of proposed action form (sample letter 3) to comply with this requirement. Before approving a cleanup proposal or site closure proposal, determining that no further action is required, or issuing a closure letter, the local agency will take all reasonable steps necessary to accommodate responsible landowner participation in the cleanup and site closure process and will consider all input and recommendations from any responsible landowner.

Please submit to this office an initial review fee of \$392.00 for the first three hours of site assessment/remediation proposal or report review. Any additional time over the initial three hours will be billed at \$131.00 per hour.

Please submit the certification within 20 days from the date of this letter.

Should you have any questions regarding the above matter, please contact Ms. Anoush Housepians of this office at (626) 458-3516, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

HARRY W. STONE  
Director of Public Works



*for* CARL W. SJOBERG  
Chief, Industrial Waste Planning & Control  
Environmental Programs Division

AH:sh  
INK3/ARCO  
C274247

cc: California Regional Water Quality Control Board (Dave Bacharowski)  
Pinnacle Environmental Solutions (Eugene Y. Park)

---

***ATTACHMENT E***

# THRIFTY OIL CO.

## SITE ASSESSMENT REPORT

**FAST FUEL STATION No. 095  
1510 GAREY AVENUE  
POMONA, CALIFORNIA**

TOC # 081

**July 7, 1995**

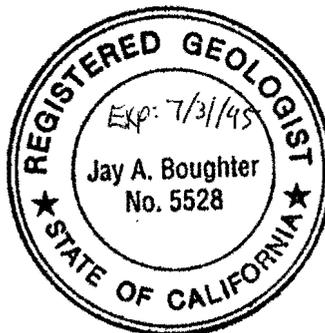
**Submitted to:**

**Thrifty Oil Co.**

**Written by:**

*Jay A. Boughter*

**Jay A. Boughter, R.G. No. 5528**



## TABLE OF CONTENTS

1.0	INTRODUCTION AND SITE DESCRIPTION . . . . .	1
1.1	Introduction . . . . .	1
1.2	Site Description . . . . .	1
2.0	PREVIOUS SITE ASSESSMENTS . . . . .	1
3.0	GEOLOGY AND HYDROGEOLOGY . . . . .	1
3.1	Geology . . . . .	1
3.2	Hydrogeology . . . . .	1
4.0	FIELD ASSESSMENT . . . . .	2
4.1	Soil Borings . . . . .	2
4.2	Soil Sampling . . . . .	2
4.3	Soil Sample Analysis . . . . .	2
5.0	DISCUSSION OF RESULTS . . . . .	3
6.0	CONCLUSIONS . . . . .	4
7.0	REMARKS . . . . .	4
8.0	REFERENCES . . . . .	5

## LIST OF FIGURES

- Figure 1 - Site Location Map
- Figure 2 - Plot Plan
- Figure 3 - Generalized Geologic Cross Section A - A'

## LIST OF TABLES

- Table 1 - Soil Analytical Results

## LIST OF APPENDICES

- Appendix A - Field Procedures
- Appendix B - Boring Logs
- Appendix C - Soil Laboratory Report and Chain-of-Custody Forms

## **1.0 INTRODUCTION AND SITE DESCRIPTION**

### **1.1 Introduction**

Thrifty Oil Co. (Thrifty), has performed site assessment activities at Fast Fuel Station No. 095 located at 1510 Garey Avenue in Pomona, California (**Figure 1**). Thrifty conducted site assessment activities as the result of a potential property transaction. Four soil borings (B-1 through B-4; **Figure 2**) were drilled onsite to assess soil conditions beneath the site. This report presents the results of the site assessment activities.

### **1.2 Site Description**

Fast Fuel Station No. 095 is located at the southeast corner of the intersection of Garey Avenue and Phillips Boulevard in Pomona, California (**Figure 1**). A strip mall is located to the north and west, a muffler shop is located to the south and a residence is located to the east of the site.

The facility is operated as a self-service gasoline station which includes one building, three gasoline dispenser islands and four underground storage tanks (USTs; **Figure 2**).

## **2.0 PREVIOUS SITE ASSESSMENTS**

No previous assessments appeared to have occurred at the site.

## **3.0 GEOLOGY AND HYDROGEOLOGY**

### **3.1 Geology**

The site is located approximately 1.25 miles west of the Puente Hills and approximately 2.5 miles southeast of the San Jose Hills. These hills are comprised predominantly of upper Cretaceous to upper Pleistocene age marine and nonmarine sedimentary rocks. The site is underlain by alluvial fans comprised of material derived from these Hills.

### **3.2 Hydrogeology**

The site lies along the western margin of the Chino Groundwater Basin. The Chino Basin is located in the northwestern portion of the Upper Santa Ana Valley. It is bounded by the San Gabriel Mountains on the north, the Puente Hills on the west and the northwest, Jurupa Mountains, Pedley Hills and the Santa Ana River on the south and subsurface barriers (faults or buried bedrock) on the east. The basin is approximately 20 miles long, 12 miles wide and

has an area of 237 square miles. The major portion of the Chino Basin is in San Bernardino County with its southern portion in Riverside County and a small western fringe (containing the site) in Los Angeles County (DWR, 1960).

The principal stream draining the Chino Basin is Chino Creek, which, together with several small streams, flows from the San Gabriel Mountains southward across the Chino Basin to the Santa Ana River. The Santa Ana River flows westerly along the southern margin of the basin (DWR, 1960).

Groundwater is obtained from the alluvial sediments in the basin. These sediments are of Recent and Pleistocene age and comprise, essentially, a singular aquifer. In the upper portion of the valley, the sediments consist chiefly of coarse gravels and groundwater occurs under unconfined conditions. Along the southwestern margin of the valley, groundwater is confined under pressure by fine-grained floodplain sediments. Faults along the northeasterly boundary of the basin impede groundwater inflow from adjacent basins. Groundwater wells yield from 135 gallons per minute (gpm) to more than 1,800 gpm (DWR, 1960).

## **4.0 FIELD ASSESSMENT**

### **4.1 Soil Borings**

On May 12, 1995, four soil borings (B-1 through B-4; **Figure 2**) were advanced onsite by West Hazmat Drilling of Anaheim, California to depths ranging from 20 to 50 feet bgs, utilizing a truck-mounted, hollow-stem auger drilling rig.

### **4.2 Soil Sampling**

Soil samples were collected at 5-foot intervals from the borings in accordance with the protocol presented in **Appendix A**. A sample log was maintained for each boring. Sample lithologies were described using the Uniform Soil Classification System (USCS). Soil boring logs are included in **Appendix B**. All on-site work was supervised by a California State Registered Geologist.

Soil cuttings and decontamination water generated by the drilling and sampling operations were placed in labeled and sealed 55-gallon steel drums and stored on-site prior to disposal.

### **4.3 Soil Sample Analysis**

Selected soil samples were transported under strict chain-of-custody procedures to American Analytics located in Canoga Park, California. American Analytics is a Thrifty contracted, California Department of Health Services (CADHS) approved analytical laboratory. Soil

samples collected from each boring were analyzed for TPH (gasoline) and benzene, toluene, ethylbenzene and xylenes (BTEX) according to EPA method 8015 modified and EPA method 8020. A summary of soil laboratory analytical results is presented in **Table 1**. Copies of the soil laboratory data sheets and chain-of-custody forms are included in **Appendix C**.

## **5.0 DISCUSSION OF RESULTS**

Data obtained during this assessment indicates the subsurface sediments consist primarily of a sand layer extending from 0 to 7.5 feet bgs, a silty sand layer extending from 7.5 to 17.5 feet bgs, a sand layer extending from 17.5 to 37.5 feet bgs, a silty clay layer extending from 37.5 to 42.5 feet bgs, a clay layer extending from 42.5 to 47.5 feet bgs and a silty sand extending from 47.5 feet bgs to the terminal depth (50 feet bgs) in soil boring B-1. Subsurface lithologies are depicted in the Generalized Geologic Cross Section A - A' (**Figure 3**).

Laboratory analysis of the soil sample collected from 10-foot depth interval in soil boring B-2 detected TPH at a concentration of 6.9 mg/kg. Laboratory analysis of all other soil samples did not detect TPH at concentrations which exceeded laboratory detection limits.

Laboratory analysis of the soil sample collected from the 10-foot depth interval in soil boring B-2 detected BTEX at concentrations of 0.009 mg/kg, 0.024 mg/kg, 0.007 mg/kg and 0.36 mg/kg, respectively.

Laboratory analysis of the soil sample collected from the 10-foot depth interval in soil boring B-4 detected benzene, toluene and xylenes at concentrations of 0.016 mg/kg, 0.023 mg/kg and 0.025 mg/kg, respectively.

Laboratory analysis of the soil sample collected from the 15-foot depth interval in soil boring B-4 detected benzene, toluene and xylenes at concentrations of 0.012 mg/kg, 0.02 mg/kg and 0.021 mg/kg, respectively.

Laboratory analysis of all other samples collected did not detect BTEX at concentrations which exceeded laboratory detection limits.

Soil laboratory analytical results generated during this assessment are summarized in **Table 1**. The soil laboratory analytical reports and chain-of-custody documents are included as **Appendix C**.

Groundwater was not encountered during drilling activities.

## **6.0 CONCLUSIONS**

Based on information collected during this assessment, it appears that the only concentrations of petroleum hydrocarbons detected in soil exceeding laboratory detection limits is in the 10-foot depth interval of soil boring B-2 and the 10 and 15-foot depth intervals in soil boring B-4. These concentrations do not appear to exceed general regulatory clean-up levels and more than likely would not require remedial activities.

## **7.0 REMARKS**

The information contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended. All work was performed under the supervision of a registered geologist as defined in the Registered Geologist Act of the California Code of Regulations.

## **8.0 REFERENCES**

State of California

Department of Water Resources

Bulletin No. 66-60

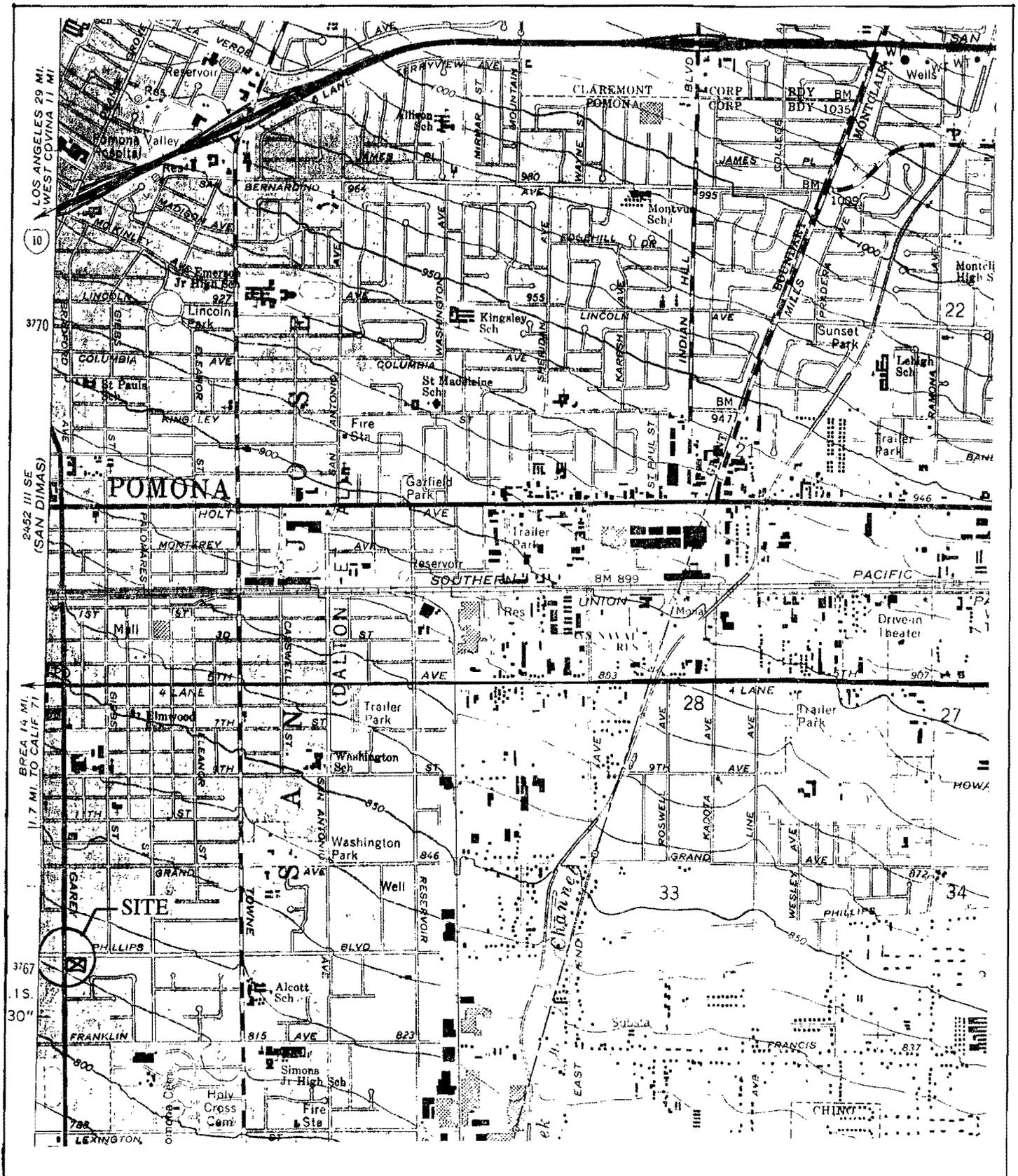
Quality of Ground Waters In California; Part II Southern California - 1960

State of California

Division of Mines and Geology

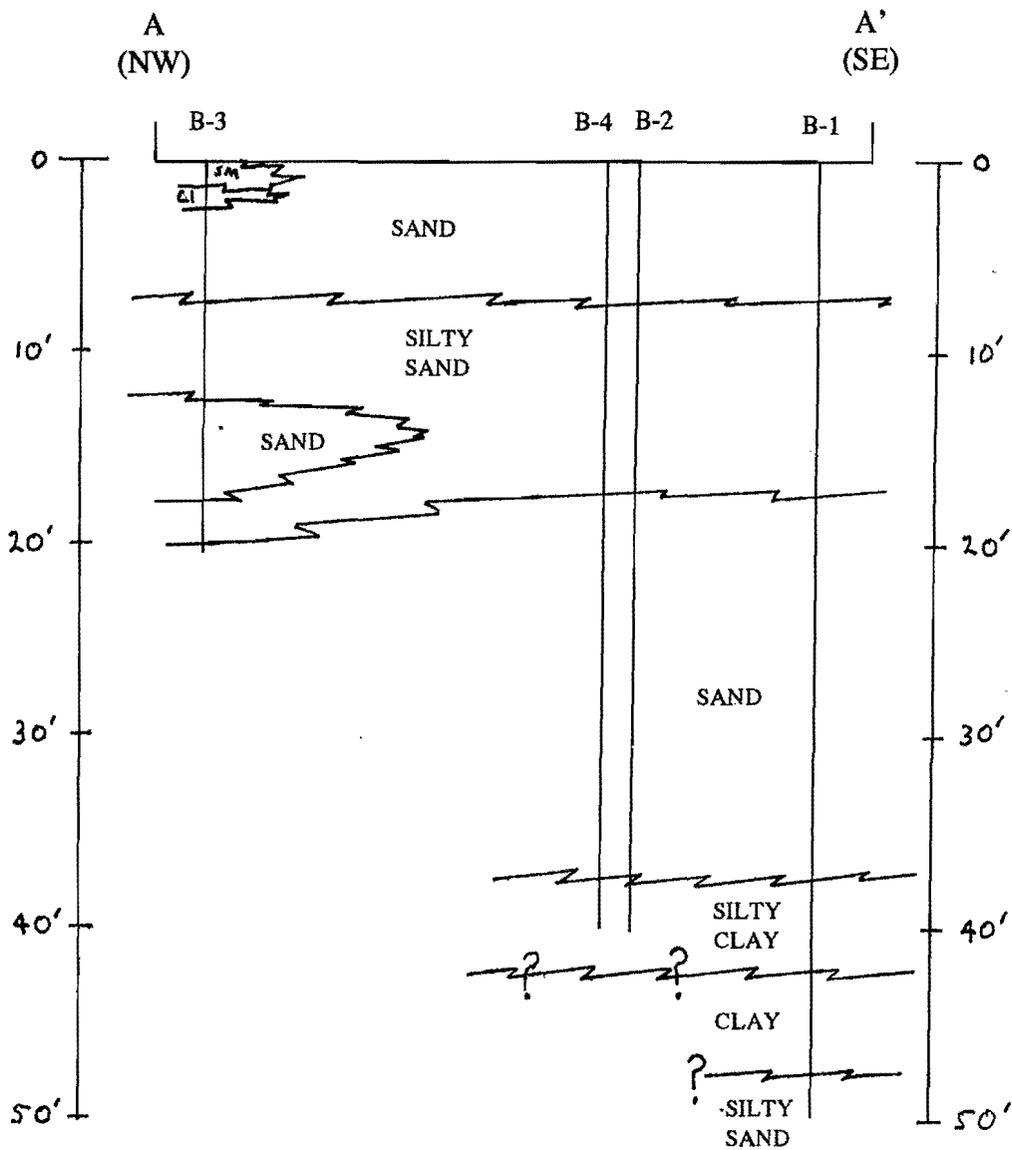
Geologic Map of California; San Bernardino Sheet - 1986

## **FIGURES**



**FIGURE 1**  
**SITE LOCATION MAP**  
**FAST FUEL STATION No. 095**  
**1510 Garey Avenue**  
**Pomona, California**





**FIGURE 3**  
**GENERALIZED GEOLOGIC CROSS SECTION A - A'**  
**FAST FUEL STATION No. 095**  
**1510 Garey Avenue**  
**Pomona, California**

## **TABLES**

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**(Concentrations Reported in mg/kg)**

<b>BORING No.</b>	<b>TPH</b>	<b>BENZENE (gas)</b>	<b>TOLUENE</b>	<b>ETHYLBENZENE</b>	<b>XYLENES</b>
SAMPLED 5/12/95					
B-1-10	ND	ND	ND	ND	ND
B-1-20	ND	ND	ND	ND	ND
B-1-30	ND	ND	ND	ND	ND
B-1-40	ND	ND	ND	ND	ND
B-2-10	6.9	0.009	0.024	0.007	0.36
B-2-20	ND	ND	ND	ND	ND
B-2-30	ND	ND	ND	ND	ND
B-2-40	ND	ND	ND	ND	ND
B-3-5	ND	ND	ND	ND	ND
B-3-10	ND	ND	ND	ND	ND
B-3-15	ND	ND	ND	ND	ND
B-3-20	ND	ND	ND	ND	ND
B-4-10	ND	0.016	0.023	ND	0.025
B-4-15	ND	0.012	0.02	ND	0.021
B-4-25	ND	ND	ND	ND	ND
B-4-30	ND	ND	ND	ND	ND
B-4-40	ND	ND	ND	ND	ND

**APPENDIX A**  
**FIELD PROCEDURES**

## **APPENDIX A**

### **Field Procedures**

#### Drilling and Decontamination

Soil borings were advanced using a truck-mounted hollow-stem auger drilling rig. Six-inch diameter (I.D.) augers were used for drilling soil borings.

To reduce the potential for cross contamination, auger flights were steam cleaned prior to use at the Site and before drilling each soil boring. Sampling equipment was washed with a laboratory-grade detergent (e.g., Alconox) and double-rinsed with distilled water between sampling points.

Soils generated during drilling activities were placed in 55-gallon drums and stored on site, pending evaluation of disposal options.

#### Soil Boring Sampling

Soils were sampled by driving the sampler every 5 feet from ground surface to the terminal depth from each boring. When possible, the bottom brass tube from each boring was retained for laboratory analysis. The remaining tubes were used for lithologic description and head space analysis in the field.

Soil samples were collected using a 1.5-inch diameter by 18-inches long, split-spoon sampler advanced driven into the soil.

Selection of soil samples for chemical analysis were based on field observations, such as visual indications of staining.

Drilling and logging was performed under the direction of a California Registered Geologist (RG). Soil samples were lithologically described and classified using the Unified Soil Classification System.

## Soil Samples

Soil samples were collected for laboratory analysis from each soil boring at approximately 5-foot intervals. Soil samples were collected below the water table only for lithologic descriptions.

Immediately following sampling, a Teflon® cover and plastic end caps were placed over each end of the retained sample tubes. The tubes were then labeled and delivered to the analytical laboratory. Strict chain-of-custody protocol was maintained throughout the sample handling process.

**APPENDIX B**  
**BORING LOGS**

Depth, ft.	CONSTRUCTION		LITHOLOGY		SAMPLE DATA	
	Type of Security:	Graphic Log	Description	NUMBER	INTERNAL PENETRATION	
0		SP	Sand: dark brown (7.5Y 3/2); dry; vt-f			
5	Concrete		dark yellowish brown (10YR 3/4); no hydrocarbon odor			6
	bentonite					
10		SM	silty sand: olive brown (2.5Y 4/3); dry; no hydrocarbon odor; vt-f; 10-20% silt			7
15			trace to 10% silt; no hydrocarbon odor			8
20		SP	sand: dark yellowish brown (10YR 3/6); slightly moist; vt-f; trace silt; no hydrocarbon odor			6
25			olive brown (2.5Y 4/3); f; no hydrocarbon odor			12 10 9
30			light olive brown (2.5Y 5/3); no hydrocarbon odor			15 12 8
35			vt-f; no hydrocarbon odor			25 13

Well Permit No.: NA  
 Date well drilled: 5-12-95  
 Date water level measured: NA  
 Well elevation: NA

Drilling Company: West Hazmat  
 Driller: Danny  
 Sampling Method: split spoon  
 Hammer Weight: 140 lbs.

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-1

Project No. TOC No. CT-095 Pomona

AQUAGEO

LITHOLOGY

SAMPLE DATA

Depth, feet	CONSTRUCTION		Description	SAMPLE DATA	
	Type of Security:	Graphic Log		NUMBER	INTERVAL
35		SP			11
40	bentonite	Ch	silty clay: very dark grayish brown (2.5Y 3/2); wet; 20-40% silt; no hydrocarbon odor; low to med plasticity; not fully saturated	25 19 7	
45		Ch	clay: olive gray (5Y 5/2); wet; high plasticity; reddish brown mottling; trace f sand; no hydrocarbon odor; not fully saturated	NA NA NA	
50		SM	silty sand: olive brown (2.5Y 4/4); moist to very moist; rf; 10-30% silt; no hydrocarbon odor	NA NA NA	

Well Permit No.: NA  
 Date well drilled: 5-12-95  
 Date water level measured: NA  
 Well elevation: NA

Drilling Company: West Hg2mat  
 Driller: Deany  
 Sampling Method: Split Spoon  
 Hammer Weight: 140 lbs.

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-1

Project No. TOC No. CT-095

AQUAGEO

LITHOLOGY

SAMPLE DATA

Depth, feet	CONSTRUCTION		LITHOLOGY		SAMPLE DATA	
	Type of Security:	Graphic Log	Description	NUMBER	INTERNAL PENETRATION	
0		concrete	SP sand: dark olive gray (5Y 3/2); slightly moist; vf-fj; trace silt; trace pebbles; slight hydrocarbon odor			
5		bentonite	moist; no pebbles; no hydrocarbon odor			21 17 9
10			SM silty sand: brown (10YR 4/3); slightly moist; vf-f; 20-40% silt; slight hydrocarbon odor			18 14 11
15			SP Sand: olive brown (2.5Y 4/4); slightly moist; vf-f; trace silt; no hydrocarbon odor			6 9 1
20			no hydrocarbon odor			7 5
25			moist; no hydrocarbon odor			12 9 7
30			light olive brown (2.5Y 5/3); no hydrocarbon odor			12 11 10
35			no hydrocarbon odor			20 18

Well Permit No.: NA  
 Date well drilled: 5-12-95  
 Date water level measured: NA  
 Well elevation: NA

Drilling Company: West Hazmat  
 Driller: Danny  
 Sampling Method: Split Spoon  
 Hammer Weight: 140 lbs

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-2

Project No. TOC No. CT-095 Pomona

AQUAGEO

Depth, feet	CONSTRUCTION		LITHOLOGY		SAMPLE DATA	
	Type of Security:	Graphic Log	Description	NUMBER	INTERVAL	PENETRATION
35		SP				17
	bentonite	CL	silty clay: very dark grayish brown (2.5Y 3/2); wet but not fully saturated; no hydrocarbon odor; 20-40% silt; low to med plasticity			34
40						25
						17

Well Permit No.: NA      Drilling Company: West Hazmat  
Date well drilled: 5-12-95      Driller: Danny  
Date water level measured: NA      Sampling Method: split spoon  
Well elevation: NA      Hammer Weight: 170 lbs.

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-2

Project No. TOC No. CT-095 Pomona

AQUAGEO

LITHOLOGY

Depth, feet	CONSTRUCTION		Description	NUMBER	INTERVAL	PENETRATION RATE
	Type of Security:	Graphic Log				
0		SM	silty sand: dark yellowish brown (10YR 4/6); slightly moist; v-f-med; 10-25% silt; 10% pebbles; no HC odor			
	concrete	CL				
5		SP	clay: light olive brown (2.5Y 5/3); slightly moist; high plasticity; no HC odor			10 8
	bentonite					
10		SM	sand: yellow (2.5Y 7/6); moist; f-med; no HC odor			6 4
15		SP	silty sand: dark yellowish brown (10YR 4/4); slightly moist; v-f; 10-25% silt; no HC odor			11 7
20		SM	sand: olive brown (2.5Y 4/4); moist; v-f; no HC odor			8 6
			silty sand: light olive brown (2.5Y 5/3); moist v-f; 10-25% silt; no HC odor			16 1

Well Permit No.: NA      Drilling Company: West Hazmat  
 Date well drilled: 5-12-95      Driller: Dan by  
 Date water level measured: NA      Sampling Method: split spoon  
 Well elevation: NA      Hammer Weight: 140 lbs.

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-3

Project No. TOC No. 095 Pomona

AQUAGEO

LITHOLOGY

SAMPLE DATA

Depth, feet	CONSTRUCTION		Graphic Log	Description	SAMPLE NUMBER	INTERVAL	PENETRATION
	Type of Security:						
0		Concrete	SP	sand: dark brown (7.5Y 3/2); dry; vt-f			
5		bentonite		dark yellowish brown (10YR 3/4); slight hydrocarbon odor		6	
10			SM	silty sand: olive brown (2.5Y 4/3); slightly moist; vt-f; 10-25% silt; hydrocarbon odor		7	
15				trace to 10% silt; slight HC odor		8	
20			SP	sand: dark yellowish-brown (10YR 3/6); slightly moist; vt-f; trace silt; no HC odor		9	
25				olive brown (2.5Y 4/3); f; no HC odor		10	
30				light olive brown (2.5Y 5/3); no HC odor		11	
35				vt-f; no HC odor		12	

Well Permit No.: NA  
 Date well drilled: 5-12-95  
 Date water level measured: NA  
 Well elevation: NA

Drilling Company: West Hazmat  
 Driller: Danny  
 Sampling Method: Split Spoon  
 Hammer Weight: 140 lbs.

Sketch of Well Location:

Geologist/Engineer: Jay Boughter

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR B-4

Project No. TDC No. CT-095

AQUAGEO



**APPENDIX C**

**SOIL  
LABORATORY REPORT  
AND  
CHAIN-OF-CUSTODY**



## LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company  
Project No.: N/A  
Project Name: CT-095  
Sample Matrix: Soil  
Method: EPA 8015M (Gasoline)

AA Project No.: A135000-5  
Date Received: 05/12/95  
Date Reported: 05/15/95  
Units: mg/Kg

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
32813	B-1-10	05/12/95	05/13/95	<1	1
32815	B-1-20	05/12/95	05/13/95	<1	1
32817	B-1-30	05/12/95	05/13/95	<1	1
32819	B-1-40	05/12/95	05/13/95	<1	1
32822	B-2-10	05/12/95	05/13/95	6.9	1
32824	B-2-20	05/12/95	05/13/95	<1	1
32826	B-2-30	05/12/95	05/13/95	<1	1
32828	B-2-40	05/12/95	05/13/95	<1	1
32829	B-3-5	05/12/95	05/13/95	<1	1
32830	B-3-10	05/12/95	05/13/95	<1	1
32831	B-3-15	05/12/95	05/13/95	<1	1
32832	B-3-20	05/12/95	05/13/95	<1	1
32834	B-4-10	05/12/95	05/13/95	<1	1
32835	B-4-15	05/12/95	05/15/95	<1	1
32837	B-4-25	05/12/95	05/15/95	<1	1
32838	B-4-30	05/12/95	05/13/95	<1	1
32840	B4-40	05/12/95	05/13/95	<1	1

MRL: Method Reporting Limit

<: Not detected at or above the value of the concentration indicated.

George Havalias  
Laboratory Director

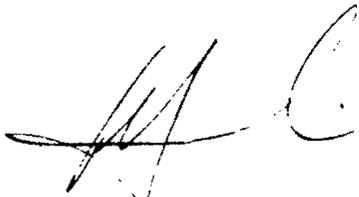


LABORATORY ANALYSIS RESULTS

**Client:** Thrifty Oil Company  
**Project No.:** N/A  
**Project Name:** CT-095  
**Sample Matrix:** Soil  
**Method:** EPA 8020 (BTEX)

**AA Project No.:** A135000-5  
**Date Received:** 05/12/95  
**Date Reported:** 05/15/95  
**Units:** mg/Kg

<b>Date Sampled:</b>	<b>05/12/95</b>	<b>05/12/95</b>	<b>05/12/95</b>	<b>05/12/95</b>	
<b>Date Analyzed:</b>	<b>05/13/95</b>	<b>05/13/95</b>	<b>05/13/95</b>	<b>05/13/95</b>	
<b>AA ID No.:</b>	<b>32813</b>	<b>32815</b>	<b>32817</b>	<b>32819</b>	
<b>Client ID No.:</b>	<b>B-1-10</b>	<b>B-1-20</b>	<b>B-1-30</b>	<b>B-1-40</b>	<b>MRL</b>
<b><u>Compounds:</u></b>					
Benzene	<0.005	<0.005	<0.005	<0.005	0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	0.005
Toluene	<0.005	<0.005	<0.005	<0.005	0.005
Xylenes	<0.01	<0.01	<0.01	<0.01	0.01



---

**George Havalias**  
Laboratory Director



## LABORATORY ANALYSIS RESULTS

Page 2

Client: Thrifty Oil Company  
Project No.: N/A  
Project Name: CT-095  
Sample Matrix: Soil  
Method: EPA 8020 (BTEX)

AA Project No.: A135000-5  
Date Received: 05/12/95  
Date Reported: 05/15/95  
Units: mg/Kg

Date Sampled:	05/12/95	05/12/95	05/12/95	05/12/95	
Date Analyzed:	05/13/95	05/13/95	05/13/95	05/13/95	
AA ID No.:	32822	32824	32826	32828	
Client ID No.:	B-2-10	B-2-20	B-2-30	B-2-40	MRL
<b>Compounds:</b>					
Benzene	0.009	<0.005	<0.005	<0.005	0.005
Ethylbenzene	0.007	<0.005	<0.005	<0.005	0.005
Toluene	0.024	<0.005	<0.005	<0.005	0.005
Xylenes	0.36	<0.01	<0.01	<0.01	0.01

George Havalias  
Laboratory Director



**LABORATORY ANALYSIS RESULTS**

**Client:** Thrifty Oil Company  
**Project No.:** N/A  
**Project Name:** CT-095  
**Sample Matrix:** Soil  
**Method:** EPA 8020 (BTEX)

**AA Project No.:** A135000-5  
**Date Received:** 05/12/95  
**Date Reported:** 05/15/95  
**Units:** mg/Kg

<b>Date Sampled:</b>	<b>05/12/95</b>	<b>05/12/95</b>	<b>05/12/95</b>	<b>05/12/95</b>	
<b>Date Analyzed:</b>	<b>05/13/95</b>	<b>05/13/95</b>	<b>05/13/95</b>	<b>05/13/95</b>	
<b>AA ID No.:</b>	<b>32829</b>	<b>32830</b>	<b>32831</b>	<b>32832</b>	
<b>Client ID No.:</b>	<b>B-3-5</b>	<b>B-3-10</b>	<b>B-3-15</b>	<b>B-3-20</b>	<b>MRL</b>
<b>Compounds:</b>					
Benzene	<0.005	<0.005	<0.005	<0.005	0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	0.005
Toluene	<0.005	<0.005	<0.005	<0.005	0.005
Xylenes	<0.01	<0.01	<0.01	<0.01	0.01

**George Havallas**  
Laboratory Director



**LABORATORY ANALYSIS RESULTS**

**Client:** Thrifty Oil Company  
**Project No.:** N/A  
**Project Name:** CT-095  
**Sample Matrix:** Soil  
**Method:** EPA 8020 (BTEX)

**AA Project No.:** A135000-5  
**Date Received:** 05/12/95  
**Date Reported:** 05/15/95  
**Units:** mg/Kg

	05/12/95	05/12/95	05/12/95	05/12/95	
<b>Date Sampled:</b>	05/12/95	05/12/95	05/12/95	05/12/95	
<b>Date Analyzed:</b>	05/13/95	05/15/95	05/15/95	05/13/95	
<b>AA ID No.:</b>	32834	32835	32837	32838	
<b>Client ID No.:</b>	B-4-10	B-4-15	B-4-25	B-4-30	<b>MRL</b>
<b><u>Compounds:</u></b>					
Benzene	0.016	0.012	<0.005	<0.005	0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	0.005
Toluene	0.023	0.020	<0.005	<0.005	0.005
Xylenes	0.025	0.021	<0.01	<0.01	0.01

**George Havalias**  
Laboratory Director



**LABORATORY ANALYSIS RESULTS**

**Client:** Thrifty Oil Company  
**Project No.:** N/A  
**Project Name:** CT-095  
**Sample Matrix:** Soil  
**Method:** EPA 8020 (BTEX)

**AA Project No.:** A135000-5  
**Date Received:** 05/12/95  
**Date Reported:** 05/15/95  
**Units:** mg/Kg

---

<b>Date Sampled:</b>	<b>05/12/95</b>	
<b>Date Analyzed:</b>	<b>05/13/95</b>	
<b>AA ID No.:</b>	<b>32840</b>	
<b>Client ID No.:</b>	<b>B4-40</b>	<b>MRL</b>
<b><u>Compounds:</u></b>		
Benzene	<0.005	0.005
Ethylbenzene	<0.005	0.005
Toluene	<0.005	0.005
Xylenes	<0.01	0.01

---

MRL: Method Reporting Limit

<: Not detected at or above the value of the concentration indicated.

**George Havalias**  
**Laboratory Director**



LABORATORY QA/QC REPORT

**Client:** Thrifty Oil Company  
**Project Name:** CT-095  
**Method:** EPA 8020 (BTEX)  
**Sample ID:** Matrix Spike  
**Concentration:** 0.04 mg/Kg

**AA ID No.:** 32786  
**Project No.:** N/A  
**AA Project No.:** A135000-5  
**Date Analyzed:** 05/13/95  
**Date Reported:** 05/15/95

Compounds	Result (mg/Kg)	Spike Recovery (%)	Dup. Result (mg/Kg)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	0.0356	89.00	0.0362	91.00	2.22	65 - 135
Ethylbenzene	0.0380	95.00	0.0400	100.00	5.13	77 - 123
Toluene	0.0366	92.00	0.0372	93.00	1.08	66 - 134
Xylenes	0.0378	95.00	0.0408	102.00	7.11	73 - 126

George Havalias  
Laboratory Director



**LABORATORY QA/QC REPORT**

**Client:** Thrifty Oil Company  
**Project Name:** CT-095  
**Method:** EPA 8020 (BTEX)  
**Sample ID:** Matrix Spike  
**Concentration:** 0.04 mg/Kg

**AA ID No.:** 32861  
**Project No.:** N/A  
**AA Project No.:** A135000-5  
**Date Analyzed:** 05/15/95  
**Date Reported:** 05/16/95

Compounds	Result (mg/Kg)	Spike Recovery (%)	Dup. Result (mg/Kg)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	0.0412	103.00	0.0426	107.00	3.81	65 - 135
Ethylbenzene	0.0388	97.00	0.0412	103.00	6.00	77 - 123
Toluene	0.0370	93.00	0.0410	103.00	10.20	66 - 134
Xylenes	0.0394	99.00	0.0414	104.00	4.93	73 - 126

**George Havallas**  
Laboratory Director



**LABORATORY QA/QC REPORT**

**Client:** Thrifty Oil Company  
**Project Name:** CT-095  
**Method:** EPA 8015M (Gasoline)  
**Sample ID:** Matrix Spike  
**Concentration:** 1 mg/Kg

**AA ID No.:** 32786  
**Project No.:** N/A  
**AA Project No.:** A135000-5  
**Date Analyzed:** 05/13/95  
**Date Reported:** 05/15/95

Compounds	Result (mg/Kg)	Spike Recovery (%)	Dup. Result (mg/Kg)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	1.29	129	1.4	140	8	51 - 149

**George Havalias**  
Laboratory Director



LABORATORY QA/QC REPORT

**Client:** Thrifty Oil Company  
**Project Name:** CT-095  
**Method:** EPA 8015M (Gasoline)  
**Sample ID:** Matrix Spike  
**Concentration:** 1 mg/Kg

**AA ID No.:** 32861  
**Project No.:** N/A  
**AA Project No.:** A135000-5  
**Date Analyzed:** 05/15/95  
**Date Reported:** 05/16/95

Compounds	Result (mg/Kg)	Spike Recovery (%)	Dup. Result (mg/Kg)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	1.16	116	1.23	123	6	51 - 149

George Havalias  
Laboratory Director

***ATTACHMENT F***



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

December 5, 1997

Thrifty Oil Company  
13539 East Foster Road  
Santa Fe Springs, California 90670

Subject: Baseline Subsurface Investigation Report  
Thrifty Service Station No. 081  
1510 Garey Avenue  
Pomona, California  
PACIFIC Project No. 732-028.1A

Dear Thrifty:

PACIFIC Environmental Group, Inc. (PACIFIC) was contracted to conduct baselining a subsurface investigation at the subject site. The purpose of the investigation was to baseline environmentally related subsurface conditions at 1510 Garey Avenue, Pomona, CA. Results of the subsurface investigation are summarized in the paragraphs below and in the enclosed attachments.

### **Scope of Work**

On June 11, 1997, PACIFIC visited the site to mark the proposed soil boring locations. Underground Service Alert (USA) was notified of the drilling. In addition to USA, a geophysical company (Spectrum E.S.I.), visited the site to clear each proposed soil boring location on July 11, 1997. On June 26, 1997 PACIFIC visited the site to collect soil samples beneath each dispenser. No samples were collected since the soil was too deep at each dispenser. On July 23 and 24, 1997, PACIFIC conducted site investigation activities in the areas of the underground storage tanks and the dispenser islands, which included drilling nine 40 foot soil borings. See the attached figure for soil boring locations, and drilling depths. All soil samples were submitted to Del Mar Analytical, a California Department of Health Services Certified Laboratory, located in Irvine, California. A total of 72 soil samples were relinquished to the laboratory. A total of 18 samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and diesel (TPHd), benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl *tert*-butyl ether (MtBE). Results of soil sample analyses are summarized in Table 1 "Analytical Summary - Soil Samples". Copies of the certified analytical reports are attached. Standard operating procedures for soil sampling techniques are attached. No evidence of an existing waste-oil tank was found.

On September 12, 1997 PACIFIC visited the site to conduct soil gas sampling activities. A total of ten soil gas samples were collected from a depth of approximately 5 feet. All soil gas

samples were submitted to Performance Analytical, Inc., a California Department of Health Services-certified laboratory located in Canoga Park, California. All samples were analyzed for TPH-g, BTEX, AND MtBE. Results of soil gas analyses are summarized in Table 1 "Analytical Summary - Air Samples". Standard operating procedures for soil gas sampling techniques are attached.

### Site Geology

Thrifty Station No. 081 is located in the City of Pomona at an elevation of approximately 811 feet above mean sea level. Local topography slopes to the southwest at approximately 0.01 foot per foot (USGS, 1967). The site is underlain by silty sand and granitic conglomerates of the Puente Formation (Durham and Yerkes, 1964). Soil types encountered during site investigation activities consisted predominantly of sand and silty sand from the ground surface to the total depth of the investigations. Groundwater was not encountered during drilling. Copies of soil boring logs are attached.

### Closing Comments

The information contained in this report represents our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

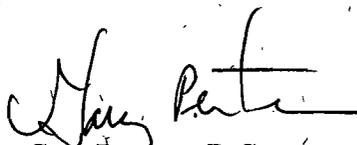
If you should have any questions, please call either of the undersigned at (626) 351-4814.

Sincerely,

**PACIFIC ENVIRONMENTAL GROUP, INC.**

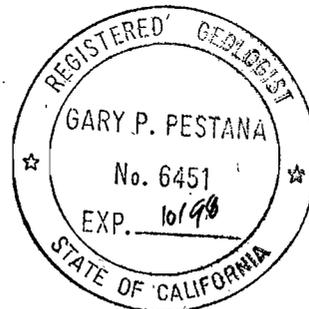


John Haberland  
Staff Geologist



Gary Pestana, R.G.  
Project Manager

cc: Kateri Luka



Attachments: Site Plan Showing Soil Boring Locations  
Site Plan Showing Soil Gas Sample Locations  
Geophysical Site Map  
Table 1: Analytical Summary - Soil Samples  
Table 1: Analytical Summary - Air Samples  
Soil Boring Logs  
Laboratory Report and Chain-of-Custody Documentation  
Equipment Decontamination Technique  
Standard Operating Procedures for Soil Sampling Techniques  
Standard Operating Procedures for Soil Gas Sampling Techniques

### References

Durham and Yerkes, 1964, Geology of Eastern Los Angeles County.

United States Geological Survey (USGS), 1967, Ontario Quadrangle, 7.5 minute topographic, photorevised 1981.

VACANT LOT

NORTH

STRIP MALL

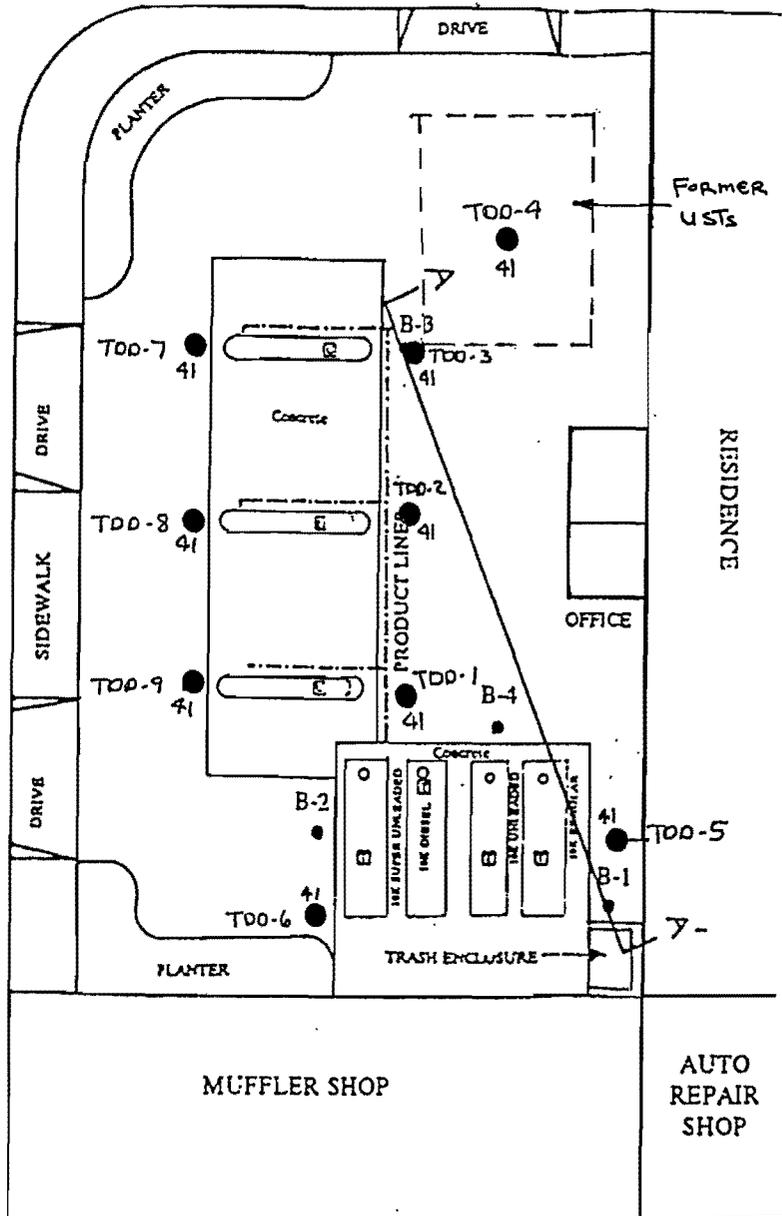
RESIDENCE

9553/081

PHILLIPS BOULEVARD

STRIP MALL

GAREY AVENUE



SCALE 1" = 20'

Thrifty No. 081

PLOT PLAN

1510 Garey Avenue  
Pomona, California

40 ● Boring and depth

VACANT LOT

NORTH

STRIP MALL

RESIDENC

9553/081

PHILLIPS BOULEVARD

STRIP MALL

GAREY AVENUE

DRIVE

SIDEWALK

DRIVE

PLANTER

DRIVE

FORMER USTs

RESIDENCE

OFFICE

SG-10 Soil Gas Sample Location

SG-1

B-3

COCKPIT

SG-10

SG-2

E

SG-9

SG-3

E

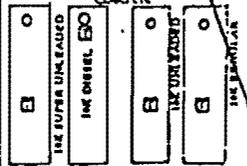
SG-8

SG-4

B-4

B-2

SG-7



SG-5

B-1

PLANTER

TRASH ENCLOSURE

SG-6

MUFFLER SHOP

AUTO REPAIR SHOP

SCALE 1" = 20'

Thrifty No. 081

PLOT PLAN

1510 Garey Avenue  
Pomona, California



**SPECTRUM** K.S.I.

855 GLENDALE BLVD  
SAN FERNANDO, CA 91340  
(818) 965-9571

Arco No. 9553

Trinity No. 081

Date 7/11/97

Project No. 970712W

Scale 1" = 20'

Client SELOZ

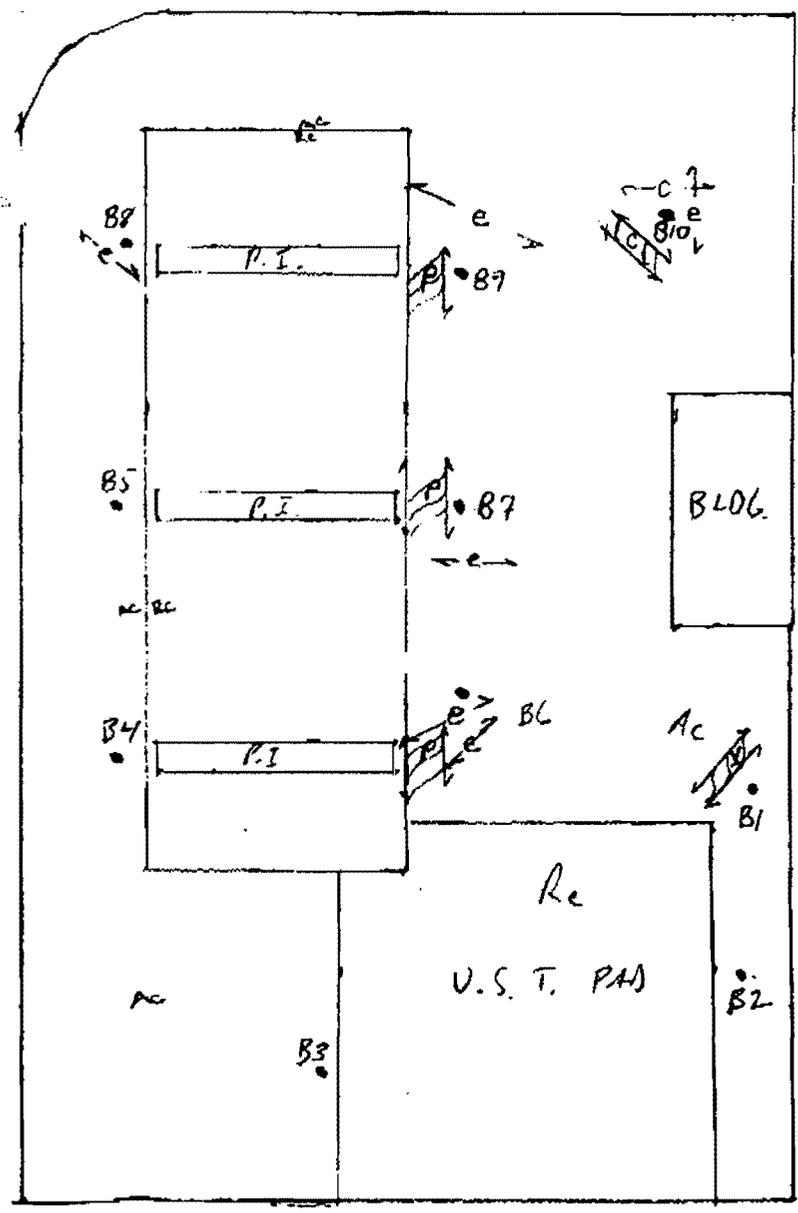
No. of borings: 10

Results of W/O search \_\_\_\_\_



PHILLIPS ROAD

GARREY AVE.



V - VENT  
 P - PRODUCT  
 C - CONDUIT  
 E - ELECTRIC



TABLE 1  
 ANALYTICAL SUMMARY - SOIL SAMPLES  
 Thrifty #081  
 1510 GAREY AVE.  
 POMONA, CALIFORNIA

Sample I.D.	Sampled	TPHg	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TPHd
		Concentration (mg/Kg)						
TDD-1-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-1-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-2-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-2-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-3-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-3-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-4-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-4-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-5-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-5-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-6-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-6-40	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-7-20	7/24/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-7-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-8-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-8-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	6.8
TDD-9-20	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0
TDD-9-40	7/23/97	<1.0	<0.005	<0.005	<0.005	<0.015	<0.05	<5.0

DEL MAR ANALYTICAL (ELAP #1855)

Mary Ann Linsel  
 Project Manager



V7071368.PEG

The data contained on the certified reports are reviewed for accuracy and completeness and should take precedence over this summary table. This report shall not be reproduced, except in full, without written permission.



**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-1  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-23-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
			5	4				
		50	7	6			SM	SILTY SAND: fine grained, medium-dark brown, moist, medium dense
			8	8				
			6	10			SM	Same as 5', decreasing silt
			8	12				
			5	14				
		0	9	16			SP	SAND: fine-medium grained, medium brown, moist, medium dense
			11	18				
			6	20			SM	SILTY SAND: fine-medium grained, medium-dark brown, moist, medium dense
		0	12	22				
			5	24			SM	Same at 20'
			9	26				
		0	13	28				
		6	30			SP	SAND: fine-medium grained, light brown with rust mottling, moist, medium dense	
		0	12	32				
		7	34					
		0	13	36		SP	SAND: fine grained, light gray-rust, moist, medium dense	
			38					
		0	6	40		ML	SANDY SILT: fine grained, medium-dark brown, moist, very stiff	
			10	42				
			12	44				

BOTTOM OF BORING AT 41'

**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-2  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-23-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
			5	4				
		0	5	6			SM	SILTY SAND: fine-medium grained, medium-dark brown, moist, medium dense
			6	8				
			6	10			SM	Same as 5', increasing silt
		0	7	12				
			5	14				
		0	8	16			SM	SILTY SAND: fine grained, light-medium brown, moist, medium dense
			0	18				
			6	20			SM	Same as 15'
		0	7	22				
			5	24				
		0	9	26			SM	SILTY SAND: fine grained, medium-dark brown, moist, medium dense
			0	28				
			8	30			SM	Same as 25'
		0	10	32				
		7	34					
	0	9	36			SP	SAND: fine grained, light brown, moist, medium dense	
		0	38					
		6	40			SP	Same as 35'	
	0	8	42					
		0	44					

BOTTOM OF BORING AT 41'

**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-3  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-24-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
				7				
				9				
		0		13	4-6	█	SM	SILTY SAND: fine-medium grained, fine gravel, light-medium brown, moist, medium dense
				8				
				10				
		0		17	10-12	█	SM	SILTY SAND: fine-medium grained, light-dark brown, moist, dense
				7				
				9				
		0		12	14-16	█	ML	SANDY SILT: fine grained, medium-dark brown, moist, very stiff
				9				
				12				
	0		18	20-22	█	ML	SANDY SILT: fine grained, fine gravel, medium brown-reddish brown, moist, hard	
			7					
			12					
	0		16	24-26	█	SP	SAND: fine-medium grained, light brown, moist, medium dense	
			8					
			13					
	0		14	30-32	█	SP	SAND: fine grained, medium brown, moist, medium dense	
			7					
			10					
	0		14	34-36	█	SM	SILTY SAND: fine grained, dark brown, moist, medium dense	
			8					
			12					
	0		16	40-42	█	SM	SILTY SAND: fine grained, medium brown-rust, moist, medium dense	
				42				
				44				
								BOTTOM OF BORING AT 41'

**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-4  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-24-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
			7	4				
			9	6			ML	SANDY SILT: fine grained, medium brown, moist, very stiff
		0	13	8				
			6	10			ML	Same as 5'
		0	12	12				
			5	14				
			8	16			SM	SILTY SAND: fine grained, light-medium brown, moist, medium dense
		0	11	18				
			7	20			ML	SANDY SILT: fine grained, medium brown, moist, very stiff
		0	14	22				
			6	24			ML	Same as 20'
		0	11	26				
		7	30			SM	SILTY SAND: fine grained, dark brown, moist, medium dense	
	0	12	32					
		9	34					
		11	36			SP	SAND: fine-medium grained, medium brown-rust, moist, medium dense	
	0	11	38					
		8	40			SP	Same as 35'	
	0	12	42					
		13	44					
								BOTTOM OF BORING AT 41'



**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-6  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-24-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
			5	4			SM	SILTY SAND: fine-medium grained, medium-dark brown, moist, medium dense
		0	6	6				
			7	8				
			5	10			SM	SILTY SAND: fine-medium grained, medium-dark brown with black mottling, moist, medium dense
		0	8	12				
			6	14				
			9	16			ML	SANDY SILT: fine grained, medium brown interbedded with reddish brown, fine-medium sand, moist, very stiff
		0	9	18				
			5	20			SM	SILTY SAND: fine-medium grained, fine gravel, light-medium brown, moist, medium dense
		0	10	22				
			6	24				
			9	26			ML	SANDY SILT: fine grained, medium-dark brown, moist, very stiff
		0	11	28				
		7	30			ML	Same as 25'	
	0	13	32					
		8	34					
		12	36			SP	SAND: fine grained, medium-dark brown, moist, medium dense	
	0	14	38					
		8	40			SP	SAND: fine-medium grained, light-medium brown, moist, medium dense	
	0	13	42					
		14	44					
BOTTOM OF BORING AT 41'								

PROJECT NO. 732-028.1A  
 LOGGED BY: C. ROHLFING  
 DRILLER: WEST HAZMAT  
 DRILLING METHOD: HSA  
 SAMPLING METHOD: SPLITSPOON  
 CASING TYPE: NA  
 SLOT SIZE: NA  
 SAND PACK: NA

CLIENT: THRIFTY  
 DATE DRILLED: 7-24-97  
 LOCATION: THRIFTY # 081  
 HOLE DIAMETER: 8"  
 HOLE DEPTH: 41'  
 WELL DIAMETER: NA  
 WELL DEPTH: NA  
 CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
				4				
			0	5	5-6		ML	SANDY SILT: fine grained, medium brown-reddish brown, moist, stiff
				8				
			0	7	10-11		SM	SILTY SAND: fine grained, medium-dark brown with black mottling, moist, medium dense
				14				
			0	9	16-17		SM	Same as 10'
				18				
			0	11	20-21		ML	SANDY SILT: fine grained, medium-dark brown, moist, very stiff
				24				
			0	12	26-27		ML	Same as 10'
				28				
			0	13	30-31		ML	SANDY SILT: fine grained, light-medium brown, moist, very stiff
				34				
			0	14	36-37		SM	SILTY SAND: fine grained, medium-dark brown, moist, medium dense
			38					
		0	9	40-41		SP	SAND: fine-medium grained, medium brown, moist, medium dense	
			11					
				42				
				44				

BOTTOM OF BORING AT 41'

**PACIFIC ENVIRONMENTAL GROUP, INC.**

WELL NO. TDD-8  
PAGE 1 OF 1

PROJECT NO. 732-028.1A  
LOGGED BY: C. ROHLFING  
DRILLER: WEST HAZMAT  
DRILLING METHOD: HSA  
SAMPLING METHOD: SPLITSPOON  
CASING TYPE: NA  
SLOT SIZE: NA  
SAND PACK: NA

CLIENT: THRIFTY  
DATE DRILLED: 7-24-97  
LOCATION: THRIFTY # 081  
HOLE DIAMETER: 8"  
HOLE DEPTH: 41'  
WELL DIAMETER: NA  
WELL DEPTH: NA  
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
				4				
			0	5	4		SM	SILTY SAND: fine-medium grained, medium brown-reddish brown, moist, medium dense
				8				
				8	6			
				8				
				5	10		SM	SILTY SAND: fine-medium grained, fine gravel, medium brown, moist, medium dense
			0	7	10			
				10				
				6	14			
			0	8	16		ML	SANDY SILT: fine grained, light-medium brown, moist, very stiff
				11				
				7	20		SM	SANDY SILT: fine grained, medium-dark brown, moist, very stiff
			0	9	22			
			6	24				
		0	10	26		SP	SAND: fine-medium grained, medium brown, moist, medium dense	
			12					
			7	30		SP	Same as 25'	
		0	12					
			8	34				
		0	12	36		SP	SAND: fine-medium grained, light-medium brown, moist, very stiff	
			16					
			9	40		SP	SAND: fine-medium grained, medium brown, moist, medium dense	
		0	10					
			11					
				42				
				44				

BOTTOM OF BORING AT 41'

PROJECT NO. 732-028.1A  
 LOGGED BY: C. ROHLFING  
 DRILLER: WEST HAZMAT  
 DRILLING METHOD: HSA  
 SAMPLING METHOD: SPLITSPOON  
 CASING TYPE: NA  
 SLOT SIZE: NA  
 SAND PACK: NA

CLIENT: THRIFTY  
 DATE DRILLED: 7-24-97  
 LOCATION: THRIFTY # 081  
 HOLE DIAMETER: 8"  
 HOLE DEPTH: 41'  
 WELL DIAMETER: NA  
 WELL DEPTH: NA  
 CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Grout				2				
				4				
		0		6			SM	SILTY SAND: fine-medium grained, fine gravel, medium-dark brown, moist, medium dense
				8				
		0		10			ML	SANDY SILT: fine grained, fine gravel, medium brown-reddish-brown, moist, very stiff
				12				
		0		13			ML	SANDY SILT: fine grained, medium brown-reddish brown, moist, very stiff
				18				
		0		12			ML	SANDY SILT: fine grained, medium-dark brown with light gray mottling, moist, very stiff
				22				
		0		9			ML	SANDY SILT: fine grained, medium-dark brown with light gray and rust mottling, moist, very stiff
				28				
		0		10			SM	SILTY SAND: fine grained, medium brown, moist, medium dense
				32				
	0		16			SP	SAND: fine-medium grained, light-medium brown, moist, medium dense	
			38					
	0		13			SP	SAND: fine-medium grained, light brown, moist, medium dense	
			42					
			44					

BOTTOM OF BORING AT 41'

Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: V7071368	Sampled: Jul 23, 1997 Received: Jul 28, 1997 Extracted: Jul 31-Aug 1, 1997 Analyzed: Jul 31-Aug 1, 1997 Reported: Aug 4, 1997
--	--	---

### VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

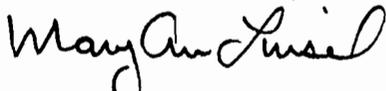
Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
V7071368	TDD-1-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071369	TDD-1-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071370	TDD-2-20	N.D.	N.D.	N.D.	N.D.	N.D.

<b>Reporting Limit:</b>	<b>1.0</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.015</b>
-------------------------	------------	---------------	---------------	---------------	--------------

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: V7071371	Sampled: Jul 24, 1997 Received: Jul 28, 1997 Extracted: Jul 31-Aug 3, 1997 Analyzed: Jul 31-Aug 3, 1997 Reported: Aug 4, 1997
--	--	---

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
V7071371	TDD-2-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071372	TDD-3-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071373	TDD-3-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071374	TDD-4-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071375	TDD-4-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071376	TDD-5-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071377	TDD-5-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071378	TDD-6-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071379	TDD-6-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071380	TDD-7-20	N.D.	N.D.	N.D.	N.D.	N.D.

<b>Reporting Limit:</b>	<b>1.0</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.015</b>
-------------------------	------------	---------------	---------------	---------------	--------------

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: V7071381	Sampled: Jul 23, 1997 Received: Jul 28, 1997 Extracted: Aug 1, 1997 Analyzed: Aug 1, 1997 Reported: Aug 4, 1997
--	--	---

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

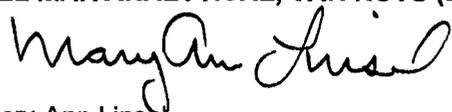
Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
V7071381	TDD-7-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071382	TDD-8-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071383	TDD-8-40	N.D.	N.D.	N.D.	N.D.	N.D.
V7071384	TDD-9-20	N.D.	N.D.	N.D.	N.D.	N.D.
V7071385	TDD-9-40	N.D.	N.D.	N.D.	N.D.	N.D.

<b>Reporting Limit:</b>	<b>1.0</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.015</b>
-------------------------	------------	---------------	---------------	---------------	--------------

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linser  
Project Manager



Pacific Environmental Group	Client Project ID: Thrifty Work Auth. #9553-97-01	Sampled: Jul 23, 1997
650 Sierra Madre Villa, Ste. 204	81, Pomona	Received: Jul 28, 1997
Pasadena, CA 91107	Analysis Method: EPA 5030/8020	Extracted: Jul 31-Aug 1, 1997
Attention: Erin O'Connell	First Sample #: V7071368	Analyzed: Jul 31-Aug 1, 1997
		Reported: Aug 4, 1997

### MTBE (EPA 8020 MODIFIED)

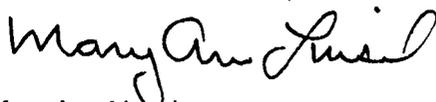
Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)
V7071368	TDD-1-20	N.D.
V7071369	TDD-1-40	N.D.
V7071370	TDD-2-20	N.D.

**Reporting Limit: 0.050**

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 5030/8020 First Sample #: V7071371	Sampled: Jul 23, 1997 Received: Jul 28, 1997 Extracted: Jul 31-Aug 3, 1997 Analyzed: Jul 31-Aug 3, 1997 Reported: Aug 4, 1997
--	---	---

### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)
V7071371	TDD-2-40	N.D.
V7071372	TDD-3-20	N.D.
V7071373	TDD-3-40	N.D.
V7071374	TDD-4-20	N.D.
V7071375	TDD-4-40	N.D.
V7071376	TDD-5-20	N.D.
V7071377	TDD-5-40	N.D.
V7071378	TDD-6-20	N.D.
V7071379	TDD-6-40	N.D.
V7071380	TDD-7-20	N.D.

<b>Reporting Limit:</b>	<b>0.050</b>
-------------------------	--------------

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager





# Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843  
 2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Pacific Environmental Group  
 650 Sierra Madre Villa, Ste. 204  
 Pasadena, CA 91107  
 Attention: Erin O'Connell

Client Project ID: Thrifty Work Auth. #9553-97-01  
 81, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: V7071381

Sampled: Jul 23, 1997  
 Received: Jul 28, 1997  
 Extracted: Aug 1, 1997  
 Analyzed: Aug 1, 1997  
 Reported: Aug 4, 1997

## MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)
V7071381	TDD-7-40	N.D.
V7071382	TDD-8-20	N.D.
V7071383	TDD-8-40	N.D.
V7071384	TDD-9-20	N.D.
V7071385	TDD-9-40	N.D.

**Reporting Limit: 0.050**

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**

Mary Ann Linsel  
 Project Manager



Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 3550/CA DHS Mod. 8015 First Sample #: V7071368	Sampled: Jul 23, 1997 Received: Jul 28, 1997 Extracted: Jul 31, 1997 Analyzed: Jul 31, 1997 Reported: Aug 4, 1997
--	---	---

## EXTRACTABLE FUEL HYDROCARBONS (CA DHS Mod. EPA 8015)

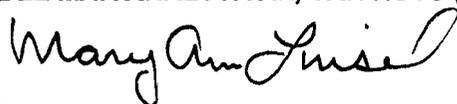
Laboratory Number	Sample Description Soil	Extractable Hydrocarbons mg/Kg (ppm)	Hydrocarbon Type
V7071368	TDD-1-20	N.D.	N.A.
V7071369	TDD-1-40	N.D.	N.A.
V7071370	TDD-2-20	N.D.	N.A.

**Reporting Limit: 5.0**

Extractable Hydrocarbons are quantitated against a diesel fuel standard. Hydrocarbons detected by this method range from C8 to C40.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group 650 Sierra Madre Villa, Ste. 204 Pasadena, CA 91107 Attention: Erin O'Connell	Client Project ID: Thrifty Work Auth. #9553-97-01 81, Pomona Analysis Method: EPA 3550/CA DHS Mod. 8015 First Sample #: V7071371	Sampled: Jul 23, 1997 Received: Jul 28, 1997 Extracted: Jul 31, 1997 Analyzed: Jul 31, 1997 Reported: Aug 4, 1997
--	---	---

## EXTRACTABLE FUEL HYDROCARBONS (CA DHS Mod. EPA 8015)

Laboratory Number	Sample Description Soil	Extractable Hydrocarbons mg/Kg (ppm)	Hydrocarbon Type
V7071371	TDD-2-40	N.D.	N.A.
V7071372	TDD-3-20	N.D.	N.A.
V7071373	TDD-3-40	N.D.	N.A.
V7071374	TDD-4-20	N.D.	N.A.
V7071375	TDD-4-40	N.D.	N.A.
V7071376	TDD-5-20	N.D.	N.A.
V7071377	TDD-5-40	N.D.	N.A.
V7071378	TDD-6-20	N.D.	N.A.
V7071379	TDD-6-40	N.D.	N.A.
V7071380	TDD-7-20	N.D.	N.A.

<b>Reporting Limit:</b>	<b>5.0</b>
-------------------------	------------

Extractable Hydrocarbons are quantitated against a diesel fuel standard. Hydrocarbons detected by this method range from C8 to C40.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group  
 650 Sierra Madre Villa, Ste. 204  
 Pasadena, CA 91107  
 Attention: Erin O'Connell

Client Project ID: Thrifty Work Auth. #9553-97-01  
 81, Pomona  
 Analysis Method: EPA 3550/CA DHS Mod. 8015  
 First Sample #: V7071381

Sampled: Jul 23, 1997  
 Received: Jul 28, 1997  
 Extracted: Jul 31, 1997  
 Analyzed: Jul 31, 1997  
 Reported: Aug 4, 1997

## EXTRACTABLE FUEL HYDROCARBONS (CA DHS Mod. EPA 8015)

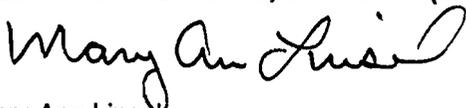
Laboratory Number	Sample Description Soil	Extractable Hydrocarbons mg/Kg (ppm)	Hydrocarbon Type
V7071381	TDD-7-40	N.D.	N.A.
V7071382	TDD-8-20	N.D.	N.A.
V7071383	TDD-8-40	6.8	C9-C40
V7071384	TDD-9-20	N.D.	N.A.
V7071385	TDD-9-40	N.D.	N.A.

**Reporting Limit: 5.0**

Extractable Hydrocarbons are quantitated against a diesel fuel standard. Hydrocarbons detected by this method range from C8 to C40.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linser  
 Project Manager



Pacific Environmental Group  
 650 Sierra Madre Villa, Ste. 204  
 Pasadena, CA 91107  
 Attention: Erin O'Connell

**Method Blank**

Extracted: Jul 31, 1997  
 Analyzed: Jul 31, 1997  
 Reported: Aug 4, 1997  
 Matrix: Soil

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Description	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
Method Blank	N.D.	N.D.	N.D.	N.D.	N.D.

<b>Reporting Limit:</b>	<b>1.0</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.015</b>
-------------------------	------------	---------------	---------------	---------------	--------------

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
 Project Manager



Pacific Environmental Group  
650 Sierra Madre Villa, Ste. 204  
Pasadena, CA 91107  
Attention: Erin O'Connell

**Method Blank**

Extracted: Jul 31, 1997  
Analyzed: Jul 31, 1997  
Reported: Aug 4, 1997  
Matrix: Soil

## MTBE (EPA 8020 MODIFIED)

Laboratory Description	Sample Result mg/Kg (ppm)
Method Blank	N.D.

**Reporting Limit:**

**1.0**

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**



Mary Ann Linsel  
Project Manager



Pacific Environmental Group  
 650 Sierra Madre Villa, Ste. 204  
 Pasadena, CA 91107  
 Attention: Erin O'Connell

**Method Blank**

Extracted: Jul 31, 1997  
 Analyzed: Jul 31, 1997  
 Reported: Aug 4, 1997  
 Matrix: Soil

## EXTRACTABLE FUEL HYDROCARBONS (CA DHS Mod. EPA 8015)

Laboratory Description	Extractable Hydrocarbons mg/Kg (ppm)	Hydrocarbon Type
Method Blank	N.D.	N.A.

<b>Reporting Limit:</b>	<b>5.0</b>
-------------------------	------------

Extractable Hydrocarbons are quantitated against a diesel fuel standard. Hydrocarbons detected by this method range from C8 to C40.

Analytes reported as N.D. were not present at or above the reporting limit.

**DEL MAR ANALYTICAL, VAN NUYS (ELAP #1855)**

*Mary Ann Linsel*  
 Mary Ann Linsel  
 Project Manager



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 08/01/97  
 Sample #: V7071378  
 Batch #: GH01G41S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0.049	1.0	0.97	0.97	92	92	0.082	92	≤28	76 - 115
Benzene	0	0.10	0.10	0.10	100	100	0.22	100	≤10	81 - 115
Toluene	0	0.10	0.096	0.097	96	97	0.50	97	≤10	78 - 115
Ethylbenzene	0	0.10	0.10	0.10	103	103	0.090	103	≤10	82 - 118
Xylenes	0	0.30	0.30	0.30	100	100	0.23	100	≤10	81 - 115

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts





## MS/MSD DATA REPORT

**EPA METHOD:** 8015 Diesel  
**Matrix:** Soil

**DATE:** 7/31/97

**SAMPLE #:** V7071379

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Hydrocarbons	0	200	180	190	90%	95%	5.4%	93%

### Definition of Terms:

**R1**..... Result of Sample Analysis

**Sp**..... Spike Concentration Added to Sample

**MS**..... Matrix Spike Result

**MSD**..... Matrix Spike Duplicate Result

**PR1**..... Percent Recovery of MS;  $((MS-R1) / SP) \times 100$

**PR2**..... Percent Recovery of MSD;  $((MSD-R1) / SP) \times 100$

**RPD**..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$

Del Mar Analytical



**CORRECTIVE ACTION REPORT**

Department: Semi-volatile      Date: 7/31/97  
Method: 8015M Diesel      Matrix: Soil

**Identification and Definition of Problem:**

Surrogate recoveries for sample numbers V7071368-1370 and V7071383-1385 were out of acceptance limits.

**Determination of the Cause of the Problem:**

Injection port liner was becoming dirty.

**Corrective Action:**

Changed the injection port liner. The problem was isolated to the surrogate only. The diesel recovery for the midpoint, in-process CCV and the closing CCV were all within specifications, as were the Matrix spike, duplicate, and Lab Control. The sample were shot again the next day and were confirmed.

Laboratory Manager: \_\_\_\_\_



Date: \_\_\_\_\_

8-5-97



Y/b

**CHAIN OF CUSTODY FORM**

Client Name/Address:			Project/PO Number:			Analysis Required							Quantify M+BE Results
Thriftly Oil Co. 10000 Lakewood Downey, CA			Thriftly # 081 1510 Garey Ave. Pomona, CA										
Project Manager/Phone Number:			Sampler:			8015M	TPH9	8015M	TPHD	8020	BTEX, M+BE	HOLD	Special Instructions
Erin O'Connell PEG 313-351-4814			Chris Rohlfing PEG # 732-0281a										
Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives								
TDD-1-5	SOIL	LINER	1	7-23-97 14:19	ICE							X	
TDD-1-10				" 14:23								X	
TDD-1-15				" 14:27								X	
TDD-1-20				" 14:30		X	X	X					
TDD-1-25				" 14:34								X	
TDD-1-30				" 14:38								X	
TDD-1-35				" 14:44								X	
TDD-1-40				" 14:49		X	X	X					
TDD-2-5				15:12								X	
TDD-2-10				" 15:26								X	
TDD-2-15				" 15:31								X	
TDD-2-20				" 15:34		X	X	X					
TDD-2-25				" 15:38								X	
TDD-2-30				" 15:42								X	

Relinquished By: <i>Chris Rohlfing</i>	Date /Time: 7/28/97 1100	Received by: <i>Erin O'Connell</i>	Date /Time: 7/28/97 1100	Turnaround Time: (check) same day _____ 72 hours _____ 24 hours _____ 5 days <input checked="" type="checkbox"/> 48 hours _____ normal _____
Relinquished By: <i>Erin O'Connell</i>	Date /Time: 7/28/97 1200	Received in Lab by: <i>Handwritten Signature</i>	Date /Time: 7-28 12 <sup>00</sup>	Sample Integrity: (Check) intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>

2852 Alton Ave., Irvine, CA 92714 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooley Dr. Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843  
 2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

**CHAIN OF CUSTODY FORM**

Client Name/Address: Thirifty Oil Co. 10000 Lakewood Downey, CA		Project/PO Number: Thirifty # 081 1510 Carey Ave. Pomona, CA				Analysis Required													
Project Manager/Phone Number: Erin O'Connell PEC 818-351-4814		Sampler: Chris Redding PECLY # 732-0281a				SOISM	TP1g	SOISM	TPHd	SO20-	BTEX, MTBE								Quantity MTBE Results
Sample Description	Sample Matrix	Container Type	#of Cont	Sampling Date/Time	Preservatives													Special Instructions	
TDD-2-35	SOIL	LINER	1	7-24-97 15:48	ICE												X		
TDD-2-40				15:53		X	X	X											
TDD-3-5				7:40													X		
TDD-3-10				7:44													X		
TDD-3-15				7:47													X		
TDD-3-20				7:51		X	X	X											
TDD-3-25				7:54													X		
TDD-3-30				7:58													X		
TDD-3-35				8:03													X		
TDD-3-40				8:08		X	X	X											
TDD-4-5				8:33													X		
TDD-4-10				8:36													X		
TDD-4-15				8:39													X		
TDD-4-20	✓	✓	✓	8:44	✓	X	X	X											
Relinquished By: <i>[Signature]</i> Date/Time: 7/28/97 1100					Received by: <i>[Signature]</i> Date/Time: 7/28/97 1100					Turnaround Time: (check) same day _____ 72 hours _____ 24 hours _____ 5 days <input checked="" type="checkbox"/> 48 hours _____ normal _____									
Relinquished By: <i>[Signature]</i> Date/Time: 7/28/97 1200					Received by: _____ Date/Time: _____					Sample Integrity: (Check) intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>									
Relinquished By: _____ Date/Time: _____					Received in Lab by: <i>[Signature]</i> Date/Time: 7-28 1200														

2852 Aiton Ave., Irvine, CA 92714 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 570-1046  
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1845  
 2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

**CHAIN OF CUSTODY FORM**

Client Name/Address:			Project/PO Number:			Analysis Required							
Thifty Oil Co. 10000 Lakewood Downey, CA			Thifty #081 1510 Gurney Pomona, CA			8015M	TPH <sub>g</sub>	8015M	TPH <sub>D</sub>	8020	BTEX, MTBE	HOLD	Quantify MTBE Results
Project Manager/Phone Number:			Sampler:										
Erin O'Connell PEG 818-351-4814			Chris Rohlfsing PEG # 732-02819										
Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives								
TDD-4-25	soil	LINER	1	7/24/97 8:48	ICE							X	
TDD-4-30				8:53								X	
TDD-4-35				8:57								X	
TDD-4-40				9:04		X	X	X					
TDD-5-5				9:28								X	
TDD-5-10				9:34								X	
TDD-5-15				9:38								X	
TDD-5-20				9:42		X	X	X					
TDD-5-25				9:45								X	
TDD-5-30				9:49								X	
TDD-5-35				9:52								X	
TDD-5-40				9:56		X	X	X					
TDD-5-5				12:04								X	
TDD-6-10				12:08								X	

Relinquished By: <i>Schubert</i> Date /Time: 7/28/97 1100	Received by: <i>Chris Rohlfsing</i> Date /Time: 7/28/97 1100	Turnaround Time: (check) same day _____ 72 hours _____ 24 hours _____ 5 days <input checked="" type="checkbox"/> 48 hours _____ normal _____
Relinquished By: <i>Chris Rohlfsing</i> Date /Time: 7/28/97 1200	Received in Lab by: <i>Wendy</i> Date /Time: 7/28 1200	Sample Integrity: (Check) intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>

2852 Alton Ave., Irvine, CA 92714 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843  
 2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968 8272 FAX (602) 968 1338

**CHAIN OF CUSTODY FORM**

Client Name/Address:			Project/PO Number:			Analysis Required									
Thirty Oil Co. 10000 Lakewood Downey, CA			Thirty # 081 1510 Garey Ave. Pomona, CA			8015M TPH <sub>9</sub>	8015M TPH <sub>4</sub>	8020. BTET, M+BE						Hold	Quantify M+BE Results
Project Manager/Phone Number:			Sampler:												
Erin O'Connell PEG 818-351-4814			Chris Ruhlberg PEG # 732-0281a												
Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives										
TDD-6-15	SIL	LINER	1	7-24-97 12:11	ICE									X	
TDD-6-20				12:15		X	X	X						X	
TDD-6-25				12:18										X	
TDD-6-30				12:22										X	
TDD-6-35				12:27										X	
TDD-6-40				12:32		X	X	X						X	
TDD-7-5				12:51										X	
TDD-7-10				12:54										X	
TDD-7-15				12:57										X	
TDD-7-20				13:01		X	X	X						X	
TDD-7-25				13:05										X	
TDD-7-30				13:08										X	
TDD-7-35				13:12										X	
TDD-7-40				13:16		X	X	X						X	

Relinquished By: <i>Chris Ruhlberg</i> Date/Time: 7/28/97 1100	Received by: <i>Erin O'Connell</i> Date/Time: 7/28/97 1100	Turnaround Time: (check) same day _____ 72 hours _____ 24 hours _____ 5 days <input checked="" type="checkbox"/> 48 hours _____ normal _____
Relinquished By: <i>Erin O'Connell</i> Date/Time: 7/28/97 1200	Received by: _____ Date/Time: _____	
Relinquished By: _____ Date/Time: _____	Received in Lab by: <i>Erin O'Connell</i> Date/Time: 7-28 12 <sup>00</sup>	Sample Integrity: (Check) intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>

### CHAIN OF CUSTODY FORM

Client Name/Address:			Project/PO Number:			Analysis Required							Quantity M+BE Results	
Thirty Oil Co. 10000 Lakewood Downey, CA			Thirty #081 1510 Gurey Ave. Pomona, CA											
Project Manager/Phone Number:			Sampler:			SOISM TPH <sub>g</sub>	SOISM TPH <sub>g</sub>	SO <sub>2</sub> O	BTEX, M+BE				Hold	Special Instructions
Eoin O'Connell PEG 918-351-4134			Chris Rohlfing PEG # 732-028, 1a											
Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives									
TDD-8-5	SUL	LINER	1	7-24-97 13:33	ICE								X	
TDD-8-10				" 13:36									X	
TDD-8-15				" 13:39									X	
TDD-8-20				" 13:44		X	X	X						
TDD-8-25				" 13:48									X	
TDD-8-30				" 13:52									X	
TDD-8-35				" 13:56									X	
TDD-8-40				" 13:59		X	X	X						
TDD-9-5				" 14:18									X	
TDD-9-10				" 14:21									X	
TDD-9-15				" 14:24									X	
TDD-9-20				" 14:27		X	X	X						
TDD-9-25				" 14:31									X	
TDD-9-30				" 14:35									X	
Relinquished By: <i>Chris Rohlfing</i>			Date /Time: 7/28/97 1100			Received by: <i>Jim K... [Signature]</i>			Date /Time: 7/28/97 1100			Turnaround Time: (check)		
Relinquished By: <i>Jim K... [Signature]</i>			Date /Time: 7/28/97 1200			Received by: <i>[Signature]</i>			Date /Time: _____			same day _____ 72 hours _____		
Relinquished By: _____			Date /Time: _____			Received in Lab by: <i>[Signature]</i>			Date /Time: 7-28 12 <sup>00</sup>			24 hours _____ 5 days <input checked="" type="checkbox"/>		
Relinquished By: _____			Date /Time: _____			Received in Lab by: _____			Date /Time: _____			48 hours _____ normal _____		
Relinquished By: _____			Date /Time: _____			Received in Lab by: _____			Date /Time: _____			Sample Integrity: (Check)		
Relinquished By: _____			Date /Time: _____			Received in Lab by: _____			Date /Time: _____			intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>		

6/6

9553-97-01

**CHAIN OF CUSTODY FORM**

Client Name/Address: Thirty Oil Co. 10000 Lakewood Dunsmuir, CA			Project/PO Number: Thirty #051 1510 Garey Ave. Pomona, CA			Analysis Required							
Project Manager/Phone Number: Erin O'Connell PEG 518-351-4814			Sampler: Chris Rohlfing PEG # 732-02819			WSIC8	TPH9	WSIC8	TPH1	020	BTEX, MTBE	HOLD	Quantify MTBE Results
Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives								
TDD-9-35	SOL	LINER	1	7-24-97 14:35	ICE							X	
TDD-9-40	"	"	1	14:42	"	X	X	X					
Relinquished By: Ch. Rohlfing			Date /Time: 7/28/97 1100			Received by: Erin O'Connell			Date /Time: 7/28/97 1100			Turnaround Time: (check)	
Relinquished By: Erin O'Connell			Date /Time: 7/28/97 1200			Received by:			Date /Time:			same day _____ 72 hours _____	
Relinquished By:			Date /Time:			Received in Lab by:			Date /Time:			24 hours _____ 5 days <input checked="" type="checkbox"/>	
Relinquished By:			Date /Time:			Received in Lab by:			Date /Time:			48 hours _____ normal _____	
Relinquished By:			Date /Time:			Received in Lab by:			Date /Time:			Sample Integrity: (Check)	
Relinquished By:			Date /Time:			Received in Lab by:			Date /Time:			intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>	



**Performance Analytical Inc.**

Air Quality Laboratory

**LABORATORY REPORT**

Client: PACIFIC ENVIRONMENTAL GROUP Date of Report: 10/05/97  
Address: 650 Sierra Madre Villa, Suite 204 Date Received: 09/12/97  
Pasadena, CA 91107 PAI Project No: P9703862  
Contact: Ms. Erin O'Connell Purchase Order: Verbal  
Client Project ID: Thrifty Oil Co., TOC #081

---

Ten (10) Tedlar Bag Samples labeled: "SG-1" through "SG-10"

---

The samples were received at the laboratory under chain of custody on September 12, 1997. The samples were received intact. The dates of analyses are indicated on the attached data sheets.

BTEX and Methyl tert-Butyl Ether Analysis

The samples were analyzed for Benzene, Toluene, Ethylbenzene, total Xylenes and Methyl tert-butyl ether according to modified CARB Method 410 using a gas chromatograph equipped with a photoionization detector.

Total Petroleum Hydrocarbons as Gasoline Analysis

The samples were also analyzed for total petroleum hydrocarbons as Gasoline using a gas chromatograph equipped with a flame ionization detector.

---

Data Release Authorization:

Wade Henton  
Analytical Chemist

Reviewed and Approved:

Michael Tuday  
Laboratory Director



## Performance Analytical Inc.

Air Quality Laboratory

### Volatile Organic Compound Analysis

One of the samples was also analyzed by combined gas chromatography/mass spectrometry (GC/MS) for Benzene, Toluene, Ethylbenzene, total Xylenes and Methyl tert-butyl ether. The analyses were performed according to the methodology outlined in EPA Method TO-14 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA 600/4-84-041, U.S. Environmental Protection Agency, Research Triangle Park, NC, April, 1984 and May, 1988. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT<sub>x</sub>-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheet.



**RESULTS OF ANALYSIS**  
PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-1**  
**PAI Sample ID : P9703862-001**

Test Code : Modified CARB Method 410      Date Sampled : 9/12/97  
Analyst : Wade Henton      Date Received : 9/12/97  
Instrument : HP5890/PID #2      Date Analyzed : 9/13/97  
Matrix : Tedlar Bag      Volume(s) Analyzed : 0.10 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	3,600	36	1,000	10
71-43-2	Benzene	520	3	160	1
108-88-3	Toluene	1,100	4	290	1
100-41-4	Ethylbenzene	360	4	82	1
1330-20-7	Total Xylenes	1,700	9	400	2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID      Date Sampled: 9/12/97  
Analyst: Wade Henton      Date Received: 9/12/97  
Instrument ID: HP 5890A/FID #2      Date Analyzed: 9/13/97  
Matrix: Tedlar Bag      Volume(s) Analyzed: 0.10 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	63,000	200	15,000	49

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT      Date : 9/19/97





**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-3**

**PAI Sample ID : P9703862-003**

Test Code : Modified CARB Method 410

Date Sampled : 9/12/97

Analyst : Wade Henton

Date Received : 9/12/97

Instrument : HP5890/PID #2

Date Analyzed : 9/13/97

Matrix : Tedlar Bag

Volume(s) Analyzed : 0.10 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	5,200	36	1,400	10
71-43-2	Benzene	560	3	170	1
108-88-3	Toluene	620	4	160	1
100-41-4	Ethylbenzene	230	4	54	1
1330-20-7	Total Xylenes	1,200	9	280	2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID

Date Sampled: 9/12/97

Analyst: Wade Henton

Date Received: 9/12/97

Instrument ID: HP 5890A/FID #2

Date Analyzed: 9/13/97

Matrix: Tedlar Bag

Volume(s) Analyzed: 0.10 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	65,000	200	16,000	49

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by :

MT

Date :

9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-4**

**PAI Sample ID : P9703862-004**

Test Code : Modified CARB Method 410

Date Sampled : 9/12/97

Analyst : Wade Henton

Date Received : 9/12/97

Instrument : HP5890/PID #2

Date Analyzed : 9/13/97

Matrix : Tedlar Bag

Volume(s) Analyzed : 0.10 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		mg/m3	LIMIT mg/m3	ppm	LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	1,200	36	340	10
71-43-2	Benzene	200	3	61	1
108-88-3	Toluene	93	4	25	1
100-41-4	Ethylbenzene	70	4	16	1
1330-20-7	Total Xylenes	250	9	58	2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID

Date Sampled: 9/12/97

Analyst: Wade Henton

Date Received: 9/12/97

Instrument ID: HP 5890A/FID #2

Date Analyzed: 9/13/97

Matrix: Tedlar Bag

Volume(s) Analyzed: 0.10 ml

Compound	RESULT	REPORTING	RESULT	REPORTING
	mg/m3	LIMIT mg/m3	ppm	LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	41,000	200	10,000	49

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by :         

Date : 9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-5**

**PAI Sample ID : P9703862-005**

Test Code : Modified CARB Method 410

Analyst : Wade Henton

Instrument : HP5890/PID #2

Matrix : Tedlar Bag

Date Sampled : 9/12/97

Date Received : 9/12/97

Date Analyzed : 9/13/97

Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	1.4	0.9	0.31	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID

Analyst: Wade Henton

Instrument ID: HP 5890A/FID #2

Matrix: Tedlar Bag

Date Sampled: 9/12/97

Date Received: 9/12/97

Date Analyzed: 9/13/97

Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT Date : 9/19/97



**RESULTS OF ANALYSIS**  
PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-6**  
**PAI Sample ID : P9703862-006**

Test Code : Modified CARB Method 410      Date Sampled : 9/12/97  
Analyst : Wade Henton      Date Received : 9/12/97  
Instrument : HP5890/PID #2      Date Analyzed : 9/13/97  
Matrix : Tedlar Bag      Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID      Date Sampled: 9/12/97  
Analyst: Wade Henton      Date Received: 9/12/97  
Instrument ID: HP 5890A/FID #2      Date Analyzed: 9/13/97  
Matrix: Tedlar Bag      Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT      Date : 9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-7**

**PAI Sample ID : P9703862-007**

Test Code : Modified CARB Method 410

Analyst : Wade Henton

Instrument : HP5890/PID #2

Matrix : Tedlar Bag

Date Sampled : 9/12/97

Date Received : 9/12/97

Date Analyzed : 9/13/97

Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID

Analyst: Wade Henton

Instrument ID: HP 5890A/FID #2

Matrix: Tedlar Bag

Date Sampled: 9/12/97

Date Received: 9/12/97

Date Analyzed: 9/13/97

Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MD

Date : 9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-8**

**PAI Sample ID : P9703862-008**

Test Code : Modified CARB Method 410

Date Sampled : 9/12/97

Analyst : Wade Henton

Date Received : 9/12/97

Instrument : HP5890/PID #2

Date Analyzed : 9/13/97

Matrix : Tedlar Bag

Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID

Date Sampled: 9/12/97

Analyst: Wade Henton

Date Received: 9/12/97

Instrument ID: HP 5890A/FID #2

Date Analyzed: 9/13/97

Matrix: Tedlar Bag

Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT

Date : 9/19/97



**RESULTS OF ANALYSIS**  
PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-9**  
**PAI Sample ID : P9703862-009**

Test Code : Modified CARB Method 410      Date Sampled : 9/12/97  
Analyst : Wade Henton      Date Received : 9/12/97  
Instrument : HP5890/PID #2      Date Analyzed : 9/13/97  
Matrix : Tedlar Bag      Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		mg/m3	LIMIT mg/m3	ppm	LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID      Date Sampled: 9/12/97  
Analyst: Wade Henton      Date Received: 9/12/97  
Instrument ID: HP 5890A/FID #2      Date Analyzed: 9/13/97  
Matrix: Tedlar Bag      Volume(s) Analyzed: 1.00 ml

Compound	RESULT	REPORTING	RESULT	REPORTING
	mg/m3	LIMIT mg/m3	ppm	LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MD      Date : 9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-10**

**PAI Sample ID : P9703862-010**

Test Code : Modified CARB Method 410	Date Sampled : 9/12/97
Analyst : Wade Henton	Date Received : 9/12/97
Instrument : HP5890/PID #2	Date Analyzed : 9/13/97
Matrix : Tedlar Bag	Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID	Date Sampled: 9/12/97
Analyst: Wade Henton	Date Received: 9/12/97
Instrument ID: HP 5890A/FID #2	Date Analyzed: 9/13/97
Matrix: Tedlar Bag	Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT Date : 9/19/97



**RESULTS OF ANALYSIS**  
PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : SG-10**

**PAI Sample ID : P9703862-010 (Laboratory Duplicate)**

Test Code : Modified CARB Method 410	Date Sampled : 1/0/00
Analyst : Wade Henton	Date Received : 1/0/00
Instrument : HP5890/PID #2	Date Analyzed : 1/0/00
Matrix : Tedlar Bag	Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID	Date Sampled: 1/0/00
Analyst: Wade Henton	Date Received: 1/0/00
Instrument ID: HP 5890A/FID #2	Date Analyzed: 1/0/00
Matrix: Tedlar Bag	Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT

Date : 9/19/97



**Performance Analytical Inc.**

Air Quality Laboratory

**RESULTS OF ANALYSIS**

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**TOC # : 081**

**Client Sample ID : N/A**

**PAI Sample ID : PAI Method Blank**

Test Code : Modified CARB Method 410  
Analyst : Wade Henton  
Instrument : HP5890/PID #2  
Matrix : Tedlar Bag

Date Sampled : N/A  
Date Received : N/A  
Date Analyzed : 9/13/97  
Volume(s) Analyzed : 1.00 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
1634-04-4	Methyl tert-Butyl Ether	ND	3.6	ND	1.0
71-43-2	Benzene	ND	0.4	ND	0.1
108-88-3	Toluene	ND	0.4	ND	0.1
100-41-4	Ethylbenzene	ND	0.5	ND	0.1
1330-20-7	Total Xylenes	ND	0.9	ND	0.2

**RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS**

Test Code: GC/FID  
Analyst: Wade Henton  
Instrument ID: HP 5890A/FID #2  
Matrix: Tedlar Bag

Date Sampled: N/A  
Date Received: N/A  
Date Analyzed: 9/13/97  
Volume(s) Analyzed: 1.00 ml

Compound	RESULT mg/m3	REPORTING LIMIT mg/m3	RESULT ppm	REPORTING LIMIT ppm
Total Petroleum Hydrocarbons as Gasoline	ND	20	ND	5.0

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Parts Per Million Results Are Based on a Molecular Weight of 100 For TPH as Gasoline Analysis.

Verified by : MT Date : 9/19/97





# Performance Analytical Inc.

Air Quality Laboratory

## RESULTS OF ANALYSIS

PAGE 1 OF 1

**Client : Pacific Environmental Group**

**Client Sample ID : N/A**

**PAI Sample ID : PAI Method Blank**

Test Code : GC/MS Mod. EPA TO-14

Date Sampled : N/A

Analyst : Chris Parnell

Date Received : N/A

Instrument : HP5973/Tekmar AUTOCAN Elite

Date Analyzed : 9/13/97

Matrix : Tedlar Bag

Volume(s) Analyzed : 1.00 Liter

.F. = 1.00

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		ug/m3	LIMIT ug/m3	ppb	LIMIT ppb
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
71-43-2	Benzene	ND	1.0	ND	0.31
108-88-3	Toluene	ND	1.0	ND	0.27
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	Total Xylenes	ND	1.0	ND	0.23

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by :

Date :

9/25/97



**Performance Analytical Inc.**  
Air Quality Laboratory

20954 Osborne Street  
Canoga Park, California 91304  
Phone 818 709-1139  
Fax 818 709-2915

### Chain of Custody Record Analytical Services Request

Client/Project Name THRIFTY OIL CO. #081		Address/Phone LAKEWOOD BLVD. 10000 <del>Downey</del> AVE. DOWNEY, CA. 90240			ANALYSES				PAI Project No. P9703862	
Project Location 1510 GAREY AVE.		Client Project No.			TPH-g BTEX/MIBE				Expected Turnaround Time	Remarks
Contact ERIN O'CONNELL	Sampler (Signature) <i>John Hubal</i>		P.O. No.							
Sample Identification No.	Date	Time	Lab Sample No.	Type of Sample						
SG-1	9/12/97	7:40	-001	AIR	X	X				Analyze sample
SG-2	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	7:48	-002	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	X	X				w/ highest MIBE
SG-3		8:05	-003		X	X				concentration for
SG-4		8:15	-004		X	X				BTEX/MIBE using
SG-5		8:25	-005		X	X				GC/MS w/ an
SG-6		8:35	-006		X	X				air concentrator
SG-7		8:45	-007		X	X				
SG-8		9:05	-008		X	X				
SG-9		9:18	-009		X	X				
SG-10		9:28	-010		X	X				

Relinquished by: (Signature) <i>John Hubal</i>	Date 9/12/97	Time 145	Received by: (Signature) KENNY MARTIN	Date 9/12/97	Time 145
Relinquished by: (Signature) <i>KM</i>	Date 9/12/97	Time 1830	Received by: (Signature) <i>John Goyance</i>	Date 9/12/97	Time 1830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Disposal Method			White Copy : Accompanies Samples		
Disposed by: (Signature)			Yellow Copy : Sampler		
Date			Time		

## Equipment Decontamination Technique

### 1.0 Scope and Application

The following section describes field techniques that were performed by Pacific Environmental Group, Inc. PACIFIC personnel in the performance of the tasks involved with this project.

### 2.0 Equipment and Supplies

<u>Quantity</u>	<u>Description</u>
3	Wash tubs or buckets (5-gallon minimum capacity).
1 gallon	Citranox <sup>®</sup> detergent.
As needed	Tap water.
As needed	Distilled water.
1 pair	Neoprene gloves.
3	Scrub brushes.

### 3.0 Procedures

- 3.1 Rinse each bucket (or wash tub) with tap water and then distilled water, prior to use.
- 3.2 Place one brush in each bucket and fill accordingly:
  - a) Bucket #1: Tap water/Citranox<sup>®</sup> detergent (mix as specified by the manufacturer).
  - b) Bucket #2: Tap water.
  - c) Bucket #3: Distilled water.
- 3.3 Place the piece of equipment to be washed into bucket #1 and scrub with brush. Rinse the equipment with the contents (tap water and detergent) of bucket #1.
- 3.4 Remove the piece of equipment from bucket #1 and place in bucket #2 and scrub with brush. Rinse the equipment with the contents (tap water) of bucket #2.
- 3.5 Remove piece of equipment from bucket #2 and place in bucket #3 and scrub with the brush. Rinse the equipment with the contents (distilled water) of bucket #3.

- 3.6 Remove the piece of equipment from bucket #3 and place on clean or prepared surface to air dry.
- 3.7 Repeat Steps 3.3 through 3.6 for each piece of field equipment which requires decontamination.

**Note:** Periodically replace the contents of each bucket. The frequency at which the contents should be replaced is dependent on site-specific conditions.

## **Standard Operating Procedure**

**for**

### **Soil Sampling Techniques**

The following section describes field techniques that were performed by Pacific Environmental Group, Inc. PACIFIC personnel in the performance of the tasks involved with this project.

#### **1.0 Locating Underground Utilities**

Prior to the commencement of work on site, PACIFIC researched the location of all underground utilities with the assistance of Underground Service Alert (USA - Southern California toll free phone number 1-800-422-4133). USA contacted the owners of the various utilities in the vicinity of the site to have the utility owners mark the locations of their underground utilities. Prior to drilling, each boring was advanced manually using a hand auger and post-hole digger to a minimum depth of 5 feet to avoid contact with underground fuel distribution and/or vent lines and other unmarked utilities.

#### **2.0 Soil Boring and Soil Sampling Protocol**

Drilling and soil sampling was performed under the direction of a PACIFIC engineer or geologist. The soil borings were drilled using a truck-mounted drill rig equipped with hollow stem augers.

All down-hole drilling equipment was steam-cleaned prior to use and between each boring to reduce the chances of cross contamination. The split-barrel sampler was washed in soap solution and double rinsed with tap and purified between each sampling event to reduce the potential for cross contamination between samples. Hand augers were washed in soap solution and double rinsed with tap and purified water between each sampling event to reduce the potential for cross contamination between samples during hand auger sampling.

Soil sampling was performed in accordance with American Society for Testing and Materials Method 1586-84. Using this procedure a California-type sampler is driven into the soil every 5 vertical feet by a 140-pound weight falling 30 inches. Three 6-inch brass liners were placed in the sampler for sample collection. The number of blow counts required to advance the sampler 18 inches was recorded at each sample interval onto soil boring logs. The lower-most intact soil sample was retained for chemical analysis. The ends of the brass sleeve were covered with Teflon™ sheets and plastic caps. Each sample was then labeled, identified on the chain of custody, and stored in a chilled cooler for transport to the laboratory. Remaining soil in the sampler was used for later screening with a flame-ionization detector (FID). The soil was field screened by placing the soil in

resealable plastic bags and allowed to reach ambient temperature. Headspace vapors in the bags were field screened with a calibrated FID. The highest observed stable reading was then recorded onto the boring log. Another portion of the soil sample was used for lithologic classification and description by the United Soil Classification System.

## 2.1 Soil Sample Analytical Selection Procedure

At a minimum, two soil samples from each soil boring were submitted to the laboratory for chemical analysis including the deepest soil sample per boring and the sample with the highest field screening result. Any additional soil samples analyzed were selected based on field observations and were analyzed at the discretion of the regional project manager.

## 2.2 Soil Sample Analyses

Select soil samples were analyzed by the following Environmental Protection Agency (EPA) test methods:

<u>Sample Location</u> <u>Method(s)</u>	<u>Analytical Parameters</u>	<u>EPA</u>
Near waste-oil, diesel, septic tanks, or clarifiers	Total recoverable petroleum hydrocarbons (TRPH)	418.1
	Volatile Organic Compounds	624/8240
	Title 22 Metals	6010/7196/ 7471
	Total Petroleum Hydrocarbons as diesel (TPHd)	Mod. 8015
	Benzene, toluene, ethylbenzene, xylenes (BTEX)	8020
All other soil samples	Total petroleum hydrocarbons as gasoline (TPHg)	Mod. 8015
	Benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MtBE)	8020 and 8020A

## **Standard Operating Procedure**

for

### **Soil Gas Sampling Techniques**

The following section describes field techniques that were performed by Pacific Environmental Group, Inc. (PACIFIC) personnel in the performance of the tasks involved with this project.

#### **1.0 Locating Underground Utilities**

Prior to the commencement of work on site, PACIFIC researched the location of all underground utilities with the assistance of Underground Service Alert (USA - Southern California toll free phone number 1-800-422-4133). USA contacted the owners of the various utilities in the vicinity of the site to have the utility owners mark the locations of their underground utilities.

#### **2.0 Soil Gas Sampling Protocol**

Soil gas sampling was performed under the direction of a PACIFIC engineer or geologist. At each sample location, a one-inch diameter steel probe, equipped with an expendable steel drive tip, was hydraulically driven to approximately 5 feet below ground surface (bgs). Upon reaching the designated sample depth, a one-quarter-inch diameter dedicated polyethylene tube with threaded adapter was inserted through the probe and threaded to the tip holder at the bottom of the probe. The probe was then raised approximately two inches, disengaging the expendable drive tip, and creating a void space from which the sample was collected. Soil gas samples were drawn through the point holder, through the adapter and into the sample tubing.

All reusable down hole equipment, including steel probes, drive tip holder, and tubing adapter, were washed in a soap solution and double rinsed with tap and distilled or deionized water between each sample location to reduce the potential for cross contamination between samples. Dedicated tubing and drive tips were used at each sample location and discarded upon sample collection.

Soil gas samples to be analyzed for gasoline constituents were collected in 5-liter Tedlar bags which were supplied by Columbia Analytical Services. Prior to collecting a sample, approximately 3 well volumes were purged through the polyethylene tubing using an electric sampling pump. Following purging, sample tubing was attached to a Tedlar bag that was subsequently placed in a vacuum chamber sampler. A vacuum was drawn on the chamber using the electric sampling pump (located at the end of the process stream), causing the Tedlar bag to fill with well gas. With this method there is minimal potential for cross contamination, because the formation air samples are not drawn through the sample pump.

Soil gas samples to be analyzed for diesel constituents were collected in charcoal tubes supplied by Columbia Analytical Services. Prior to sampling, the glass ends of the tubes were broken and the tubes were placed in-line with the sample tubing, between the sample probe and the sample pump. At each location, a minimum of 10 liters of air were pulled through the charcoal tubes at a flow rate of 500 milliliters per minute. The maximum volume pulled through each tube was no more than 20 liters. A flow meter was used to calculate the flow volume. Subsequent to sampling, plastic end caps were placed on the charcoal tube and the tubes were placed into individual ziplock baggies, placed in a cooler, and stored at 4 degree Celsius.

## **2.0 Soil Gas Sampling Analyses**

Soil gas samples collected from sites containing gasoline UST's were analyzed for MtBE, BTEX, and Total Petroleum Hydrocarbons by EPA Methods 8020 and 8015 Modified. At each site, the soil gas sample that contained the highest TPHg/BTEX was additionally analyzed for BTEX/MTBE using Method TO-14 Modified.

Soil gas samples collected from sites containing diesel UST's were analyzed for Total Petroleum Hydrocarbons by NIOSH Method 1550.

***ATTACHMENT G***



# State Water Resources Control Board



**Terry Tamminen**  
Secretary for  
Environmental  
Protection

**Division of Financial Assistance**  
1001 I Street • Sacramento, California 95814  
P.O. Box 944212 • Sacramento, California • 94244-2120  
(916) 341-5719 • FAX (916) 341-5806 • www.swrcb.ca.gov/cwphome/ustcf

**Arnold Schwarzenegger**  
Governor

December 11, 2003

Best California Gas, Ltd.  
Barry Berkett  
13116 Imperial Hwy  
Santa Fe Springs, CA 90670

1.41639  
**RECEIVED**  
DEC 23 2003  
ENVIRONMENTAL  
TOC#219

FILE

UNDERGROUND STORAGE TANK CLEANUP FUND (FUND), STAFF DECISION TO REJECT CLAIM: CLAIM NUMBER 016846; FOR SITE ADDRESS: 9505 DE SOTO AVE, CHATSWORTH

Your claim has been found to be ineligible for placement on the Priority List for the following reason:

After the claim application and all submitted reports were reviewed by our technical unit, it has been determined that your claim is not eligible for reimbursement from the Underground Storage Tank Cleanup Fund. The technical unit reviewed the submitted reports and determined that all soil samples taken were reported non-detect. Please note that the Fund does not accept the soil vapor samples as the final but only as a screening tool to be confirmed by the actual soil samples. There is no indication why the soil vapor samples were collected and what prompted that action especially only two months prior to that a preliminary site assessment was conducted. Please include details requiring the additional vapor sampling directive in your appeal.

The Fund considers the contamination discovered when the tanks were removed February 17, 1999 to be the responsibility of ARCO since the lease agreement was in effect.

NOTE: Sections cited are found in the Petroleum Underground Storage Tank Cleanup Fund Regulations, Title 23, Division 3, Chapter 18, of the California Code of Regulations.

If you disagree with this Staff Decision, you may appeal to the Division Chief pursuant to Section 2814.1 of the Petroleum Underground Storage Tank Cleanup Fund Regulations. If you would like review of the decision by the Fund Manager, please submit your request along with any additional documentation to:

Allan V. Patton, Fund Manager, Claim #016846  
Underground Storage Tank Cleanup Fund  
State Water Resources Control Board  
Division of Financial Assistance  
P.O. Box 944212  
Sacramento, CA 94244-2120

*California Environmental Protection Agency*



Best California Gas, Ltd.

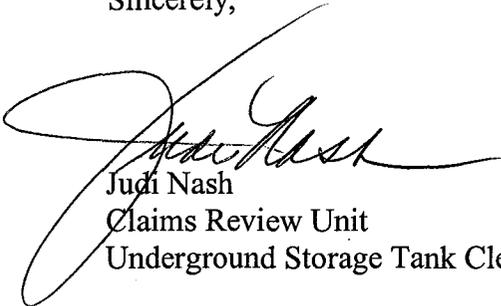
-2-

A request to the Fund Manager must include, at a minimum: (1) a statement describing how the claimant is damaged by the prior Staff Decision; (2) a description of the remedy or outcome desired; and (3) an explanation of why the claimant believes the Staff Decision is erroneous, inappropriate or improper.

If you do not a request review by the Fund Manager within thirty (30) calendar days from the date of this letter, the Staff Decision will then become final and conclusive.

If you have any questions, please call me at (916) 341-5719.

Sincerely,



Judi Nash  
Claims Review Unit  
Underground Storage Tank Cleanup Fund

Lustis Case #: 913110198

cc: Mr. Dan Pirotton  
RWQCB, Region 4  
320 W. 4th Street, Ste. 200  
Los Angeles, CA 90013

Capt. David Soto  
Los Angeles Fire Dept.  
200 N. Main St., Room 960  
Los Angeles, CA 90012

# ***ATTACHMENT H***

*Environmental Solutions*

**RECEIVED**

OCT 28 1998

ENVIRONMENTAL

1.1388

File  
M.Z.  
C.P.

**UNDERGROUND STORAGE TANK  
REMOVAL REPORT**

Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

August 13, 1998

Prepared for

ARCO Products Company  
Post Office Box 5077  
Buena Park, California 90622-5077

Prepared by

Pinnacle Environmental Solutions, a Division of EMCON  
15255 Alton Parkway, Suite 200  
Irvine, California 92618

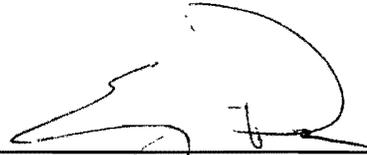
Project 20805-532.001

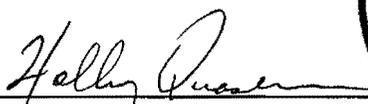
**UNDERGROUND STORAGE TANK  
REMOVAL REPORT**

Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

The material and data in this report were prepared under the supervision and direction of the undersigned.

Pinnacle Environmental Solutions

  
\_\_\_\_\_  
Eugene Y. Pak  
Staff Geologist

  
\_\_\_\_\_  
Holly Quasem, PE  
Project Manager



# CONTENTS

---

## 1 INTRODUCTION

## 2 FIELD ACTIVITIES

- 2.1 SCAQMD Rule 1166 Monitoring
- 2.2 Underground Storage Tank, Dispenser Island, and Product Piping Removal
- 2.3 UST, Dispenser, and Product Line Soil Sampling
- 2.4 Excavated Soil Handling

## 3 LABORATORY ANALYSIS

## 4 DISCUSSION OF RESULTS

## TABLE AND FIGURES

## LIMITATIONS

## APPENDIX A ORGANIC VAPOR MONITORING DATA

## APPENDIX B UST DESTRUCTION AND SOIL DISPOSAL DOCUMENTATION

## APPENDIX C GENERAL FIELD PROCEDURES

## APPENDIX D LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

## TABLE AND FIGURES

---

### Table

Table 1 Summary of Soil Analytical Results

### Figures

Figure 1 Site Plan With Soil Sample Locations

Figure 2 Stockpile Sample Locations

Figure 3 Stockpile Sample Locations

# 1 INTRODUCTION

This report presents the results of underground storage tank (UST) replacement activities at Former Thrifty Oil Company Service Station 81, 1510 Garey Avenue, Pomona, California (Figure 1).

The site is bounded on the north by Phillips Boulevard; on the west by Garey Avenue; on the south by an automotive repair shop; and on the east by a residential home.

The UST removal, installation, and overexcavation activities were coordinated by RD Builders. South Coast Air Quality Management District (SCAQMD) Rule 1166 air monitoring and soil sampling activities were conducted by Pinnacle Environmental Solutions (Pinnacle), a Division of EMCON. Soil transportation and disposal activities were coordinated by Thrifty Oil Company. Laboratory analysis of soil samples was performed by Del Mar Analytical.

## 2 FIELD ACTIVITIES

### 2.1 SCAQMD Rule 1166 Monitoring

In compliance with the SCAQMD Rule 1166 permit issued to ARCO Products Company (Application A/N 258945 and Company ID 74690), organic vapors were monitored during excavation activities between March 31 and April 23, 1998. Excavated soil exhibited PID readings ranging from 0 to 2943 parts per million by volume (ppmv). The SCAQMD was notified that vapor readings exceeding 50 ppmv were recorded and a new notification number (ED980141) was assigned to the site. Soil excavated from the UST cavity, dispensers, and piping trenches was stockpiled on visqueen and covered with visqueen until it was transported offsite. Organic vapor monitoring data has been forwarded to the SCAQMD under separate cover (dated May 1, 1998). Copies of the data are included in Appendix A.

### 2.2 Underground Storage Tank, Dispenser Island, and Product Piping Removal

On April 8, 1998, Pinnacle personnel was onsite to witness exposure of four, 10,000 gallon, single-walled steel gasoline USTs (Figure 1). Soil in the northern half of the excavation was visually stained.

Following tank cleaning, the USTs were removed from the excavation and transported from the site on April 10, 1998. Total depth of the UST excavation was approximately 13 feet below grade (fbg). No apparent holes were observed in the USTs. Inspector Steve Camacho with the Los Angeles County Fire Department, Fire Prevention Division,

was onsite to inspect UST removal activities. The four USTs were transported to American Metal Recycling, Inc. in Ontario, California for destruction (see Appendix B for UST disposal documentation).

On April 13 and 14, 1998, Pinnacle personnel observed overexcavation of the former UST cavity to a depth of approximately 17 fbg (an additional 4 feet below the original excavation floor) to accommodate the new larger USTs. On April 15, two (one 20,000 gallon and one 10,000/10,000 gallon split) double-walled fiberglass gasoline USTs were installed (Figure 1). Imported pea gravel was used to backfill the UST cavity.

On April 21, 1998, Pinnacle personnel observed the removal of twelve dispensers and associated product piping (Figure 1). Depth of the dispenser island and product piping excavations was approximately 2 fbg.

On April 23 and 24, 1998, Pinnacle personnel observed excavation of trenches to accommodate the new product piping. Depth of the dispenser island and product piping excavations was approximately 3 to 4 fbg. Double-walled fiberglass product piping was installed and the excavation was backfilled with imported pea gravel.

### **2.3 UST, Dispenser, and Product Line Soil Sampling**

Soil sampling activities were performed by a qualified geologist under the direct supervision of a California Registered Civil Engineer. The soil analytical results are summarized in Table 1. The soil samples were collected using the protocol described in Appendix C.

On April 9, 13, 14, and 24, 1998, forty-eight samples (SP-1 through SP-48) were collected from the soil stockpiles generated during the unearthing and overexcavation of the USTs and product piping. These samples were used to characterize soils for treatment and recycling. Stockpile configurations and sample locations are shown on Figures 2 and 3.

On April 10, 1998, soil samples were collected from beneath the former USTs. The Los Angeles County Department of Public Works (LACDPW) was notified and a request was submitted to receive direction of sampling activities. The LACDPW authorized the collection of soil samples without the direction of an onsite official. Eight soil samples (EF-1 through EF-8) were collected from the UST excavation floor at a depth of approximately 13 fbg. Sample locations are presented in Figure 1.

On April 21, 1998, twelve soil samples (DI-1 through DI-12) were collected beneath the former dispenser islands at approximately 3 fbg and five soil samples (PL-1 through PL-5) were collected beneath the former product lines at a depth of approximately 3 fbg (Figure 1). These samples were collected with approval from LACDPW.

## **2.4 Excavated Soil Handling**

Soil generated from UST, dispenser island, and product piping removal activities was stockpiled and sampled prior to being transported offsite. All soils from the UST cavity, dispenser islands, and piping trenches were transported to American Remedial Technologies (ART) in Lynwood, California. Thrifty Oil Company coordinated the removal of all soil. A total of 1,176.34 tons of soil was transported between April 14 and April 30, 1998. Soil disposal documentation is included in Appendix B. According to Kenny Rahja of RD Builders, approximately 900 tons of peagravel was used to backfill the UST, dispenser, and piping excavations.

## **3 LABORATORY ANALYSIS**

Soil samples collected from the stockpiles, UST, dispenser island, and product line excavations were analyzed by a state certified laboratory for total petroleum hydrocarbons (TPH) as gasoline using EPA Method 8015 modified, and benzene, toluene, ethylbenzene, total xylenes (BTEX), and Methyl tert-Butyl Ether (MTBE) using EPA Method 8020. Analytical results of soil samples are presented in Table 1. Copies of the certified analytical reports and chain of custody records are included in Appendix D.

## **4 DISCUSSION OF RESULTS**

- Soils encountered during UST removal activities primarily consist of sand and silty sand from ground surface to a depth of approximately 17 fbg.
- Groundwater was not encountered during UST removal activities.
- With the exception of EF-3 containing low levels of MTBE (0.45 mg/kg), soil samples collected from the southern half of the UST floor (EF-1, EF-3, EF-5, and EF-7) did not contain TPH, BTEX, or MTBE above the laboratory detection limits.
- Dispenser island samples DI-4 through DI-8 and DI-10 through DI-12 and product line samples PL-1 through PL-5 did not contain detectable TPH or BTEX (see Table 1).
- A total of 1,176.34 tons of excavated soil from the UST cavity, dispenser islands, and piping trenches was transported to American Remedial Technologies in Lynwood, California, for treatment and recycling. Thrifty Oil Company coordinated the removal of all soil.
- Soil in the northern half of the UST excavation was visually stained.

- Based on the soil analytical results, hydrocarbon impacted soil exists onsite.
- The hydrocarbon impacted soil and other subsurface conditions are the result of operations at Thrifty Oil Company Service Station 81.

## LIMITATIONS

---

The purpose of a geologic/hydrogeologic study is to reasonably characterize existing site conditions based on the geology/hydrogeology of the area. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the site conditions and an exhaustive analysis of each conceivable environmental characteristic. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to describe all geologic/hydrogeologic conditions of interest at a given site. If conditions have not been identified during the study, such a finding should not therefore be construed as a guarantee of the absence of such conditions at the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

We are unable to report on or accurately predict events that may change the site conditions after the described services are performed, whether occurring naturally or caused by external forces. We assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when services were performed.

Geologic/hydrogeologic conditions may exist at the site that cannot be identified solely by visual observation. Where subsurface exploratory work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

## TABLE AND FIGURES

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2) (mg/kg)	Total		Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)		Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	
<b><u>Stockpiles</u></b>									
SP-1	4/9/98	--	2.1	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.030	0.12	Del Mar (A)
SP-2	4/9/98	--	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.11	Del Mar (A)
SP-3	4/9/98	--	36	0.040	ND (<0.005)	0.068	0.69	0.15	Del Mar (A)
SP-4	4/9/98	--	2.7	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.060	0.12	Del Mar (A)
SP-5	4/9/98	--	3300	11	98	44	370	30	Del Mar (A)
SP-6	4/9/98	--	1200	1.6	23	13	120	6.5	Del Mar (A)
SP-7	4/9/98	--	5900	15	250	12	690	20	Del Mar (A)
SP-8	4/9/98	--	3900	11	93	41	340	22	Del Mar (A)
SP-9	4/9/98	--	5800	19	240	100	640	31	Del Mar (A)
SP-10	4/9/98	--	2300	3.2	39	23	160	8.1	Del Mar (A)
SP-11	4/9/98	--	420	0.33	ND (<0.025)	0.53	17	4.6	Del Mar (A)
SP-12	4/9/98	--	130	0.3	ND (<0.010)	0.14	3.5	5.5	Del Mar (A)
SP-13	4/9/98	--	480	1.2	15	7.2	58	13	Del Mar (A)
SP-14	4/9/98	--	5700	17	190	77	580	61	Del Mar (A)
SP-15	4/9/98	--	2600	5.6	74	36	280	17	Del Mar (A)
SP-16	4/9/98	--	5200	22	220	73	560	110	Del Mar (A)
SP-17	4/13/98	--	560	0.3	6.8	5	49	2	Del Mar (A)
SP-18	4/13/98	--	800	0.9	18	10	82	3.4	Del Mar (A)
SP-19	4/13/98	--	1300	1.2	25	20	140	3.8	Del Mar (A)
SP-20	4/13/98	--	1200	2	37	23	160	30	Del Mar (A)
SP-21	4/13/98	--	380	0.3	5.7	5.8	44	5.5	Del Mar (A)
SP-22	4/13/98	--	540	0.46	9.9	8.7	64	5.1	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2) (mg/kg)	Total Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)				
SP-23	4/13/98	--	390	0.45	10	6.8	54	7.8	Del Mar (A)
SP-24	4/13/98	--	3500	4.6	140	65	410	13	Del Mar (A)
SP-25	4/13/98	--	310	0.048	6.2	4.3	34	3.2	Del Mar (A)
SP-26	4/13/98	--	380	0.13	3.7	3.8	32	3	Del Mar (A)
SP-27	4/13/98	--	1000	0.94	19	14	100	1.9	Del Mar (A)
SP-28	4/13/98	--	100	0.097	2.3	1.1	9.5	1.3	Del Mar (A)
SP-29	4/13/98	--	850	0.75	22	12	90	3.3	Del Mar (A)
SP-30	4/13/98	--	1100	1.4	35	16	130	5.7	Del Mar (A)
SP-31	4/14/98	--	250	0.065	3.1	3.6	25	3.6	Del Mar (A)
SP-32	4/14/98	--	33	0.007	0.074	0.1	1.2	1.6	Del Mar (A)
SP-33	4/14/98	--	15	ND (<0.005)	0.3	0.048	0.42	0.97	Del Mar (A)
SP-34	4/14/98	--	13	ND (<0.005)	0.04	0.05	0.51	1.1	Del Mar (A)
SP-35	4/14/98	--	7.9	ND (<0.005)	0.019	0.028	0.24	0.56	Del Mar (A)
SP-36	4/14/98	--	47	0.015	0.17	0.3	2.7	1.3	Del Mar (A)
SP-37	4/14/98	--	320	0.16	4.1	4.3	33	4.9	Del Mar (A)
SP-38	4/14/98	--	940	0.81	18	15	110	7.3	Del Mar (A)
SP-39	4/14/98	--	160	0.05	1.2	1.6	13	3.9	Del Mar (A)
SP-40	4/14/98	--	54	0.02	0.38	0.39	3.5	1.6	Del Mar (A)
SP-41	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.23	Del Mar (A)
SP-42	4/24/98	--	150	0.02	ND (<0.005)	0.39	13	5.5	Del Mar (A)
SP-43	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-44	4/24/98	--	1.3	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-45	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
SP-46	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2) (mg/kg)	Total		Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)		Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	
SP-47	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.13	Del Mar (A)
SP-48	4/24/98	--	ND(<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
<b><u>UST Excavation Floor</u></b>									
EF-1	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-2	4/10/98	13	1100	81	570	200	1300	280	Del Mar (A)
EF-3	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.45	Del Mar (A)
EF-4	4/10/98	13	940	46	400	150	1000	81	Del Mar (A)
EF-5	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-6	4/10/98	13	720	0.9	17	13	85	2.3	Del Mar (A)
EF-7	4/10/98	13	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
EF-8	4/10/98	13	1900	3.7	59	36	170	3.2	Del Mar (A)
<b><u>Dispenser Island/ Product Piping</u></b>									
DI-1	4/21/98	3	40	0.6	3.1	0.5	8.7	41	Del Mar (A)
DI-2	4/21/98	3	ND (<1.0)	ND (<0.005)	0.008	ND (<0.005)	0.034	2	Del Mar (A)
DI-3	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	0.055	0.67	Del Mar (A)
DI-4	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.1	Del Mar (A)
DI-5	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.32	Del Mar (A)
DI-6	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.04	Del Mar (A)
DI-7	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
DI-8	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
DI-9	4/21/98	3	49	0.6	6.2	0.11	5.1	66	Del Mar (A)

**Table 1**  
**Summary of Soil Analytical Results**  
Former Thrifty Oil Company Service Station 81  
1510 Garey Avenue  
Pomona, California

Sample	Date Sampled	Sample Depth (Feet)	TPH (1)			Ethyl-benzene(2) (mg/kg)	Total		Laboratory
			Gasoline (mg/kg)	Benzene (2) (mg/kg)	Toluene(2) (mg/kg)		Xylenes(2) (mg/kg)	MTBE(2) (mg/kg)	
DI-10	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
DI-11	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.06	Del Mar (A)
DI-12	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND (<0.035)	Del Mar (A)
PL-1	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	0.21	Del Mar (A)
PL-2	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-3	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-4	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)
PL-5	4/21/98	3	ND (<1.0)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.015)	ND(<0.035)	Del Mar (A)

Notes:

Del Mar = Del Mar Analytical

ND = Not detected; detection limit shown in parenthesis.

-- = Not applicable.

TPH = Total Petroleum Hydrocarbons as gasoline.

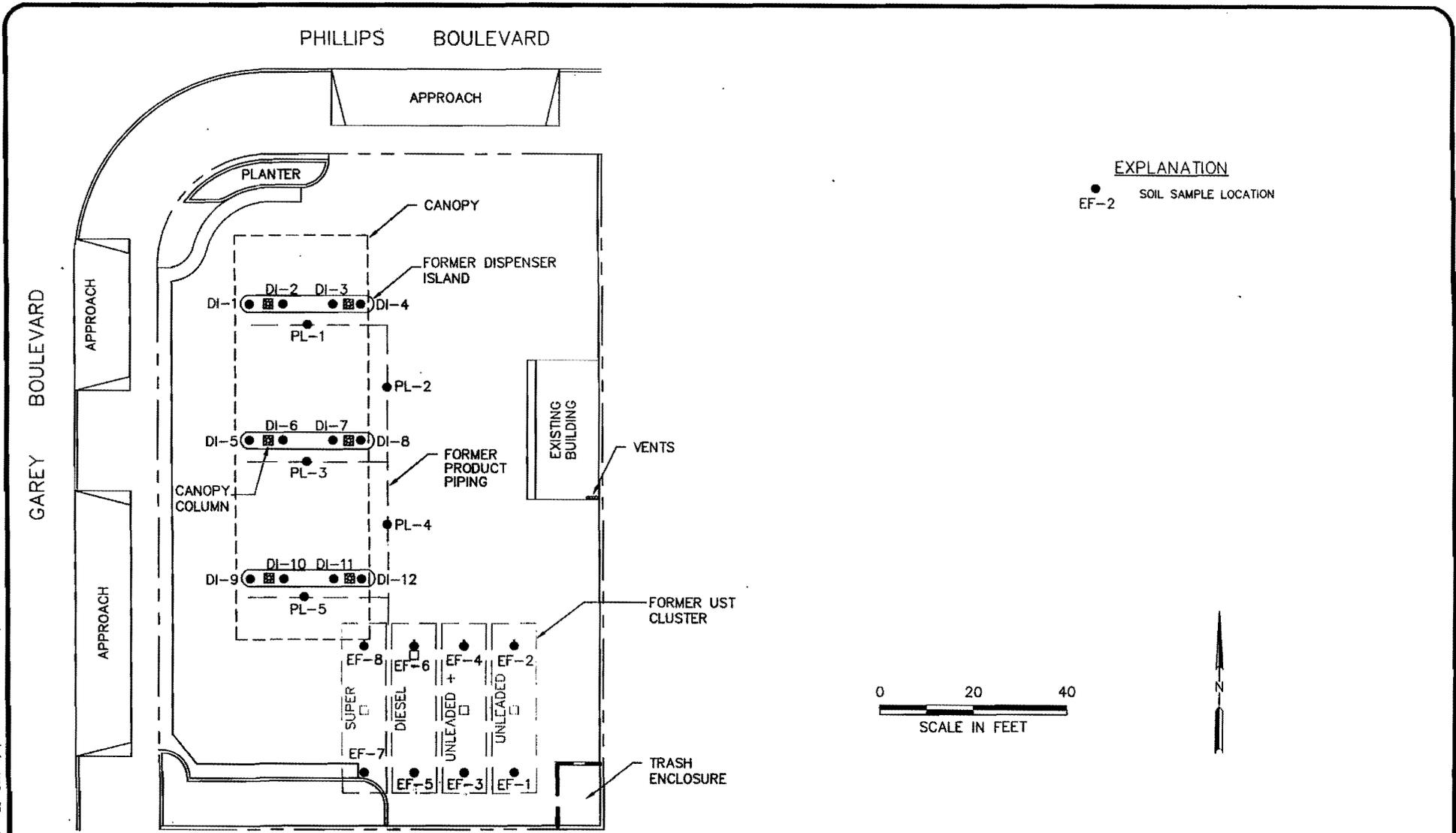
MTBE = methyl tert butyl ether.

(1) Analyzed using modified EPA Method 8015.

(2) Analyzed using EPA Method 8020.

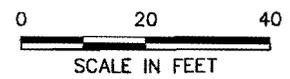
(A) See appendix for Certified Analytical Reports.

EA-NR03\_V0101/010000 HA-NR03A-RES3/SMP/LOC-406\_Xref: NORTH\_11X17  
 Scale: 1" = 1' Date: 8/1/08 Time: 10:56 AM Operator: EPAK



**EXPLANATION**

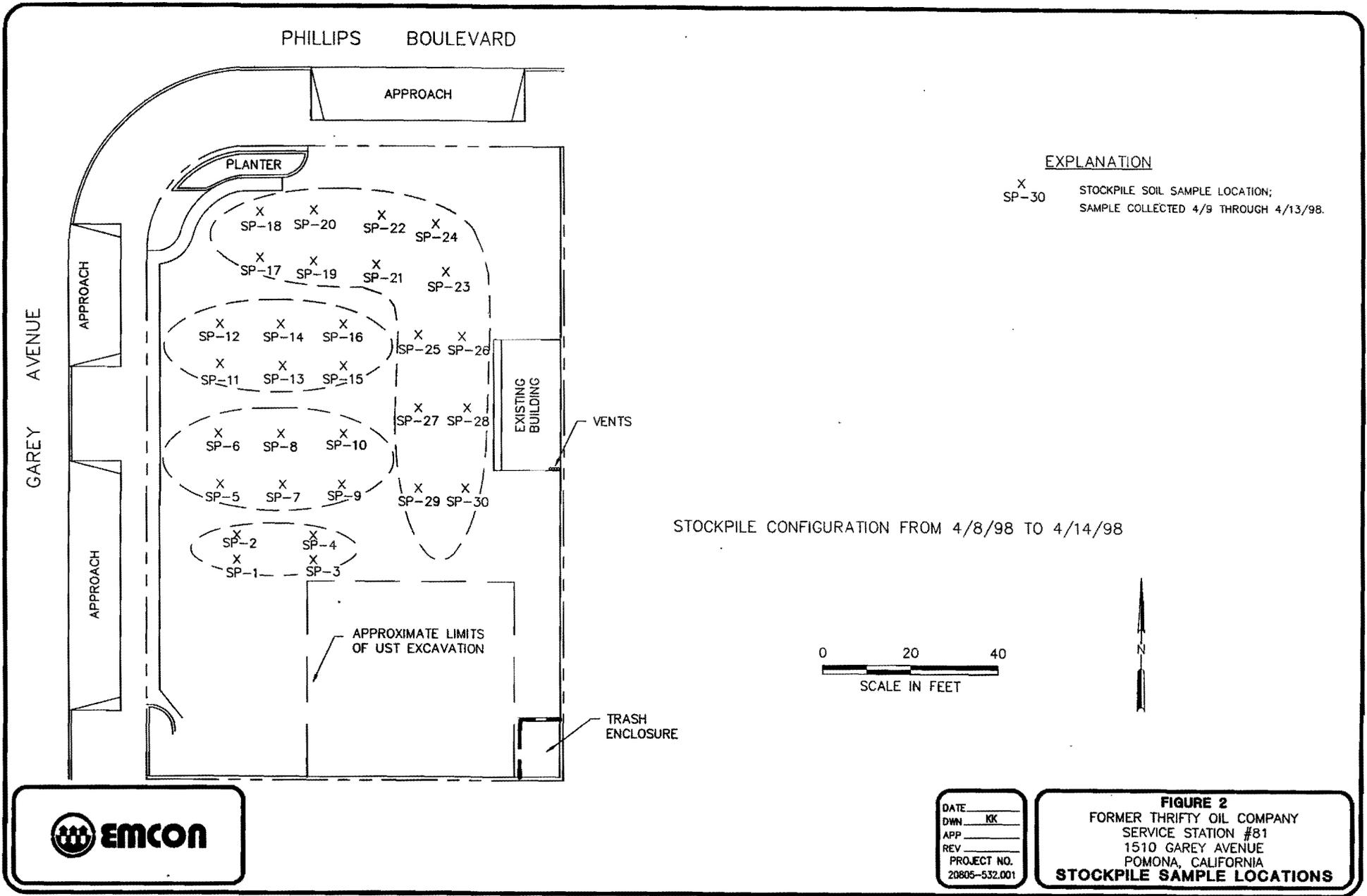
● EF-2 SOIL SAMPLE LOCATION



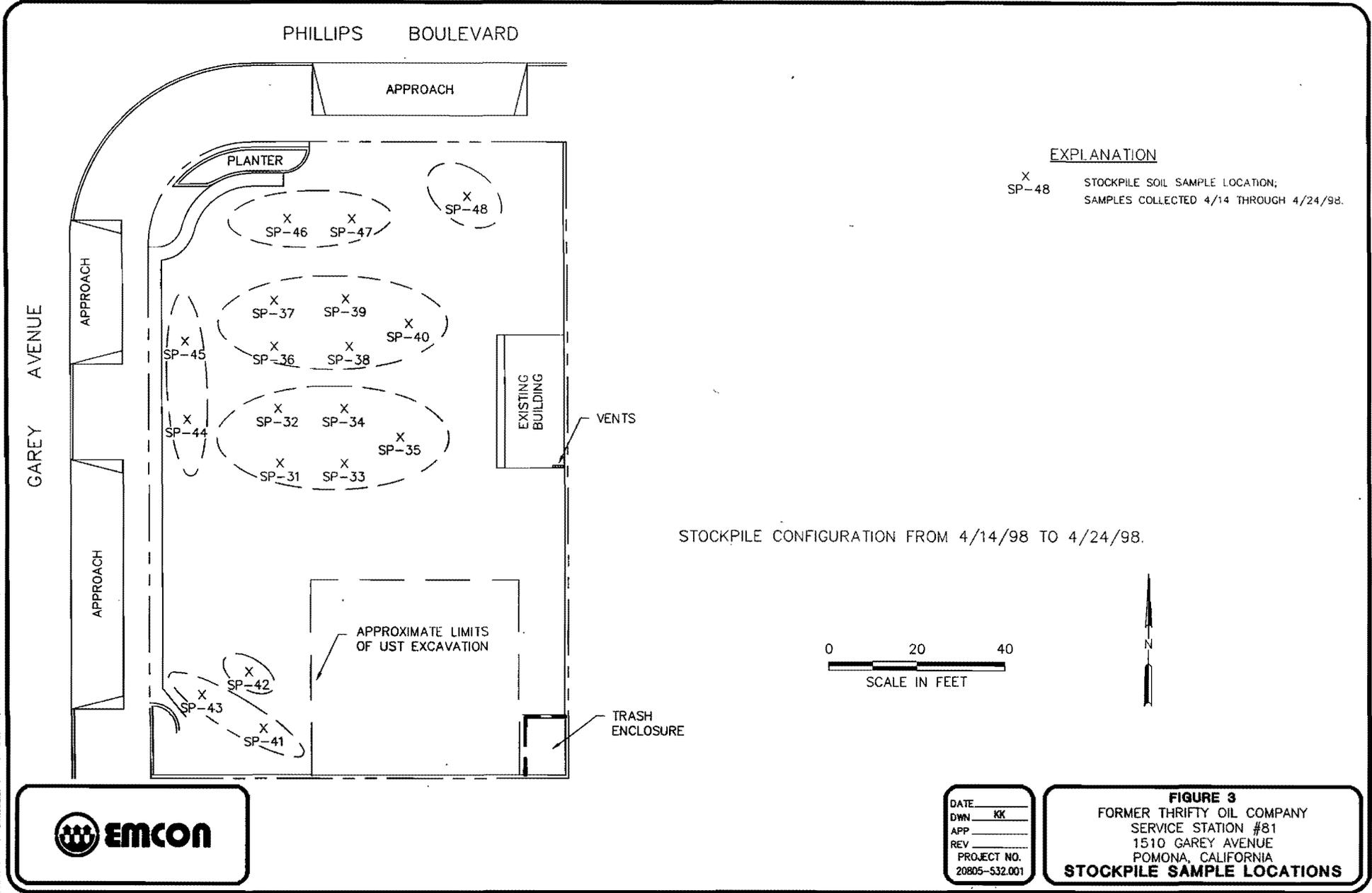
DATE \_\_\_\_\_  
 DWN KK  
 APP \_\_\_\_\_  
 REV \_\_\_\_\_  
 PROJECT NO.  
 20805-532.001

**FIGURE 1**  
 FORMER THRIFTY OIL COMPANY  
 SERVICE STATION #81  
 1510 GAREY AVENUE  
 POMONA, CALIFORNIA  
**SITE PLAN W/ SAMPLE LOCATIONS**

EA-1180-VEJOY/CORCOAD NA-0804-9803-0501-A-01g Xmap: NORTH, 11X17  
 Scale: 1" = 1' Date: 07/27/98 Time: 3:42 PM Operator: EPAK



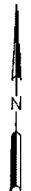
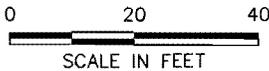
EA-452D, MELODY CAD/CADD, N/A, BRUCE'S STICKLER, B. 449, Xref: NORTH, 11/17  
Scale: 1" = 1' Date: 6/24/98 Time: 3:48 PM Operator: EPAK



**EXPLANATION**

X  
SP-48 STOCKPILE SOIL SAMPLE LOCATION;  
SAMPLES COLLECTED 4/14 THROUGH 4/24/98.

STOCKPILE CONFIGURATION FROM 4/14/98 TO 4/24/98.



DATE \_\_\_\_\_  
DWN KK  
APP \_\_\_\_\_  
REV \_\_\_\_\_  
PROJECT NO.  
20805-532.001

**FIGURE 3**  
FORMER THRIFTY OIL COMPANY  
SERVICE STATION #81  
1510 GAREY AVENUE  
POMONA, CALIFORNIA  
**STOCKPILE SAMPLE LOCATIONS**

**APPENDIX A**  
**ORGANIC VAPOR MONITORING DATA**



April 30, 1998  
Project 20805-532.001

South Coast Air Quality Management District  
Enforcement Division Toxic Branch  
21865 E. Copley Drive  
Diamond Bar, California 91765-4182

Re: Transmittal of Rule 1166 Permit Monitoring Data  
ARCO Station No 9553  
1510 Garey Avenue  
Pomona, California

Dear Sir or Madam:

In compliance with conditions set forth in the Rule 1166 Contaminated Soil Mitigation Plan (Application A/N 258945 and Company ID 74690) issued to ARCO Products Company, EMCON submits the following records for the referenced site. The activities described herein are related to the excavation of soil from the vicinity of the underground storage tanks, dispenser islands and product piping areas.

## **MONITORING**

Volatile organic compounds (VOCs) were monitored continuously during soil excavation and handling using a Microtip, HL-2000 photoionization detector (PID) calibrated to 100 ppm isobutylene.

Readings from the PID were recorded during excavation of soil between March 31 and April 24, 1998. Copies of the soil monitoring data sheets are presented as an attachment.

## **EXCAVATED SOIL HANDLING**

The soil exhibited PID readings ranging from 0 to 2,993 parts per million (ppm). On April 8, 1998, the South Coast Air Quality Management District (SCAQMD) was notified that vapor readings exceeding 50 ppm were recorded. A notification number was assigned at this time (ED980082). In accordance with the verbal notification and existing SCAQMD permit, the hydrocarbon impacted soil was covered with plastic prior to transport to a treatment facility.



South Coast Air Quality Management District  
May 4, 1998  
Page 2

Project 20805-532.001

If you have any questions regarding this transmittal, please call me at (714) 450-0622.

Sincerely,

EMCON

A handwritten signature in black ink, appearing to read 'Eugene Pak', with a stylized flourish at the end.

Eugene Pak  
Staff Geologist

Attachment: SCAQMD Rule 1166 Air Monitoring Data Sheets

cc: Kateri Luka, ARCO Products Company



EMCON  
Southwest

## AIR MONITORING RECORD

STORE NO.: APCO 9553 / Thrday #1 EMCON PROJECT NO.: 22615 / 20805 532.00

PROJECT ADDRESS: 1510 GAREY AVE. PAMONA, CA

DATE: 3/31/98

HOURS OF OPERATION FROM: 11:30 TO: 12:30

WEATHER: Overcast / Cloudy, cool

OPERATIONS SUMMARY: Evacuated two "pot holes" in corner tank area to determine where end of tanks were for shoring purposes.

INSTRUMENTATION USED: 580 B OMA MODEL NUMBER: \_\_\_\_\_

CALIBRATION GAS: Isobutylene CONCENTRATION: 100ppm

INSTRUMENTATION CALIBRATION DATE: 3-31-98 TIME: 11:15

INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_

NAME OF OPERATOR: EUGENE DW

(Continued on other side)



# AIR MONITORING RECORD

STORE NO.: NECO 9553/Thoby 81 EMCON PROJECT NO.: 20805-532,001  
PROJECT ADDRESS: 1510 GABRY AVENUE POMONA CA  
GABRY/Phillips

DATE: 4-1-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Partly cloudy to Sunny, cool, sl. breeze  
OPERATIONS SUMMARY: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INSTRUMENTATION USED: PID MODEL NUMBER: MICROTEC  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100 PPM  
INSTRUMENTATION CALIBRATION DATE: 4-1-98 TIME: 11:05  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: EUGENE PAK

(Continued on other side)



EMCON  
Southwest

## AIR MONITORING RECORD

STORE NO.: ADCO 9553/Thorsty & EMCON PROJECT NO.: \_\_\_\_\_  
PROJECT ADDRESS: 150 GARRY Ave @ Phillips  
Pomona, CA

DATE: 4-8-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Sunny / Cool  
OPERATIONS SUMMARY: Excavation from UST area to  
expose tanks. Excavated soil will be  
stockpiled

INSTRUMENTATION USED: Micromer PID MODEL NUMBER: HC-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-8-98 TIME: 07:30  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: Eugene Pak

(Continued on other side)





# AIR MONITORING RECORD

STORE NO.: NO 609553 / THEFTV 81 EMCON PROJECT NO.: 20805-4532,001  
PROJECT ADDRESS: 1510 GAREY AVE POMONA CA

DATE: 4-6-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Partly Cloudy, cool  
OPERATIONS SUMMARY: Excavation along edges of existing  
USR area to shore sides.

INSTRUMENTATION USED: AKRATIP-PI0 MODEL NUMBER: HL-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-6-98 TIME: 07:00  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: 4/8/98 07:00  
NAME OF OPERATOR: EUGENE PAK

(Continued on other side)

4/6/98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
12:15		Northerly	0.0		Soil from SE corner of tanks. Soil excavation
					See sketch (trenching along edges ~ 3-4 ft)
12:16					
12:18					
12:22					SOUTH WALL
12:44			0.0		
			0.0		
12:45			0.0		
12:47					
12:49					
13:03			0		
13:04					
13:05			12		
			12		
			21		
			0		
			249		



4-8-98  
US1 excavati

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
07:45			0		SE corner of
			0		bank area
			0		
07:47			0		
			0		
			0		
			0		
			0		
07:48			1.1		
			0		
07:49			0		
			5.8		
			2.9		
			0.0		
07:50			3.4		
			3.8		
			2.8		
07:52			3.5		
			1.2		
			1.4		
			10.8		
			3.6		
07:54			2.6		
			0		
			0		
			0		
			0		
07:55			0		
			2.6		
			2.2		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
07:56			0.2		
			22.6		
			12.3		
			12.6		
07:57			5.8		
			10.6		
			3.4		
			5.1		
			0.0		
			0.0		
			0.0		
7:58			0.0		
			0.0		
			12.0		
			13.8		
			2.9		
08:00			10.6		
			10.8		
			2.9		
			64.8		
			78.6		
			56.3		
08:03			171		Soil adjacent to ground
			96.6		<del>turbine</del> from eastern
			86.3		tank. Soil is stained
			16.3		greenish gray, 4-5' by 3
			43.7		
			198		
08:10			837		
			366		
			843		
			150		

Soil adjacent to ground  
~~turbine~~ from eastern  
 tank. Soil is stained  
 greenish gray, 4-5' by 3



TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES	
08:14			247		↓	
			383			
			344			
			160			
			426			
			542			
			89.6			
			79.3			
08:17			112			Tank west of east most tank. Soil 4-5' is greenish gray ↓
			364			
			180			
			190			
			223			
			116.5			
			187			
			349			
			250			
			177			
			187		↓	
08:25			180			
			291			
			1020			
			831			
			260			
			1087			
			891			
			860			
			396			
			1020			
			1085			
			1060			
08:30			493			

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
			860		
			1080		
			1016		
			1663		
			730		
			534		
08:35			364		- Switch bucket on back
08:54			623		- Between two eastern tanks.
			254		
			245		
			251		
			524		
			1000		
			1800		
08:57			575		
			937		
			664		
			2020		
			1070		
			839		
			1360		
			1955		
			860		
			1030		
			1116		
			2443		
09:25			1060		
			1040		
09:34			54.6		
			15.1		
			7.9		
			8.4		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
10:10			24.6		
			112		
			116		
			246		
10:20			117		- Recalibrate PID
			403		- Soil adjacent to
			119		turbines of western
			235		tanks
			176		
			199		
			1399		
			1394		
<del>10:30</del>					
11:30			1642		NW portion of
			302		USF AREA staining
			817		visible along north
			2993		wall down to bottom
			917		of tanks.
			1580		
			860		Parameter air quality
11:55			1804		check, Oplus
			927		
			684		
12:20			1260		
			1264		
			908		
			960		
			714		
			721		
			824		





# AIR MONITORING RECORD

STORE NO.: 9553 (ARCO) EMCON PROJECT NO.: 20805.532.001  
PROJECT ADDRESS: 1510 GAREY AVE DUNCAN, CA

DATE: 4-10-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: \_\_\_\_\_  
OPERATIONS SUMMARY: \_\_\_\_\_

INSTRUMENTATION USED: MICROTIS P10 MODEL NUMBER: HC 2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-10-98 TIME: 11:49 AM  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: Eugene Pck

(Continued on other side)

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
09:36			6.4		South end of western tanks
			17.6		
			24.7		
			35.6		
			90.1		
			23.1		
			17.7		
			39.1		
09:45			7.8		
			8.8		
			9.7		
			3.6		
09:47			120		Stagnated dark greenish grey
			116		
			94.6		
			120		
			96.4		
			103		
			89.6		
			112		SW corner
			24.2		
			19.6		
			104		
			242		
09:55			112		SW corner on deck
10:06			24.6		
			7.8		Between tanks
			8.3		
			12.6		
			20.6		
			46.8		
			76.6		



# AIR MONITORING RECORD

STORE NO.: APCO 9553 / Truffly #81 EMCON PROJECT NO.: 20865-532,001  
PROJECT ADDRESS: 1510 GABRY AVE @ Phillips  
Pemona, CA

DATE: 4-13-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Prly cloudy, sl. breezy, cool  
OPERATIONS SUMMARY: Excavate additional soil from  
north wall of tank hole to make room for  
~~excavation~~ new VST's

INSTRUMENTATION USED: PID MODEL NUMBER: MicroCAP 46-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-13-98 TIME: 07:00  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: 12:03 pm / 4-14-98 @ 05'C  
NAME OF OPERATOR: E. PAK

(Continued on other side)

4-13-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
07:20			65		
			183		
			213		
07:30			113		
			1210		
			430		
			265		
			465		
07:35			934		
			749		
			1006		
			866		
			821		
			921		
			716		
			820		
			1034		
			851		
			996		
			1010		
			96.9		
			198		
07:41			430		
			629		
			881		
			951		
			266		
			198		
			334		
07:50			306		
			270		
			822		

4-13-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
07:53			921		
			720		
			651		
			232		
08:40			246		
			257		
			249		
			198		
			431		
			112		
			278		
			1510		
			519		
			246		
			394		
			401		
08:53			431		
			1560		
			947		
			981		
			286		
			230		
			323		
			1112		
			436		
			320		
			190		
09:01			343		

4-13-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
09:44			1476		
			1112		
			1203		
			849		
			623		
			979		
			1750		
			1116		
09:48			632		
			725		
			1006		
			939		
			646		
			596		
			348		
			989		
			603		
			666		
			843		
			949		
			963		
09:54			656		
			686		
			710		
			540		
			622		
			725		
10:50			219		
			482		
			386		
			417		

4-13-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
			419		
			324		
10:58			900		
			821		
			679		
			640		
			1020		
11:57			622		
			795		
			641		
			1103		
			513		
			721		
			856		
			654		
			779		
			785		
12:07			919		
			555		
			935		
			1467		
			903		
			574		
			693		
			844		
			920		
			912		
12:15			536		
13:33			391		
			278		
			428		
			444		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
			396		
			243		
			198		
			421		
13:42			669		
			343		
			555		
			1524		
			466		
			166		
13:46			675		
			376		
			1308		
			649		
			1008		
			249		
			180		
			675		
			663		
13:51			542		
			1190		
			770		
			1080		
			1455		
			1111		
			440		
			1084		
			794		
			710		
			844		

4-14-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
08:20			141		
			544		
			949		
			836		
			236		
			404		
			451		
			321		
			557		
			1051		
			1116		
08:30			423		
			320		
			211		
			466		
			863		
			390		
			720		
			1003		
			194		
			622		
			1376		
			827		
09:22			433		
			342		
			521		
			146		
			310		
			186		
			114		
			866		
			1668		

4-14-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
09:30			738		
			1006		
			1123		
			453		
			1210		
			988		
			733		
			692		
			934		
			1019		
09:35			1248		
			822		
			1398		
			852		
			280		
10:15			314		
			186		
			144		
			243		
			865		
			556		
			198		
			499		
			393		
			620		
			723		
			824		
10:30			610		
10:53			224		
			810		
			663		
			929		

4-14-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
			826		
			720		
			545		
			198		
			164		
			292		
			843		
			1034		
			796		
			644		
			636		
			690		
			853		
11:20			1116		
11:55			304		
			726		
			509		
			524		
			263		
			194		
			157		
			92		
			118		
12:25			186		
			223		
			386		
			496		
			243		
			198		
12:55			119		Recalibrated
			898		
			196		

4-14-98

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
			1023		
			119		
			186		
			243		
			268		
			112		
			154		
			196		
			843		
			86.7		
			111		
			228		
13:07			397		
			760		
			199		
			291		
			108		
			146		
			39.9		
			94.6		
			448		
			155		
			150		
			711		
			143		
			116		
			68.9		
			89.6		
			76.4		
			849		
13:50			14.6		
			68.4		



# AIR MONITORING RECORD

STORE NO.: ARCO 9553 EMCON PROJECT NO.: 20805-532,001  
PROJECT ADDRESS: 1510 GARBAY AVE  
\_\_\_\_\_  
\_\_\_\_\_

DATE: 4-21-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Sunny / Warm  
OPERATIONS SUMMARY: Excavate product piping in the vicinity of the former dispensing islands.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INSTRUMENTATION USED: P10 MODEL NUMBER: MICROTEC HL-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-21-98 TIME: 0715  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: EUGENE PAK

(Continued on other side)





# AIR MONITORING RECORD

STORE NO.: ARCO 9553 EMCON PROJECT NO.: 20805 532.001  
PROJECT ADDRESS: 1510 GAREY AVE @ Phillips  
Pemeta CA

DATE: 4-23-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: Overcast / Cool  
OPERATIONS SUMMARY: TEUCHING FOR NEW PRODUCT LINES

INSTRUMENTATION USED: P10 MODEL NUMBER: MICRO TIP HL-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100ppm  
INSTRUMENTATION CALIBRATION DATE: 4-23-98 TIME: 07:05  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: EUGENE PAK

(Continued on other side)

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
09:50			16.9		
			8.9		
			38.0		
			20.2		
			0.0		
			1.7		
			12.6		
			5.7		
			0.0		
10:10			1.3		
			2.7		
			0.0		
			8.6		
			11.3		
10:40			2.8		
			1.6		
			1.7		
			0.9		
11:00			8.4		
			9.8		
			32.6		
			17.0		
			2.6		
11:15			16.4		
			12.1		
			9.8		
			15.6		
			54.8		
			65.3		
			35.4		
			33.2		
11:30			16.8		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
13:05			12.9		
			6.3		
			2.9		
			3.4		
			1.6		
			7.6		
			3.4		
13:20			2.1		
			2.8		
			2.4		
			2.2		
13:45			0.5		
			6.1		
			13.5		
			21.4		
			3.7		
			7.4		
14:00			9.6		
			23.1		
			35.1		
			14.6		
14:30			14.6		
			4.9		
			5.9		
			24.1		
			12.1		
			8.9		
			13.4		
14:45			15.7		
			74.4		
			32.2		
			12.9		





# AIR MONITORING RECORD

STORE NO.: ADCO 953 EMCON PROJECT NO.: 20505-532.00  
PROJECT ADDRESS: 1510 GREET AVE

DATE: 4-24-98  
HOURS OF OPERATION FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
WEATHER: \_\_\_\_\_  
OPERATIONS SUMMARY: Trenching for product lines & electrical lines.

INSTRUMENTATION USED: MicroTIP MODEL NUMBER: HL-2000  
CALIBRATION GAS: ISOBUTYLENE CONCENTRATION: 100 ppm  
INSTRUMENTATION CALIBRATION DATE: 4-24-98 TIME: 07:05  
INSTRUMENTATION RECALIBRATION/VARIFICATION TIME: \_\_\_\_\_  
NAME OF OPERATOR: S. PAK

(Continued on other side)

4-24-98

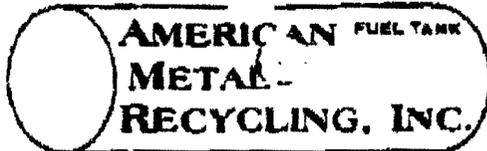
TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
07:30			907		Near UST's along
			149		section 500
			647		disposal island
			16.9		
			8.4		
			9.7		
			12.6		
			30.6		steamed
			1.0		
			1.6		
			2.1		
			8.9		
07:40			84.6		
			66.1		
			24.4		
			12.0		
			4.2		
			4.4		
			5.1		
			2.6		
			1.4		
			2.9		
			1.5		
08:00			1.9		
08:30			2.9		
			6.3		
			8.9		
			22.7		
			18.4		
			29.0		
			18.4		
			8.0		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
09:25			16.0		
			5.4		
			0.0		
			1.6		
			0.0		
09:45			0.6		
			7.0		
			1.6		
			0.5		
			1.0		
10:00			1.6		
			2.2		
			0.8		
			2.4		
			7.8		
			6.4		
10:20			0.0		
			0.0		
			0.6		
			0.0		
			0.2		
			0.2		
10:40			0.3		
			0.0		
			0.2		
			0.7		
			0.0		
			0.5		
11:00			0.2		
			0.2		
			0.4		
			0.1		

TIME	WIND SPEED (mph)	WIND DIRECTION (degrees)	INSTRUMENT READING (ppm)	DOWNWARD DISTANCE FROM SOURCE (ft)	NOTES
11:30			26.4		
			9.2		
			11.4		
			8.5		
			0.9		
			5.0		
			38.3		
			9.0		
11:50			40.1		
			72.2		
			25.3		
			51.8		
			25.1		
13:00			1.8		
			0.0		
			0.0		
			0.8		
			2.6		
			0.0		
13:20			6.2		
			1.6		
			5.6		
			0.3		
			0.0		
			0.8		
13:37			9.7		
			12.2		
			2.7		
			1.1		
			5.9		
			2.1		

**APPENDIX B**

**UST DESTRUCTION AND  
SOIL DISPOSAL DOCUMENTATION**



2202 South Milliken Avenue  
Ontario, CA 91761  
(714) 988-8000

No. 45021

TANK DISPOSAL FORM

Date: 4/21, 19 78  
Job #  
P.O. #

CONTRACTOR: E.S.T.  
ADDRESS: 13737 SENECA AVE. FONTANA, CA 92337  
JOB SITE:  
ADDRESS:  
DESTINATION: A.M.R. 2202 S. Milliken Ave., Ontario, CA 91761

DATE	TIME	PROJECTED TANKS	ORDERED BY	LIC NO
------	------	-----------------	------------	--------

SPECIAL INSTRUCTIONS: *EXHAUSTIVE*  
34347  
TIME IN:  
TIME OUT:  
*1-10K-6673-36536*

Services Rendered	Cost
Disposal Fee	200.00
Extensive Loading Time	150.00
Disposal Fee with Permit	300.00
Fiberglass Tank Disposal Fee Per Tank	400.00
Fiberglass Tank Delivered	200.00
Bobtail Disposal Fee	250.00
Cancellation Fee	250.00
<b>TOTAL CHARGES</b>	<b>\$ 1750.00</b>

QTY	TANKS RECEIVED GALLONS	TYPE	NET TONS	TOTAL
	250	□	.14	
	500	□	.21	
	550	□	.24	
	1000 - 12%	□	.44	
	1000 - 8%	□	.87	
	1500	□	.87	
	2000	□	.87	
	2500	□	1.14	
	3000	□	1.30	
	4000	□	1.64	
	5000	□	2.42	
	6000	□	2.84	
	7500	□	3.26	
	9000	□	3.44	
	9000	□	3.82	
	10000	□	4.33	
	12200	□	4.83	

All fees incurred are per load unless specified. Terms are net 30 days from date of invoice. Contractor's signature represents acceptance of terms for payment, and confirms that tank removal complies with State laws.

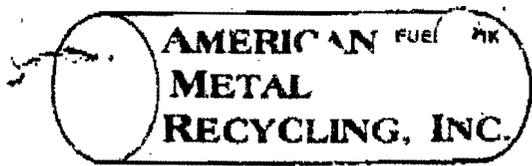
NO. OF TANKS: 1  
TOTAL: 1  
NET TONS: 4.83  
\*F - FIBERGLASS \*S - STEEL 105

CONTRACTOR'S SIGNATURE  
*[Signature]*  
AUTHORIZED REP

CERTIFICATE OF TANK DISPOSAL / DESTRUCTION  
THIS IS TO CERTIFY THE RECEIPT AND ACCEPTANCE OF THE TANK(S) AS SPECIFIED ABOVE. ALL MATERIALS SPECIFIED HAVE BEEN COMPLETELY DESTROYED FOR SCRAP PURPOSES ONLY.  
DATE: 4/21/78

BILLING COPY

OFFICE COPY



2202 South Milliken Avenue  
 Ontario, CA 91761  
 (714) 988-8000

No. 45022

**TANK DISPOSAL FORM**

Date: 4/21, 19 98  
 Job # \_\_\_\_\_  
 P.O. # \_\_\_\_\_

CONTRACTOR: E.C.I.  
 ADDRESS: 13738 SLOVER AVE., FONTANA, CA 92337  
 JOB SITE: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 DESTINATION: A.M.R. 2202 S. Milliken Ave., Ontario, CA 91761

DATE	TIME	PROJECTED TANKS	ORDERED BY	LIC. NO.
------	------	-----------------	------------	----------

SPECIAL INSTRUCTIONS: Scrap Ticket # 34340  
 TIME IN: \_\_\_\_\_  
 TIME OUT: \_\_\_\_\_

1-10K-6060-36519 ← from and site  
1-10K-6074-36536 ← from Gary H

Services Rendered	Cost
Disposal Fee	200.00
Extensive Loading Time	150.00
Disposal Fee with Permit	300.00
Fiberglass Tank Disposal Fee Per Tank	400.00
Fiberglass Tank Delivered	200.00
Boat/H Disposal Fee	250.00
Cancellation Fee	250.00
<b>TOTAL CHARGES</b>	<b>\$ <u>1750.00</u></b>

QTY	TANKS RECEIVED			TOTAL
	GALLONS	TYPE F* S*	NET TONS	
<del>280</del>	<del>0</del>	<del>0</del>	<del>.14</del>	
<del>500</del>	<del>0</del>	<del>0</del>	<del>.26</del>	
<del>550</del>	<del>0</del>	<del>0</del>	<del>.24</del>	
<del>1000-12 ft</del>	<del>0</del>	<del>0</del>	<del>.42</del>	
<del>1000-8 ft</del>	<del>0</del>	<del>0</del>	<del>.61</del>	
<del>1600</del>	<del>0</del>	<del>0</del>	<del>.87</del>	
<del>2000</del>	<del>0</del>	<del>0</del>	<del>.97</del>	
<del>2500</del>	<del>0</del>	<del>0</del>	<del>1.14</del>	
<del>3000</del>	<del>0</del>	<del>0</del>	<del>1.32</del>	
<del>4000</del>	<del>0</del>	<del>0</del>	<del>1.84</del>	
<del>5000</del>	<del>0</del>	<del>0</del>	<del>2.42</del>	
<del>6000</del>	<del>0</del>	<del>0</del>	<del>2.84</del>	
<del>7500</del>	<del>0</del>	<del>0</del>	<del>3.28</del>	
<del>9000</del>	<del>0</del>	<del>0</del>	<del>3.64</del>	
<del>10000</del>	<del>0</del>	<del>0</del>	<del>4.30</del>	
<del>12000</del>	<del>0</del>	<del>0</del>	<del>4.93</del>	

All fees incurred are per load unless specified.  
 Terms are net 30 days from date of invoice.  
 Contractor's signature represents acceptance of terms for payment, and confirms that tank removal complies with State laws.

NO. OF TANKS: 2      TOTAL: \_\_\_\_\_      NET TONS: \_\_\_\_\_  
 \*F - FIBERGLASS      \*S - STEEL 105

CONTRACTOR'S SIGNATURE: [Signature]  
 AUTHORIZED REP.

DATE: 4/21/98

**CERTIFICATE OF TANK DISPOSAL / DESTRUCTION**  
 THIS IS TO CERTIFY THE RECEIPT AND ACCEPTANCE OF THE TANK(S) AS SPECIFIED ABOVE. ALL MATERIALS SPECIFIED HAVE BEEN COMPLETELY DESTROYED FOR SCRAP PURPOSES ONLY.

CONTRACTOR COPY



2202 South Milliken Avenue  
 Ontario, CA 91761  
 (714) 988-8000

No. 45037

**TANK DISPOSAL FORM**

Date: 4/30, 1998  
 Job # \_\_\_\_\_  
 P. O. # \_\_\_\_\_

CONTRACTOR: F.C.T.  
 ADDRESS: 13732 SLOVER AVE. FONTANA, CA 92337  
 JOB SITE: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_

DESTINATION: A.M.R. 2202 S. Milliken Ave., Ontario, CA 91761

DATE	TIME	PROJECTED TANKS	ORDERED BY:	LIC. NO.
------	------	-----------------	-------------	----------

SPECIAL INSTRUCTIONS: SCRAP TICKET  
# 34671  
 TIME IN: \_\_\_\_\_  
 TIME OUT: \_\_\_\_\_  
1-10K-6071-36536  
1-10K-6072-36536

Services Rendered	Cost
<input checked="" type="checkbox"/> Disposal Fee	200.00
<input checked="" type="checkbox"/> Extensive Loading Time	150.00
<input checked="" type="checkbox"/> Disposal Fee with Permit	300.00
<input checked="" type="checkbox"/> Fiberglass Tank Disposal Fee Per Tank	400.00
<input checked="" type="checkbox"/> Fiberglass Tank Delivered	200.00
<input checked="" type="checkbox"/> Bobtail Disposal Fee	250.00
<input checked="" type="checkbox"/> Cancellation Fee	250.00

**TOTAL CHARGES** \$ 2000.00

All fees incurred are per load unless specified.  
 Terms are net 30 days from date of invoice.  
 Contractor's signature represents acceptance  
 of terms for payment, and confirms that tank  
 removal complies with State laws.

QTY	TANKS RECEIVED GALLONS	TYPE F* S*	NET TONS	TOTAL
	200	<input type="checkbox"/>	1.4	
	400	<input type="checkbox"/>	2.8	
	600	<input type="checkbox"/>	4.2	
	800	<input type="checkbox"/>	5.6	
	1000	<input type="checkbox"/>	7.0	
	1000 - 6 ft.	<input type="checkbox"/>	6.1	
	1500	<input type="checkbox"/>	8.7	
	2000	<input type="checkbox"/>	11.4	
	2500	<input type="checkbox"/>	14.1	
	3000	<input type="checkbox"/>	16.8	
	4000	<input type="checkbox"/>	22.4	
	5000	<input type="checkbox"/>	28.0	
	6000	<input type="checkbox"/>	33.6	
	7500	<input type="checkbox"/>	42.0	
	8000	<input type="checkbox"/>	44.8	
	9000	<input type="checkbox"/>	49.0	
	10000	<input type="checkbox"/>	53.3	
	12000	<input type="checkbox"/>	63.9	

NO. OF TANKS 2 TOTAL NET TONS  
 \*F - FIBERGLASS \*S - STEEL 105

CONTRACTOR'S SIGNATURE  
Maria Espada  
 AUTHORIZED REP.

4/30/98  
 DATE

CONTRACTOR COPY

**CERTIFICATE OF TANK DISPOSAL / DESTRUCTION**  
 THIS IS TO CERTIFY THE RECEIPT AND ACCEPTANCE OF THE TANK(S) AS SPECIFIED ABOVE. ALL MATERIALS SPECIFIED  
 HAVE BEEN COMPLETELY DESTROYED FOR SCRAP PURPOSES ONLY.



JOB REPORT FOR  
04/14/98 THRU 04/14/98

DATE: 04/15/98

PAGE: 1

STATION #81 - POMONA	TICKET	DATE	TRUCK	NET	TONS	AMOUNT
JOB: 9800762						
047 THRIFTY OIL CO.	14989	04/14/98	ZP88	50860	25.43 ✓	0.00
047 THRIFTY OIL CO.	14993	04/14/98	JV107	50880	25.44 ✓	0.00
047 THRIFTY OIL CO.	14994	04/14/98	JV109	53940	26.97 ✓	0.00
047 THRIFTY OIL CO.	14999	04/14/98	JV110	50260	25.13 ✓	0.00
047 THRIFTY OIL CO.	15011	04/14/98	AM13	46620	23.31 ✓	0.00
047 THRIFTY OIL CO.	15019	04/14/98	JV109	47260	23.63 ✓	0.00
047 THRIFTY OIL CO.	15020	04/14/98	JV107	49460	24.73 ✓	0.00
047 THRIFTY OIL CO.	15025	04/14/98	ZP88	51620	25.81 ✓	0.00
047 THRIFTY OIL CO.	15028	04/14/98	JV110	47720	23.86 ✓	0.00
047 THRIFTY OIL CO.	15037	04/14/98	AM13	49120	24.56 ✓	0.00
047 THRIFTY OIL CO.	15038	04/14/98	JV105	51860	25.93 ✓	0.00
047 THRIFTY OIL CO.	15043	04/14/98	JV107	54660	27.33 ✓	0.00
JOB SUBTOTAL		12		604260	302.13	0.00
=====						
GRAND TOTAL		12		604260	302.13	0.00



JOB REPORT FOR  
04/17/98 THRU 04/17/98

DATE: 04/17/98

PAGE: 1

Station #81 - Pomona JOB: 9800762	TICKET	DATE	TRUCK	NET	TONS	AMOUNT
047 THRIFTY OIL CO.	15113	04/17/98	JT6	47640	23.62	0.00
047 THRIFTY OIL CO.	15114	04/17/98	JT7	46980	23.49	0.00
047 THRIFTY OIL CO.	15115	04/17/98	AM13	44480	22.24	0.00
047 THRIFTY OIL CO.	15122	04/17/98	JG1	36760	18.38	0.00
047 THRIFTY OIL CO.	15135	04/17/98	JT6	48680	24.34	0.00
047 THRIFTY OIL CO.	15136	04/17/98	JT7	49800	24.90	0.00
047 THRIFTY OIL CO.	15141	04/17/98	JG1	45500	22.75	0.00
047 THRIFTY OIL CO.	15146	04/17/98	AM13	48980	24.49	0.00
047 THRIFTY OIL CO.	15150	04/17/98	JT6	49400	24.70	0.00
047 THRIFTY OIL CO.	15153	04/17/98	JT7	49780	24.89	0.00
047 THRIFTY OIL CO.	15156	04/17/98	JG1	44760	22.38	0.00
047 THRIFTY OIL CO.	15164	04/17/98	JT6	48840	24.42	0.00
JOB SUBTOTAL	12			561600	280.80	0.00
GRAND TOTAL	12			561600	280.80	0.00



JOB REPORT FOR  
04/20/98 THRU 04/20/98

DATE: 04/20/98

PAGE: 1

STATION #81 - POMONA	TICKET	DATE	TRUCK	NET	TONS	AMOUNT
JOB: 9800762						
047 THRIFTY OIL CO.	15177	04/20/98	ZP85	50700	25.35 ✓	0.00
047 THRIFTY OIL CO.	15179	04/20/98	ZP80	50640	25.32 ✓	0.00
047 THRIFTY OIL CO.	15180	04/20/98	AM13	47680	23.84 ✓	0.00
047 THRIFTY OIL CO.	15186	04/20/98	M11	47320	23.66 ✓	0.00
047 THRIFTY OIL CO.	15189	04/20/98	JG1	45560	22.78 ✓	0.00
047 THRIFTY OIL CO.	15205	04/20/98	ZP85	48520	24.26 ✓	0.00
047 THRIFTY OIL CO.	15206	04/20/98	ZP80	52080	26.04 ✓	0.00
047 THRIFTY OIL CO.	15207	04/20/98	AM13	51780	25.89 ✓	0.00
047 THRIFTY OIL CO.	15211	04/20/98	M11	50260	25.13 ✓	0.00
047 THRIFTY OIL CO.	15214	04/20/98	JG1	46180	23.09 ✓	0.00
047 THRIFTY OIL CO.	15228	04/20/98	ZP85	51640	25.82 ✓	0.00
047 THRIFTY OIL CO.	15233	04/20/98	ZP80	50820	25.41 ✓	0.00
047 THRIFTY OIL CO.	15237	04/20/98	AM13	51140	25.57 ✓	0.00
047 THRIFTY OIL CO.	15240	04/20/98	M11	51520	25.76 ✓	0.00
047 THRIFTY OIL CO.	15244	04/20/98	JG1	45180	22.59 ✓	0.00
047 THRIFTY OIL CO.	15254	04/20/98	GV302	47760	23.88 ✓	0.00
047 THRIFTY OIL CO.	15256	04/20/98	ZP85	50540	25.27 ✓	0.00
047 THRIFTY OIL CO.	15257	04/20/98	ZP80	51060	25.53 ✓	0.00
047 THRIFTY OIL CO.	15258	04/20/98	AM13	47540	23.77 ✓	0.00
JOB SUBTOTAL		19		937920	468.96	0.00
GRAND TOTAL		19		937920	468.96	0.00



JOB REPORT FOR  
04/30/98 THRU 04/30/98

DATE: 04/30/98  
PAGE: 1

Station #81 - Pomona  
JOB: 9800762

	TICKET	DATE	TRUCK	NET	TONS	AMOUNT
047 THRIFTY OIL CO.	15613	04/30/98	JT15	47840	23.92 ✓	0.00
047 THRIFTY OIL CO.	15615	04/30/98	JT13	48180	24.09 ✓	0.00
047 THRIFTY OIL CO.	15618	04/30/98	JT11	50340	25.17 ✓	0.00
047 THRIFTY OIL CO.	15638	04/30/98	JT15	49040	24.52 ✓	0.00
047 THRIFTY OIL CO.	15641	04/30/98	JT13	53500	26.75 ✓	0.00
JOB SUBTOTAL		5		248900	124.45	0.00
=====						
GRAND TOTAL		5		248900	124.45	0.00

## **APPENDIX C**

### **GENERAL FIELD PROCEDURES**

## APPENDIX C

### GENERAL FIELD PROCEDURES

---

This appendix provides a description of general field procedures used during site investigation activities.

#### **Excavation and Stockpile Soil Sampling**

Excavation soil samples are collected either by driving a stainless steel or brass sample tube directly into freshly uncovered soil, or from a backhoe bucket. If collected from the backhoe, a relatively coherent and undisturbed portion of soil within the bucket is selected and a stainless steel tube driven into the soil. The sample tube is then removed, and the ends are covered with Teflon sheeting and sealed with airtight caps.

Stockpile soil samples are collected by driving a stainless steel or brass sample tube into the soil at a depth of approximately one to two feet below the stockpile surface. The sample tube is then removed, and the ends are covered with Teflon sheeting and sealed with airtight caps.

All samples are labeled, documented in the chain of custody record, and placed in a cooler with ice at approximately 4°C prior to laboratory analysis. Selected samples are delivered to a state certified laboratory for analysis. Samples not selected for immediate analysis are transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

Prior to use, the sampler and sampling tubes are thoroughly cleaned to avoid cross contamination. Sampling equipment is brush scrubbed in a Liquinox and potable water solution and rinsed twice in clean potable water.

#### **Chain of Custody Protocol**

Chain of custody protocol is followed for all soil and groundwater samples selected for laboratory analysis. The chain of custody form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

**APPENDIX D**

**LABORATORY REPORTS AND CHAIN-OF-CUSTODY  
DOCUMENTATION**



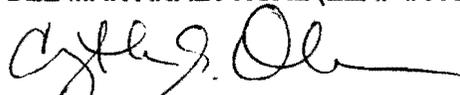
Emcon 15255 Alton Pkwy, Suite #200 Irvine, CA 92618 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #22615.00 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040419	Sampled: Apr 9, 1998 Received: Apr 9, 1998 Extracted: Apr 8-9, 1998 Analyzed: Apr 8-9, 1998 Reported: Apr 10, 1998
--	---	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040419</b>	<b>SP-1</b>	<b>2.1</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>0.030</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040420</b>	<b>SP-2</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040421</b>	<b>SP-3</b>	<b>36</b>	<b>0.040</b>	<b>N.D.</b>	<b>0.068</b>	<b>0.69</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040422</b>	<b>SP-4</b>	<b>2.7</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>0.060</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040423</b>	<b>SP-5</b>	<b>3,300</b>	<b>11</b>	<b>98</b>	<b>44</b>	<b>370</b>
Dilution: 60	Reporting Limit:	60	0.30	0.30	0.30	0.90
<b>C8040424</b>	<b>SP-6</b>	<b>1,200</b>	<b>1.6</b>	<b>23</b>	<b>13</b>	<b>120</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager

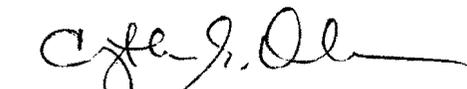
<b>Emcon</b> 15255 Alton Pkwy, Suite #200 Irvine, CA 92618 Attention: Holly Quasem	<b>Client Project ID: ARCO Work Auth. #22615.00</b> 9553, Pomona <b>Analysis Method: EPA 5030/CA DHS Mod. 8015/8020</b> <b>First Sample #: C8040419</b>	<b>Sampled: Apr 9, 1998</b> <b>Received: Apr 9, 1998</b> <b>Extracted: Apr 8-9, 1998</b> <b>Analyzed: Apr 8-9, 1998</b> <b>Reported: Apr 10, 1998</b>
---	--	---

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons		Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
		mg/Kg (ppm)	Benzene mg/Kg (ppm)			
<b>C8040425</b>	<b>SP-7</b>	<b>5,900</b>	<b>15</b>	<b>250</b>	<b>12</b>	<b>690</b>
Dilution: 120	Reporting Limit:	120	0.60	0.60	0.60	1.8
<b>C8040426</b>	<b>SP-8</b>	<b>3,900</b>	<b>11</b>	<b>93</b>	<b>41</b>	<b>340</b>
Dilution: 60	Reporting Limit:	60	0.30	0.30	0.30	0.90
<b>C8040427</b>	<b>SP-9</b>	<b>5,800</b>	<b>19</b>	<b>240</b>	<b>100</b>	<b>640</b>
Dilution: 120	Reporting Limit:	120	0.60	0.60	0.60	1.8
<b>C8040428</b>	<b>SP-10</b>	<b>2,300</b>	<b>3.2</b>	<b>39</b>	<b>23</b>	<b>160</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040429</b>	<b>SP-11</b>	<b>420</b>	<b>0.33</b>	<b>N.D.</b>	<b>0.53</b>	<b>17</b>
Dilution: 5	Reporting Limit:	5.0	0.025	0.025	0.025	0.075
<b>C8040430</b>	<b>SP-12</b>	<b>130</b>	<b>0.30</b>	<b>N.D.</b>	<b>0.14</b>	<b>3.5</b>
Dilution: 2	Reporting Limit:	2.0	0.010	0.010	0.010	0.030

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL (ELAP #1169)**



Alma Borok  
Laboratory Manager



Emcon 15255 Alton Pkwy, Suite #200 Irvine, CA 92618 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #22615.00 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040419	Sampled: Apr 9, 1998 Received: Apr 9, 1998 Extracted: Apr 9, 1998 Analyzed: Apr 9, 1998 Reported: Apr 10, 1998
--	---	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040431</b>	<b>SP-13</b>	<b>480</b>	<b>1.2</b>	<b>15</b>	<b>7.2</b>	<b>58</b>
Dilution: 12	Reporting Limit:	12	0.060	0.060	0.060	0.18
<b>C8040432</b>	<b>SP-14</b>	<b>5,700</b>	<b>17</b>	<b>190</b>	<b>77</b>	<b>580</b>
Dilution: 120	Reporting Limit:	120	0.60	0.60	0.60	1.8
<b>C8040433</b>	<b>SP-15</b>	<b>2,600</b>	<b>5.6</b>	<b>74</b>	<b>36</b>	<b>280</b>
Dilution: 60	Reporting Limit:	60	0.30	0.30	0.30	0.90
<b>C8040434</b>	<b>SP-16</b>	<b>5,200</b>	<b>22</b>	<b>220</b>	<b>73</b>	<b>560</b>
Dilution: 120	Reporting Limit:	120	0.60	0.60	0.60	1.8

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



Emcon  
 15255 Alton Pkwy, Suite #200  
 Irvine, CA 92618  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #22615.00  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8040419

Sampled: Apr 9, 1998  
 Received: Apr 9, 1998  
 Extracted: Apr 8-9, 1998  
 Analyzed: Apr 8-9, 1998  
 Reported: Apr 10, 1998

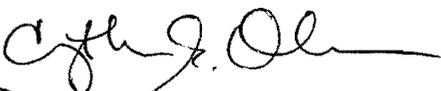
### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040419	SP-1	0.12	0.035	1.0
C8040420	SP-2	0.11	0.035	1.0
C8040421	SP-3	0.15	0.035	1.0
C8040422	SP-4	0.12	0.035	1.0
C8040423	SP-5	30	1.1	30
C8040424	SP-6	6.5	1.1	30
C8040425	SP-7	20	2.1	60
C8040426	SP-8	22	1.1	30
C8040427	SP-9	31	1.1	30
C8040428	SP-10	8.1	1.1	30

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcak  
 Laboratory Manager



2852 Alton Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843  
 2465 W. 12th St., Suite I, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-340

Emcon  
 15255 Alton Pkwy, Suite #200  
 Irvine, CA 92618  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #22615.00  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8040419

Sampled: Apr 9, 1998  
 Received: Apr 9, 1998  
 Extracted: Apr 8-9, 1998  
 Analyzed: Apr 8-9, 1998  
 Reported: Apr 10, 1998

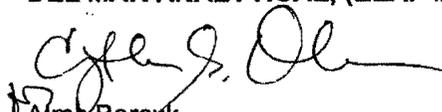
**MTBE (EPA 8020 MODIFIED)**

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040429	SP-11	4.6	0.070	2.0
C8040430	SP-12	5.5	0.070	2.0
C8040431	SP-13	13	0.42	12
C8040432	SP-14	61	1.1	30
C8040433	SP-15	17	0.70	20
C8040434	SP-16	110	1.1	30

MTBE = Methyl tert-Butyl Ether

Analyses reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 04/08/98

Sample #: LBS

Batch #: HD08G12S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0	1.0	1.0	1.1	104	105	1.2	105	≤ 30	85 - 130
Benzene	0	0.10	0.098	0.10	98	100	2.2	99	≤ 10	85 - 130
Toluene	0	0.10	0.099	0.098	99	98	0.62	98	≤ 11	85 - 130
Ethylbenzene	0	0.10	0.099	0.10	99	100	0.63	99	≤ 10	85 - 130
Xylenes	0	0.30	0.34	0.34	113	112	0.78	112	≤ 10	85 - 130

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts



**MS/MSD DATA REPORT**

**EPA Method 8015/8020**

Matrix: Soil

Date: 04/09/98

Sample #: LBS

Batch #: HD09G11S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0	1.0	1.1	1.0	108	105	2.8	106	≤30	85 - 130
Benzene	0	0.10	0.10	0.10	105	105	0.27	105	≤10	85 - 130
Toluene	0	0.10	0.10	0.10	105	103	1.7	104	≤11	85 - 130
Ethylbenzene	0	0.10	0.10	0.10	103	102	0.87	102	≤10	85 - 130
Xylenes	0	0.30	0.35	0.34	116	115	0.96	116	≤10	85 - 130

**Definition of Terms**

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts

ARCO Facility no. **9553** City (Facility) **POMONA** Project manager (Consultant) **HOLLY QUASEM**  
 ARCO engineer **KATERE LUKA** Telephone no. (ARCO) **714-543-3147** Telephone no. (Consultant) **714-450-0622** Fax no. (Consultant) **714-450-0524**  
 Consultant name **FUCON** Address (Consultant) **15255 Alton Pkwy Ste 200 IRVINE, CA 92618**

Laboratory name **DEL MAR**  
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 801/802/803/804/805	TPH EPA 801/802/803/804/805	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/6010	EPA 624/6240	EPA 625/6270	TCLP Metals <input type="checkbox"/> VOC <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals EPA 601/607/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	MTBE <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice	Acid															
SP-1		1	✓			✓		4-9-98		X	X											Courier
SP-2		1	✓			✓																
SP-3		1	✓			✓																
SP-4		1	✓			✓																
SP-5		1	✓			✓																
SP-6		1	✓			✓																
SP-7		1	✓			✓																
SP-8		1	✓			✓																
SP-9		1	✓			✓																
SP-10		1	✓			✓																
SP-11		1	✓			✓																
SP-12		1	✓			✓																
SP-13		1	✓			✓																
SP-14		1	✓			✓																
SP-15		1	✓			✓																
SP-16		1	✓			✓																

Method of shipment **Courier**

Special detection Limit/reporting

Special QA/QC

Remarks  
**TANK REPLACEMENT**  
**24-Hour Turnaround**

Lab number

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample: **intact** Temperature received: **On ice**

Relinquished by sampler **[Signature]** Date **4-9-98** Time **10:15** Received by **[Signature]** Date **4-9-98** Time **10:15**

Relinquished by **[Signature]** Date **4-9-98** Time **11:00** Received by **[Signature]** Date **4-9-98** Time **11:00**



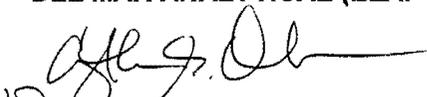
Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040467	Sampled: Apr 10, 1998 Received: Apr 10, 1998 Extracted: Apr 12-13, 1998 Analyzed: Apr 12-13, 1998 Reported: Apr 13, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040467</b>	<b>EF-1</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040468</b>	<b>EF-2</b>	<b>1,100</b>	<b>81</b>	<b>570</b>	<b>200</b>	<b>1,300</b>
Dilution: 300	Reporting Limit:	300	1.5	1.5	1.5	4.5
<b>C8040469</b>	<b>EF-3</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040470</b>	<b>EF-4</b>	<b>940</b>	<b>46</b>	<b>400</b>	<b>150</b>	<b>1,000</b>
Dilution: 300	Reporting Limit:	300	1.5	1.5	1.5	4.5
<b>C8040471</b>	<b>EF-5</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040472</b>	<b>EF-6</b>	<b>720</b>	<b>0.90</b>	<b>17</b>	<b>13</b>	<b>85</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL (ELAP #1169)**

  
 Alma Borçuk  
 Laboratory Manager



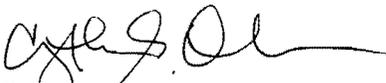
Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040473	Sampled: Apr 10, 1998 Received: Apr 10, 1998 Extracted: Apr 12, 1998 Analyzed: Apr 12, 1998 Reported: Apr 13, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040473</b>	<b>EF-7</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040474</b>	<b>EF-8</b>	<b>1,900</b>	<b>3.7</b>	<b>59</b>	<b>36</b>	<b>170</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>Method Blank</b>		<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager



Emcon  
 15255 Alton Pkwy., Suite #200  
 Irvine, CA 92606  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #2261500  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8040467

Sampled: Apr 10, 1998  
 Received: Apr 10, 1998  
 Extracted: Apr 12-13, 1998  
 Analyzed: Apr 12-13, 1998  
 Reported: Apr 13, 1998

### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040467	EF-1	N.D.	0.035	1.0
C8040468	EF-2	280	2.1	60
C8040469	EF-3	0.45	0.035	1.0
C8040470	EF-4	81	2.1	60
C8040471	EF-5	N.D.	0.035	1.0
C8040472	EF-6	2.3	1.1	30
C8040473	EF-7	N.D.	0.035	1.0
C8040474	EF-8	3.2	0.42	12
Method Blank		N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 04/12/98

Sample #: C8040467

Batch #: HD12G11S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0.085	1.0	1.1	1.1	105	101	3.4	103	≤30	85 - 130
Benzene	0.00032	0.10	0.091	0.093	91	92	1.6	92	≤10	85 - 130
Toluene	0.0010	0.10	0.091	0.094	90	93	3.0	91	≤11	85 - 130
Ethylbenzene	0.00036	0.10	0.095	0.093	95	92	2.9	93	≤10	85 - 130
Xylenes	0.0025	0.30	0.32	0.31	105	101	3.1	103	≤10	85 - 130

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 04/13/98

Sample #: LBS

Batch #: HD13G11S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0	1.0	1.1	1.1	110	112	1.1	111	≤30	73 - 130
Benzene	0	0.10	0.10	0.10	105	105	0.046	105	≤10	78 - 126
Toluene	0	0.10	0.098	0.10	98	100	1.9	99	≤11	82 - 124
Ethylbenzene	0	0.10	0.098	0.099	98	99	0.65	98	≤10	83 - 121
Xylenes	0	0.30	0.32	0.32	107	108	0.45	108	≤11	85 - 130

### Definition of Terms

- R1. .... Result of Sample Analysis
- Sp. .... Spike Concentration added to sample
- MS. .... Matrix Spike Result
- MSD. .... Matrix Spike Duplicate Result
- PR1. .... Percent Recovery of MS; ((MS-R1)/SP) X 100
- PR2. .... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
- RPD. .... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Mean PR. .... Mean Percent Recovery
- Acceptance Limits ..... Determined by in-house Control Charts

ARCO Facility no. 9553 City (Facility) Pomona Project manager (Consultant) Holly Casey  
 ARCO engineer KATEPI LAKA Telephone no. (ARCO) 714-543-3147 Telephone no. (Consultant) 714-450-4622 Fax no. (Consultant) 714-450-0524  
 Consultant name EMCON Address (Consultant) 15255 Allen Parkway Ste. 200 Irvine CA 92618

Laboratory name DEL MAR  
 Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 1602/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/6010	EPA 624/6240	EPA 625/6270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> IVOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> EPA 601/7000 TTLC <input type="checkbox"/> STL <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	MTRF (Case)	
			Soil	Water	Other	Ice	Acid															
EF-1		1	✓			✓		4-10-98	15:55	X		X										X
EF-2		1	✓			✓		↓	↓	↓		↓										↓
EF-3		1	✓			✓		↓	↓	↓		↓										↓
EF-4		1	✓			✓		↓	↓	↓		↓										↓
EF-5		1	✓			✓		↓	↓	↓		↓										↓
EF-6		1	✓			✓		↓	↓	↓		↓										↓
EF-7		1	✓			✓		↓	↓	↓		↓										↓
EF-8		1	✓			✓		↓	↓	↓		↓										↓

Method of shipment  
 COURIER

Special detection Limit/reporting

Special QA/QC

Remarks  
 TANK REPLACEMENT  
 24-Hour Turnaround

Lab number

Turnaround time  
 Priority Rush 1 Business Day   
 Rush 2 Business Days   
 Expedited 5 Business Days   
 Standard 10 Business Days

Condition of sample: intact Temperature received: On ice  
 Relinquished by sampler [Signature] Date 4-10-98 Time 16:05 Received by James [Signature] 4-10-98 16:05  
 Relinquished by [Signature] Date 4-10-98 Time 16:50 Received by [Signature]  
 Relinquished by [Signature] Date 4-10-98 Time 16:50 Received by laboratory [Signature] Date 4-10-98 Time 16:50



<b>Emcon</b> 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	<b>Client Project ID: ARCO Work Auth. #2261500</b> 9553, Pomona <b>Analysis Method: EPA 5030/CA DHS Mod. 8015/8020</b> <b>First Sample #: C8040660</b>	<b>Sampled: Apr 13, 1998</b> <b>Received: Apr 13, 1998</b> <b>Extracted: Apr 14, 1998</b> <b>Analyzed: Apr 14, 1998</b> <b>Reported: Apr 14, 1998</b>
--	---	---

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040660</b>	<b>SP-17</b>	<b>560</b>	<b>0.30</b>	<b>6.8</b>	<b>5.0</b>	<b>49</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040661</b>	<b>SP-18</b>	<b>800</b>	<b>0.90</b>	<b>18</b>	<b>10</b>	<b>82</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040662</b>	<b>SP-19</b>	<b>1,300</b>	<b>1.2</b>	<b>25</b>	<b>20</b>	<b>140</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040663</b>	<b>SP-20</b>	<b>1,200</b>	<b>2.0</b>	<b>37</b>	<b>23</b>	<b>160</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040664</b>	<b>SP-21</b>	<b>380</b>	<b>0.30</b>	<b>5.7</b>	<b>5.8</b>	<b>44</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040665</b>	<b>SP-22</b>	<b>540</b>	<b>0.46</b>	<b>9.9</b>	<b>8.7</b>	<b>64</b>
Dilution: 10	Reporting Limit:	10	0.050	0.050	0.050	0.15

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Boreuk  
 Laboratory Manager



Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040666	Sampled: Apr 13, 1998 Received: Apr 13, 1998 Extracted: Apr 14, 1998 Analyzed: Apr 14, 1998 Reported: Apr 14, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040666</b>	<b>SP-23</b>	<b>390</b>	<b>0.45</b>	<b>10</b>	<b>6.8</b>	<b>54</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040667</b>	<b>SP-24</b>	<b>3,500</b>	<b>4.6</b>	<b>140</b>	<b>65</b>	<b>410</b>
Dilution: 60	Reporting Limit:	60	0.30	0.30	0.30	0.90
<b>C8040668</b>	<b>SP-25</b>	<b>310</b>	<b>0.048</b>	<b>6.2</b>	<b>4.3</b>	<b>34</b>
Dilution: 10	Reporting Limit:	10	0.050	0.050	0.050	0.15
<b>C8040669</b>	<b>SP-26</b>	<b>380</b>	<b>0.13</b>	<b>3.7</b>	<b>3.8</b>	<b>32</b>
Dilution: 20	Reporting Limit:	20	0.10	0.10	0.10	0.30
<b>C8040670</b>	<b>SP-27</b>	<b>1,000</b>	<b>0.94</b>	<b>19</b>	<b>14</b>	<b>100</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040671</b>	<b>SP-28</b>	<b>100</b>	<b>0.097</b>	<b>2.3</b>	<b>1.1</b>	<b>9.5</b>
Dilution: 4	Reporting Limit:	4.0	0.020	0.020	0.020	0.060

Volatiles Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040672	Sampled: Apr 13, 1998 Received: Apr 13, 1998 Extracted: Apr 14, 1998 Analyzed: Apr 14, 1998 Reported: Apr 14, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040672</b>	<b>SP-29</b>	<b>850</b>	<b>0.75</b>	<b>22</b>	<b>12</b>	<b>90</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040673</b>	<b>SP-30</b>	<b>1,100</b>	<b>1.4</b>	<b>35</b>	<b>16</b>	<b>130</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>Method Blank</b>		<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borzok  
 Laboratory Manager



# Del Mar Analytical

2652 Alton Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-122  
 1014 E. Coast Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-104  
 16525 Sherman Way, Suite C-111, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-184  
 2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-340

Emcon  
 15255 Alton Pkwy., Suite #200  
 Irvine, CA 92606  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #2261500  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8040660

Sampled: Apr 13, 1998  
 Received: Apr 13, 1998  
 Extracted: Apr 14, 1998  
 Analyzed: Apr 14, 1998  
 Reported: Apr 14, 1998

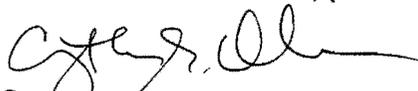
## MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040660	SP-17	2.0	1.1	30
C8040661	SP-18	3.4	1.1	30
C8040662	SP-19	3.8	1.1	30
C8040663	SP-20	30	1.1	30
C8040664	SP-21	5.5	1.1	30
C8040665	SP-22	5.1	0.35	10
C8040666	SP-23	7.8	1.1	30
C8040667	SP-24	13	0.53	15
C8040668	SP-25	3.2	0.35	10
C8040669	SP-26	3.0	0.70	20

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/8020 First Sample #: C8040670	Sampled: Apr 13, 1998 Received: Apr 13, 1998 Extracted: Apr 14, 1998 Analyzed: Apr 14, 1998 Reported: Apr 14, 1998
---	---	--

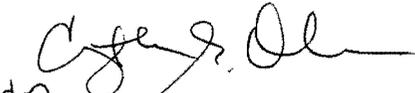
### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040670	SP-27	1.9	1.1	30
C8040671	SP-28	1.3	0.14	4.0
C8040672	SP-29	3.3	1.1	30
C8040673	SP-30	5.7	1.1	30
Method Blank		N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 04/14/98

Sample #: LBS

Batch #: HD14G11S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0	1.0	1.1	1.1	113	113	0.23	113	≤30	73 - 130
Benzene	0	0.10	0.11	0.10	109	101	6.8	105	≤10	78 - 126
Toluene	0	0.10	0.10	0.096	102	96	6.6	99	≤11	82 - 124
Ethylbenzene	0	0.10	0.10	0.095	102	95	6.3	98	≤10	83 - 121
Xylenes	0	0.30	0.33	0.31	111	104	6.4	108	≤11	85 - 130

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts

ARCO Facility no. **9553** City (Facility) **ROMANA** Project manager (Consultant) **HOLLY QUASEM**  
 ARCO engineer **KATERI LUCA** Telephone no. (ARCO) **714-543-3147** Telephone no. (Consultant) **714-450-0622** Fax no. (Consultant) **714-450-0524**  
 Consultant name **EMCON** Address (Consultant) **15255 Altam Pkwy Ste 200 Irvine**

Laboratory name **DEL MAR**  
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 801/EPA 806	BTEX/TPH EPA 802/803/804/805	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SMS03E	EPA 601/6010	EPA 624/6240	EPA 625/6270	TCMP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 6010/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	MRE (500)
			Soil	Water	Other	Ice	Acid															
SP-17		1	✓			✓	4-13-98	14:36	X	X												X
SP-18		1	✓			✓																
SP-19		1	✓			✓																
SP-20		1	✓			✓																
SP-21		1	✓			✓																
SP-22		1	✓			✓																
SP-23		1	✓			✓																
SP-24		1	✓			✓																
SP-25		1	✓			✓																
SP-26		1	✓			✓																
SP-27		1	✓			✓																
SP-28		1	✓			✓																
SP-29		1	✓			✓																
SP-30		1	✓			✓				X	X											X

Method of shipment **COUWER**

Special detection Limit/reporting

Special QA/QC

Remarks  
**TANK REPLACEMENT**  
  
**24 Hr TURNAROUND**

Lab number

Turnaround time  
 Priority Rush 1 Business Day   
 Rush 2 Business Days   
 Expedited 5 Business Days   
 Standard 10 Business Days

Condition of sample: **intact** Temperature received: **Onia**  
 Relinquished by sampler **[Signature]** Date **4-13-98** Time **15:30** Received by **[Signature]** Date **4-13-98** Time **16:30**  
 Relinquished by **[Signature]** Date **4-13-98** Time **1640** Received by **[Signature]**  
 Relinquished by **[Signature]** Date **4-13-98** Time **1640** Received by laboratory **[Signature]** Date **4-13-98** Time **1640**



Emcon 15255 Alton Parkway, Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040757	Sampled: Apr 14, 1998 Received: Apr 14, 1998 Extracted: Apr 15, 1998 Analyzed: Apr 15, 1998 Reported: Apr 15, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons			Ethyl Benzene	Total Xylenes
		mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)
<b>C8040757</b>	<b>SP-31</b>	<b>250</b>	<b>0.065</b>	<b>3.1</b>	<b>3.6</b>	<b>25</b>
Dilution: 5	Reporting Limit:	5.0	0.025	0.025	0.025	0.075
<b>C8040758</b>	<b>SP-32</b>	<b>33</b>	<b>0.0070</b>	<b>0.074</b>	<b>0.10</b>	<b>1.2</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040759</b>	<b>SP-33</b>	<b>15</b>	<b>N.D.</b>	<b>0.30</b>	<b>0.048</b>	<b>0.42</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040760</b>	<b>SP-34</b>	<b>13</b>	<b>N.D.</b>	<b>0.040</b>	<b>0.050</b>	<b>0.51</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040761</b>	<b>SP-35</b>	<b>7.9</b>	<b>N.D.</b>	<b>0.019</b>	<b>0.028</b>	<b>0.24</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8040762</b>	<b>SP-36</b>	<b>47</b>	<b>0.015</b>	<b>0.17</b>	<b>0.30</b>	<b>2.7</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



# Del Mar Analytical

2852 Alton Ave. Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1222  
 1014 E. Cooley Dr., Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1044  
 16525 Sherman Way, Suite C-111, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844  
 2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3466

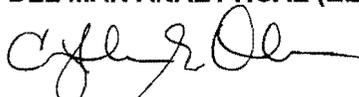
Emcon 15255 Alton Parkway, Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8040763	Sampled: Apr 14, 1998 Received: Apr 14, 1998 Extracted: Apr 15, 1998 Analyzed: Apr 15, 1998 Reported: Apr 15, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8040763</b>	<b>SP-37</b>	<b>320</b>	<b>0.16</b>	<b>4.1</b>	<b>4.3</b>	<b>33</b>
Dilution: 10	Reporting Limit:	10	0.050	0.050	0.050	0.15
<b>C8040764</b>	<b>SP-38</b>	<b>940</b>	<b>0.81</b>	<b>18</b>	<b>15</b>	<b>110</b>
Dilution: 30	Reporting Limit:	30	0.15	0.15	0.15	0.45
<b>C8040765</b>	<b>SP-39</b>	<b>160</b>	<b>0.050</b>	<b>1.2</b>	<b>1.6</b>	<b>13</b>
Dilution: 10	Reporting Limit:	10	0.050	0.050	0.050	0.15
<b>C8040766</b>	<b>SP-40</b>	<b>54</b>	<b>0.020</b>	<b>0.38</b>	<b>0.39</b>	<b>3.5</b>
Dilution: 5	Reporting Limit:	5.0	0.025	0.025	0.025	0.075
<b>Method Blank</b>		<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



Emcon  
 15255 Alton Parkway, Suite #200  
 Irvine, CA 92606  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #2261500  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8040757

Sampled: Apr 14, 1998  
 Received: Apr 14, 1998  
 Extracted: Apr 15, 1998  
 Analyzed: Apr 15, 1998  
 Reported: Apr 15, 1998

### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8040757	SP-31	3.6	0.18	5.0
C8040758	SP-32	1.6	0.035	1.0
C8040759	SP-33	0.97	0.035	1.0
C8040760	SP-34	1.1	0.035	1.0
C8040761	SP-35	0.56	0.035	1.0
C8040762	SP-36	1.3	0.035	1.0
C8040763	SP-37	4.9	0.35	10
C8040764	SP-38	7.3	1.1	30
C8040765	SP-39	3.9	0.35	10
C8040766	SP-40	1.6	0.035	1.0
Method Blank		N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Bofcuk  
 Laboratory Manager



**MS/MSD DATA REPORT**

**EPA Method 8015/8020**

Matrix: Soil

Date: 04/15/98

Sample #: LBS

Batch #: HD15G51S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0	1.0	1.1	1.2	106	115	8.4	111	≤30	85 - 124
Benzene	0	0.10	0.12	0.099	115	99	15	107	≤25	77 - 115
Toluene	0	0.10	0.11	0.10	105	100	5.0	103	≤25	82 - 115
Ethylbenzene	0	0.10	0.099	0.095	99	95	4.0	97	≤25	81 - 115
Xylenes	0	0.30	0.34	0.31	112	105	6.7	109	≤25	85 - 116

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts

# ARCO Products Company

Division of AtlanticRichfieldCompany

Task Order No. 22615.00

## Chain of Custody

ARCO Facility no. 9553	City (Facility) POMONA	Project manager (Consultant) HOLLY OLASEM	Laboratory name DEL MAR
ARCO engineer KATERS LOKA	Telephone no. (ARCO) 714-543-3147	Telephone no. (Consultant) 714-450-0622	Contract number
Consultant name EMCON	Address (Consultant) 15255 ALTOG PEWAY STE 800 LEWIS CA		

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 802	BTEX/TPH EPA 1602/8020/8015	TPH Modified 8015 Gas <input checked="" type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/> Semi <input type="checkbox"/>	CAM Metals EPA 6010/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	MTBE (802)	Method of shipment COURIER	
			Soil	Water	Other	Ice	Acid																
SP-31		1	✓			✓	4-14-98	5:00	X		X											X	Special detection Limit/reporting
SP-32		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-33		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-34		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-35		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-36		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-37		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-38		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-39		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	
SP-40		1	↓			↓	↓	↓	↓	↓	↓	↓										↓	

Special detection Limit/reporting

Special QA/QC

Remarks  
TANK REPLACEMENT

24-Hour TURNAROUND

Lab number

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample: intact	Temperature received: On ice
Relinquished by sampler S J	Date 4-14-98 Time 15:00 Received by James Butler 4-14-98 15:00
Relinquished by James Butler	Date 4-14-98 Time 16:00 Received by
Relinquished by	Date 4-14-98 Time 16:00 Received by laboratory Carroll Date 4-14-98 Time 16:00



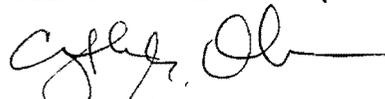
Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8041097	Sampled: Apr 21, 1998 Received: Apr 21, 1998 Extracted: Apr 22, 1998 Analyzed: Apr 22, 1998 Reported: Apr 22, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8041097</b>	<b>DI-1</b>	<b>40</b>	<b>0.60</b>	<b>3.1</b>	<b>0.50</b>	<b>8.7</b>
Dilution: 5	Reporting Limit:	5.0	0.025	0.025	0.025	0.075
<b>C8041098</b>	<b>DI-2</b>	<b>N.D.</b>	<b>N.D.</b>	<b>0.0080</b>	<b>N.D.</b>	<b>0.034</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041099</b>	<b>DI-3</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>0.055</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041100</b>	<b>DI-4</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041101</b>	<b>DI-5</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041102</b>	<b>DI-6</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



<b>Emcon</b> 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	<b>Client Project ID: ARCO Work Auth. #2261500</b> 9553, Pomona <b>Analysis Method: EPA 5030/CA DHS Mod. 8015/8020</b> <b>First Sample #: C8041103</b>	<b>Sampled: Apr 21, 1998</b> <b>Received: Apr 21, 1998</b> <b>Extracted: Apr 22, 1998</b> <b>Analyzed: Apr 22, 1998</b> <b>Reported: Apr 22, 1998</b>
--	---	---

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8041103</b>	<b>DI-7</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041104</b>	<b>DI-8</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041105</b>	<b>DI-9</b>	<b>49</b>	<b>0.60</b>	<b>6.2</b>	<b>0.11</b>	<b>5.1</b>
Dilution: 5	Reporting Limit:	5.0	0.025	0.025	0.025	0.075
<b>C8041106</b>	<b>DI-10</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041107</b>	<b>DI-11</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041108</b>	<b>DI-12</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL (ELAP #1169)**

  
 for Alma Borcuk  
 Laboratory Manager

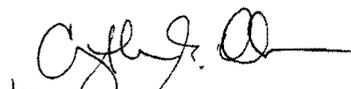
Emcon 15255 Alton Pkwy., Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8041109	Sampled: Apr 21, 1998 Received: Apr 21, 1998 Extracted: Apr 22, 1998 Analyzed: Apr 22, 1998 Reported: Apr 22, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8041109</b>	<b>PL-1</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041110</b>	<b>PL-2</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041111</b>	<b>PL-3</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041112</b>	<b>PL-4</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041113</b>	<b>PL-5</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>Method Blank</b>		<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)



Alma Borcuk  
Laboratory Manager



# Del Mar Analytical

2852 Alton Ave. Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1228  
 1014 E. Cooper Dr. Suite A, Costa Mesa, CA 92626 (909) 370-4667 FAX (909) 370-1046  
 16525 Sherman Way, Suite C-1, San Juan Capistrano, CA 92675 (818) 779-1844 FAX (818) 779-1844  
 2455 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3400

Emcon  
 15255 Alton Pkwy., Suite #200  
 Irvine, CA 92606  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #2261500  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8041097

Sampled: Apr 21, 1998  
 Received: Apr 21, 1998  
 Extracted: Apr 22, 1998  
 Analyzed: Apr 22, 1998  
 Reported: Apr 22, 1998

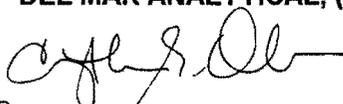
## MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8041097	DI-1	41	0.18	5.0
C8041098	DI-2	2.0	0.035	1.0
C8041099	DI-3	0.67	0.14	4.0
C8041100	DI-4	0.10	0.035	1.0
C8041101	DI-5	0.32	0.035	1.0
C8041102	DI-6	0.040	0.035	1.0
C8041103	DI-7	N.D.	0.035	1.0
C8041104	DI-8	N.D.	0.035	1.0
C8041105	DI-9	66	0.18	5.0
C8041106	DI-10	N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

8041097.EMC <4 of 5>



Emcon  
 15255 Alton Pkwy., Suite #200  
 Irvine, CA 92606  
 Attention: Holly Quasem

Client Project ID: ARCO Work Auth. #2261500  
 9553, Pomona  
 Analysis Method: EPA 5030/8020  
 First Sample #: C8041107

Sampled: Apr 21, 1998  
 Received: Apr 21, 1998  
 Extracted: Apr 22, 1998  
 Analyzed: Apr 22, 1998  
 Reported: Apr 22, 1998

### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8041107	DI-11	0.060	0.035	1.0
C8041108	DI-12	N.D.	0.035	1.0
C8041109	PL-1	0.21	0.035	1.0
C8041110	PL-2	N.D.	0.035	1.0
C8041111	PL-3	N.D.	0.035	1.0
C8041112	PL-4	N.D.	0.035	1.0
C8041113	PL-5	N.D.	0.035	1.0
Method Blank		N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**

  
 Alma Borcuk  
 Laboratory Manager

## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

**Date:** 04/22/98

**Sample #:** C8041112

**Batch #:** HD22G11S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0.048	1.0	1.1	1.1	109	107	1.5	108	≤30	73 - 130
Benzene	0.00012	0.10	0.10	0.10	100	100	0.29	100	≤10	78 - 126
Toluene	0.00045	0.10	0.097	0.097	97	96	0.043	97	≤11	82 - 124
Ethylbenzene	0.00023	0.10	0.10	0.10	99	100	0.62	100	≤10	83 - 121
Xylenes	0.0012	0.30	0.33	0.33	109	110	1.1	110	≤11	85 - 130

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts

ARCO Facility no. **9553** City (Facility) **Pomona** Project manager (Consultant) **Holly Quisenberry**  
 ARCO engineer **KATERE LUCA** Telephone no. (ARCO) **714-543-3147** Telephone no. (Consultant) **714-450-0622** Fax no. (Consultant) **714-450-0524**  
 Consultant name **EMCON** Address (Consultant) **15255 Alta Pkwy Ste 200 Buena Park**

Laboratory name  
**DEL LAB**  
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 8020/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM4503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CMM Metals EPA 601/7000 TTLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>	<b>41785 (6020)</b>	
			Soil	Water	Other	Ice	Acid																
DI-1		1	✓			✓		4-21-98	12:55	X	X												X
DI-2		1	✓																				
DI-3		1	✓																				
DI-4		1	✓																				
DI-5		1	✓																				
DI-6		1	✓																				
DI-7		1	✓																				
DI-8		1	✓																				
DI-9		1	✓																				
DI-10		1	✓																				
DI-11		1	✓																				
DI-12		1	✓																				
PL-1		1	✓																				
PL-2		1	✓																				
PL-3		1	✓																				
PL-4		1	✓																				
PL-5		1	✓																				

Method of shipment  
**Courier**

Special detection Limit/reporting

Special QA/QC

Remarks  
**TANK REPLACEMENT**  
**24-Hr Turnaround**

Lab number

Turnaround time

Condition of sample: **Contact** Temperature received: **On ice**

Relinquished by sampler **[Signature]** Date **4-21-98** Time **13:15** Received by **James Betler** Date **4-21-98** Time **13:15**

Relinquished by **[Signature]** Date **4-21-98** Time **14:10** Received by **[Signature]**

Relinquished by **[Signature]** Date **4-21-98** Time **14:10** Received by laboratory **[Signature]** Date **4-21-98** Time **14:10**

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days



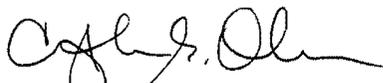
Emcon 15255 Alton Parkway, Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8041227	Sampled: Apr 24, 1998 Received: Apr 24, 1998 Extracted: Apr 27, 1998 Analyzed: Apr 27, 1998 Reported: Apr 27, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8041227</b>	<b>SP-41</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041228</b>	<b>SP-42</b>	<b>150</b>	<b>0.020</b>	<b>N.D.</b>	<b>0.39</b>	<b>13</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041229</b>	<b>SP-43</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041230</b>	<b>SP-44</b>	<b>1.3</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041231</b>	<b>SP-45</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041232</b>	<b>SP-46</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

### DEL MAR ANALYTICAL (ELAP #1169)

  
 Alma Borcuk  
 Laboratory Manager



Emcon 15255 Alton Parkway, Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/CA DHS Mod. 8015/8020 First Sample #: C8041233	Sampled: Apr 24, 1998 Received: Apr 24, 1998 Extracted: Apr 27, 1998 Analyzed: Apr 27, 1998 Reported: Apr 27, 1998
---	--	--

## VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015/8020)

Laboratory Number	Sample Description Soil	Volatile Fuel Hydrocarbons mg/Kg (ppm)	Benzene mg/Kg (ppm)	Toluene mg/Kg (ppm)	Ethyl Benzene mg/Kg (ppm)	Total Xylenes mg/Kg (ppm)
<b>C8041233</b>	<b>SP-47</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>C8041234</b>	<b>SP-48</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015
<b>Method Blank</b>		<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>
Dilution: 1	Reporting Limit:	1.0	0.0050	0.0050	0.0050	0.015

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL (ELAP #1169)**

  
 Alma Boreuk  
 Laboratory Manager

Emcon 15255 Alton Parkway, Suite #200 Irvine, CA 92606 Attention: Holly Quasem	Client Project ID: ARCO Work Auth. #2261500 9553, Pomona Analysis Method: EPA 5030/8020 First Sample #: C8041227	Sampled: Apr 24, 1998 Received: Apr 24, 1998 Extracted: Apr 27, 1998 Analyzed: Apr 27, 1998 Reported: Apr 27, 1998
---	---	--

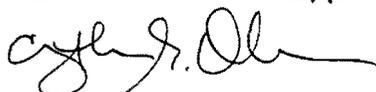
### MTBE (EPA 8020 MODIFIED)

Laboratory Number	Sample Description Soil	Sample Result mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)	Dilution Factor
C8041227	SP-41	0.23	0.035	1.0
C8041228	SP-42	5.5	0.11	3.0
C8041229	SP-43	N.D.	0.035	1.0
C8041230	SP-44	N.D.	0.035	1.0
C8041231	SP-45	N.D.	0.035	1.0
C8041232	SP-46	N.D.	0.035	1.0
C8041233	SP-47	0.13	0.035	1.0
C8041234	SP-48	N.D.	0.035	1.0
Method Blank		N.D.	0.035	1.0

MTBE = Methyl tert-Butyl Ether

Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

**DEL MAR ANALYTICAL, (ELAP #1169)**



Alma Borcuk  
Laboratory Manager



## MS/MSD DATA REPORT

### EPA Method 8015/8020

Matrix: Soil

Date: 04/27/98  
 Sample #: C8041231  
 Batch #: HD27G51S

<u>Analyte</u>	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Mean PR</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	%	<u>RPD</u>	<u>Mean PR</u>
TPH	0.060	1.0	0.80	1.0	75	95	23	85	≤30	85 - 124
Benzene	0	0.10	0.086	0.098	86	98	13	92	≤25	77 - 115
Toluene	0.00033	0.10	0.085	0.096	85	96	12	91	≤25	82 - 115
Ethylbenzene	0.00037	0.10	0.086	0.091	86	91	5.2	88	≤25	81 - 115
Xylenes	0.0013	0.30	0.26	0.30	87	100	14	93	≤25	85 - 116

### Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS;  $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD;  $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference;  $((MS-MSD)/(MS+MSD)/2) \times 100$
- Mean PR..... Mean Percent Recovery
- Acceptance Limits..... Determined by in-house Control Charts

ARCO Facility no. **9553** City (Facility) **ROMONA** Project manager (Consultant) **Holly Quisenberry**  
 ARCO engineer **KAREE LUKA** Telephone no. (ARCO) **714-543-3147** Telephone no. (Consultant) **714-450-0622** Fax no. (Consultant) **714-450-0524**  
 Consultant name **EMCON** Address (Consultant)

Laboratory name **DEL MAR**  
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 1602/8020/8015	TPH Woolmer 8015 Gas <input checked="" type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/> Semi <input type="checkbox"/>	CAM Metals EPA 601/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	MT02 (802)	
			Soil	Water	Other	Ice	Acid															
SP-41		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		4-24-98	14:45	X	X											X
SP-42		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-43		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-44		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-45		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-46		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-47		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓
SP-48		1	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		↓	↓	↓	↓											↓

Method of shipment **COVER**

Special detection Limit/reporting

Special QA/QC

Remarks  
**TANK REPLACEMENT**  
**24 Hour Turnaround**

Lab number

Turnaround time  
 Priority Rush 1 Business Day   
 Rush 2 Business Days   
 Expedited 5 Business Days   
 Standard 10 Business Days

Condition of sample: **intact** Temperature received: **On ice**  
 Relinquished by sampler **[Signature]** Date **4-24-98** Time **14:45** Received by **[Signature]** Date **4-24-98** Time **14:45**  
 Relinquished by **[Signature]** Date **4-24-98** Time **1600** Received by **[Signature]** Date **4-24-98** Time **1600**