



VNDM DUBS  
[Redacted]

817

3164 Gold Camp Drive  
Suite 200  
Rancho Cordova, CA 95670-6021  
U.S.A.  
916/638-2085  
FAX: 916/638-8385

August 25, 2000

Mr. Paul Supple  
ARCO Products Company  
P.O. Box 6459  
Moraga, CA 94570

ASSessment  
ack 3/12/00  
00:15:29 PM 4/19  
[Handwritten initials]

Subject: *Hand Auger Assessment Boring Results Report*  
ARCO Service Station No. 5387  
20200 Hesperian Boulevard  
Hayward, California  
Delta Project No. D000-318

Dear Mr. Supple:

Delta Environmental Consultants, Inc. (Delta) has been authorized by ARCO Products Company (ARCO) to conduct additional environmental investigative work at ARCO Service Station No. 5387, located at 20200 Hesperian Boulevard, Hayward, Alameda County, California. The investigation is being conducted to further assess the distribution of petroleum hydrocarbons in soil beneath the site. The location of the site is shown in Figure 1. A site map is shown in Figure 2.

MISSING  
also missing

Additional work was proposed in Work Plan to Evaluate Hydrocarbon Impacted Soil at ARCO Station 5387 dated December 15, 1999 prepared by the IT Group, and a revision to the work plan dated June 12, 2000. Alameda County Health Care Services (ACHCS) issued a letter dated June 12, 2000 agreeing to the revision to the work plan. A copy of the June 12, 2000 letter from ACHCS is included in Enclosure A.

**Project Background**

In December 1998, an ACHCS representative observed a leak from the impact valve of dispenser No. 8 while overseeing the re-booting of the dispenser piping. Consequently, on May 27, 1999, a Thrifty Oil geologist, under the direction of Ms. Juliet Shin and Mr. Robert Weston of ACHCS, collected two soil samples from beneath dispenser No. 8 (samples identified as 8E and 8N). Additionally, one soil sample was collected from beneath dispensers No. 6 identified as sample 6E and beneath dispenser No. 7 identified as 7E to assess whether or not prior fuel leaks had occurred at the other dispenser locations. Petroleum hydrocarbon constituents were detected only in the soil samples identified as 8N and 8E. As a result, the ACHCS requested further assessment under dispenser No. 8.

**Work Performed**

On June 13, 2000, a Delta geologist was on site to advance one hand auger soil boring (HA-1) to a total depth of approximately 13 feet below surface grade (bsg) at an angle approximately 60° off horizontal. Soil samples were collected at 3-feet, 6-feet, 9-feet, and 12.5-feet bsg for chemical analysis. Soil samples collected were submitted to Columbia Analytical Services, Inc. in Santa Clara, California for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B, and total petroleum hydrocarbons (TPH) as gasoline by EPA Method 5030/Ca-LUFT. Detected concentrations of MTBE were confirmed by EPA Method 8260 by the laboratory. The location of the hand auger boring is illustrated in Figure 2.

Laboratory analysis reported detectable concentrations of petroleum hydrocarbon constituents in each sample analyzed. Benzene was not detected at or above the laboratory reporting limits in the soil samples. Concentrations of TPH as gasoline were reported in soil samples collected at depths of 3-feet, 6-feet, 9-feet, and 12.5-feet ranging from 2 milligrams per kilogram (mg/kg) to 820 mg/kg. Concentrations of MTBE were reported in samples collected at 3-feet, 6-feet, 9-feet, and 12.5-feet ranging from 0.15 mg/kg to 0.97 mg/kg. Soil sample analytical results are summarized in Table 1. A copy of the laboratory analytical report with chain of custody documentation is included in Enclosure B.

At the completion of the boring, it was backfilled with neat cement grout from the base of the boring to within six inches of surface. The surface was then capped with concrete to match the existing grade.

#### Soil Stockpile

Soil and debris generated from advancement of the hand auger boring was placed inside a 55-gallon DOT drum. A field composite soil sample was collected from the drum for chemical analyses to evaluate disposal options. The soil was subsequently accepted for disposal by Republic-Vasco landfill in Livermore, California and, on July 6, 2000, Dillard Trucking, Inc. removed the drum from the site and transported it to the Republic-Vasco landfill. A copy of the soil removal completion letter with waste manifest is included in Enclosure C.

#### Conclusions/Recommendations

Based on the analytical results, it appears that the soil beneath dispenser No. 8 was not significantly impacted. Benzene concentrations were not detected at or above the laboratory reporting limits and MTBE was reported at less than 1 milligram per kilogram. The data indicates that no further action is required at this site.

#### Remarks/Signatures


The interpretations contained in this report represent our professional opinions and are based, in part, on information supplied by the client. 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 have any questions concerning this project, please contact Steven Meeks at (916) 536-2613.

Sincerely,

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**

  
J. William Speth  
Project Geologist

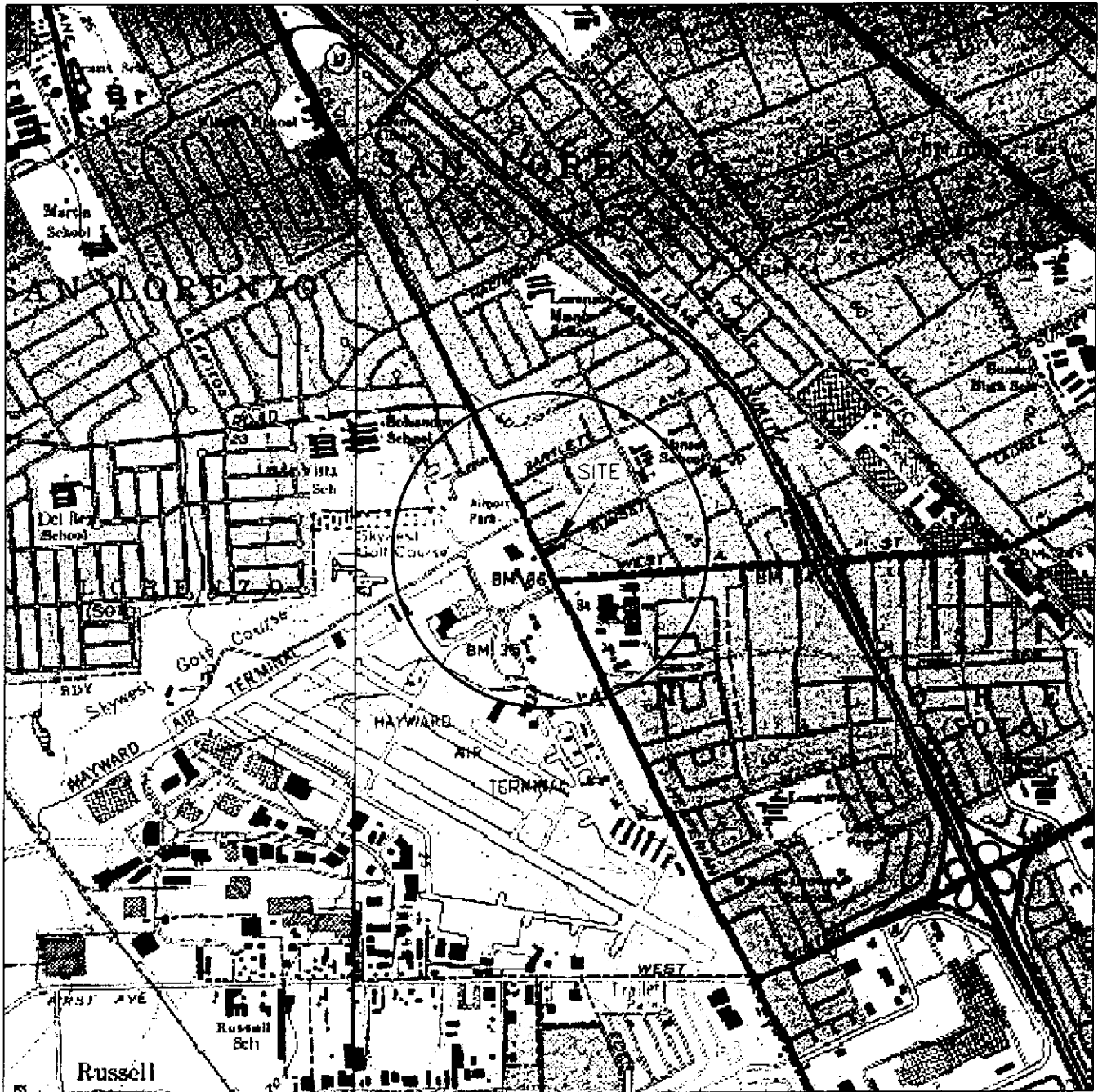
  
Steven W. Meeks, P.E.  
Project Manager  
California Registered Civil Engineer No. C057461

JWS (LRP001.318)

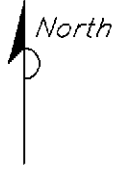
Enclosures



cc: Mr. Amir Gholami - Alameda County Health Care Services, Environmental Protection



R.2 W.



GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 SAN LEANDRO & HAYWARD, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1980



QUADRANGLE LOCATION

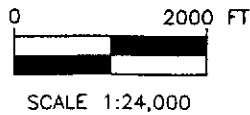
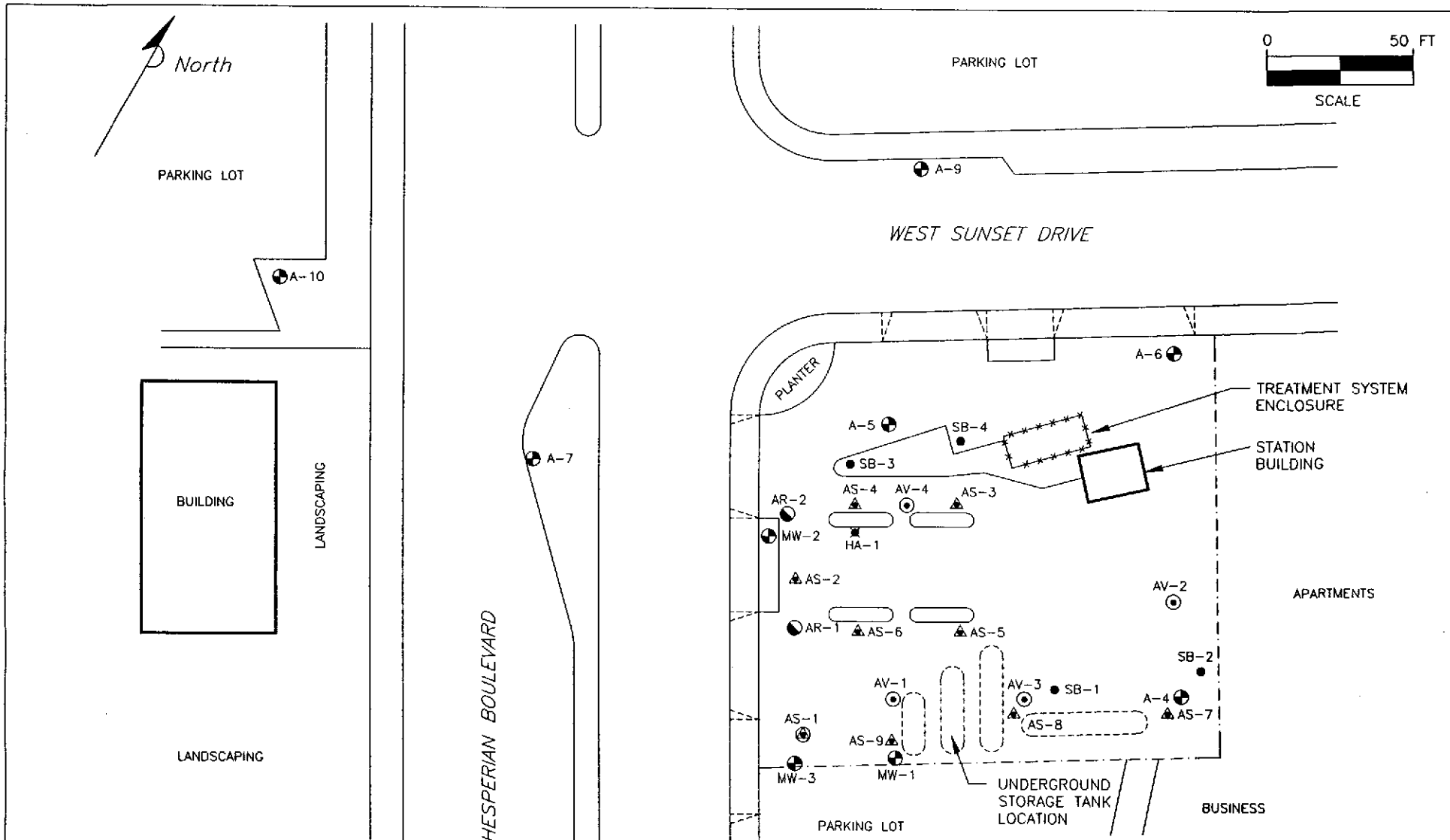


FIGURE 1  
 SITE TOPOGRAPHIC MAP  
 ARCO SERVICE STATION NO. 05387  
 20200 HESPERIAN BOULEVARD  
 HAYWARD, CA.

PROJECT NO. D000-318	DRAWN BY M.L. 8/8/00
FILE NO. D000318A	PREPARED BY JWS
REVISION NO. 1	REVIEWED BY





LEGEND:

- A-4 MONITORING WELL LOCATION
- AR-1 GROUNDWATER EXTRACTION WELL LOCATION
- ⊙ AV-1 SOIL VAPOR EXTRACTION WELL LOCATION
- ▲ AS-2 AIR SPARGE WELL LOCATION
- ⊙ AS-1 DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- SB-1 SOIL BORING LOCATION
- HA-1 HAND AUGER LOCATION

NOTE: FIGURE ADAPTED FROM IT CORPORATION DRAWING. SITE DIMENSIONS AND FEATURES NOT VERIFIED.

**FIGURE 2**  
**SITE MAP**

ARCO SERVICE STATION NO. 05387  
20200 HESPERIAN BOULEVARD  
HAYWARD, CA.

PROJECT NO. D000-318	DRAWN BY M.L. 8/8/00	
FILE NO. D000318B	PREPARED BY JWS	
REVISION NO. 1	REVIEWED BY	

TABLE 1

## SOIL SAMPLE ANALYTICAL RESULTS

ARCO Station No. 5387  
20200 Hesperian Boulevard  
Hayward, California

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as Gasoline (mg/kg)	MTBE (mg/kg)
6E	05/27/99	2.5	<0.005	<0.005	<0.005	<0.01	<1.0	<0.02
7E	05/27/99	2.5	<0.005	<0.005	<0.005	<0.01	<1.0	<0.02
8N	05/27/99	2.5-3.0	<0.005	<0.005	<0.005	0.038	8.4	8.1/2.2 <sup>a</sup>
8E	05/27/99	2.5-3.0	0.38	9.8	18	210	2,400	13/10 <sup>a</sup>
HA-1-3	06/13/00	3.0	<0.012	0.18	2.1	12	170	0.65
HA-1-6	06/13/00	6.0	<0.025	<0.025	9.4	31	820	0.66
HA-1-9	06/13/00	9.0	<0.012	<0.012	1.1	4.1	190	0.97
HA-1-125	06/13/00	12.5	<0.005	<0.005	0.016	0.069	2.0	0.15

<sup>a</sup> MTBE by EPA Method 8260B

TPH = Total petroleum hydrocarbons

mg/kg = Milligrams per kilogram

MTBE = Methyl-tertiary-butyl ether

**ENCLOSURE A**

Alameda County Health Care Services Letter Dated June 12, 2000

ALAMEDA COUNTY  
HEALTH CARE SERVICES



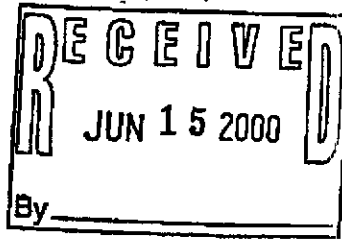
COPY

AGENCY  
DAVID J. KEARS, Agency Director

Stid 817

June 12, 2000

Mr. Paul Supple  
P.O. Box 6459  
Moraga, CA 94570



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

Re: Arco Station at 20200 Hesperian Blvd. Hayward, CA 94541

Dear Mr. Supple:

This office received a request, dated June 12, 2000, for a revision of a workplan to evaluate Hydrocarbon Impacted Soil regarding the above referenced site dated December 15, 1999. In my letter dated February 25<sup>th</sup>, 2000, I concur with the proposal made by Mr. Glen VanderVeen of The IT Group in regard to the above workplan to investigate contamination in areas below dispensers #6, #7, and #8. However, I had a recent discussion with Mr. Steven Meeks of Delta Environmental, Inc., your recent consultant, who requested to investigate under dispenser #8 only. This is due to the fact that this area has been the only area under dispensers with hydrocarbon contaminated soil underneath.

Per our previous communication and the letter dated September 3, 1999, by Juliet Shin, formerly of our office, the concentrations of contaminants in most monitoring wells have generally decreased to acceptable levels. Therefore, the groundwater monitoring at the site was to be discontinued until further notice.

I will be looking forward for the result of this investigation.

If you have any questions, please call me at (510)-567-6876.

Sincerely,

Amir K. Gholami, REHS  
Hazardous Materials Specialist

✓ C: Steven Meeks, Delta Environmental Inc., 3164 Gold Camp Drive, Rancho Cordova, CA  
95670  
files

**ENCLOSURE B**

Soil Sample Laboratory Analytical Report

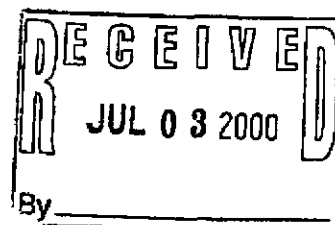




June 29, 2000

Service Request No.: S2001749

Mr. Steve Meeks  
Delta Environmental Consultants  
3164 Gold Camp Dr. Suite 200  
Rancho Cordova, CA 95670



RE: 26107.00 RAT#8/5387 Hayward

Dear Mr. Meeks:

Enclosed are the results of the sample(s) submitted to our laboratory on June 15, 2000. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 10, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

Bernadette Troncales  
Project Chemist

Greg Jordan  
Laboratory Manager

**COLUMBIA ANALYTICAL SERVICES, Inc.**

**Acronyms**

<b>A2LA</b>	American Association for Laboratory Accreditation
<b>ASTM</b>	American Society for Testing and Materials
<b>BOD</b>	Biochemical Oxygen Demand
<b>BTEX</b>	Benzene, Toluene, Ethylbenzene, Xylenes
<b>CAM</b>	California Assessment Metals
<b>CARB</b>	California Air Resources Board
<b>CAS Number</b>	Chemical Abstract Service registry Number
<b>CFC</b>	Chlorofluorocarbon
<b>CFU</b>	Colony-Forming Unit
<b>COD</b>	Chemical Oxygen Demand
<b>DEC</b>	Department of Environmental Conservation
<b>DEQ</b>	Department of Environmental Quality
<b>DHS</b>	Department of Health Services
<b>DLCS</b>	Duplicate Laboratory Control Sample
<b>DMS</b>	Duplicate Matrix Spike
<b>DOE</b>	Department of Ecology
<b>DOH</b>	Department of Health
<b>EPA</b>	U. S. Environmental Protection Agency
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
<b>IC</b>	Ion Chromatography
<b>ICB</b>	Initial Calibration Blank sample
<b>ICP</b>	Inductively Coupled Plasma atomic emission spectrometry
<b>ICV</b>	Initial Calibration Verification sample
<b>J</b>	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
<b>LCS</b>	Laboratory Control Sample
<b>LUFT</b>	Leaking Underground Fuel Tank
<b>M</b>	Modified
<b>MBAS</b>	Methylene Blue Active Substances
<b>MCL</b>	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA.
<b>MDL</b>	Method Detection Limit
<b>MPN</b>	Most Probable Number
<b>MRL</b>	Method Reporting Limit
<b>MS</b>	Matrix Spike
<b>MTBE</b>	Methyl tert-Butyl Ether
<b>NA</b>	Not Applicable
<b>NAN</b>	Not Analyzed
<b>NC</b>	Not Calculated
<b>NCASI</b>	National Council of the paper industry for Air and Stream Improvement
<b>ND</b>	Not Detected at or above the method reporting/detection limit (MRL/MDL)
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>tr</b>	Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
<b>TRPH</b>	Total Recoverable Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TLCL</b>	Total Threshold Limit Concentration

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** ARCO Products Company  
**Project:** 26107.00 RAT#8/5387 Hayward  
**Sample Matrix:** Soil

**Service Request:** S2001749  
**Date Collected:** 6/13/00  
**Date Received:** 6/15/00

BTEX, MTBE and TPH as Gasoline

**Sample Name:** HA-1-3FT  
**Lab Code:** S2001749-001  
**Test Notes:**

**Units:** mg/Kg (ppm)  
**Basis:** Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	1	5	6/15/00	6/19/00	170	
Benzene	EPA 5030	8021B	0.005	2.5	6/15/00	6/25/00	<0.012	C1
Toluene	EPA 5030	8021B	0.005	5	6/15/00	6/19/00	0.18	
Ethylbenzene	EPA 5030	8021B	0.005	5	6/15/00	6/19/00	2.1	
Xylenes, Total	EPA 5030	8021B	0.10	5	6/15/00	6/19/00	12	
Methyl tert-Butyl Ether	EPA 5030	8021B	0.05	2.5	6/15/00	6/25/00	0.65	

C1

The MRL was elevated due to high analyte concentration requiring sample dilution.

Approved By: \_\_\_\_\_

*[Signature]*

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

*06/29/00*

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** ARCO Products Company  
**Project:** 26107.00 RAT#8/5387 Hayward  
**Sample Matrix:** Soil

**Service Request:** S2001749  
**Date Collected:** 6/13/00  
**Date Received:** 6/15/00

BTEX, MTBE and TPH as Gasoline

**Sample Name:** HA-1-6FT  
**Lab Code:** S2001749-002  
**Test Notes:**

**Units:** mg/Kg (ppm)  
**Basis:** Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	1	12.5	6/15/00	6/25/00	820	
Benzene	EPA 5030	8021B	0.005	5	6/15/00	6/19/00	<0.025	C1
Toluene	EPA 5030	8021B	0.005	5	6/15/00	6/19/00	<0.025	C1
Ethylbenzene	EPA 5030	8021B	0.005	12.5	6/15/00	6/25/00	9.4	
Xylenes, Total	EPA 5030	8021B	0.10	12.5	6/15/00	6/25/00	31	
Methyl tert-Butyl Ether	EPA 5030	8021B	0.05	12.5	6/15/00	6/25/00	0.66	

C1

The MRL was elevated due to high analyte concentration requiring sample dilution.

Approved By: \_\_\_\_\_

*Handwritten signature*

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

*06/29/00*

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company  
Project: 26107.00 RAT#8/5387 Hayward  
Sample Matrix: Soil

Service Request: S2001749  
Date Collected: 6/13/00  
Date Received: 6/15/00

BTEX, MTBE and TPH as Gasoline

Sample Name: HA-1-9FT  
Lab Code: S2001749-003  
Test Notes:

Units: mg/Kg (ppm)  
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	1	5	6/15/00	6/19/00	190	
Benzene	EPA 5030	8021B	0.005	2.5	6/15/00	6/25/00	<0.012	C1
Toluene	EPA 5030	8021B	0.005	2.5	6/15/00	6/25/00	<0.012	C1
Ethylbenzene	EPA 5030	8021B	0.005	5	6/15/00	6/19/00	1.1	
Xylenes, Total	EPA 5030	8021B	0.10	5	6/15/00	6/19/00	4.1	
Methyl tert-Butyl Ether	EPA 5030	8021B	0.05	2.5	6/15/00	6/25/00	0.97	

C1

The MRL was elevated due to high analyte concentration requiring sample dilution.

Approved By: \_\_\_\_\_



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

06/29/00

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

Client: ARCO Products Company  
 Project: 26107.00 RAT#8/5387 Hayward  
 Sample Matrix: Soil

Service Request: S2001749  
 Date Collected: 6/13/00  
 Date Received: 6/15/00

BTEX, MTBE and TPH as Gasoline

Sample Name: HA-1-12.5FT  
 Lab Code: S2001749-004  
 Test Notes:

Units: mg/Kg (ppm)  
 Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	1	1	6/15/00	6/25/00	2	
Benzene	EPA 5030	8021B	0.005	1	6/15/00	6/25/00	ND	
Toluene	EPA 5030	8021B	0.005	1	6/15/00	6/25/00	ND	
Ethylbenzene	EPA 5030	8021B	0.005	1	6/15/00	6/25/00	0.016	
Xylenes, Total	EPA 5030	8021B	0.10	1	6/15/00	6/25/00	0.069	
Methyl tert-Butyl Ether	EPA 5030	8021B	0.05	1	6/15/00	6/25/00	0.15	

Approved By: \_\_\_\_\_

*PUT*

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

*06/29/00*

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company  
Project: 26107.00 RAT#8/5387 Hayward  
Sample Matrix: Soil

Service Request: S2001749  
Date Collected: NA  
Date Received: NA

BTEX, MTBE and TPH as Gasoline

Sample Name: Method Blank  
Lab Code: S200615-SB1  
Test Notes:

Units: mg/Kg (ppm)  
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	1	1	6/15/00	6/16/00	ND	
Benzene	EPA 5030	8021B	0.005	1	6/15/00	6/16/00	ND	
Toluene	EPA 5030	8021B	0.005	1	6/15/00	6/16/00	ND	
Ethylbenzene	EPA 5030	8021B	0.005	1	6/15/00	6/16/00	ND	
Xylenes, Total	EPA 5030	8021B	0.10	1	6/15/00	6/16/00	ND	
Methyl tert-Butyl Ether	EPA 5030	8021B	0.05	1	6/15/00	6/16/00	ND	

Approved By: \_\_\_\_\_



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

06/29/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company  
 Project: 26107.00 RAT#8/5387 Hayward  
 Sample Matrix: Soil

Service Request: S2001749  
 Date Collected: NA  
 Date Received: NA  
 Date Extracted: 6/15/00  
 Date Analyzed: 6/16/00

Matrix Spike/Duplicate Matrix Spike Summary  
 BTEX and TPH as Gasoline

Sample Name: BATCH QC  
 Lab Code: S2001719-001MS, S2001719-001DMS  
 Test Notes:

Units: mg/Kg (ppm)  
 Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
				MS	DMS		MS	DMS	MS	DMS			
Benzene	EPA 5030	8021B	0.005	0.5	0.5	ND	0.49	0.50	98	100	57-154	2	
Toluene	EPA 5030	8021B	0.005	0.5	0.5	ND	0.48	0.51	96	102	60-142	6	
Ethylbenzene	EPA 5030	8021B	0.005	0.5	0.5	ND	0.49	0.50	98	100	46-150	2	
Gasoline	EPA 5030	CA/LUFT	1	10	10	ND	9.8	9.9	98	99	67-121	1	

Approved By: \_\_\_\_\_

*PT*

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

*06/29/00*



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company  
 Project: 26107.00 RAT#8/5387.Hayward  
 LCS Matrix: Soil


Service Request: S2001749  
 Date Collected: NA  
 Date Received: NA  
 Date Extracted: 6/15/00  
 Date Analyzed: 6/16/00

Laboratory Control Sample Summary  
 BTEX and TPH as Gasoline

Sample Name: Lab Control Sample  
 Lab Code: S200615-LCS  
 Test Notes:

Units: mg/Kg (ppm)  
 Basis: Wet

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS		Result Notes
						Percent Recovery	Acceptance Limits	
Benzene	EPA 5030	8021B	0.5	0.48	96	96	57-154	
Toluene	EPA 5030	8021B	0.5	0.48	96	96	60-142	
Ethylbenzene	EPA 5030	8021B	0.5	0.47	94	94	46-150	
Gasoline	EPA 5030	CA/LUFT	10	9.8	98	98	67-121	

Approved By:  Date: 06/29/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company  
Project: 26107.00.RAT#8/5387 Hayward  
Sample Matrix: Soil

Service Request: S2001749  
Date Collected: NA  
Date Received: NA  
Date Extracted: NA  
Date Analyzed: NA

Surrogate Recovery Summary  
BTEX and TPH as Gasoline

Prep Method: EPA 5030  
Analysis Method: 8021B CA/LUFT

Units: PERCENT  
Basis: NA

Sample Name	Lab Code	Test Notes	Percent Recovery	
			a,a,a-Trifluorotoluene	a,a,a-Trifluorotoluene
HA-1-3FT	S2001749-001		109	116
HA-1-6FT	S2001749-002		109	113
HA-1-9FT	S2001749-003		108	114
HA-1-12.5FT	S2001749-004		107	106
Method Blank	S200615-SB1		108	111
Lab Control Sample	S200615-LCS		107	118
BATCH QC	S2001719-001MS		107	120
BATCH QC	S2001719-001DMS		108	122

CAS Acceptance Limits: 70-130% 70-130%

Approved By: \_\_\_\_\_



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

06/29/00

ARCO Facility no. **5387** City (Facility) **Hayward** Project manager (Consultant) **Steve Meeks**  
 ARCO engineer **Paul Supple** Telephone no. (ARCO) **(925) 299-8891** Telephone no. (Consultant) **(916) 536-2613** Fax no. (Consultant) **(916) 638-8385**  
 Consultant name **Delta Env. Consultants, Inc.** Address (Consultant) **3169 Gold Camp Drive, Suite 200 Rancho Cordova, Ca**

Laboratory name **Colombia**  
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 802/EPA 8020	BTEX/TPH 811/86 EPA 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/MSMD0E	EPA 601/6010	EPA 624/6240	EPA 625/6270	TCMP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/> Sem <input type="checkbox"/>	CMI Metals EPA 811/87000 ITLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Cu/CHS <input type="checkbox"/> Lead EPA 7430/7421 <input type="checkbox"/>	
			Soil	Water	Other	Ice	Acid														
A-1-3'	①	1	X			X		6/13/00	0835		X										
A-1-6'	②	1	X			X		7	0855		X										
A-1-9'	③	1	X			X		7	0920		X										
A-1-12.5'	④	1	X			X		6/13/00	1000		X										
			X			X															

Method of shipment **Laboratory Courier UPS**

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number **R2**  
Turnaround time **6/29/00**

Condition of sample:  
 Relinquished by **Paul Supple**  
 Relinquished by  
 Relinquished by

Temperature received:  
 Received by **P. B. W. S. C. A. S.** **6/15/00 1000**  
 Received by  
 Received by laboratory

Priority Rush 1 Business Day   
 Rush 2 Business Days   
 Expedited 5 Business Days   
 Standard 10 Business Days

Dillard Trucking, Inc. dba

# Dillard Environmental Services

P.O. Box 579 - Byron, CA 94514

Phone (925) 634-8850 -- Fax (925) 634-0569

EPA #CAD981692809 - D.T.S.C. #1715 - CA LIC #624665-A HAZ

July 31, 2000

Mr. Steve Meeks  
Delta Environmental Consultants, Inc.  
3164 Gold Camp Drive, Ste. 200  
Rancho Cordova, CA 95670

RE: ARCO #05387  
20200 Hesperian Blvd.  
Hayward, CA

Dear Mr. Meeks:

Please be advised that the petroleum hydrocarbon contaminated soils from the referenced site has been removed. The 1 drum of material was transported for disposal to Republic-Vasco Landfill in Livermore, CA on July 7, 2000.

Should you have any questions, please do not hesitate to call.

Sincerely,

Dillard Trucking, Inc. dba,  
DILLARD ENVIRONMENTAL SERVICES

  
Lynette Smith  
Customer Service Representative

/Enclosure



Republic Services  
Vasco Road Landfill

**WASTE APPROVAL FORM/NON-HAZARDOUS WASTE MANIFEST**

**WASTE STREAM INFORMATION**

Date	Friday, June 30, 2000		
Generator	Arco #05387		
Generator Location	20200 Hesperian Blvd	Hayward	CA
SWIC Number	02619		
Bill To	Dillard-Arco		
Approval Date	06/30/2000		
Expiration Date	06/30/2001		
Waste Description	Soil		
Management	Direct Burial		

The above is a recommendation of the Vasco Road Landfill. It must be understood that management of the waste for disposal must be in compliance with the facility's permit and applicable federal, state and local regulations. The approval is based upon a review of the information provided by the generator and is contingent upon the receipt at the disposal facility of a waste material essentially equivalent in chemical composition and physical properties to that as defined above.

AT THE REQUEST OF ARCO PRODUCTS CO.

A MINIMUM OF ONE SIGNED AND COMPLETED COPY OF THIS FORM MUST ACCOMPANY EACH LOAD. ONE COPY WILL BE RETAINED BY THE VASCO ROAD LANDFILL.

*[Signature]*  
Generator Signature

7/6/00  
Date

**TRANSPORTER INFORMATION**

DTI Job # 1007/188  
PO # 09-30471

Transporter to complete this section

Transporter Name	DILLARD ENVIRONMENTAL SERVICES
Transporter Address	P.O. Box 579
Transporter City, State, Zip	BYRON, CA 94514
Transporter Phone Number	(925) 634-6850
Driver Name	FRANK STANICH
Trailer Number	TK60
Vehicle License Number/State	4P09499

*[Signature]*  
Driver Signature

7-8-00  
Date

**DESTINATION INFORMATION**

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Signature of Vasco Road Landfill employee

7-7-00  
Date

4001 North Vasco Road, Livermore - Phone: 925-447-0491 - Fax: 925-447-3086 or 925-447-0499

Dillard



**REPUBLIC SERVICES VASCO ROAD, LLC**  
 4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

No 0034369

TICKET: 43975  
 CUSTOMER: DILL ARC / DILLARD TRUCKING / ARC  
 TRUCK: 1 P.O.:  
 ACCT#: 5006861  
 PROFILE #: 02619

DATE: 07/07/2008  
 TIME: 13:54 - 13:54

GENERATOR: AR 05387 / ARCO 05387  
 ORIGIN: 0005 / HAYWARD  
 LICENSE:  
 COMMENT:

GROSS: 0 LBS  
 TARE: 0 LBS  
 NET: 0 LBS

WASTE	QUANTITY	UNIT	RATE	AMOUNT
CONTAMINATED / CONTAMINATED BOIL DRUMS	1.00	U	50.00	\$ 50.00

I certify that I have not disposed  
 of any liquid or hazardous waste.

Total: \$ 50.00

Weight: \_\_\_\_\_

DRIVER

RECYCLING

All children must remain in vehicles.  
 Absolutely no salvaging allowed.

WARNING: Transporting any unauthorized  
 hazardous waste to this facility for disposal is  
 prohibited by law. Persons violating this prohibition  
 are subject to civil and criminal prosecution.