

Alameda County

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

September 25, 2002

Environmental Health

Mr. Barney Chan Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

ROSS

Subject: Monitoring Well Installation Report

Former Texaco Service Station No. 211283

3810 Broadway

Oakland, California
Delta Project No. D211-283-H

Mr. Chan:

At the request of Chevron Products Company (Chevron), Delta Environmental Consultants, Inc. (Delta) installed two monitoring wells at the subject site. The location of the site is presented on Figure 1 and site features are shown on Figure 2. The scope of work included drill out and reconstruction of damaged monitoring well MW-5, and install a replacement well within the former excavation. This report includes the results of drilling and well installation activities conducted on May 30, 2002.

The work was conducted in accordance with a workplan submitted to your agency by Toxichem Management Services (Toxichem). Toxichem's workplan was submitted in conjunction with their Second Quarter 2001 Quarterly Monitoring Report, dated August 8, 2001. Alameda County Health Care Services (ACHCS) approved the workplan in a letter dated May 9, 2002. The well installation was permitted with Alameda County Department of Public Works. Copies of the ACHCS letter and the well installation permits are included in Enclosure A.

Site Description

According to files obtained from Chevron, the subject site operated as a Texaco Service Station from approximately 1963 to 1985. Currently, the site operates as a retail gasoline station and automobile repair facility. The site consists of a station building with two service bays, two dispenser islands, and two 10,000-gallon underground storage tanks (USTs) that share a common pit near the northern site boundary. Pertinent site features are shown on Figure 2.

Previous Environmental Work

A total of five USTs were installed in 1963 including four 6,000-gallon USTs and one 550-gallon used-oil UST. The four 6,000-gallon USTs were removed from the site in February 1980. The 550-gallon used-oil UST was removed in May 1991. During the removal of the used-oil UST, soil impacted with petroleum hydrocarbons was excavated and removed.

In October 1991, groundwater monitoring well MW-1 was installed by Harza Kaldveer following the removal of the used-oil UST. In January 1992, groundwater monitoring well MW-2 was installed by Harza Kaldveer to further access groundwater quality in the vicinity of the former used-oil UST. Petroleum hydrocarbons were not detected in soil samples analyzed from well borings MW-1 and MW-2.

In September 1995, McLaren Hart installed soil borings B-1 through B-6. Encountered soils consisted of clay to silty sands. Concentrations of benzene and total petroleum hydrocarbons as gasoline (TPHg) were detected in soil samples submitted from B-1, B-2, B-4, and B-5. In October 1995, McLaren Hart installed wells MW-3 and MW-4 in response to hydrocarbon impacts observed in borings B-1 through B-6. A soil sample from MW-3 contained concentrations of benzene and TPHg. Wells MW-1 and MW-2 were redeveloped as part of a monitoring and sampling program and upon redevelopment of MW-2, liquid-phase petroleum hydrocarbons (LPH) were observed in the well. Soil analytical results from the installation of borings B-1 through B-6 and MW-3 and MW-4 is included in Enclosure B.

In September 1996, Fluor Daniel GTI installed monitoring wells MW-5 through MW-10 to evaluate the lateral extent of dissolved petroleum hydrocarbons in groundwater. Well MW-6 was installed directly east of the former UST basin. Low-level detections of benzene and TPHg were reported in soil samples collected from MW-6. Concentrations of benzene and TPHg were reported in soil samples collected from MW-8, located near the northern end of the dispenser islands. Soil samples collected from off site wells MW-7 and MW-10 did not contain concentrations of petroleum hydrocarbons.

During 1999, wells MW-2, MW-3, and MW-8 contained LPH for four consecutive quarters. Observed LPH thickness ranged between 0.04 and 1.89 feet.

In February 2000, wells MW-3 and MW-8 were destroyed by Toxichem due to their location within the proposed limits of a large scale overexcavation. In March 2000, soil within the former UST basin was overexcavated to a depth of 22 feet bsg and removed from the site. Approximately 1,400 cubic yards of impacted soil were disposed of at an appropriate treatment, storage, and disposal facility. During the overexcavation of the former UST basin, well MW-2 was damaged and later destroyed. Limits of overexcavation are shown on Figure 2.

In August 2000, Toxichem installed off-site monitoring well MW-11. Concentrations of petroleum hydrocarbons were not detected in soil samples submitted from MW-11.

Soil Borings

On May 30, 2002, Delta supervised the overdrilling of well MW-5 to an approximate depth of 36 feet bsg. The well was drilled out one foot past the installed well casing to remove the annular seal, sand pack, and well casing by Cascade Drilling (C57 #717510) of Rancho Cordova, California. The borehole was backfilled approximately six feet bsg (from 30 to 36 feet bsg) with Lonestar #3 sand. Well MW-5B was reconstructed in the same bore-hole to a depth of approximately 30 feet bsg. Well MW-12 was installed near the southern end of the western dispenser island in the former excavation to an approximate depth of 29.5 feet bsg. Well MW-12 was installed to monitor concentrations in the former source area since MW-3 was destroyed during overexcavation in 2000. Field methods and procedures used by Delta during the drilling activities are summarized in Enclosure C. Logs of the borings are included in Enclosure D.

Monitoring Well Construction

Monitoring wells MW-5B and MW-12 were constructed of 2-inch diameter, Schedule 40 polyvinyl chloride (PVC) casing. The wells were screened with 20 feet (approximately 10 to 30 feet bsg) of 0.020-inch machine-slotted well screen. The annuluses of both wells were backfilled with clean Monterey sand to two feet above the top of the well screen followed by a two-foot thick bentonite transition seal. The upper six feet of annulus were backfilled to surface grade with neat cement containing approximately five percent bentonite powder. The wells were completed with locking well caps and traffic-rated well boxes set flush grade in concrete. Well construction details are included in Enclosure D.

Soil Sample Analytical Results

Discrete soil samples were not collected from well borings MW-5B or MW-12. Well MW-5 was a re-construction and MW-12 was installed in gravel backfill from the overexcavation so soil was not available for sampling. One composite soil sample (SP A-D) was collected from the drill cuttings and analyzed by Lancaster Laboratories (Lancaster) in Lancaster, Pennsylvania, for benzene, TPH as gasoline range organics (TPH-GRO), and total lead. Table 1 presents the results of the composite soil sample. A copy of the analytical report is included in Enclosure E.

Disposal of Soil Cuttings and Decontamination Water

Approximately two cubic yards of soil cuttings were generated during drilling activities. The cuttings were placed in eight 55-gallon DOT drums and stored at the site pending disposal. Approximately 100 gallons of decontamination water generated during steam cleaning of augers were placed in two 55-gallon DOT drums and stored at the site pending disposal. On June 7, 2002, Integrated Wastestream Management removed and transported 10 drums to Republican Services VRL in Livermore, California. Copies of the Certificates of Disposal are included in Enclosure F.

Well Survey

On June 24, 2002 monitoring wells MW-5B and MW-12 were surveyed by Morrow Surveying of West Sacramento, California relative to a City of Oakland benchmark. In accordance with State Assembly Bill AB2886, longitude and latitude coordinates were recorded from GPS observations along with well box and top of casing elevation relative to mean sea level. The well survey is presented in Enclosure G.

Well Development, Sampling, and Groundwater Level Measurements

On June 25, 2002, Gettler-Ryan, Inc. developed and sampled the newly installed wells, MW-5B and MW-12, in conjunction with the quarterly monitoring and sampling event conducted at the site. Field methods and procedures used during the development and sampling of the wells are included in Enclosure C.

Groundwater elevations were calculated between 64.81 and 65.54 feet above mean sea level. Based and the June 25, 2002 monitoring event, groundwater beneath the site appears to flow towards the southwest and northeast at an approximate gradient of 0.01. Groundwater monitoring results are presented in Table 2. Groundwater monitoring field data sheets including well development data for MW-5B and MW-12 are provided in Enclosure H. A groundwater elevation contour map constructed using data collected on June 25, 2002 is included as Figure 3.

Groundwater Sample Analytical Results

On June 25, 2002 groundwater samples were collected from wells MW-1, MW-4, MW-5B, MW-6, MW-7, and MW-9 through MW-12. Groundwater samples were submitted to Lancaster for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8021 and TPH-GRO and TPH as diesel range organics (TPH-DRO) by DHS LUFT Method.

Laboratory chemical analyses of groundwater samples collected from wells MW-1, MW-4, MW-7, MW-9, and MW-11 did not detect concentrations of benzene, TPH-GRO or MTBE at or above the laboratory reporting limits. Benzene was detected in four of the nine groundwater samples analyzed at concentrations ranging between 89 and 2,200 micrograms per liter (µg/L). Concentrations of TPH-GRO ranging from 660 to 21,000 µg/L were detected in four of the nine groundwater samples analyzed. Concentrations of TPH-DRO ranging between 100 and 2,500 µg/L were detected in seven of the nine groundwater samples analyzed. The fuel oxygenate MTBE was detected in two groundwater samples collected at concentrations of 11 and 130 µg/L from wells MW-12 and MW-5B, respectively. The highest benzene, TPH-GRO, and TPH-DRO concentrations were detected in groundwater collected from well MW-6. Table 2 presents the groundwater analytical results. Copies of the groundwater analytical results are included in Enclosure I.

Conclusions/Recommendations

The groundwater flow direction in the site vicinity is expected to be toward the southwest based on topography (Figure 1). During the June 25, 2002 monitoring event, groundwater beneath the site appeared to be mounded in the vicinity of well MW-12, located in the backfill of the former excavation. The mounding may be due to groundwater moving through the higher permeable material of the excavation and backing-up when in contact with native soil southwest of the former excavation.

Based on the groundwater analytical results from the June 25, 2002 sampling event, it appears that groundwater in the vicinity of well MW-6 continues to be impacted by residual hydrocarbons in excess of 1,000 μ g/L. However, downgradient concentrations measured at MW-10 are more than one order of magnitude less. Prior to proposing additional site assessment, Delta recommends that one full year of groundwater monitoring be performed to provide seasonal concentration trends.

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 regarding this project, please contact Todd Del Frate at (916) 536-2612.

PED GEO

TODD ANDREW DEL FRATE No. 7394

OF CAL

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

William Slowik Staff Scientist

Todd A. Del Frate, R.G.

Project Manager

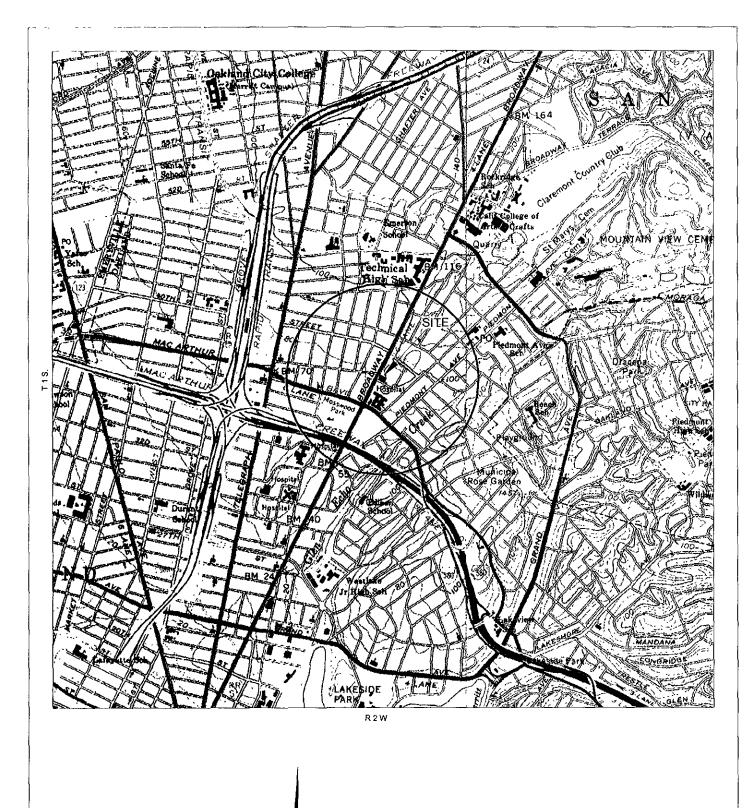
California Registered Geologist No. 7394

WS (LRP001.D211-283)

Enclosures

cc: Ms. Karen Streich - Chevron Products Company

Mr. Joe Zadik - 8255 San Leandro Street, Oakland, CA 94621



GENERAL NOTES: BASE MAP FROM U.S.G.S. OAKLAND WEST & EAST, CA. 7.5 MINUTE TOPOGRAPHIC PHOTOREVISED 1980



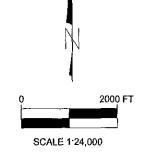
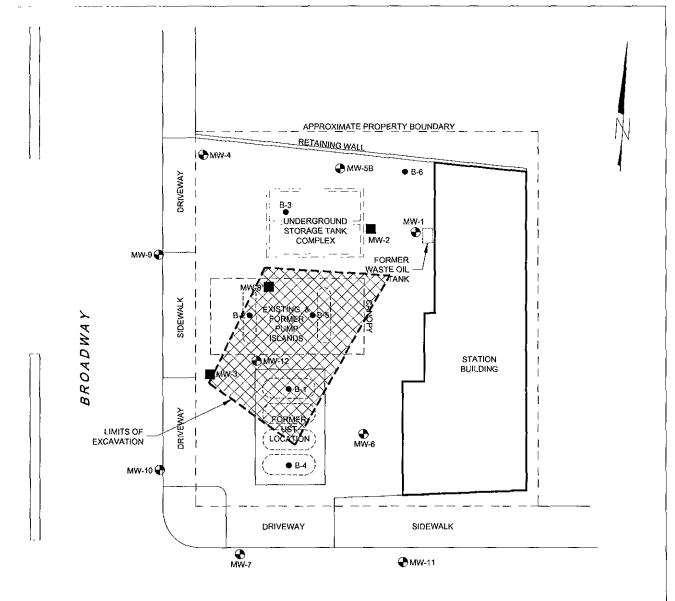


FIGURE 1 SITE LOCATION MAP

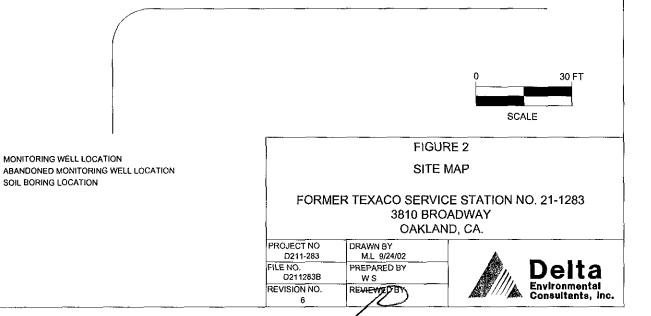
FORMER TEXACO SERVICE STATION 21-1283 3810 BROADWAY OAKLAND, CA.

	· · · ·
PROJECT NO.	DRAWN BY
D211-283	M L 6/25/02
FILE NO	PREPARED BY
D211283A	w.s
REVISION NO	REVIEWED BY





38th STREET



LEGEND

₩W-1

MW-2

● 8-1

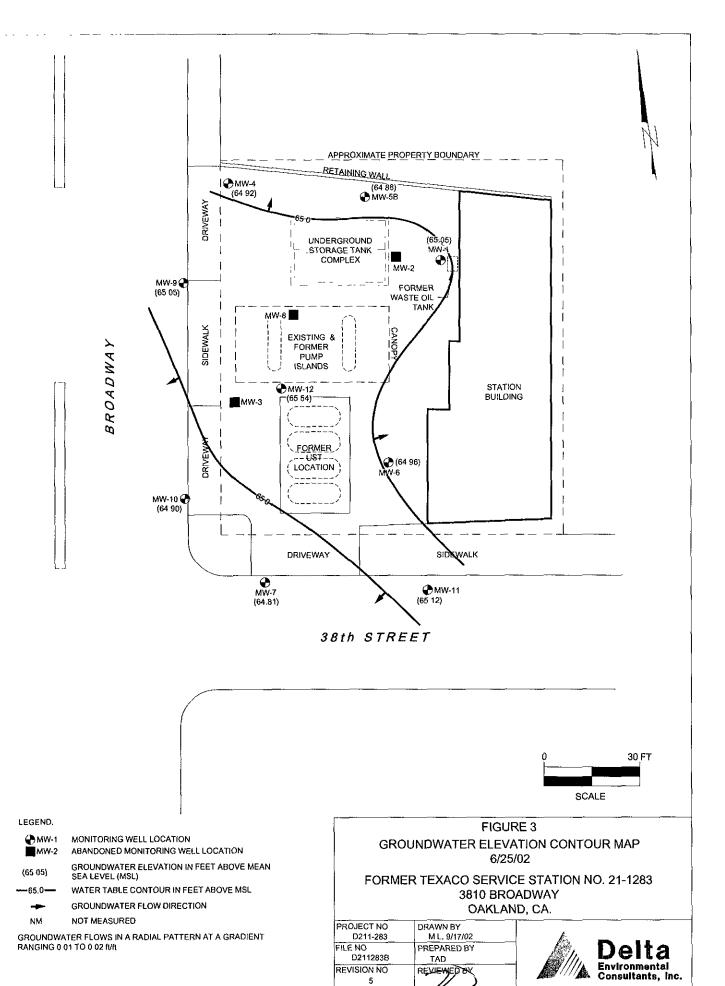


TABLE 1

SOIL CHEMICAL ANALYTICAL RESULTS

Former Texaco Service Station 3810 Broadway Oakland, California

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Toluene (mgkg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	Lead (mg/kg)	
Soil Stockpile	Samples								
SP-A,B,C,D	5/30/2002	Composite	< 0.005	< 0.005	< 0.005	< 0.015	2.1	10	

TPH-GRO = Total petroleum hydrocarbons as gasoline range organics. mg/kg = Milligrams per kilogram.

ft = feet

TABLE 2 GROUNDWATER ANALYTICAL RESULTS

Former Texaco Service Station 3810 Broadway Oakland, California

Sample ID	Date Sampled	Top of Casing Elevation (ft above msl)	Depth to Water (ft)	Groundwater Elevation (ft above msl)	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPH-GRO (μg/L)	TPH-DRO (μg/L)	MtBE (μg/L)
MW-1	06/25/02	86.69	21.64	65.05	< 0.5	< 0.5	< 0.5	<1.5	<50	490 ¹	<2.5
MW-4	06/25/02	83.31	18.39	64.92	< 0.5	< 0.5	< 0.5	<1.5	<50	250	<2.5
MW-5B	06/25/02	85.36	20.48	64.88	89	1.9	39	11	660	320	130
MW-6	06/25/02	86.09	21.13	64.96	2,200	1,800	850	2,100	21,000	2,500	<100
MW- 7	06/25/02	84.11	19.30	64.81	< 0.5	< 0.5	< 0.5	<1.5	<50	<50	<2.5
MW-9	06/25/02	82.17	17.12	65.05	< 0.5	< 0.5	< 0.5	<1.5	< 50	100	<2.5
MW-10	06/25/02	81.83	16.93	64.90	180	3.2	17	8.0	810	180	<2.5
MW-11	06/25/02	90.63	25.51	65.12	< 0.5	< 0.5	< 0.5	<1.5	< 50	250	<2.5
MW-12	06/25/02	84.19	18.65	65.54	340	8.2	16	8.3	1,000	410	11

¹ The observed sample pattern is not typical of diesel/fuel oil #2.

TPH-GRO = Total petroleum hydrocarbons as gasoline range organics.

TPH-DRO = Total petroleum hydrocarbons as diesel range organics.

 $MtBE = Methyl \ tertiary \ butyl \ ether \ analyzed \ by \ EPA \ Method \ 8021B \ unless \ otherwise \ noted.$

msl = mean sea level

ft = feet

 μ g/L = Micrograms per liter.

ENCLOSURE A

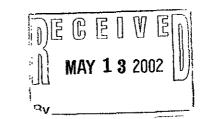
Alameda County Health Care Services Letter
Dated May 9, 2002
Alameda County Department of Public Works Well Installation Permits

ALAMEDA COUNTY HEALTH CARE SERVICES

AGENCY







ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

May 9, 2002

Mr. Karen Petryna Shell Oil Products US P.O. Box 7869 Burbank, CA 91510-7869

Re: Fuel Leak Case RO0000056, 3810 Broadway, Oakland CA 94607

Dear Ms. Petryna:

This letter formally approves the scope of work described in the August 8, 2001 Toxichem Quarterly Monitoring Report- Second Quarter 2001. This work includes the proper closure of MW-5 and the replacement of this well in the same general location and the installation of a replacement well for MW-3 and MW-8 within the former excavation pit. Since the replacement well for MW-5 will be located next to the former well, no vadose soil samples need to be analyzed unless field screen results indicate significant contamination.

Please notify our office prior to performing this work. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

Barres in Cho_

C: B. Chan, files

Mr. T. Del Frate, Delta Environmental Consultants, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670

Mr. Joe Zadik, 8255 San Leandro St., Oakland CA 94621

Wpap3810Broadway

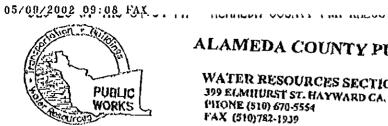
05/09/2002 09:08 FAX



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WA'TER RESOURCES SECTION 399 ELMHURST ST. HAYWARD CA, 94544-1395 FITONE (\$10) 670-5554 FAX (\$10)782-1919

LOCATION OF PROJECT FORMER TEXACO STRICE STATION 3810 Broadway Oaklade, Car	FOR OFFICE USE PERMIT NUMBER WOULD OSO 9 WELL NUMBER APN
CIJENT Name Chevion Texaco Address Pr. Box 6004 Phono City San Farmon Zip 44583	PERMIT CONDITIONS Circled Permit Requirements Apply A. GENERAL I. A permit application should be submitted so as to strive at the ACPWA office five days prior to proposed starting date.
APPLICANT Delta Environmental Consultants, Inc. Name Delta Environmental Consultants, Inc. Address 3164 Gde Camp Dc. Phone 914 536-2617 City Rancho Cordava Zip 95/070	Well Completion Report. 3. Pennit is vold if project not begun within 90 days of approval date b. Water supply Wells
TYPE OF PROJECT Well Construction Cathodic Protection Water Supply Monitoring Geotechnical Investigation General Contamination Well Destruction People:	1. Minimum surface spal thickness is two inches of coment grout placed by tromic. 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. C. GROUNDWATER MONITORING WELLS
New Domestic 17 Replacement Domestic Municipal Englacement Domestic Integration Industrial Other MULLING METHOD:	INCLUDING PIEZOMETERS I. Minimum surface seal thickness is two inches of coment grout placed by tremis. Z. Minimum seal depth for monitoring wells is the maximum depth practicable of 10 feet. D. GEOTECHNICAL
Mul Rotary 1) AN Rotary Auger Cable 1 Other Calling, Inc. MILLER'S NAME Cascade Cilling, Inc. MILLER'S LICYINSE NO. 7/75/0	Backfil bore hate by tremic with coment grout or coment grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. E. CATTIONIC Fill hole anode zono with concrete placed by tremic. F. WELL DESTRUCTION
Casing Diameter 2 in. Depth 35 R. Surface Seal Depth 5 R. Owner's Well Number MW-5	Send a map of work site. A separate permit is required for wells deeper than 45 feet. G. SPECIAL CONDITIONS NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.
FOTECHNICAL PROJECTS Number of Borings Hole Diameter	1 MD 5-50
PLICANT'S SIGNATURE WILLIAM SOWIK PASE PRINT NAME WILLIAM SOWIK	APPROVED DATE DATE DATE DATE DATE DATE DATE DA



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395 PHONE (510) 670-5554 FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPEARANTING CONTINUE	
FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT & FORMER TEXACO	1 -40 0 (7)
Service Station # 711283	PERMIT NUMBER WOL- 05/0
Dakland California	WELL NUMBER
- All Torala	
The state of the s	PERMIT CONDITIONS
CLIENT Classes Tax	Circled Pertait Requirements Apply
Name Chevron Texaco	
Address P.O. Bay: 6004 Phone (975) 372-9899 City San Raman CA Zin 9435372-9899	A. GENERAL
City San Ramon, CA Zip 94583	I. A permit application should be submitted so as to
APPLICANT	will what uld ALPWA office five claus peter to
Name Delta Environmental Consultants, Inc.	proposed starting date.
Address 3164 Cold C 51 Fox (916) 639-8385	2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-
	THE COMPLETE REPORT.
City Rancha Condoval Zip 95620	3. Permit is void if project not became within an a
TYPE OF PROJECT	B. WATER SUPPLY WELLS
Wall 21 1 /	1. Minimum surface spal thickness is two inches of
Calbridge Pentage	VEGICAL KIDIK DISCON BU Promia
Water Coasts	2. Minimum seal depth is 50 feet for municipal and
Monitoring Contamination 2 Well Destruction	Industrial wells or 20 feet for domestic and irrigation wells unless a lessor depth is specially approved.
	() Y YAYYALI ER MUNTANIA BIYAT X
ROPOSED WATER SUPPLY WELL USE	/ / CLUMING FIEZOMETERS
Replacement Donustic	i- Minimum surface seal thickness is not inches of
followed the firigation	estable Right bidged by themps
Industrial . Other	2. Minimum seed depth for manitaring wells to the
RHAING METHOD:	
Mul Rotune	D. GEOTECHNICAL
Cable Other Auger	Backfill bore hole by tremie with coment grout or content
Ottlet.	growthand mixture. Upper two-three feet replaced in kind or with compaced cuttings.
RILLER'S NAME Cascade Dilling, Inc.	E. CATHODIC
	Pill hole annde zone with a normal
RILLER'S LICENSENO. 717510	
	Send a map of work site. A separate permit is required for wells durant then 45 feet.
ELL PROJECTS	for wells deeper than 45 feet.
Drill Hole Diameter K-10 in Advanced	C. SPRCIAL CONDITIONS
Section Conductor 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	NOTE: One application report he was the
Surface Seal Depth Owner's Well Number MW-12	NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable
<u> </u>	for geotechnical and communication investigations.
COTECHNICAL PROJECTS	
Number of Borings Maximum Maximum Depth fo	
TIMATED STARTING DATE 5/30/02	(A_{α})
TIMATED COMPLETION DATE SAME	APPROVED DAYES 90
	APPROVED
reby agree to comply with all requirements of this period and Alayseda County O	olimpea Va 22 ca
CULUANT STORIA WIDE (1777 1774 A	, , , , , , , , , , , , , , , , , , ,
DATE	1/02
ASEPRINTNAME William Slowik	
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ENCLOSURE B

Soil Analytical Results for Borings B-1 Through B-6 and MW-3 and MW-4

TABLE 3
SOIL ANALYTICAL RESULTS
3810 Broadway, Oakland, California

Sample	Sample		TPH-G	TPH-D	ТРН-МО	Benzene	Toluene	Ethylbenzene	Xylenes
Location	Date	Depth	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
B-1	9/11/95	12.5	310	~ - ~		0.15	0.29	6.2	31.2
		19	3,600			33	310	67	361
		26.5	1.1	~ * =		0.27	0.06	0.018	0.023
B-2	9/11/95	12.5	3.1	4 -		0.69	0.11	0.69	0.103
		16.5	2,200			15	120	37	445
		26.5	<1			<0.005	0.011	< 0.005	< 0.005
B-3	9/12/95	27	<1	<1	1.3	<0.005	<0.005	<0.005	<0.005
B-4	9/11/95	12.5	1 83			0.06	<0.050	1.2	7.2
		18	1,400			3.8	44	18	101
		26.5	1.9	<20	<20	0.52	0.078	0.039	0.07
B-5	9/12/95	12.5	4,800			48	390	93	466
		29.5	<1			0.055	0.009	< 0.005	< 0.005
B-6	9/12/95	12.5	<1		# w =	<0.005	0.009	<0.005	<0.005
MW-3	10/26/95	8.5	65,000	* = =	~ ~ ~	88	550	140	690
		15.5	1.4			< 0.005	0.027	0.0064	0.0265
		19.5	6.2		•	1.3	1.5	0,11	0.43
MW-4	10/26/95	29	<1		* * =	<0.005	<0.005	<0.005	<0.005

TPH-G = Total petroleum hydrocarbons quantitated against gasoline by DHS/LUFT method.

TPH-D = Total petroleum hydrocarbons quantitated against diesel by EPA Method 8015 Modified.

TPH-MO = Total petroleum hydrocarbons quantitated against motor oil by EPA Method 8015 Modified. ppm = Parts per million.

^{--- =} Not analyzed.

<= Compound not detected at or above the specified laboratory reporting limit.

ENCLOSURE C

Field Methods and Procedures

1.0 METHODS AND PROCEDURES

1.1 Health and Safety Plan

Field work performed by Delta and Delta's subcontractors at the site is conducted according to guidelines established in a Site Health and Safety Plan (SHSP). The SHSP is a document which describes the hazards that may be encountered in the field and specifies protective equipment, work procedures, and emergency information. A copy of the SHSP is at the site and available for reference by appropriate parties during work at the site.

1.2 Locating Underground Utilities

Prior to commencement of work on-site, Delta researches the location of underground utilities with the assistance of Underground Service Alert (USA). USA contacts the owners of the various utilities in the vicinity of the site to have the utility owners mark the locations of their underground utilities. Work associated with the boring and monitoring well installation is preceded by manual hand augering to a minimum depth of 5 feet below surface grade (bsg) to avoid contact with underground utilities.

1.3 Soil Sampling and Contamination Reduction

Soil borings and soil sampling are performed under the direction of a Delta geologist. Soil borings are advanced using a truck-mounted hollow-stem auger drill rig.

To reduce the chances of cross-contamination between boreholes, all downhole drilling equipment is steam-cleaned between each boring. To reduce cross-contamination between samples, the split-barrel sampler is washed in a soap solution and double-rinsed between each sampling event.

Soil sampling beyond 5 feet bsg is conducted in accordance with ASTM 1586-84. Using this procedure, a 2-inch outside-diameter split-barrel sampler or a 2-inch inside-diameter California-type sampler is driven into the soil by a 140-pound weight falling 30-inches. After an initial set of 6-inches, the number of blows required to drive the sampler an additional 12-inches (known as penetration resistance or the "N" value) is recorded. The N value is used as an empirical measure of the relative density of cohesionless soils and the consistency of cohesive soils.

Upon recovery, a portion of the soil sample is placed into a plastic bag and sealed for later screening with a photoionization detector (PID). Another portion of the soil sample is used for classification and description.

That part of the soil sample collected in the leading brass tube within the California-type sampler is stored at approximately 4°C for transport to the laboratory.

1.4 Soil Classification

As the samples are obtained in the field, they are classified by the geologist in accordance with the Unified Soil Classification System (USCS). Representative portions of the samples are then retained for further examination and for verification of the field classification. Logs of the borings indicating the depth and identification of the various strata, the N value, and pertinent information regarding the method of maintaining and advancing the borehole are made.

1.5 Soil Sample Screening/hNu Portable Photoionization Detector Method

After the soil sample plastic bags are brought to ambient temperature, the headspace vapors of the soil sample in the bag are screened with a PID equipped with a 10.2 eV lamp. The sample corner of the bag is opened and the detector probe immediately placed within the headspace. The highest observed reading is recorded.

1.6 Monitoring Well Gravel Pack and Slot Size Selection

The gravel pack is selected such that it will permit the development of a zone of higher hydraulic conductivity adjacent to the well screen but will reduce piping of the finer-grained formation materials into the well. The slot size of the well screen is selected such that it will retain a minimum of 95 percent of the gravel pack material.

1.7 Monitoring Well Development

After monitoring wells are installed, each monitoring well is developed with a surge block and bailer (or pump) until the water produced is relatively sediment-free and until the conductivity, pH, and temperature stabilize. If the well is pumped dry during the development process, recharge rates are recorded. No water or chemicals are introduced into the monitoring wells during well development. All development water is placed in drums on-site for later disposal.

1.8 Groundwater Sampling

At least three wetted easing volumes of liquid are removed from each well by bailing with a clean disposable bailer. A liquid sample is collected from each well with a clean disposable bailer and transferred into a laboratory supplied sampling container. Each sample is appropriately labeled and stored on ice from the time

of collection through the time of delivery to the laboratory. Groundwater samples are transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses.

1.9 Liquid-Phase Petroleum Hydrocarbons

If liquid-phase petroleum hydrocarbons are present in a well, the thickness of the petroleum layer is measured by collecting a sample in a transparent disposable bailer with a check valve at the bottom, or by measurement using appropriate fluid-level sounding equipment.

2.0 ANALYTICAL PROCEDURES

Selected soil samples submitted to the laboratory are analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021, methyl tertiary butyl ether (MTBE) by EPA Method 8260B, and total petroleum hydrocarbons as gasoline (TPHg) using DHS LUFT.

3.0 QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed throughout the investigation.

3.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of soil samples used on this project can be found in Section 1.0 (Methods).

3.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, are recorded on the borehole log or in the field records. Samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquish as the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirm that it was collected in the proper container, preserved correctly, and that there is an adequate volume for analysis.

If these conditions are met, the sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory in the laboratory. The sample description, date received, client's name, and other relevant information is also be recorded.

ENCLOSURE D

Log of Borings and Well Construction Details



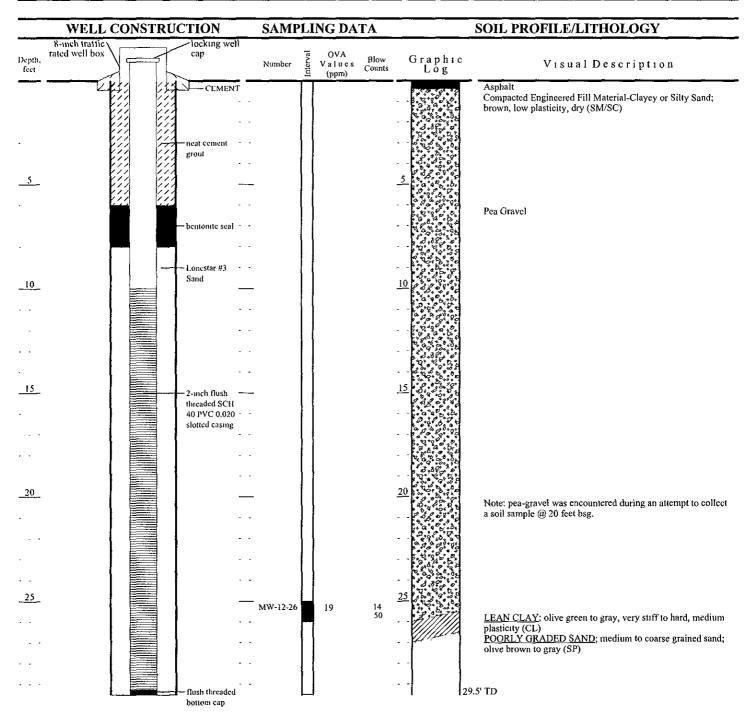
Street Address	Project ID	r manue.
3810 Broadway	Former To	exaco #211283
City & State	Surface Elev.	Well / Boring ID
Oakland, California		MW-5 (B)
Delta Project #	Casing Elev	Total Depth
D211-283		30'

	WELL CONSTRUCTION	N SAMP	LING DATA	SOIL PROFILE/LITHOLOGY
Depth, feet	rated well box cap	ing well Number	OVA Blow Grap	hic Visual Description
		CEMENT		
	neat co	 ement		
5	grout			
	— bentor	nte seal		
10	Lones Sand	ar #3	. <u> </u>	
	* * * * * * * * * * * * * * * * * * *			
			15	
<u>15</u>	40 PV	ed SCH C 0 020		
	slotted	casing		
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25	and the statement of th		<u>25</u>	
30_	flush	hreaded	30	30' TD

	Logger	Sampling Method & Drameter	Permitting Agency
Dates and Times	Will Slowik	2-Inch Split Spoon	Alameda County Public Works Agency
Start	Drilling Company & Driller	Bore Hole Diameter	Permit #
5/30/02 1130	Cascade Drilling, Inc., Jaydean	8-inches	W02-0509
Lotal Depth	Drillers C-57#	Diameter, Type & Slot Size of Casing	
5/30/02 1225	717510	2-inch SCH 40 PVC/0.020 slot	
Completion or backfill	Drilling Equipment and method		
5/30/02 1320	LAR HSA, Hollow Stem Auger		Page 1 of 1



Street Address	Project ID	
3810 Broadway	Former To	exaco #211283
City & State	Surface Elev.	Well / Boring ID
Oakland, California		MW-12
Delta Project #	Casing Elev.	Total Depth
D211-283		29.5'



	Logger	Sampling Method & Diameter	Permitting Agency
Dates and Times	Will Stowik	2-Inch Split Spoon	Alameda County Public Works Agency
Start	Drilling Company & Driller	Bore Hole Diameter	Permit #
5/30/02 1430	Cascade Drilling, Inc., Jaydean	8-inches	W02-0510
Fotal Depth	Drillers C-57#	Diameter, Type & Slot Size of Casing	
5/30/02 1600	717510	2-inch SCH 40 PVC/0.020 slot	
Completion or backfill	Drilling Equipment and method		
5/30/02 1730	LAR HSA, Hollow Stem Auger		Page 1 of 1

ENCLOSURE E

Soil Stockpile Analytical Data



ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 809597. Samples arrived at the laboratory on Sal	urday, June 01.
2002. The PO# for this group is 99011184 and the release number is STREICH.	•

Client Descrip	otion	
SP-A,B,C,D	Composite Soil S	ample

<u>Lancaster Labs Number</u> 3828996

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO

Delta Environmental

Attn: Mr. Ben Heningburg

Questions? Contact your Client Services Representative Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steven A. Skiles Sr. Chemist

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D. TNTC IU umhos/cm C Cal meq g ug mi	none detected Too Numerous To Count International Units micromhos/cm degrees Celsius (diet) calories milliequivalents gram(s) microgram(s) milliiter(s)	BMQL MPN CP Units NTU F Ib. kg mg I	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units degrees Fahrenheit pound(s) kilogram(s) milligram(s) liter(s) microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight
basis
Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

•	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J.	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
Þ	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	4	Correlation coefficient for MSA < 0.995
U	Compound was not detected		
X,Y,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Page 1 of 1

Lancaster Laboratories Sample No. SW 3828996

Collected: 05/30/2002 13:05 by WS

through 05/30/2002 16:05 Submitted: 06/01/2002 10:25

Reported: 06/05/2002 at 10:34

Discard: 07/06/2002

SP-A,B,C,D Composite Soil Sample

Facility# 211283

3810 Broadway; Oakland, CA

Account Number: 10900

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01155	Lead (furnace method)	7439-92-1	10.	0.54	mg/kg	5
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	2.1	1.0	mg/kg	25
	The reported concentration of T	PH-GRO does no	t include MTBE or	other		
	gasoline constituents eluting p	rior to the C6	(n-hexane) TPH-0	RO range		
	start time.					
	The analysis for volatiles was p	performed on a	sample which was	preserved		
	in methanol. The reporting lim	its were adjus	ted appropriately	.		
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
	The analysis for volatiles was p					
	in methanol. The reporting lim	its were adjust	ed appropriately	٠.		

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01155	Lead (furnace method)	SW-846 7421	1	06/04/2002 12:21	Jessica L Boyd	5
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	06/04/2002 03:56	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	06/04/2002 03:56	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	06/03/2002 15:11	Steven A Skiles	n.a.
05710	SW SW846 GFAA Digest	SW-846 3050B	1	06/03/2002 17:45	Megan L Ross	1

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D. TNTC Its umhos/cm C Cal meg g ug ug	none detected Too Numerous To Count International Units micromhos/cm degrees Celsius (diet) calories milliequivalents gram(s) microgram(s) milliliter(s)	BMQL MPN CP Units NTU F Ib. kg mg I	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units degrees Fahrenheit pound(s) kilogram(s) milligram(s) liter(s) microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- pprm parts per million One pprn is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Inorganic Qualifiers

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank		Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	փ	Correlation coefficient for MSA < 0.995
U	Compound was not detected		
X,Y,Z	Defined in case narrative		

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Page 1 of 1

Client Name: ChevronTexaco

Group Number: 809597

Reported: 06/05/02 at 10:34 AM

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 02143A33C TPH-GRO - Soils Benzene Toluene Ethylbenzene Total Xylenes	Sample nu N.D. N.D. N.D. N.D. N.D.	umber(s): 1. .005 .005 .005 .015	3828996 mg/kg mg/kg mg/kg mg/kg mg/kg	92 117 116 118 117		75-117 84-132 88-116 87-127 88-120		
Batch number: 021545710001 Lead (furnace method)	Sample nu N.D.	mber(s):	3828996 mg/kg	107		74-126		

Sample Matrix Quality Control

	MS	MSD	ms/msd		RPD	BKG	DUP	DUP	Dup
Analysis Name	%REC	%REC	<u>Limits</u>	RPD	<u>MAX</u>	Conc	Conc	RPD	RPD Max
Batch number: 02143A33C	Sample	number	(s): 382899	6					
TPH-GRO - Soils	79	81	44-116	2	30				
Benzene	111	116	56~142	5	30				
Toluene	85	89	66-120	5	30				
Ethylbenzene	96	102	66-131	5	30				
Total Xylenes	88	92	67-122	5	30				
Batch number: 021545710001	Sample	number	(s): 382899	5					
Lead (furnace method)	(2)	(2)	80-120	8	20	10.	9.3	7 (1)	20

Surrogate Quality Control

Analysis Name: BTEX/MTBE Batch number: 02143A33C

	Trifluorotoluene-F	Trifluorotoluene-P	
3828996	98	114	
Blank	83	99	
LCS	95	108	
MS	94	100	
MSD	95	103	
Limits:	61-127	68-122	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.



Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units
TNTC	Too Numerous To Count	MPN	
IU	International Units	CP Units	
umhos/cm	micromhos/cm	NTU	
C	degrees Celsius	F	degrees Fahrenheit pound(s)
Cal	(diet) calories	lb.	
meq	milliéquivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	1	liter(s)
ml	milliliter(s) cubic meter(s)	ul	microliter(s)
m3		fib >5 um/ml	fibers greater than 5 microns in length per ml

- less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight basis

 Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Inorganic Qualifiers

A	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
P	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	+	Correlation coefficient for MSA < 0.995
	Compound was not detected		
X,Y,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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For Lancaster Laboratories use only

Acct. # 10900 Sample #: 3828996-7 SCR#;

															A	naly	505 i	geques	ted						
Facility #: Former	TAX	202 9	42	112	82				Π						F	res	ervati	on Co	des			Preserv	ative Cod		
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Chevron PM: Karen Streich Lead Consultant: Delta Environmental Consultant/Office: 3164 Gold Camp Drive Ste 200 Parists										ers	_		3						Ì		☐ J value repor	ting needer			
·								down			Containers	□ 8021 B		iğ Ç								☐ Must meet lo	west detect	tion limits	
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Service Order #:			No	n SAR	!: <u>, </u>					Composite	Ž	X) 15 W) 15 N	SC E						Ì	Run oxy's on highest hit			
Field Point Name	Matrix	Repeat Sample	Top	Voor	Manth	Dov	Time Collected	New Field D	Grab	l Mo	Total Number	Xalg	TPH 8015 MOD	TPH 8015 MOD DRO	8260 full scan		ead 7					Runox			
SP-A	SOIL	Sample	NA				1305	Pleto Pt.	ž	1	1	X	·	<u> </u>	8	'	X				_	Comments /	Remarks		
5P-B	SOIL		1				1514		X	1	E	X	Ż				X								
SP-C	SOIL			02			1530		X		1	X	X				X						Posi	TE	
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Turnaround Time Requested (TAT) (please circle)					1	Retinguishe	une	1/2	04	υŹX		•	5	Date 3	02 1	Time <i> : 45</i>		ived t	by:	<u></u>		Date	Time		
STD. TAT 24 hour	72 hour 4 day	33	8 hour				Relinquished	d by:	,	`	*			•	Date		Time	Rece	ived t	эу:			Date	Time	
Data Package Options (please circle if required)					Relinquished by:						Date	*	Time	Received by:					Date	Time					
QC Summary Type I – Full Type VI (Raw Data) ☐ Coelt Deliverable not needed WIP (RWQCB)					Relinquished by Commercial Carrier: UPS FedEx Other_										Rece	Received by:			y Alan	Date	Time [025				
Disk					Temperature Upon Receipt							Custody Seals Intact? Yes No													

ENCLOSURE F

Certificate of Waste Disposal

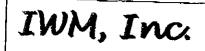
IWM, Inc.

INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 408 942 8965 FAX: 408.942.1499

CERTIFICATE OF DISPOSAL

Ι

Generate Address Contact: Phone;	San Ramon, CA 94583	Facility Name: Address: Facility Contact; Phone:	3810 Oakla Wil S	Fron #21-1283 Broadway and, CA Slowik 536-2617
	IWM Job #;	92249-DS		
	Description of Waste:	8 Drum(s) of	~~ 	_
		Non-Hazardous	s	-
	_	Soil		
	Removal Date:	June 7, 2002		-
	Ticket #:	RSVRL070602		-
Transp	orter Information	Disposal Fac	1:4	In Comment
Name; Address;	IWM, Inc. 950 Ames Avenue	Name: Repub	lic Ser	vices Vasco Road Landfill
Phone:	Milpitas, CA 95035 (408) 942-8955	Livern		CA 94550
	INC. CERTIFIES THAT THE ABOVE ATED AND DISPOSED AT THE DESIGN APPLICABLE FEDERAL, STA Villiam T. DeLon Authorized Representative (Print Name and Signature)	TE, AND LOCAL RI		



INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 408.042.8955 FAX: 408 942,1499

CERTIFICATE OF DISPOSAL

Ι

Generator Name: Address;	6001 Bollinger Canyon Road	Facility Name: Address:	Chevron #21-1283 3810 Broadway
Contact: Phone:	San Ramon, CA 94583 Bob Cochran 925-842-9500	Facility Contact: Phone:	Oalland, CA

IWM Job #:
Description of Waste:

Description of Waste:

Non-Hazardous

Water

June 7, 2002

MCK070602-CH

Transp	orter Information		T.		
	ditel modifiation		Dispos	sal Facility	Information
Name: Address:	IWM, Inc. 950 Ames Avenue		Name; Address;	McKittrick	Waste Treatment
Phone:	Milpitas, CA 95035 (408) 942-8955		Phone:	56533 Hwy McKittrick (661) 762-7	CA 92351
		-			

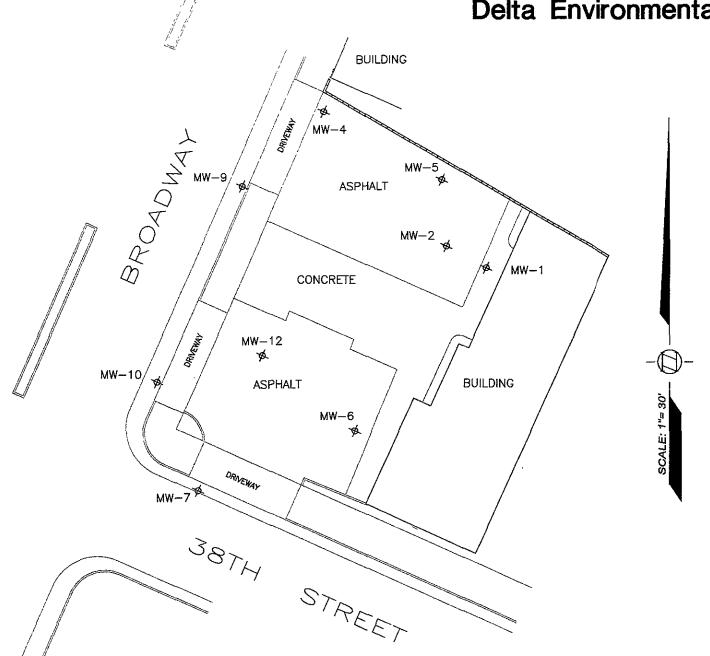
IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARD OUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon Authorized Representative (Print Name and Signature)	6/7/02 Date
	11

ENCLOSURE G

Well Survey Report

Monitoring Well Exhibit Prepared for: Delta Environmental



DESCRIPTION	NORTHING	EASTING	ELEV (PVC)	ELEV (BOX)
MW-1 MW-2 MW-4 MW-5B MW-6 MW-7 MW-9 MW-10 MW-12	2128020. 8 2128027. 7 2128069. 7 2128048. 4 2127970. 1 2127951. 5 2128046. 5 2127985. 5 2127993. 7	6054191. 1 6054178. 6 6054140. 6 6054177. 3 6054149. 8 6054100. 4 6054114. 7 6054087. 8 6054120. 7	86, 69 85, 83 83, 31 85, 36 86, 09 84, 11 82, 17 81, 83 84, 19	87. 03 86. 02 83. 69 85. 61 86. 63 84. 58 82. 55 82. 19 84. 45
MW-1 MW-2 MW-4 MW-5B MW-6 MW-7 MW-9 MW-10 MW-12	LATITUDE 37. 8260803 37. 8260987 37. 8262122 37. 8261556 37. 8259390 37. 8258854 37. 8261471 37. 8259782 37. 8260024	LUNGITUDE -122, 2571521 -122, 2571958 -122, 2573303 -122, 2572017 -122, 2572917 -122, 2574617 -122, 2574183 -122, 2575076 -122, 2573940		

BASIS OF COORDINATES AND ELEVATIONS:

COURDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COURDINATES FROM GPS
OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS
STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE
CENTER DATUM, REFERENCE EPOCH 2000, 35.
COURDINATE DATUM IS NAD 83(1986)
DATUM ELLIPSOID IS GRS80
REFERENCE GEOID IS NGS99

CORS STATIONS USED WERE FARB AND POTB.

ELEVATIONS ARE BASED ON DAKLAND BENCHMARK.



Former Texaco 21-1283
3810 Broadway
Oakland
Alameda County
California



1450 Harbor Blvd Ste D West Sacramento California 95691 (916) 372-8124 tom@morrowsurveying.com Date: 06/24/02 Scale !"= 30' Sheet I of ! Revised Field Book MW-8 Dwg No 1275-049DT

ENCLOSURE H

Groundwater Monitoring and Well Development Data Sheets



CLIENT/

GETTLER-RYAN INC.

GROUNDWATER MONITORING SUMMARY SHEET

EACHITY: C	hevronTexaco #2	211283	JOB #: 386956		
-	310 Broadway		DATE:		5.02
	akland, CA		SAMPLER:	7	
Well ID	Total Well Depth	Depth to Water	Product Thickness (ft)	List Itern IN Well	Additional Comments
MW-1	29.95	21.64			BUNT CASILG
MW-4	28.56	18.39		Programme and the second	
MW-5B	30.35	20.48		-	
MW-6	27.51	21.13		STIPSEK	
MW-7	33.50	19.30			me di
MW-9	34.10	17.12			
MW-10	33.10	16.93			
MW-11	37.50	25.51			
MW-12	29.62	18.65			Development
			M		-
	Alternative and the second				
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·			
			W-10-01-01-01-01-01-01-01-01-01-01-01-01-		-
Comments_	Took 7000	of well Do	epts.		
		- 0			

FIELD DATA SHEET

	Date: _ Sampler: _		.25.02	<u>-</u>
	Sampler: _		TC	
Well Conditio	n:		o.k	
n, Hydrocarbon	Ø	Amount B	lailed	
Thickness: _	F			(981.)
- am			12" = 5.80	' ≒ 0.66
	メルン Mar (case volume)	= Estimated Pe	urga Volume:	18 /2 _{gal}
	uipment:	-	aller	
•			ėr	
cal Bailer		•		
	m.			
Weather	Conditions:		SUNN	
			Odor: 4	<i>C</i> S
<u> ගත</u> Sedimen	t Description:	silty		
If yes;	Time:	Volu	ıme:	(ga
Conductivity µmhos/cm	Temperature •C	D.O. (mg/L)	ÓRP (mV)	Alkalinit (ppm)
8 530	8/0			
			•	
	67.6	'	-	
	67.2			
4.				
				
5 521	<u>(do.7</u>			······································
				
		RORATORY	ANAIN	/SFS
1			TPH G/BTEX	
Y NP	· · · · · · · · · · · · · · · · · · ·		TPH-DRO	
	, ac.	4	1. 2.	, ,,
ico. UP GOOD	AT 18	12 GAL.	WATCH	WAS
	Thickness: Volume Factor (VF) It. X VF . 17 = 1.8 Weather Water Conductivity productivity p	Thickness: Volume Factor (VF) Sampling Equipment: Weather Conditions: Water Color: If yes; Time: Conductivity puthos/cm Signature Conductivity Conductivity puthos/cm Signature Conductivity Signature Conductivit	Thickness: Thickness: Thickness: Volume Factor (VF) Thickness: Thickness: Volume Factor (VF) Thickness: Fit. (product/was as a product of a	Thickness: Thickness Et [product/water] Et Volume 2" = 0.17 3" = 0.38 4" Factor (VF)

FIELD DATA SHEET

Client/ Facility <u>Chev</u>	ronTexaco #211283		Job#: _	386956		
Address: <u>381</u>	O Broadway		Date: _	6	77.	
	land, CA		Sampler: _		70	
Well ID	MW- 5B	Well Conditio	n:		o.k	
Well Diameter	2 in.	Hydrocarbon Thickness: _	Ø F1	Amount Ba		(gal.)
Total Depth Depth to Water	2 - 110/	Volume Factor (VF)	2" = 0.17 6" =	3* = 0.38 1.50	12" = 5.80 ^{4"}	= 0.66
·		17 = 1.61	XIO De (case volume)	= Estimated Pu	rge Volume:	/6 (ggl.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundtos Other: 2" STOW	· Eq		Disposable Ba Bailer Pressure Baile Grab Sample		
Starting Time: Sampling Time: Purging Flow R Did well de-wa	ate:	Water Co	Conditions: plor: <u>C/</u> t Description: Time:	pury	Odor: So	<i>J6)fT</i>
Time	Volume pH (gal.)	Conductivity µmhos/cm	Temperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1547	1.5 _ 7.86	1610	74.7			
1553	3.0 7.42	986	72-2			*
/	4.5 7.80	938	69.0	, , , , , , , , , , , , , , , , , , , 		
	7.40	969	68.2	·		
	1.5 7.32 9.0 7.40	776	69.2.		· · · · · · · · · · · · · · · · · · ·	
- Tree -	0.5 7.3/	985	64.5			
· · · · · · · · · · · · · · · · · · ·	2.0 7-24	992	69.1			
	3.5 7.22	991	70.2			
1606 1	6.0 7.16	996	70.2			
		LABORATORY		DONATORY.	40141	V050
SAMPLE ID		frig. Preserv Y HCL		BORATORY	ANAL	
NW-5B		T NP	-	ester	TPH-DRO	W. 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
WW.3	V WILLET	, MI	E CANCE			
COMMENTS:	well Classes			6 d. 1	NATER	WAS
A Cittle			lopment		= 30.35	
	.ei∸		V	*		

ENCLOSURE I

Groundwater Analytical Data



ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 812857. Samples arrived at the laboratory on Thursday, June 27, 2002. The PO# for this group is 99011184 and the release number is STREICH.

Client Description		Lancaster Labs Number
QA-T-020625	NA Water	3843046
MW-1-W-020625	Grab Water	3843047
MW-4-W-020625	Grab Water	3843048
MW-5B-W-020625	Grab Water	3843049
MW-6-W-020625	Grab Water	3843050
MW-7-W-020625	Grab Water	3843051
MW-9-W-020625	Grab Water	3843052
MW-10-W-020625	Grab Water	3843053
MW-11-W-020625	Grab Water	3843054
MW-12-W-020625	Grab Water	3843055

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Delta C/O Gettler-Ryan Attn: Deanna L. Harding





Respectfully Submitted,

Susan M. Croyle
Sr. Chemist/Coordinator



Page 1 of 1

Lancaster Laboratories Sample No. WW 3843046

Collected:06/25/2002 00:00 Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

QA-T-020625 NA Water

3810 Broadway-Oakland T00600101108 QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
02725	III ONO MACCIB			1		
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was was performed to demonstrate pr	rior to the C6	(n-hexane) TPH-G	RO range A LCS/LCSD		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether A site-specific MSD sample was	1634-04-4 not submitted	N.D. for the project.	2.5 A LCS/LCSD	ug/l	1
	was performed to demonstrate pr			•		

State of California Lab Certification No. 2116

Laboratory	Chronicle

		<u> </u>	CIII O.	111010		
CAT				Analysis		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1.	07/01/2002 06:21	Patrick N Evans	1
		Method				
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 06:21	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1.	07/01/2002 06:21	Patrick N Evans	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit

N.D.=Not detected at or abbreatter Reissortings Uninit MEMBER 2425 New Holland Pike

ACIL

2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681

As Received



Page 1 of 2

Lancaster Laboratories Sample No. 3843047

Collected: 06/25/2002 14:15 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-1-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T0060,0101108 MW-1

283M1

CAT				No recerved		
	N		As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection	Units	Factor
٥٥٥٥	MDU DDO GD THOM (***			Limit		
05553	TPH - DRO CA LUFT (Waters)	n.a.	490.	50.	ug/1	1
	According to the California LUFT	Protocol, the	e quantitation fo	or Diesel		
	Range Organics was performed by	peak area comp	parison of the sa	ample pattern		
	to that of our #2 fuel oil refer	ence standard	(between Cl0 and	d C28 normal		
	hydrocarbons).					
	Site-specific MS/MSD samples wer	e not submitte	ed for the projec	ct. A LCS/LCSD		
	was performed to demonstrate pre	cision and acc	uracy at a batch	level.		
	Due to interferences from the sa	mple matrix (nigh sediment com	ntent), the		
	reporting limit was increased.					
	The observed sample pattern is n	ot typical of	diesel/#2 fuel d	oil.		
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters					
01730		n.a.	N.D.	50.	ug/l	1
	The reported concentration of TP	H-GRO does not	: include MTBE or	other		
	gasoline constituents eluting pr	TOT CO THE CO	(n-nexane) TPH-C	RO range		
	A site-specific MSD sample was n	ot submitted i	or the project.	A LCS/LCSD		
	was performed to demonstrate pre	cision and acc	uracy at a batch	ı level.		
08214	BTEX, MTBE (8021)					
	2221, 1122 (0022)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N D.	0.50	uq/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	09/1	1
00780	Methyl tert-Butyl Ether	1634-04-4	N D.	2.5	ug/1	1
	A site-specific MSD sample was n	ot submitted f	or the project.	A LCS/LCSD	5.	

State of California Lab Certification No. 2116

717-656-2300 Fax: 717-656-2681

was performed to demonstrate precision and accuracy at a batch level.

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or abbyeather theoretical MEMBER 2425 New Holland Pike MEMBER PO Box 12425 Lancaster, PA 17605-2425

2216 Rev. 9/11/00



Page 2 of 2

Lancaster Laboratories Sample No. WW 3843047

Collected:06/25/2002 14:15 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-1-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-1

283M1

Laboratory Chronicle

CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1.	07/02/2002 21:59	Devin M Lahr	1
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	07/01/2002 12:49	Patrick N Evans	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 12:49	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	07/01/2002 12:49	Patrick N Evans	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1

As Received



Page 1 of 2

Lancaster Laboratories Sample No. WW 3843048

Collected: 06/25/2002 13:37 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-4-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-4

283M4

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters)	n.a.	250.	50.	ug/l	1
	According to the California LUF	T Protocol, the	e quantitation fo	or Diesel		
	Range Organics was performed by	peak area comp	parison of the sa	umple pattern		
	to that of our #2 fuel oil refe hydrocarbons).	rence standard	(between C10 and	l C28 normal		
	Site-specific MS/MSD samples we	re not submitte	ed for the projec	t. A LCS/LCSD		
	was performed to demonstrate pr	ecision and acc	curacy at a batch	level.		
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T					
	gasoline constituents eluting p	rior to the C6	(n-hexane) TPH-G	RO range		
	start time.		C	* * GG /* GG		
	A site-specific MSD sample was					
	was performed to demonstrate pr	ecision and acc	curacy at a bater	i tevet.		
08214	BTEX, MTBE (8021)					
00211	DIDIT, TIEB (0022)			1		
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was	not submitted	for the project.	A LCS/LCSD		
	was performed to demonstrate pr	ecision and ac	curacy at a batch	ı level.		

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT Analysis Name Method Trial# Date and Time Analyst Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above fife Reporting Ulmit



PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 2 of 2

Lancaster Laboratories Sample No. 3843048

Collected: 06/25/2002 13:37 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94581

MW-4-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T00600101108 MW-4

283M4						
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	07/03/2002 21:16	Devin M Lahr	1
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	07/01/2002 13:24	Patrick N Evans	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 13:24	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	07/01/2002 13:24	Patrick N Evans	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Liquit



MEMBER 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 1 of 2

Lancaster Laboratories Sample No. WW 3843049

Collected: 06/25/2002 16:20 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-5B-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-5B

2835B

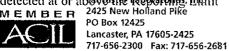
CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre-	peak area comp ence standard e not submitte	earison of the same (between C10 and and and are the project	50. Diesel ple pattern C28 normal	ug/l	1
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters n.a. 660. 50. ug/l The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)			1		
00776	Benzene	71-43-2	89.	0.50	ug/l	1
00777	Toluene	108-88-3	1.9	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	39.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	11.	1.5	ug/l	1
00780	7,0000					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT Analysis Name Method Trial# Date and Time Analyst Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit





Page 2 of 2

Lancaster Laboratories Sample No. WW 3843049

Collected: 06/25/2002 16:20 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-5B-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-5B

|--|

05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	07/02/2002 19:00	Devin M Lahr	1
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	07/01/2002 16:20	Patrick N Evans	1
08214 01146 07003	BTEX, MTBE (8021) GC VOA Water Prep Extraction - DRO (Waters)	SW-846 8021B SW-846 5030B TPH by CA LUFT	1 1 1	07/01/2002 16:20 07/01/2002 16:20 07/01/2002 01:50	Patrick N Evans Patrick N Evans JoElla L Rice	1 n.a. 1

As Received



Page 1 of 2

Lancaster Laboratories Sample No. WW 3843050

Collected: 06/25/2002 12:59 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-6-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-6

283M6

CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre-	peak area comp cence standard ce not submitte	earison of the same (between C10 and ed for the project	mple pattern C28 normal t. A LCS/LCSD	ug/1	5
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of Tigasoline constituents eluting prostart time. A site-specific MSD sample was a was performed to demonstrate pro-	rior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD	ug/l	10
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	2,200.	2.0	ug/l	1.0
00777	Toluene	108-88-3	1,800.	2.0	ug/l	10
00778	Ethylbenzene	100-41-4	850.	2 0	ug/1	10
00779	Total Xylenes	1330-20-7	2,100.	6.0	ug/l	10
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	100.	ug/l	10
	A site-specific MSD sample was	not submitted	for the project.	A LCS/LCSD		

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for MTBE. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

State of California Lab Certification No. 2116

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit



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Page 2 of 2

Lancaster Laboratories Sample No. WW 3843050

Collected: 06/25/2002 12:59 by TC Account Number: 10205

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-6-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T00600101108 MW-6

283M6

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	07/03/2002 20:54	Devin M Lahr	5
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1.	07/01/2002 20:31	Patrick N Evans	10
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 20:31	Patrick N Evans	10
01146	GC VOA Water Prep	SW-846 5030B	1	07/01/2002 20:31	Patrick N Evans	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1



Page 1 of 2

Lancaster Laboratories Sample No. WW 3843051

Collected: 06/25/2002 10:44 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-7-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-7

283M7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor	
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre	peak area com rence standard re not submitt	parison of the sa (between C10 and ed for the projec	50. r Diesel mple pattern C28 normal	ug/l	1	
01729	TPH-GRO - Waters						
01730	TPH-GRO - Waters n.a. N.D. 50. ug/l 1 The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
08214	BTEX, MTBE (8021)						
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1	
00777	Toluene	108-88-3	N.D.	0.50	ug/1	1	
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/1	1	
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1	
00780	2000 EV						

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT Analysis Name Method Trial# Date and Time Analyst Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or abbresche Responsives.ltimit

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2216 Rev. 9/11/00



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Lancaster Laboratories Sample No. WW 3843051

Collected:06/25/2002 10:44 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-7-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-7

2	8	3M7

Z03M/						
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range	1	07/02/2002 19:22	Devin M Lahr	1
		Organics				
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1	07/01/2002 13:59	Patrick N Evans	1
		Method		·		
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 13:59	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	07/01/2002 13:59	Patrick N Evans	n a
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1
		=		-		-

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Lancaster Laboratories Sample No. 3843052

by TC Account Number: 10905 Collected: 06/25/2002 12:08

Submitted: 06/27/2002 09:30 ChevronTexaco

6001 Bollinger Canyon Rd L4310 Reported: 07/12/2002 at 11:45

San Ramon CA 94583 Discard: 08/12/2002

Grab Water MW-9-W-020625

GRD Job# 386956 Facility# 211283

T00600101108 MW-9 3810 Broadway-Oakland

283M9

				As Received			
CAT			As Received	Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
05553	TPH - DRO CA LUFT (Waters)	n.a.	100.	50.	ug/l	1	
	According to the California LUF Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples we was performed to demonstrate pro	peak area com rence standard re not submitt	parison of the sa (between C10 and ed for the projec	ample pattern 1 C28 normal ct. A LCS/LCSD			
01729	TPH-GRO - Waters						
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1	
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
08214	BTEX, MTBE (8021)						
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1	
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1	
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1	
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1	
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2,5	ug/l	1	
	A site-specific MSD sample was						
	was performed to demonstrate pr	ecision and ac	curacy at a batc	h level.			

State of California Lab Certification No. 2116

Laboratory Chronicle

Dilution Analysis CAT Factor Analyst Method Trial# Date and Time No. Analysis Name

#=Laboratory MethodDetection Limit exceeded target detection limit



N.D.=Not detected at or above the Reportating Indimit PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



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Lancaster Laboratories Sample No. 3843052

Collected:06/25/2002 12:08 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:45 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-9-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T00600101108 MW-9

283M9

203112						
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range	1	07/02/2002 19:44	Devin M Lahr	1
		Organics				
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1.	07/01/2002 14:34	Patrick N Evans	1
		Method		, ,		-
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/01/2002 14:34	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1.	07/01/2002 14:34	Patrick N Evans	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1
	• • • • • • • • • • • • • • • • • • • •	•		•		-





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Lancaster Laboratories Sample No. WW 3843053

Collected:06/25/2002 11:25 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:46 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-10-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-10

28310

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre-	peak area comp cence standard ce not submitte	parison of the same (between Cl0 and ed for the project	mple pattern C28 normal	ug/l	1
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of Tigasoline constituents eluting postart time. A site-specific MSD sample was a was performed to demonstrate pro-	rior to the Cf	(n-hexane) TPH-GP for the project.	RO range A LCS/LCSD	ug/1	1
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	180,	0.50	ug/l	1
00777	Toluene	108-88-3	3.2	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	17.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	8.0	1.5	ug/l	1
00780	Total Rytenes					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT Analysis Name Method Trial# Date and Time Analyst Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Indimit



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Lancaster Laboratories Sample No. WW 3843053

Collected: 06/25/2002 11:25 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:46 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-10-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-10

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05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	07/02/2002 20:52	Devin M Lahr	1.
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	07/02/2002 12:27	Anastasia Papadoplos	1
08214 01146 07003	BTEX, MTBE (8021) GC VOA Water Prep Extraction - DRO (Waters)	SW-846 8021B SW-846 5030B TPH by CA LUFT	1 1 1	07/02/2002 12:27 07/02/2002 12:27 07/01/2002 01:50	Anastasia Papadoplos Anastasia Papadoplos WoElla L Rice	1 n.a. 1

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As Pagained



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Lancaster Laboratories Sample No. WW 3843054

Collected:06/25/2002 10:05 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:46 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-11-W-020625 Grab Water

3810 Broadway-Oakland T00600101108 MW-11

28311

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection	Units	Factor
				Limit		
05553	TPH - DRO CA LUFT (Waters)	n.a.	N.D.	50.	ug/l	1
	According to the California LUFT					
	Range Organics was performed by	peak area comp	arison of the sam	mple pattern		
	to that of our #2 fuel oil refer hydrocarbons).	rence standard	(between C10 and	C28 normal		
	Site-specific MS/MSD samples wer	e not submitte	d for the project	. A LCS/LCSD		
	was performed to demonstrate pre	ecision and acc	uracy at a batch	level.		
01729	TPH-GRO - Waters					
				•		
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/1	1
	The reported concentration of TE					
	gasoline constituents eluting pr	rior to the C6	(n-hexane) TPH-GR	RO range		
	start time.	_				
	A site-specific MSD sample was r					
	was performed to demonstrate pre	ecision and acc	uracy at a batch	level.		
08214	BTEX, MTBE (8021)					
	DIER, MDD (COEI,					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was r	ot submitted f	or the project. A	LCS/LCSD		
	was performed to demonstrate pre	ecision and acc	uracy at a batch	level.		

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT Analysis Name Method Trial# Date and Time Analyst Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above तर स्थितावाङ्गीयातांर na = na = = 2425 New Holland Pike





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Lancaster Laboratories Sample No. 3843054

Collected:06/25/2002 10:05 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:46 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-11-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T00600101108 MW-11

28311

05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range	1	07/02/2002 21:14	Devin M Lahr	1
		Organics		1		
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1	07/02/2002 11:16	Anastasia Papadoplos	1
		Method				
08214	BTEX, MTBE (8021)	SW-846 8021B	1	07/02/2002 11:16	Anastasia Papadoplos	1
01146	GC VOA Water Prep	SW-846 5030B	1	07/02/2002 11:16	Anastasia Papadoplos	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	07/01/2002 01:50	JoElla L Rice	1



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Lancaster Laboratories Sample No. 3843055

Collected: 06/25/2002 15:10

by TC

Account Number: 10905

Submitted: 06/27/2002 09:30

Reported: 07/12/2002 at 11:46

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002

San Ramon CA 94583

As Received

MW-12-W-020625

Grab

Water

GRD

Facility# 211283 Job# 386956 3810 Broadway-Oakland

T00600101108 MW-12

28312

CAT				wa kecelhed		
No.	33		As Received	Method		Dilution
	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters)	n.a.	410.	50.	ug/l	1
	According to the California LUF	T Protocol, the	e quantitation f	or Diesel		_
	Range Organics was performed by	peak area com	parison of the s	ample pattern		
	to that of our #2 fuel oil refe hydrocarbons).	rence standard	(between C10 and	d C28 normal		
	Site-specific MS/MSD samples we	re not submitte	ed for the project	et. A LCS/LCSD		
	was performed to demonstrate pr	ecision and acc	curacy at a batcl	n level.		
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	1,000.	50,	ug/1	1.
	The reported concentration of T	PH-GRO does not	include MTBE or	r other		*
	<pre>gasoline constituents eluting p start time.</pre>	rior to the C6	(n-hexane) TPH-(GRO range		
	A site-specific MSD sample was	not submitted i	or the project.	A LCS/LCSD		
	was performed to demonstrate pr	ecision and acc	curacy at a batch	level.		
00074			-			*
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	340.	0.50	ug/l	1
00777	Toluene	108-88-3	8,2	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	16.	0.50	ug/1	1
00779	Total Xylenes	1330-20-7	8.3	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	11.	2.5	ug/1	ı
	A site-specific MSD sample was	not submitted f	or the project.	A LCS/LCSD	·· .	-
	was performed to demonstrate pr	ecision and acc	uracy at a batch	level.		
			-			

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.

Analysis Name

Method

Analysis Trial# Date and Time

Analyst

Dilution Factor

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or abdocenterReportinged April



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Lancaster Laboratories Sample No. 3843055

Collected: 06/25/2002 15:10 by TC Account Number: 10905

Submitted: 06/27/2002 09:30 ChevronTexaco

Reported: 07/12/2002 at 11:46 6001 Bollinger Canyon Rd L4310

Discard: 08/12/2002 San Ramon CA 94583

MW-12-W-020625 Grab Water

Facility# 211283 Job# 386956 GRD

3810 Broadway-Oakland T00600101108 MW-12

28312						
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	07/02/2002 22:44	Devin M Lahr	1
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	07/03/2002 03:31	Anastasia Papadoplos	1
08214 01146 07003	BTEX, MTBE (8021) GC VOA Water Prep Extraction - DRO (Waters)	SW-846 8021B SW-846 5030B TPH by CA LUFT	1 1 1	07/03/2002 03:31 07/03/2002 03:31 07/01/2002 01:50	Anastasia Papadoplos Anastasia Papadoplos JoElla L Rice	1 n.a. 1





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Quality Control Summary

Client Name: ChevronTexaco Group Number: 812857

Reported: 07/12/02 at 11:46 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 021800004A	Sample nu	mber(s): 3	843047-38	43055				
TPH - DRO CA LUFT (Waters)	N.D.	50.	ug/l	81	77	154~120	5	20
Batch number: 02181A56A	Sample num	nher(e). 2	042046-20	42040 2042	001 2042	252		
Benzene	N.D.	0.5	ug/l	95	91	80~118		
Toluene	N.D.	0.5	ug/l	101	97	82-119	4 4	30 30
Ethylbenzene	N.D.	0.5	ug/1	100	96	81-119 81-119		
Total Xylenes	N.D.	1.5	ug/l	100	96 97	81-119 82-120	4	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/1 ug/1	91	91		4	30
TPH-GRO - Waters	N.D.	50.	ug/1 ug/1	97	93	79-127	0	30
THE CHO HACCED	11.10.	50.	ug/1	31	93	76-126	4	30
Batch number: 02181A56B	Sample num	mber(s): 3	843050					
Benzene	N.D.	0.5	ug/l	95	91	80-118	4	30
Toluene	N.D.	0.5	ug/1	101	97	82-119	4	30
Ethylbenzene	N.D.	0.5	ug/l	100	96	81-119	4	30
Total Xylenes	N.D.	1.5	ug/l	100	97	82-120	4	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	91	91	79-127	0	30
TPH-GRO - Waters	N.D	50.	ug/l	97	93	76-126	4	30
Batch number: 02183A56A	Sample num	show(a) . 3	043063 30	12054				
Benzene	N.D.	0.5					_	
Toluene	N.D. N.D.		ug/1	101	104	80-118	3	30
Ethylbenzene	N.D. N.D.	0.5	ug/1	102	107	82-119	4	30
Total Xylenes		0.5	ug/l	104	108	81-119	5	30
Methyl tert-Butyl Ether	N.D.	1.5	ug/l	103	108	82-120	4	30
TPH-GRO - Waters	N.D.	2.5	ug/1	102	97	79-127	5	30
IFM-GRO - Waters	N.D.	50.	ug/l	96	100	76-126	4	30
Batch number: 02183A56B	Sample num	mber(s): 3	843055					
Benzene	N.D.	0.5	uq/l	101	104	311-08	3	30
Toluene	N.D.	0.5	uq/l	102	107	82-119	4	30
Ethylbenzene	N.D.	0.5	ug/l	104	108	81-119	5	30
Total Xylenes	N.D.	1,5	uq/l	103	108	82-120	4	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	102	97	79-127	5	30
TPH-GRO - Waters	N.D.	50.	ug/l	96	100	76-126	4	30
			٠,	-		. 5 125	*	

Sample Matrix Quality Control

	MS	MSD	ms/msd		RPD	BKG	DUP	DUP	Dup
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	RPD Max
Batch number: 02181A56A Benzene	Sample	e number	(s): 384304	16-38430	49,384	3051-38430	52		

80-128

76-132

76-132

Toluene 110
Ethylbenzene 112
Total Xylenes 111

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



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Dup RPD Max

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 812857

Reported: 07/12/02 at 11:46 AM

Sample Matrix Quality Control

	MS	MSD	ms/msd		RPD	BKG	DUP	DUP
Analysis Name Methyl tert-Butyl Ether TPH-GRO - Waters	%REC 92 92	%REC	Limits 61-144 74-132	RPD	MAX	Conc	Conc	RPD
Batch number: 02181A56B Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH-GRO - Waters	Sample 106 110 112 111 92 92	number(s): 3843050 77-131 80-128 76-132 76-132 61-144 74-132			•		
Batch number: 02183A56A Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH-GRO - Waters	Sample 102 104 104 104 86 91	number(s): 3843053- 77-131 80-128 76-132 76-132 61-144 74-132	-384305	4			
Batch number: 02183A56B Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH-GRO - Waters	Sample 102 104 104 104 86 91		s): 3843055 77-131 80-128 76-132 76-132 61-144 74-132					

Surrogate Quality Control

Analysis Name: TPH - DRO CA LUFT (Waters)

Batch number: 021800004A Orthoterphenyl

3843047	87
3843048	59
3843049	91
3843050	86
3843051	90
3843052	94
3843053	103
3843054	93
3843055	99
Blank	96
LCS	91
LCSD	88

- *- Outside of specification
- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



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Quality Control Summary

Client Name: ChevronTexaco

Group Number: 812857

Reported: 07/12/02 at 11:46 AM

Surrogate Quality Control

		Sand Sadiffy Courtor
Limits:	59-139	
Analvsis	Name: TPH-GRO - Waters	
Batch num	ber: 02181A56A	
	Trifluorotoluene-F	Trifluorotoluene-P
2042046		
3843046	93	98
3843047	92	98
3843048	95	96
3843049	95	99
3843051	91	97
3843052	95	97
Blank	92	97
LCS	105	98
LCSD	101	98
MS	102	98
Limits:	67-135	71-130
Amalasada 1	Towns MDI OD	
Analysis I	Name: TPH-GRO - Waters Der: 02181A56B	
batti ilum		
	Trifluorotoluene-F	Trifluorotoluene-P
3843050	98	106
Blank	93	9.7
LCS	105	98
LCSD	101	98
MS	102	98
Limits:	67-135	71-130
Analysis N	Jame: TPH-GRO - Waters	
Batch numb	per: 02183A56A	
Ducon nam	Trifluorotoluene-F	Trifluorotoluene-P
3843053	98	99
3843054	90	98
Blank	92	97
LCS	105	99
LCSD	111	97
MS	104	98
Limits:	67-135	71-130
Analysis N	ame: TPH-GRO - Waters	
Batch numb	er: 02183A56B	
	Trifluorotoluene-F	Trifluorotoluene-P
3843055	98	95
Blank	90	96
LCS	105	99
		· ·

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.





Page 4 of 4

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 812857

Reported: 07/12/02 at 11:46 AM

Surrogate Quality Control

LCSD MS

111

97

104

98

Limits:

67-135

71-130

⁽²⁾ The background result was more than four times the spike added.



^{*-} Outside of specification

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

Chevron California Region Analysis Request/Chain of Custody

412	Lancaster	Laboratories science.
4	Where quality is a	science.

912857 Acct. #: 10905 Sample #: 3843046-55 SCR#:	gr#812857	For Lancaster Laboratories use only Acct. #: 10905 Sample #: 3843046-55	SCR#:
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W. Where quality is a science.	02-00	2-005						Ana	alyse	s Re	7							
Facility #: 211283 Job #386956	Giobel ID#T00600101108				Matrix				Pr∈	sen	/atio	n Co	Preservative Codes					
1 45 11 11 11 11 11 11 11 11 11 11 11 11 11						Ā	H							+		T = Thiosu		
Site Address: 3810 BROADWAY, OAKLAND, CA								aunb						1			B = NaOH O = Other	
Chevron PM: K.STREICH Lead Consultant: DELTA					Sign			Cle								☐ J value reporti	ng needed	
Consultant/Office: G-R, Inc., 6747 Sierra Court, Dublin, Ca 94568					Oil Air Cotal Number of Containers	□ 8021 \	1	Silica Gel Cleanup								☐ Must meet low possible for 82	est detection	
Consultant Prj. MgDeanna L. Harding (Deanna@grinc.com)					ြင်	ä					٦						-	inus
Consultant Phone #25-551-7555 Fax #: _925-551-7899				Potable NPDES	ا ا	8260	SRC SRC	DRO	2	127						8021 MTBE Conf		30
Sampler: Tony CAMARDA					민활	盟	gop	TPH 8015 MOD DRO	ult scan Oxygenates	[ונ					Confirm all hits	•	
Service Order #:Non SAR:			sod	ь Б	Air	¥	3015	30151								Runoxy		st hit
Sample Identification	Date Collected C	Time &	Composite	Water	Oil C	BTEX + MTBE	TPH 8015 MOD GRO	TPH.8	8260 full scan	ead						☐ Run oxy	s on all hits	;
OA	6.25.02 -			×	7	2 ×	X									Comments / R	emarks	
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Mw. 4		337 X		X	2		X	X				_				_		1
MW.5B		020 X		X			X			+	+	-			+			
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