Alameda County

CAMBRIA

September 2, 2003

Mr. Don Hwang Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-9335

Re:

Additional Subsurface/Baseline Investigation 2003

Cambria Project No: 31D-1650



Dear Mr. Hwang:

On behalf of Chevron Products Company (Chevron), Cambria Environmental Technology Inc. (Cambria) has completed an additional subsurface investigation at the site referenced above. The Alameda County Health Care Services Agency (ACHCSA), in a letter dated December 4, 2002, requested this investigation to further characterize the site by collecting and analyzing additional soil and groundwater data. Presented below are a site description, brief history and investigation results.

SITE DESCRIPTION

The site is an operating Chevron gasoline service station located on the northern corner of the intersection of MacArthur Boulevard and Magee Avenue in Oakland, California. The site is approximately 210 feet above sea level and local topography slopes gently toward the southwest (Figure 1). The site is surrounded by small commercial properties, with residential properties located upslope to the northeast.

INVESTIGATION RESULTS

The objective was to further investigate the occurrence and define the extent of hydrocarbons in soils and groundwater onsite. To meet this objective, Cambria advanced eight soil borings on site. Cambria's investigation results are presented below. The boring logs and laboratory analytical reports are presented in Attachments A and B.

Cambria **Environmental** Technology, Inc.

Project Personnel:

Staff Geologist Sarah Owen conducted all fieldwork under the supervision

of Registered Geologist Robert Foss.

5900 Hollis Street Suite A Emeryville, CA 94608 Tel (510) 420-0700 Fax (510) 420-9170

Permits:

Alameda County Public Works Agency ...

Gregg Drilling & Testing, Inc. of Martinez, California.

Drilling Company:

Drilling Dates:

Number of Borings:

Drilling Method:

Chevron's safety protocol requires that the first eight feet of each soil boring be cleared prior to drilling. This was accomplished using an air knife. Since the scope of work outlined that the borings be advanced to 10 feet below grade (fbg), the remaining depths of each boring were also cleared with the air knife and samples, at intermediate depths, were collected with a hand

auger.

Boring Depths:

Soil borings B-1 and B-3 through B-9 were advanced to total depths between

6 and 10.5 fbg.

Site Hydrogeology:

The site is predominantly underlain by clayey silts and gravelly silts, with some gravelly sands. Groundwater was encountered from 3 to 10 fbg in all borings. Groundwater beneath the site generally flows south/southwest.

Sampling Technique:

The borings were cleared to approximately 10 fbg with an air-knife and/or a hand auger, unless refusal occurred at shallower depths. Soil samples were collected above the water table and at approximately 9-9.5 fbg using a hand sampler. Samples were also collected at areas of suspected hydrocarbon impacts. Grab groundwater samples were collected from each boring, after total depth was reached, using dedicated disposable polyethylene bailers. Groundwater from B-3 was collected the following day in order to allow water to infiltrate into the borehole. All samples were labeled, placed on ice, and transported to Lancaster Laboratories following prescribed Chain of

Custody procedures.

Sample Screening:

A photo-ionization detector and field observations were used to screen

samples from all borings.

Laboratory Analysis: Soil and groundwater samples were analyzed for:

 Total Petroleum Hydrocarbons as gasoline (TPHg), and ethanol by modified EPA Method 8015;

 BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2 DCA, and EDB by EPA Method 8260.

Depth to Water:

Groundwater was encountered in the borings at depths between 3 and 10 fbg. No groundwater was encountered in boring B-7.

Soil/Water Disposal:

Cuttings from the borings were stockpiled and stored onsite. Soil cuttings were characterized by Lancaster Laboratories and transported by Integrated Waste Management of Milipitas, California to Republic Services Vasco Road Landfill in Livermore, California.

HYDROCARBON DISTRIBUTION IN SOIL

Eight soil borings were advanced on site: B-1, and B-3 through B-9 (Figure 2). Boring B-2 was attempted but abandoned due to intersecting tankfield backfill gravels in both the initial boring and the relocated boring attempt. Upon the recommendations of the project manager, no further attempts to relocate B-2 were made and the borings were backfilled with gravel and patched with concrete. Boring B-7 was attempted three times and refusal was met in each boring at 5, 5, and 6 fbg. A soil sample from the third attempted B-7 location was collected at 1.5 fbg. An additional soil boring was advanced on the southern end of the property near MW-3, due to the presence of green-stained soils observed in upgradient borings B-5 and B-6 near the used oil tank.

TPHg was detected in soil samples collected from soil borings B-7 and B-8, at concentrations of 2.5 and 3.3 mg/kg at depths of 1.5 and 2.0 fbg, respectively. MTBE was detected in soil samples collected from all borings, except B-1, at low concentrations. The highest MTBE concentration detected in soil was 0.13 mg/kg collected from B-4 at 9.5 fbg. Low levels of TAME and TBA were detected in borings B-4, B-7 and B-8 at maximum concentrations of 0.002 and 0.044 mg/kg, respectively. Other tested oxygenates, lead scavengers and ethanol were not detect. Table 1 summarizes soil analytic results.

HYDROCARBON DISTRIBUTION IN GROUNDWATER

Grab groundwater samples were collected during advancement of soil borings on July 29 and 30, 2003. The highest concentrations of TPHg and MTBE were detected at 5,200 µg/L and 980 µg/L, respectively, in groundwater samples collected from B8. The highest TAME and TBA concentrations were detected in groundwater samples collected from B-8. Other oxygenates, lead scavengers and ethanol were not detected. Table 2 summarizes the grab groundwater analytic results.

CONCLUSIONS AND RECOMMENDATIONS



The objective of this work was to further define the lateral extent of hydrocarbons in soil and groundwater. TPHg concentrations in soil were detected only in B-7 and B-8 at very shallow depths. TPHg concentrations in groundwater were detected only in B-7 and B-8. Low concentrations of MTBE were detected in soil samples from all borings except B-1. MTBE was detected in all grab groundwater samples collected during this investigation, with the highest concentrations being found in B-8, B-7 and B-4. These data suggest that the areas of greatest impact on site are downstream of the used oil tank and groundwater monitoring well MW-2. Cambria recommends the continued monitoring and sampling of onsite wells, with the possible installation of a fourth monitoring well offsite on the south side of Magee Avenue to determine the extent of hydrocarbon impacts to groundwater.

Please contact Sarah Owen at (510) 420-3350 or Robert Foss at (510) 420-3348 with any questions or comments regarding this report.

Sincerely,

Cambria Environmental Technology, Inc.

Sarah Owen

Staff Geologist

Robert Foss, R.G.

Senior Project Geologist

Figures

1 - Site Vicinity Map

2 - Site Plan with Soil Boring and Well Locations

Tables 1 - Analytic Results for Soil

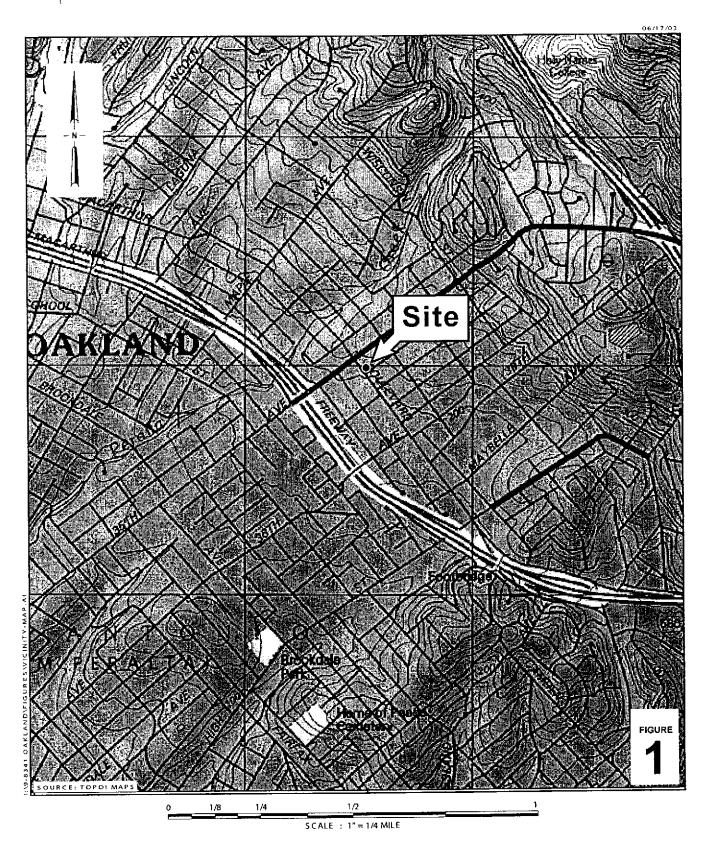
2 - Analytic Results for Groundwater

Attachments: A - Boring Logs

B-Laboratory Soil and Groundwater Analytic Results

cc: Karen Streich, ChevronTexaco, P.O. Box 6012, San Ramon, CA 94583

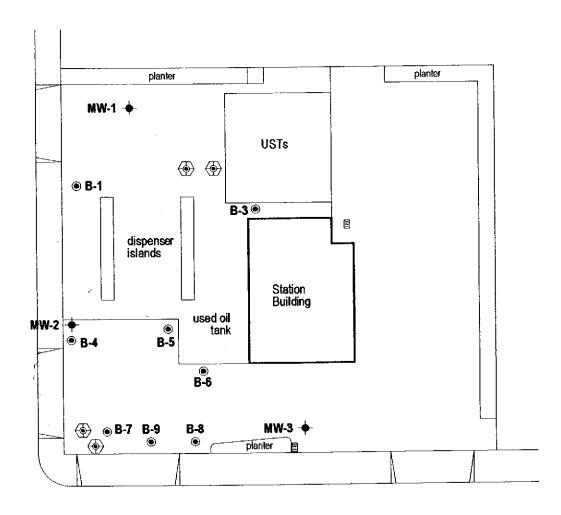




Chevron Service Station 9-8341



Vicinity Map



EXPLANATION

IW-1

Monitoring well location

B-7

Soil boring location

Attempted soil boring location

0 15 30 Scale (ft)

7

Chevron Service Station 9-8341

3530 MacArther Boulevard Oakland, California



Site Plan

Table 1. Analytic Results for Soil - Chevron Station 9-8341, 3530 MacArthur Boulevard, Oakland, California

Sample	Sample	Sample	TPHg	В	T	Е	X	MTBE*	TAME*	TBA*
ID	Date	Depth (fbg)			Concentration	ns reported in mi	lligrams per kile	ogram - mg/kg		
B-1-A	7/29/03	3.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.020
B-3-A	7/29/03	3.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.020
B-3-B	7/29/03	10.0	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.001	100.0>	< 0.020
B-4-A	7/30/03	2.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.029	< 0.001	< 0.020
B-4-B	7/30/03	9.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.13	0.002	< 0.020
B-5-A	7/29/03	3.0	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.020
B-5-B	7/29/03	9.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.020
B-6-A	7/29/03	2.0	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.020
B-6-B	7/29/03	9.5	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.020
B-7-A	7/30/03	1.5	2.5	< 0.001	< 0.001	< 0.001	< 0.001	0.020	0.001	< 0.020
B-8-A	7/30/03	2.0	3.3	< 0.001	< 0.001	0.001	0.002	0.11	0.002	0.044
B-8-B	7/30/03	9.5	<1.0	< 0.001	< 0.001	< 0.001	0.001	0.034	< 0.001	< 0.020
B-9-A	7/30/03	3.0	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.004	< 0.001	< 0.020
B-9-B	7/30/03	8.0	<1.0	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.020

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Oxygenates and lead scavengers by EPA Method 8260B

< x =Not detected above method detection limit

fbg = Feet below grade

^{* =} No DIPE, ETBE, 1, 2 DCA, or EDB were detected by EPA Method 8260B and no ethanol was detected by EPA Method 8015M

Table 2. Analytic Results for Groundwater - Chevron Station 9-8341, 3530 MacArthur Boulevard, Oakland, California

Sample	Sample	TPHg	В	T	E	X	MTBE*	TAME*	TBA*
ID	Date			Concentr	ations reported in	micrograms per	liter - µg/L		
B-1	7/29/03	<50	<0.5	<0.5	< 0.5	< 0.5	25	0.6	<5.0
B-3	7/30/03	<50	<0.5	<0.5	<0.5	< 0.5	10	< 0.5	8.0
B-4	7/30/03	<50	<0.5	< 0.5	<0.5	<0.5	420	9	28
B-5	7/29/03	<50	<0.5	4	0.6	8	50	11	<5.0
B-6	7/29/03	<50	<0.5	< 0.5	< 0.5	< 0.5	2	<0.5	<5.0
B-7	7/30/03	98	<0.5	<0.5	<0.5	<0.5	460	8	41
B-8	7/30/03	5,200	3	3	160	450	980	15	<5.0
B-9	7/30/03	<50	<0.5	< 0.5	< 0.5	< 0.5	10	0.6	<5.0

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Oxygenates and lead scavengers by EPA Method 8260B

< x =Not detected above method detection limit

fbg = Feet below grade

* = No DIPE, ETBE, 1, 2 DCA, or EDB were detected by EPA Method 8260B and no ethanol was detected by EPA Method 8015M

ATTACHMENT A

Boring Logs



Cambria Environmental Technology, Inc. 5900 Hollis Street. Ste. A Emeryville, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME BORING/WELL NAME B-1 Chevron Products Company DRILLING STARTED 29-Jul-03 JOB/SITE NAME Chevron Station #9-8341 DRILLING COMPLETED 29-Jul-03 3530 Mac Arthur Boulevard, Oakland, CA LOCATION WELL DEVELOPMENT DATE (YIELD) NA PROJECT NUMBER 31D-1650 GROUND SURFACE ELEVATION Not Surveyed Gregg Drilling DRILLER DRILLING METHOD Air Vac and Hand Auger TOP OF CASING ELEVATION Not Surveyed SCREENED INTERVAL NA BORING DIAMETER 4"

LOGGED BY	Sarah Owen				DEPTH TO WATER (First Encountered) 4.0 ft (29-Jul-03)				
REVIEWED BY	В.	Foss, RG	i# 7445	<u> </u>	DEPTH TO WATER (Static)	NA	<u> </u>	<u> </u>	
REMARKS	Re	efusal at 8	fbg.						
TPHg (mg/kg) BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WEL	L DIAGRAM	
WELL LOG (TPH-G) 1:9-8341 OAKLANDNINVESTIGATION 2003/GINT9-8341 GPJ DEFAULTGDT 8/25/03	B-1-A		ML		Pea gravel. Pea gravel. Sandy Gravelly SILT Red-brown; dry; stiff; 45% silt, 20% sand, 20% gravel, 15% clay; moderate plasticity; moderate estimated permeability. Clayey SILT Black; damp; stiff; 75% silt, 25% clay; moderate to high plasticity; moderate to low estimated permeability. Vacuum-cleared to 8 fbg.	0.5 1.0 6.5 8.0		✓ Concrete ✓ Portland Type I/II Bottom of Boring @ 8 fbg	



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BORING/WELL LOG

CLIENT NAME	Chevron Products Company	BORING/WELL NAI
JOB/SITE NAME	Chevron Station #9-8341	DRILLING STARTE
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLE
PROJECT NUMBER_	31D-1650	WELL DEVELOPME
DRILLER	Gregg Drilling	GROUND SURFACE
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING EL
BORING DIAMETER_	4 ¹¹	SCREENED INTER\
LOGGED BY	Sarah Owen	DEPTH TO WATER
	5 E 50% 344E	

BORING/WELL NAME B-3

DRILLING STARTED 29-Jul-03

DRILLING COMPLETED 29-Jul-03

WELL DEVELOPMENT DATE (YIELD) NA

GROUND SURFACE ELEVATION Not Surveyed

TOP OF CASING ELEVATION Not Surveyed

SCREENED INTERVAL NA

DEPTH TO WATER (First Encountered) 10.0 ft (29-Jul-03)

DEPTH TO WATER (Static) NA

REVIEWED BY	В	. Fos:	s, RG#	£7445		DEPTH TO WATER (Static)	NA		<u>Ā</u>
REMARKS									
TPHg (mg/kg) BLOW COUNTS	SAMPLEID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WEL	L DIAGRAM
<1.0	B-3-A		-	ML		Concrete. Pea gravel. Gravelly Sandy SILT Light brown; dry; stiff; 55% silt, 25% gravel, 10% sand, 10% clay; moderate plasticity; moderate estimated permeability. Clayey SILT Red brown; damp; stiff; 75% silt, 20% clay, 5% gravel; moderate plasticity; moderate to low	-0.5 -1.0		■ Concrete
			5 -	ML		estimated permeability. Vacuum-cleared to 8 fbg.	10.5		✓ Portland Type I/II
<1.0	B-3-B	1	-10-				10.5		Bottom of Boring @ 10.5 fbg
	ANAGONISSI MAMOONIS		val bour valerair van						PAGE 1 OF



Cambria Environmental Technology, Inc. 5900 Hollis Street, Ste. A Emeryville, CA 94608 Telephone: (510) 420-0700

BORING/WELL LOG

Fax: (510) 420-9170

CLIENT NAME	Chevron Products Company	BORING/WELL NAME B-4
JOB/SITE NAME _	Chevron Station #9-8341	DRILLING STARTED 30-Jul-03
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLETED 30-Jul-03
PROJECT NUMBER_	31D-1650	WELL DEVELOPMENT DATE (YIELD) NA
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATION Not Surveyed
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING ELEVATION Not Surveyed
BORING DIAMETER	4"	SCREENED INTERVAL NA
LOGGED BY	Sarah Owen	DEPTH TO WATER (First Encountered) 3.0 ft (30-Jul-03)
REVIEWED BY	B. Foss, RG# 7445	DEPTH TO WATER (Static) NA
		-

REMARKS CONTACT DEPTH (fbg) TPHg (mg/kg) SAMPLE ID GRAPHIC LOG BLOW U.S.C.S. DEPTH (fbg) EXTENT WELL DIAGRAM LITHOLOGIC DESCRIPTION Concrete 0.5 Gravelly SILT Red brown; dry; stiff; 55% silt, 20% gravel, 15% clay, 10% sand; moderate plasticity; moderate estimated permeability. ML<1.0 B-4-A 4.0 Clayey SILT Black; damp; stiff; 70% silt, 30% clay; ML moderate to high plasticity; moderate to low estimated 5.5 Portland Type permeability.

Clayey SILT Green; damp; stiff; 70% silt, 30% clay; moderate to high plasticity; moderate to low estimated ML 6.5 \permeability.
Clayey Gravelly SILTRed-brown; damp; stiff; 70% silt, ML20% clay, 10% gravel; moderate plasticity; moderate to high estimated permeability.

Vacuum-cleared to 8 fbg. 10.0 <1.0 B-4-B Bottom of Boring @ 10 fbg WELL LOG (TPH-G) 1:9-8341 OAKLANDIINVESTIGATION 2003/GINT9-8341.GPJ DEFAULT.GDT 8/25/03 PAGE 1 OF



Cambria Environmental Technology, Inc. 5900 Hollis Street. Ste. A

BORING/WELL LOG

Emeryville, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Chevron Products Company	BORING/WELL NAME B-5		
JOB/SITE NAME	Chevron Station #9-8341	DRILLING STARTED 29-Jul-03		
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLETED 29-Jul-03		
PROJECT NUMBER	31D-1650	WELL DEVELOPMENT DATE (YIELD) NA	
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed	
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING ELEVATION Not Su	ırveyed	
BORING DIAMETER_	4"	SCREENED INTERVAL NA		
LOGGED BY	Sarah Owen	DEPTH TO WATER (First Encounter	ed) 4.0 ft (29-Jul-03)	$\bar{\lambda}$
REVIEWED BY	B. Foss, RG# 7445	DEPTH TO WATER (Static)	NA	Ţ

REMARKS CONTACT DEPTH (fbg) TPHg (mg/kg) GRAPHIC LOG SAMPLE ID BLOW DEPTH (fbg) EXTENT U.S.C.S. WELL DIAGRAM LITHOLOGIC DESCRIPTION Asphalt.

Clayey SILT Dark gray to black with intermittent green; dry; soft; 40% clay, 40% silt, 20% gravel; high plasticity; moderate to low estimated permeability. Concrete 0.5 ML. <1.0 B-5-A $\bar{\Delta}$ 5.0 Portland Type I/II Gravelly SAND Red-brown; wet; loose; 65% sand, 15% gravel, 10% silt, 10% clay; moderate to high plasticity; moderate to high estimated permeability. SP Vacuum-cleared to 8 fbg. 10.0 B-5-B <1.0 Bottom of Boring @ 10 fbg WELL LOG (TPH-G) 1:9-8341 OAKLANDINVESTIGATION 2003/GINT9-8341.GPJ DEFAULT.GDT 8/25/03 PAGE 1 OF



Cambria Environmental Technology, Inc. 5900 Hollis Street. Ste. A Emeryville, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Chevron Products Company	BORING/WELL NAMEB-6		
JOB/SITE NAME	Chevron Station #9-8341	DRILLING STARTED 29-Jul-03		
_OCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLETED 29-Jul-03		
PROJECT NUMBER_	31D-1650	WELL DEVELOPMENT DATE (YIELD) N	IA	
ORILLER	Gregg Drilling	GROUND SURFACE ELEVATIONN	lot Surveyed	
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING ELEVATION Not Survey	yed	
BORING DIAMETER	4"	SCREENED INTERVAL NA		
LOGGED BY	Sarah Owen	DEPTH TO WATER (First Encountered)	4.0 ft (29-Jul-03)	<u>Z</u>
REVIEWED BY	B. Foss, RG# 7445	DEPTH TO WATER (Static)	NA	

REMARKS CONTACT DEPTH (fbg) TPHg (mg/kg) GRAPHIC LOG SAMPLE ID BLOW COUNTS EXTENT U.S.C.S. DEPTH (fbg) WELL DIAGRAM LITHOLOGIC DESCRIPTION Concrete 0.5 Asphalt. Clavey SILT Dark gray to black with intermittent green; dry; soft; 40% clay, 40% silt, 20% gravet; high plasticity; moderate to low estimated permeability. B-6-A <1.0 ML ∇ Portland Type 6.0 Gravelly SAND Red-brown; wet; loose; 70% sand, 15% gravel, 10% silt, 5% clay; moderate to high plasticity; moderate to high estimated permeability. SP Vacuum-cleared to 8 fbg. 10.0 B-6-B <1.0 Bottom of Boring @ 10 fbg WELL LOG (TPH-G) 1:9-8341 OAKLANDIINVESTIGATION 2003/GINT9-8341.GPJ DEFAULT.GDT 8/25/03 PAGE 1 OF



Cambria Environmental Technology, Inc. 5900 Hollis Street. Ste. A

BORING/WELL LOG

Emeryville, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Chevron Products Company	BORING/WELL NAME B-7
JOB/SITE NAME	Chevron Station #9-8341	DRILLING STARTED 30-Jul-03
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLETED 30-Jul-03
PROJECT NUMBER	31D-1650	WELL DEVELOPMENT DATE (YIELD) NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION Not Surveyed
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING ELEVATION Not Surveyed
BORING DIAMETER	4"	SCREENED INTERVAL NA
LOGGED BY	Sarah Owen	DEPTH TO WATER (First Encountered) NA $\overline{\Sigma}$
REVIEWED BY	B. Foss, RG# 7445	DEPTH TO WATER (Static) NA
		•

REMARKS Water not encountered. Refusal at 6 fbg. CONTACT DEPTH (fbg) TPHg (mg/kg) SAMPLE ID GRAPHIC LOG BLOW U.S.C.S. EXTENT DEPTH (fbg) LITHOLOGIC DESCRIPTION WELL DIAGRAM Asphalt.

Clayey SILT Black; dry; stiff; 70% silt, 30% clay; moderate plasticity; moderate to low estimated permeability. Upper 1-1.5 foot interval is green. Concrete 0.5 2.5 B-7-A MLPortland Type 1/11 4.5 Gravelly SILT Red-brown to green; dry; stiff; 60% silt, 20% gravel, 15% sand, 5% clay; low plasticity; moderate to high estimated permeability. ML 6.0 Bottom of Boring @ 6 fbg Vacuum-cleared to 8 fbg. WELL LOG (TPH-G) 1:9-8341 OAKLANDNNVESTIGATION 2003/GINT9-8341.GPJ DEFAULT.GDT 8/25/03 PAGE 1 OF 1



Cambria Environmental Technology, Inc.

BORING/WELL LOG

5900 Hollis Street, Ste. A Emeryville, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Chevron Products Company	BORING/WELL NAME B-8	
JOB/SITE NAME	Chevron Station #9-8341	DRILLING STARTED 30-Jul-03	
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DRILLING COMPLETED 30-Jul-03	
PROJECT NUMBER	31D-1650	WELL DEVELOPMENT DATE (YIELD)	NA .
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	lot Surveyed
DRILLING METHOD_	Air Vac and Hand Auger	TOP OF CASING ELEVATION Not Surve	yed
BORING DIAMETER	4"	SCREENED INTERVAL NA	·
LOGGED BY	Sarah Owen	DEPTH TO WATER (First Encountered)	10.0 ft (30-Jul-03) <u>⊻</u>
REVIEWED BY	B. Foss, RG# 7445	DEPTH TO WATER (Static)	NA
REMARKS			

CONTACT DEPTH (fbg) TPHg (mg/kg) BLOW COUNTS SAMPLE ID GRAPHIC LOG U.S.C.S. EXTENT DEPTH (fbg) LITHOLOGIC DESCRIPTION WELL DIAGRAM Aspnait.

Clayev StLT Black; dry; stifft; 70% silt, 30% clay; moderate plasticity; moderate to low estimated permeability.

Clayev SILT Green; dry; stiff; 70% silt, 30% clay; moderate plasticity; moderate to low estimated permeability. Concrete 0.5 Asphalt. ML2.0 3.3 B-8-A ML Portland Type 5.5 1/11 Clayey SILT Red-brown; dry; stiff; 70% silt, 30% clay; moderate to low plasticity; moderate estimated permeability. ML Vacuum-cleared to 8 fbg. ☑ 10.0 <1.0 B-8-B 10 Bottom of Boring @ 10 fbg WELL LOG (TPH-G) 1:39-8341 OAKLANDNINVESTIGATION 2003/GINT/9-8341.GPJ DEFAULT.GDT 8/25/03 PAGE 1 OF



PAGE 1 OF



Cambria Environmental Technology, Inc. 5900 Hollis Street. Ste. A Emeryville, CA 94608 Telephone: (510) 420-0700

CLIENT NAME	Chevron Products Company	во
JOB/SITE NAME	Chevron Station #9-8341	ום
LOCATION	3530 Mac Arthur Boulevard, Oakland, CA	DI
PROJECT NUMBER_	31D-1650	w
DRILLER	Gregg Drilling	GI
DRILLING METHOD_	Air Vac and Hand Auger	то
BORING DIAMETER_	4"	s
LOGGED BY	Sarah Owen	DE
REVIEWED BY	B. Foss, RG# 7445	DI

Fax: (510) 420-9170

BORING/WELL NAME B-9

DRILLING STARTED 30-Jul-03

DRILLING COMPLETED 30-Jul-03

WELL DEVELOPMENT DATE (YIELD) NA

GROUND SURFACE ELEVATION Not Surveyed

TOP OF CASING ELEVATION Not Surveyed

SCREENED INTERVAL NA

DEPTH TO WATER (First Encountered) 7.0 ft (30-Jul-03)

EPTH TO WATER (Static) REMARKS Refusal at 8.5 fbg. TPHg (mg/kg) CONTACT DEPTH (fbg) SAMPLE ID GRAPHIC LOG BLOW COUNTS DEPTH (fbg) U.S.C.S. EXTENT LITHOLOGIC DESCRIPTION WELL DIAGRAM Concrete 0.5 Clayey SILT Black; dry; stiff; 75% silt, 25% clay; moderate plasticity; low estimated permeability. ML 3.0 Gravelly SILT Red-brown; dry; stiff; 60% sift, 20% <1.0 B-9-A gravel, 10% sand, 10% clay; low plasticity; moderate to high estimated permeability. Upper foot is green. ML Portland Type 5.0 M Gravelly SILT Red-brown; wet; moderately stiff; 40% silt, 30% gravel, 30% sand; high estimated permeability. ML ∇ Bottom of Boring @ 7 fbg 8.5 B-9-B <1.0 Vacuum-cleared to 8 fbg. WELL LOG (TPH-G) 1:19-8341 OAKLANDNNVESTIGATION 2003/GINT9-8341.GPJ DEFAULT.GDT 8/25/03

ATTACHMENT B

Laboratory Soil and Groundwater Analytic Results



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 861569. Samples arrived at the laboratory on Friday, August 01, 2003. The PO# for this group is 99011184 and the release number is STREICH.

Client Description			Lancaster Labs Number
B-1-A-S-3.5-030729	Grab	Soil	4093182
B-3-A-S-3.5-030729	Grab	Soil	4093183
B-3-B-S-10.0-030729	Grab	Soil	4093184
B-4-A-S-2.5-030730	Grab	Soil	4093185
B-4-B-S-9.5-030730	Grab	Soil	4093186
B-5-A-S-3.0-030729	Grab	Soil	4093187
B-5-B-S-9.5-030729	Grab	Soil	4093188
B-6-A-S-2.0-030729	Grab	Soil	4093189
B-6-B-S-9.5-030729	Grab	Soil	4093190
B-7-A-S-1.5-030730	Grab	Soil	4093191
B-8-A-S-2.0-030730	Grab	Soil	4093192
B-8-B-S-9.5-030730	Grab	Soil	4093193
B-9-A-S-3.0-030730	Grab	Soil	4093194
B-9-B-S-8.0-030730	Grab	Soil	4093195

1 COPY TO

ChevronTexaco

Attn: Sarah Owen





Questions? Contact your Client Services Representative Alison M O'Connor at (717) 656-2300.

Respectfully Submitted,

Victoria M. Martell
Victoria M. Martell
Chemist



Account Number: 10880

ChevronTexaco



Page 1 of 2

Lancaster Laboratories Sample No. SW 4093182

Collected: 07/29/2003 12:00

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-1-A-S-3.5-030729 Grab Soil San Ramon CA 94583

by SO

Facility# 9-8341 CETR

3530 MacArthur Oakland NANA

B-1-A

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils The analysis for volatiles was pringer in methanol. The reporting liming the reported concentration of Transcoline constituents eluting present time.	its were adjust PH-GRO does not	ted appropriately t include MTBE or	other	mg/kg	25
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory	Chronicle

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 04:29	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 12:13	Lisa A Johnson	1





Page 2 of 2

n.a.

Lancaster Laboratories Sample No. SW 4093182

Collected: 07/29/2003 12:00 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

Ext

B-1-A-S-3.5-030729 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-1-A

07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 1 08/04/2003 18:42 Susan McMahon-Luu 1

00374 GC/MS VOA Soil Prep SW-846 5030A 1 08/04/2003 17:14 Susan McMahon-Luu n.a.

00380 Direct Injection Solids SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson 1

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:15 Martha L Seidel



Page 1 of 2

Lancaster Laboratories Sample No. SW 4093183

Collected:07/29/2003 13:20

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:12

Discard: 09/14/2003

B-3-A-S-3.5-030729

Grab Soil

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Facility# 9-8341

CETR

3530 MacArthur Oakland

NA

NA

B-3-A

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils The analysis for volatiles was pain methanol. The reporting liming the reported concentration of Transcoline constituents eluting pastart time.	its were adjust PH-GRO does not	ted appropriately t include MTBE or	1.0 preserved	mg/kg	25
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05~8	N.D.	0.001	mq/kq	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mq/kq	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2~Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	î
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

G3.88	Laboratory Chronicle					
CAT No.	Analysis Name	16-11-J		Analysis		Dilution
01725	-	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 05:07	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 12:52	Lisa A Johnson	1



Martha L Seidel

n.a.



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093183

Collected: 07/29/2003 13:20 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

GC VOA Soil Prep

01150

B-3-A-S-3.5-030729 Grab Soil San Ramon CA 94583

SW-846 5035

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-3-A BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 07361 08/07/2003 13:20 Roy R Mellott Jr 1 00374 GC/MS VOA Soil Prep SW-846 5030A 08/05/2003 10:19 1 Anastasia Papadoplos n.a. 00380 Direct Injection Solids SW-846 8015B 08/08/2003 15:30 Lisa A Johnson 1 Ext

08/04/2003 15:16

Lancaster Laboratories, Inc.
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. 4093184

Collected:07/29/2003 14:15

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:12

ChevronTexaco

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-3-B-S-10.0-030729

Grab Soil San Ramon CA 94583

Facility# 9-8341

3530 MacArthur Oakland

CETR

NA

B-3B-

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.001	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

		Laboratory	Chro	nicle		
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline	1	08/05/2003 05:45	Stephanie A Selis	25

method SW-846 8015B 01428 Methanol and Ethanol (modified)

08/09/2003 13:05 Lisa A Johnson

1



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093184

Collected: 07/29/2003 14:15 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-3-B-S-10.0-030729 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-3B-07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 08/07/2003 13:46 1 Roy R Mellott Jr 1 GC/MS VOA Soil Prep 00374 SW-846 5030A 08/05/2003 10:22 1 Anastasia Papadoplos 00380 Direct Injection Solids SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson 1 Ext

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:17 Martha L Seidel n.a.



Page 1 of 2

Lancaster Laboratories Sample No. 4093185 SW.

Collected:07/30/2003 12:30

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:12

ChevronTexaco

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-4-A-S-2.5-030730

Grab Soil

San Ramon CA 94583

Facility# 9-8341

CETR

3530 MacArthur Oakland NANΑ

B-4-A

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection	Units	Dilution Factor
01725	TPH-GRO - Soils The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	other	mg/kg	25
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.029	0.001	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.023	mg/kg mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	J. J	
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg mg/kg	0.99 0.99

State of California Lab Certification No. 2116

	Laboratory Chronicle					
CAT No.	Name Transfer Name			Analysis		Dilution
	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 06:23	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 13:18	Lisa A Johnson	1



Account Number: 10880



Page 2 of 2

n.a.

Lancaster Laboratories Sample No. SW 4093185

Collected: 07/30/2003 12:30 by SO

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

Ext

B-4-A-S-2.5-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-4-A07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 1 08/07/2003 14:12 Roy R Mellott Jr 0.99 00374 GC/MS VOA Soil Prep SW-846 5030A Direct Injection Solids SW-846 8015B Anastasia Papadoplos 1 08/05/2003 10:25 n.a. 00380 1 08/08/2003 15:30 Lisa A Johnson 1

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:18 Martha L Seidel



Page 1 of 2

Lancaster Laboratories Sample No. SW 4093186

Collected: 07/30/2003 12:45 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-4-B-S-9.5-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-4-B

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was p					
	in methanol. The reporting limit The reported concentration of T					
	gasoline constituents eluting p					
	start time.		•	,		
01.400	Wether I and Dahman					
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mq/kq	1
		31 1 1 3		0.20	mg/ mg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.13	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	0.002	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

	•	Laboratory	Chro	nicle		
CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 08:31	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 13:32	Lisa A Johnson	1



Martha L Seidel



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093186

Collected: 07/30/2003 12:45 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

GC VOA Soil Prep

01150

B-4-B-S-9.5-030730 Grab Soil San Ramon CA 94583

SW-846 5035

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-4-B 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 08/07/2003 14:38 1 Roy R Mellott Jr 1 00374 GC/MS VOA Soil Prep SW-846 5030A 1 08/05/2003 10:58 Anastasia Papadoplos n.a. 00380 Direct Injection Solids SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson i Ext

08/04/2003 15:19

MEMBER 2425 PO E



Page 1 of 2

Lancaster Laboratories Sample No. 4093187

Collected:07/29/2003 09:30

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:12

ChevronTexaco

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003 B-5~A-S-3.0-030729

Grab

Soil

San Ramon CA 94583

Facility# 9-8341

3530 MacArthur Oakland NA

NA

CETR

B-5-A

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection	Units	Dilution Factor
01725	TPH-GRO - Soils The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately	- other	mg/kg	25
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016 02017 02018 02019 02020 05460 05461 05466 05471 05474 06301	Methyl Tertiary Butyl Ether di-Isopropyl ether Ethyl t-butyl ether t-Amyl methyl ether t-Butyl alcohol Benzene 1,2-Dichloroethane Toluene 1,2-Dibromoethane Ethylbenzene Xylene (Total)	1634-04-4 108-20-3 637-92-3 994-05-8 75-65-0 71-43-2 107-06-2 108-88-3 106-93-4 100-41-4 1330-20-7	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	0.001 0.001 0.001 0.001 0.020 0.001 0.001 0.001	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99
00301	whrene (Loral)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

03.m	Laboratory Chronicle					
CAT No. 01725	Analysis Name TPH-GRO - Soils	Method N. CA LUFT Gasoline method	Trial#	Analysis Date and Time 08/05/2003 09:09	Analyst Stephanie A Selis	Dilution Factor 25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 13:45	Lisa A Johnson	I





Page 2 of 2

Lancaster Laboratories Sample No. SW 4093187

Collected: 07/29/2003 09:30 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-5-A-S-3.0-030729 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-5-A 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 08/07/2003 15:04 Roy R Mellott Jr 0.99 GC/MS VOA Soil Prep SW-846 5030A 00374 08/05/2003 10:59 Anastasia Papadoplos n.a. 00380 Direct Injection Solids SW-846 8015B 08/08/2003 15:30 Lisa A Johnson 1 Ext

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:20 Martha L Seidel n.a.



Page 1 of 2

Lancaster Laboratories Sample No. SW 4093188

Collected:07/29/2003 10:10

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

ChevronTexaco

Reported: 08/14/2003 at 14:12

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-5-B-S-9.5-030729

Grab Soil

San Ramon CA 94583

Facility# 9-8341

CETR

3530 MacArthur Oakland

NA

B-5-B

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately tinclude MTBE or	other	mg/kg	25
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.003	0.001	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.99
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

		Laboratory Chronicle					
CAT	Analysis						
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor	
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 09:47	Stephanie A Selis	25	
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 13:58	Lisa A Johnson	1	





Page 2 of 2

n.a.

Lancaster Laboratories Sample No. SW 4093188

Collected: 07/29/2003 10:10 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-5-B-S-9.5-030729 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-5-B 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 1 08/07/2003 15:30 Roy R Mellott Jr 0.99 GC/MS VOA Soil Prep SW-846 5030A Direct Injection Solids SW-846 8015B 00374 1 08/05/2003 11:01 Anastasia Papadoplos n.a. 00380 1 08/08/2003 15:30 Lisa A Johnson 1 Ext

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:21 Martha L Seidel



Page 1 of 2

Lancaster Laboratories Sample No. SW 4093189

Collected: 07/29/2003 11:15 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-6-A-S-2.0-030729 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-6-A

				As Received			
CAT			As Received	Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25	
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 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.						
01428	Methanol and Ethanol						
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1	
07361	BTEX+5 Oxygenates+EDC+EDB						
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.003	0.001	mg/kg	1.01	
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1.01	
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1.01	
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1.01	
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1.01	
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1.01	
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1.01	
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1.01	
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1.01	
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.01	
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1.01	

State of California Lab Certification No. 2116

Laboratory Chronicle						
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 10:25	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 14:11	Lisa A Johnson	1



Martha L Seidel



Page 2 of 2

n.a.

Lancaster Laboratories Sample No. SW 4093189

Collected: 07/29/2003 11:15 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:12 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

GC VOA Soil Prep

01150

B-6-A-S-2.0-030729 Grab Soil San Ramon CA 94583

SW-846 5035

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-6-A 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 08/07/2003 15:56 Roy R Mellott Jr 1.01 1 SW-846 5030A 00374 GC/MS VOA Soil Prep 1 08/05/2003 11:03 Anastasia Papadoplos n.a. 00380 SW-846 8015B Direct Injection Solids 08/08/2003 15:30 Lisa A Johnson 1 1 Ext

08/04/2003 15:22

MEMBER



Lancaster Laboratories Sample No. SW 4093190

Collected:07/29/2003 11:30

by SO

Account Number: 10880

San Ramon CA 94583

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:13

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003 B-6-B-S-9.5-030729

Grab Soil

Facility# 9-8341

CETR

3530 MacArthur Oakland

NA

B-6-B

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	• other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	200.	ug/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle						
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 11:03	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 14:37	Lisa A Johnson	1



Martha L Seidel



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n.a.

Lancaster Laboratories Sample No. SW 4093190

Collected: 07/29/2003 11:30 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

GC VOA Soil Prep

01150

B-6-B-S-9.5-030729 Grab Soil San Ramon CA 94583

SW-846 5035

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-6-B 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 08/07/2003 16:22 1 Roy R Mellott Jr 1 00374 GC/MS VOA Soil Prep SW-846 5030A 08/05/2003 12:01 1 Anastasia Papadoplos n.a. 00380 Direct Injection Solids SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson 1

08/04/2003 15:23

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



Lancaster Laboratories Sample No. SW 4093191

Collected: 07/30/2003 08:50

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:13

ChevronTexaco

14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-7-A-S-1.5-030730

Soil

San Ramon CA 94583

Facility# 9-8341

Grab

CETR

3530 MacArthur Oakland

NA

NA

B-7-A

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	2.5	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPH-GRO does not include MTBE or other					
	gasoline constituents eluting postart time.	rior to the C6	(n-hexane) TPH-G	RO range		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.020	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	0.001	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1
	Matrix QC was performed on this	sample for th	e GCMS volatile a	nalysis.		
	Please see the attached QC summa	ary report for	compounds showin	g a matrix		
	bias.					

State of California Lab Certification No. 2116

Laboratory Chronicle

No. Analysis Name

CAT

Method

Analysis Trial# Date and Time

Analyst

Dilution Factor



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



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093191

Collected: 07/30/2003 08:50 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-7-A-S-1.5-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-7-A						
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/05/2003 11:41	Stephanie A Selis	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 14:50	Lisa A Johnson	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/07/2003 16:48	Roy R Mellott Jr	1
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	08/07/2003 11:46	Roy R Mellott Jr	n,a.
00380	Direct Injection Solids Ext	SW-846 8015B	1	08/08/2003 15:30	Lisa A Johnson	1
01150	GC VOA Soil Prep	SW-846 5035	1	08/04/2003 15:24	Martha L Seidel	n.a.



Lancaster Laboratories Sample No. SW 4093192

Collected: 07/30/2003 10:30 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-8-A-S-2.0-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-8-A

			•	As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	3.3	1.0	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.11	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	0.002	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	0.044	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	0.001	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	0.002	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle

		Tancara	01140	*****		
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
0172	25 TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/06/2003 07:51	Deborah S Garrison	25
0142	28 Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 15:03	Lisa A Johnson	1
0736	61 BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	08/07/2003 18:06	Roy R Mellott Jr	1
0031	74 GC/MS VOA Soil Prep	SW-846 5030A	1	08/07/2003 12:12	Roy R Mellott Jr	n.a.



Account Number: 10880

ChevronTexaco



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093192

Collected: 07/30/2003 10:30 by SO

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-8-A-S-2.0-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-8-A

00380 Direct Injection Solids SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson 1

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:25 Martha L Seidel n.a.



Lancaster Laboratories Sample No. SW 4093193

Collected:07/30/2003 10:45

by SO

Account Number: 10880

Submitted: 08/01/2003 09:20

Reported: 08/14/2003 at 14:13

ChevronTexaco

CETR

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-8-B-S-9.5-030730

Grab Soil

San Ramon CA 94583

Facility# 9-8341

3530 MacArthur Oakland NA

NA

B-8-B

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriatel t include MTBE o	y. r other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.034	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	0.001	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle						
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/06/2003 08:27	Deborah S Garrison	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 15:16	Lisa A Johnson	1



Martha L Seidel

n.a.



Page 2 of 2

Lancaster Laboratories Sample No. SW 4093193

Collected: 07/30/2003 10:45 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

01150

GC VOA Soil Prep

B-8-B-S-9.5-030730 Grab Soil San Ramon CA 94583

SW-846 5035

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-8-B 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 1 08/07/2003 18:32 Roy R Mellott Jr 1 GC/MS VOA Soil Prep 00374 SW-846 5030A 08/07/2003 12:14 Roy R Mellott Jr 1 n.a. 00380 Direct Injection Solids SW-846 8015B 08/08/2003 15:30 Lisa A Johnson . 1 1 Ext

08/04/2003 15:26



Lancaster Laboratories Sample No. SW 4093194

Collected: 07/30/2003 09:50 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-9-A-S-3.0-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-9-A

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim The reported concentration of T gasoline constituents eluting p start time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.004	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

- 1 .	~1	
Laboratory	7 ('hran	1712
	(OTT # OTT	エンエン

		=======================================	0.1			
CAT Analysis				Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/06/2003 09:03	Deborah S Garrison	25
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 15:29	Lisa A Johnson	1





Page 2 of 2

Lancaster Laboratories Sample No. SW 4093194

Collected: 07/30/2003 09:50 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-9-A-S-3.0-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-9-A 07361 BTEX+5 Oxygenates+EDC+EDB SW-846 8260B 1 08/07/2003 18:58 Roy R Mellott Jr 1 00374 GC/MS VOA Soil Prep Direct Injection Solids SW-846 5030A 1 08/07/2003 12:17 Roy R Mellott Jr n.a. 00380 SW-846 8015B 1 08/08/2003 15:30 Lisa A Johnson 1 Ext

01150 GC VOA Soil Prep SW-846 5035 1 08/04/2003 15:27 Martha L Seidel n.a.

Account Number: 10880



Page 1 of 2

4093195 Lancaster Laboratories Sample No. SW

Collected:07/30/2003 10:15

Submitted: 08/01/2003 09:20 ChevronTexaco

by SO

6001 Bollinger Canyon Rd L4310 Reported: 08/14/2003 at 14:13

Discard: 09/14/2003

B-9-B-S-8.0-030730 Grab Soil San Ramon CA 94583

CETR Facility# 9-8341

3530 MacArthur Oakland NA NA

B-9-B

				As Received		Man-Li
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was prin methanol. The reporting limit The reported concentration of Transcoline constituents eluting prostart time.	its were adjus PH-GRO does no	ted appropriately t include MTBE or	other		
01428	Methanol and Ethanol					
01429	Ethanol (by Direct Injection)	64-17-5	N.D.	0.20	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.001	0.001	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.001	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle							
CAT		-		Analysis		Dilution	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor	
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	08/06/2003 09:40	Deborah S Garrison	25	
01428	Methanol and Ethanol	SW-846 8015B (modified)	1	08/09/2003 15:42	Lisa A Johnson	1	





Page 2 of 2

Lancaster Laboratories Sample No. SW 4093195

Collected: 07/30/2003 10:15 by SO Account Number: 10880

Submitted: 08/01/2003 09:20 ChevronTexaco

Reported: 08/14/2003 at 14:13 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-9-B-S-8.0-030730 Grab Soil San Ramon CA 94583

Facility# 9-8341 CETR

3530 MacArthur Oakland NA NA

B-9-B

lott Jr l	
lott Jr n	a.
hnson I	
Seidel n.	a.
	lott Jr n. hnson I



Quality Control Summary

Client Name: ChevronTexaco Group Number: 861569

Reported: 08/14/03 at 02:13 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 03215A34A TPH-GRO - Soils	Sample N.D.	number(s):	4093182-40 mg/kg	93185 103		70-130		
Batch number: 03215A34B TPH-GRO - Soils	Sample N.D.	number(s): 1.0	4093186-40 mg/kg	93191 103		70-130		
Batch number: 03217A31A TPH-GRO - Soils	Sample N.D.	number(s): 1.0	4093192-40 mg/kg	93195 93		70-130		
Batch number: 032200019A Ethanol (by Direct Injection)	Sample N.D.	number(s): 200.	4093182-40 ug/kg	93195 102		85-121		
Batch number: D032101AD Methyl Tertiary Butyl Ether	N.D.	number(s):	4093182 ug/kg	106		75-125		
<pre>di-Isopropyl ether Ethyl t-butyl ether t-Amyl methyl ether</pre>	N.D. N.D. N.D.	1. 1. 1.	ug/kg ug/kg ug/kg	122 113 109		70-129 71-124 70-122		
t-Butyl alcohol Benzene 1,2-Dichloroethane	N.D. N.D. N.D.	20. 1. 1.	ug/kg ug/kg ug/kg	79 113 114		46-158 83-118 76-126		
Toluene 1,2-Dibromoethane	N.D. N.D.	1. 1.	ug/kg ug/kg	101 94		81-116 77-114		
Ethylbenzene Xylene (Total)	N.D. N.D.	1. 1.	ug/kg ug/kg	105 103		82-115 82-117		
Batch number: X032191AA Methyl Tertiary Butyl Ether di-Isopropyl ether	Sample N.D. N.D.	number(s): 1. 1.	ug/kg	93195 100 96		75-125 70-129		
Ethyl t-butyl ether t-Amyl methyl ether	N.D. N.D.	1. 1.	ug/kg ug/kg ug/kg	96 99		71-124 70-122		
t-Butyl alcohol Benzene 1,2-Dichloroethane	N.D. N.D. N.D.	20. 1. 1.	ug/kg ug/kg ug/kg	101 95 97		46-158 83-118 76-126		
Toluene 1,2-Dibromoethane	N.D.	1. 1.	ug/kg ug/kg	93 95		81-116 77-114		
Ethylbenzene Xylene (Total)	N.D.	1. 1.	ug/kg ug/kg	91 91		82-115 82-117		

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	Маж

Batch number: 03215A34A

Sample number(s): 4093182-4093185

- (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 2 of 5

Quality Control Summary

Client Name: ChevronTexaco

Reported: 08/14/03 at 02:13 PM

Sample Matrix Quality Control

Group Number: 861569

	ms	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name TPH-GRO - Soils	*REC 81	%REC 83	<u>Limits</u> 70-130	$\frac{\mathbf{RPD}}{3}$	MAX 30	Conc	Conc	RPD	Max
Batch number: 03215A34B			(s): 409318						
TPH-GRO - Soils	81	83	70-130	3	30				
Batch number: 03217A31A	Sample	number	(s): 409319	2-40931	.95				
TPH-GRO - Soils	81	79	70-130	3	30				
Batch number: 032200019A	Sample	number	(s): 409318	2-40931	.95				
Ethanol (by Direct Injection)	98	91	73-109	8	20				
Batch number: D032101AD	Sample	number	(s): 409318	2					
Methyl Tertiary Butyl Ether	90	97	57-136	- 8	30				
di-Isopropyl ether	105	108	55-132	3	30				
Ethyl t-butyl ether	96	101	58-127	6	30				
t-Amyl methyl ether	90	93	58-126	3	30				
t-Butyl alcohol	69	71	14-185	3	30				
Benzene	103	106	52-141	3	30				
1,2-Dichloroethane	98	99	57-137	2	30				
Toluene	99	100	53-137	1	30				
1,2-Dibromoethane	83	85	61-125	3	30				
Ethylbenzene	100	99	50-136	1	30				
Xylene (Total)	96	95	47-139	1	30				
Batch number: X032191AA	Sample	number	(s): 409318	3-40931	.95				
Methyl Tertiary Butyl Ether	67	42*	57-136	17	30				
di-Isopropyl ether	89	91	55-132	2	30				
Ethyl t-butyl ether	89	89	58-127	0	30				
t-Amyl methyl ether	85	83	58-126	3	30				
t-Butyl alcohol	96	100	14-185	3	30				
Benzene	77	78	52-141	2	30				
1,2-Dichloroethane	85	86	57-137	1	30				
Toluene	74	74	53-137	0	30				
1,2-Dibromoethane	75	77	61-125	1	30				
Ethylbenzene	69	71	50-136	2	30				
Xylene (Total)	65	66	47-139	1	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils

Batch number: 03215A34A

Trifluorotoluene-F

4093182

98

- (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 3 of 5

Quality Control Summary

Group Number: 861569 Client Name: ChevronTexaco Reported: 08/14/03 at 02:13 PM Surrogate Quality Control 4093183 100 97 4093184 4093185 96 Blank 107 LCS 112 95 MS MSD 96 Limits: 66-117 Analysis Name: TPH-GRO - Soils Batch number: 03215A34B Trifluorotoluene-F 4093186 99 4093187 97 87 4093188 4093189 100 4093190 94 4093191 92 Blank 115 112 LCS MS 95 96 MSD Limits: 66-117 Analysis Name: TPH-GRO - Soils Batch number: 03217A31A Trifluorotoluene-F 4093192 101 4093193 95 4093194 92 4093195 90 99 Blank LCS 108 98 MS MSD 94 Limits: 66-117 Analysis Name: Methanol and Ethanol Batch number: 032200019A Acetone 4093182 84 4093183 116 87 4093184 4093185 116 4093186 109

- (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 5

Quality Control Summary

Client Name: ChevronTexaco Group Number: 861569

Reported: 08/14/03 at 02:13 PM

Surrogate Quality Control

4093187	100
4093188	103
4093189	107
4093190	99
4093191	107
4093192	108
4093193	100
4093194	100
4093195	95
Blank	103
LCS	103
MS	109
MSD	91

Limits: 55-127

Analysis Name: BTEX+5 Oxygenates+EDC+EDB

Batch number: D032101AD

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4093182	88	84	97	85
Blank	87	86	97	85
LCS	84	89	97	92
MS	84	82	102	86
MSD	86	83	100	86
Limits	70-129	70-121	70-130	70-128

Analysis Name: BTEX+5 Oxygenates+EDC+EDB

Batch number: X032191AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4093183	89	88	93	91
4093184	91	85	91	90
4093185	92	89	92	92
4093186	89	85	93	90
4093187	94	88	102	77
4093188	93	88	94	87
4093189	89	86	93	90
4093190	89	84	92	90
4093191	93	90	97	88
4093192	92	87	93	93
4093193	91	86	92	90
4093194	92	86	92	92
4093195	91	86	92	92
Blank	90	89	91	92
LCS	91	92	91	93
MS	91	87	97	87
MSD	92	88	99	86
Limits:	70-129	70-121	70-130	70-128

- (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 5 of 5

Quality Control Summary

Client Name: ChevronTexaco Reported: 08/14/03 at 02:13 PM Group Number: 861569

Surrogate Quality Control

*- 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.



Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories		Δα	ort #	10) (X	Ũ	Samr	POFL	U h a	er Laboratories use (イスレンコー <i>ロぐ</i>	only - SCR #: 4	96156°	5
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Facility #: 9-8341								Pres	ervati	on Codes	Preserv	ative Code	es
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Chevron PM: Streich Lead Consultant:				ည		Cilica Cal Cleanur					S = H ₂ SO ₄	O = Othe	
Consultant/Office: Cambria				aine	<u> </u>	ا ان اور	5				☐ J value repo ☐ Must meet k	_	
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Sampler: Sarah Owen			۔ ا <u>و</u>	X I	1 /	֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	₩ ₩	Oxygenates			☐ Confirm high	-	60
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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 861306. Samples arrived at the laboratory on Thursday, July 31, 2003. The PO# for this group is 99011184 and the release number is STREICH.

Client Description			Lancaster Labs Number
B-1-W-030729	Grab	Water	4091656
B-3-W-030730	Grab	Water	4091657
B-4-W-030730	Grab	Water	4091658
B-5-W-030729	Grab	Water	4091659
B-6-W-030729	Grab	Water	4091660
B-7-W-030730	Grab	Water	4091661
B-8-W-030730	Grab	Water	4091662
B-9-W-030730	Grab	Water	4091663

1 COPY TO

Cambria Environmental

Attn: Bob Foss

Questions? Contact your Client Services Representative Alison M O'Connor at (717) 656-2300.

Respectfully Submitted,

Robert E. Mellinger
Sr. Chemist/Coordinator



Lancaster Laboratories Sample No. WW 4091656

Collected:07/29/2003 00:00

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-1-W-030729

Grab Water

San Ramon CA 94583

Facility# 98341

CETR

3530 MacArthur Blvd

T0600101790 B-1

729B1

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time. A site-specific MSD sample was was performed to demonstrate p	prior to the CO not submitted	(n-hexane) TPH- for the project.	GRO range A LCS/LCSD		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH		-			
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	25.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	0.6	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory	Chroni	cle
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CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 05:44	K. Robert Caulfeild- James	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/12/2003 10:49	Trent S Sprenkle	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/04/2003 05:44	K. Robert Caulfeild- James	n.a.





Page 2 of 2

Lancaster Laboratories Sample No. 4091656

Collected:07/29/2003 00:00

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-1-W-030729

Grab

Water

San Ramon CA 94583

6001 Bollinger Canyon Rd L4310

Facility# 98341

3530 MacArthur Blvd

CETR T0600101790 B-1

729B1

01163 GC/MS VOA Water Prep

SW-846 5030B

1 08/12/2003 10:49 Trent S Sprenkle

ChevronTexaco



Lancaster Laboratories Sample No. WW 4091657

Collected:07/30/2003 13:00

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-3-W-030730

Grab

Water

San Ramon CA 94583

ChevronTexaco

Facility# 98341

3530 MacArthur Blvd T0600101790 B-3

730B3

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of Tigasoline constituents eluting postart 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		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	10.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	8.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

CETR

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory	Curonicie
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CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 06:14	K. Robert Caulfeild- James	1
01594	BTEX+5	SW-846 8260B	1	08/12/2003 15:40	Trent S Sprenkle	1
01146	Oxygenates+EDC+EDB+ETOH GC VOA Water Prep	SW-846 5030B	1	08/04/2003 06:14	K. Robert Caulfeild- James	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/12/2003 15:40	Trent S Sprenkle	n.a.





Page 2 of 2

Lancaster Laboratories Sample No. 4091657

Collected:07/30/2003 13:00

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-3-W-030730

Grab

Water

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

ChevronTexaco

CETR

Facility# 98341

3530 MacArthur Blvd T0600101790 B-3

730B3



Lancaster Laboratories Sample No. 4091658

Collected:07/30/2003 13:15

by SO

Account Number: 10880

6001 Bollinger Canyon Rd L4310

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-4-W-030730

Grab

Water

San Ramon CA 94583

ChevronTexaco

Facility# 98341

CETR

3530 MacArthur Blvd T0600101790 B-4

730B4

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time. A site-specific MSD sample was was performed to demonstrate p	prior to the C6 not submitted	<pre>for the project.</pre>	GRO range A LCS/LCSD		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	420.	2.	ug/l	4
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	9.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	28.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116 Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 06:45	K. Robert Caulfeild- James	1
01594	BTEX+5	SW-846 8260B	1	08/12/2003 16:11	Trent S Sprenkle	1
	Oxygenates+EDC+EDB+ETOH					_
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/12/2003 20:16	Trent S Sprenkle	4
01146	GC VOA Water Prep	SW-846 5030B	1	08/04/2003 06:45	K. Robert Caulfeild- James	n.a.





Page 2 of 2

Lancaster Laboratories Sample No. 4091658

Collected:07/30/2003 13:15

by SO

Account Number: 10880

6001 Bollinger Canyon Rd L4310

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-4-W-030730

Grab

Water

CETR

San Ramon CA 94583

ChevronTexaco

Facility# 98341

3530 MacArthur Blvd

T0600101790 B-4

730B4

01163 GC/MS VOA Water Prep SW-846 5030B

08/12/2003 16:11 Trent S Sprenkle

n.a.



Lancaster Laboratories Sample No. WW 4091659

Collected: 07/29/2003 00:00 by SO Account Number: 10880

Submitted: 07/31/2003 09:10 ChevronTexaco

Reported: 08/14/2003 at 12:19 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-5-W-030729 Grab Water San Ramon CA 94583

Facility# 98341 CETR

3530 MacArthur Blvd T0600101790 B-5

729B5

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of The gasoline constituents eluting pastart 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		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	50.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	11.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	4.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	0.6	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	8.	0.5	ug/l	1

State of California Lab Certification No. 2116 Trip blank vials were not received by the laboratory for this sample group.

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CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 07:17	K. Robert Caulfeild- James	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/12/2003 13:38	Trent S Sprenkle	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/04/2003 07:17	K. Robert Caulfeild- James	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/12/2003 13:38	Trent S Sprenkle	n.a.





Page 2 of 2

Lancaster Laboratories Sample No. 4091659

Collected:07/29/2003 00:00

by SO

Account Number: 10880

San Ramon CA 94583

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-5-W-030729

Grab

Water

CETR

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Facility# 98341

3530 MacArthur Blvd T0600101790 B-5

729B5



Lancaster Laboratories Sample No. WW 4091660

Collected: 07/29/2003 00:00 by SO Account Number: 10880

Submitted: 07/31/2003 09:10 ChevronTexaco

Reported: 08/14/2003 at 12:19 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-6-W-030729 Grab Water San Ramon CA 94583

Facility# 98341 CETR

3530 MacArthur Blvd T0600101790 B-6

729B6

CAT		•	As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	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 pro-	rior to the C6 not submitted :	(n-hexane) TPH-G For the project.	RO range A LCS/LCSD		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	2.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT					Dilution	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 07:48	K. Robert Caulfeild- James	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/12/2003 14:08	Trent S Sprenkle	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/04/2003 07:48	K. Robert Caulfeild- James	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/12/2003 14:08	Trent S Sprenkle	n.a.





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Lancaster Laboratories Sample No. 4091660

Collected:07/29/2003 00:00

by SO

Account Number: 10880

San Ramon CA 94583

6001 Bollinger Canyon Rd L4310

ChevronTexaco

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

Discard: 09/14/2003

B-6-W-030729

Grab

Water

CETR

Facility# 98341

3530 MacArthur Blvd

T0600101790 B-6

729B6



Lancaster Laboratories Sample No. WW 4091661

Collected:07/30/2003 13:45

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-7-W-030730

Grab

Water

San Ramon CA 94583

ChevronTexaco

Facility# 98341

3530 MacArthur Blvd

T0600101790 B-7

730B7

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	98.	50.	ug/l	1
	The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was	rior to the C6	(n-hexane) TPH-C	GRO range		
	was performed to demonstrate pr	ecision and ac	curacy at a batch	level.		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	460.	3.	ug/1	5
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	8.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	41.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

CETR

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for t

Trip blank vials were not received by the laboratory for this sample group.

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Laboratory	('hroi	nicle

CAT	CAT			Analysis					
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/04/2003 08:18	K. Robert Caulfeild- James	1			
01594	BTEX+5	SW-846 8260B	1	08/12/2003 16:41	Trent S Sprenkle	1			
01594	Oxygenates+EDC+EDB+ETOH BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/12/2003 20:46	Trent S Sprenkle	5			
01146	GC VOA Water Prep	SW-846 5030B	1	08/04/2003 08:18	K. Robert Caulfeild- James	n.a.			





Page 2 of 2

Lancaster Laboratories Sample No. WW 4091661

Collected: 07/30/2003 13:45

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:19

6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-7-W-030730

Grab Water San Ramon CA 94583

Facility# 98341

3530 MacArthur Blvd

T0600101790 B-7

730B7

01163 GC/MS VOA Water Prep

SW-846 5030B

1 08/12/2003 16:41 Trent S Sprenkle

CETR

ChevronTexaco



Page I of 2

Lancaster Laboratories Sample No. WW 4091662

Collected: 07/30/2003 14:00 by SO Account Number: 10880

Submitted: 07/31/2003 09:10 ChevronTexaco

Reported: 08/14/2003 at 12:20 6001 Bollinger Canyon Rd L4310

Discard: 09/14/2003

B-8-W-030730 Grab Water San Ramon CA 94583

Facility# 98341 CETR

3530 MacArthur Blvd T0600101790 B-8

730B8

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	5,200.	50.	ug/l	1
	The reported concentration of TI gasoline constituents eluting prostart time. A site-specific MSD sample was reported to demonstrate pro-	cior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH		•			
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	980.	5.	ug/l	10
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	15.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	3.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	3.	0.5	ug/l	1
05412	1,2-Dibromoethane	106~93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	160.	5.	ug/l	10
06310	Xylene (Total)	1330-20-7	450.	5.	ug/l	10

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

		7				
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline	1	08/06/2003 11:12	Linda C Pape	1
		Method				
01594	BTEX+5	SW-846 8260B	1	08/12/2003 17:12	Trent S Sprenkle	1
	Oxygenates+EDC+EDB+ETOH					
01594	BTEX+5	SW-846 8260B	1	08/12/2003 21:17	Trent S Sprenkle	10
	Oxygenates+EDC+EDB+ETOH					
01146	GC VOA Water Prep	SW-846 5030B	1	08/06/2003 11:12	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/12/2003 17:12	Trent S Sprenkle	n.a.





Page 2 of 2

Lancaster Laboratories Sample No. WW 4091662

Collected:07/30/2003 14:00

by SO

Account Number: 10880

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:20

Discard: 09/14/2003

B-8-W-030730

Grab

Water

CETR

ChevronTexaco 6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Facility# 98341

3530 MacArthur Blvd

T0600101790 B~8

730B8



Lancaster Laboratories Sample No. WW 4091663

Collected:07/30/2003 13:30 by SO

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:20

Discard: 09/14/2003

3530 MacArthur Blvd

B-9-W-030730

Facility# 98341

Grab

Water

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Account Number: 10880

CETR T0600101790 B-9

730B9

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time.					
	A site-specific MSD sample was	not submitted	for the project.	A LCS/LCSD		
	was performed to demonstrate p	recision and ac	curacy at a bate	h level.		
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	10.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	0.6	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116 Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/06/2003 11:43	Linda C Pape	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	08/13/2003 10:30	Trent S Sprenkle	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/06/2003 11:43	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/13/2003 10:30	Trent S Sprenkle	n.a.



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Lancaster Laboratories Sample No. WW 4091663

Collected:07/30/2003 13:30

by SO

Account Number: 10880

6001 Bollinger Canyon Rd L4310

Submitted: 07/31/2003 09:10

Reported: 08/14/2003 at 12:20

Discard: 09/14/2003

B-9-W-030730

Grab

Water

CETR

San Ramon CA 94583

ChevronTexaco

Facility# 98341

3530 MacArthur Blvd

T0600101790 B-9

730B9



Quality Control Summary

Client Name: ChevronTexaco Group Number: 861306

Reported: 08/14/03 at 12:20 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 03213A16B	Sample nu	mber(s):	4091656-40	91661				
TPH-GRO - Waters	N.D.	50.	ug/l	105	107	70-130	2	30
Batch number: 03218A16A	Sample nu	mber(s):	4091662-40	91663				
TPH-GRO - Waters	N.D.	50.	ug/l	102	102	70-130	0	30
Batch number: P032231AB	Sample nu	mber(s):	4091656,40	91659-409	91660			
Ethanol	N.D.	50.	ug/l	97		43-159		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	104		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	99		74-125		
Ethyl t-butyl ether	N.D.	0.5	ug/l	102		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	105		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	139		53-147		
Benzene	N.D.	0.5	ug/l	101		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	109		77-132		
Toluene	N.D.	0.5	ug/l	102		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	99		81-114		
Ethylbenzene	N.D.	0.5	ug/l	105		82-119		
Xylene (Total)	N.D.	0.5	ug/l	105		84-120		
Batch number: P032241AA	Sample nu		4091657-40	91658,409	91661-4091	662		
Ethanol	N.D.	50.	ug/l	93		43-159		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	98		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	98		74-125		
Ethyl t-butyl ether	N.D.	0.5	ug/l	100		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	103		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	139		53-147		
Benzene	N.D.	0.5	ug/l	100		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	113		77-132		
Toluene	N.D.	0.5	ug/l	102		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	100		81-114		
Ethylbenzene	N.D.	0.5	ug/l	103		82-119		
Xylene (Total)	N.D.	0.5	ug/l	106		84-120		
Batch number: P032241AB	Sample nu							
Ethanol	N.D.	50.	ug/l	93		43-159		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	98		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	98		74-125		
Ethyl t-butyl ether	N.D.	0.5	ug/l	100		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	103		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	139		53-147		
Benzene	N.D.	0.5	ug/l	100		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	113		77-132		
Toluene	N.D.	0.5	ug/l	102		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	100		81-114		
Ethylbenzene	N.D.	0.5	ug/l	103		82-119		
Xylene (Total)	N.D.	0.5	ug/l	106		84-120		

- (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 2 of 4

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 861306

Reported: 08/14/03 at 12:20 PM

Laboratory Compliance Quality Control

Blank Blank Report LCS LCSD LCS/LCSD

Analysis Name Result MDL Units %REC %REC Limits RPD RPD Max

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	<u>MAX</u>	Conc	Conc	RPD	Max
Batch number: 03213A16B TPH-GRO - Waters	Sample 110	number	(s): 409165 70-130	56-4091	561				
Batch number: 03218A16A TPH-GRO - Waters	Sample 118	number	(s): 409166 70-130	52-40910	563				
Batch number: P032231AB	Sample	number	(s): 409165	56,4091	559-409	1660			
Ethanol	95	100	34-163	6	30				
Methyl Tertiary Butyl Ether	102	110	69-134	7	30				
di-Isopropyl ether	101	102	75-130	1	30				
Ethyl t-butyl ether	105	103	73-123	2	30				
t-Amyl methyl ether	115	109	77-117	5	30				
t-Butyl alcohol	139	144	39-155	3	30				
Benzene	106	105	83-128	1	30				
1,2-Dichloroethane	113	111	73-136	2	30				
Toluene	107	108	83-127	1	30				
1,2-Dibromoethane	101	101	78-120	1	30				
Ethylbenzene	109	112	82-134	3	30				
Xylene (Total)	111	113	82-130	2	30				
Batch number: P032241AA	Sample	number	(s): 409165	57-4091	658,409	1661-40916	62		
Ethanol	97	103	34-163	6	30				
Methyl Tertiary Butyl Ether	99	99	69-134	0	30				
di-Isopropyl ether	100	102	75-130	2	30				
Ethyl t-butyl ether	103	103	73-123	0	30				
t-Amyl methyl ether	111	109	77-117	2	30				
t-Butyl alcohol	155	157*	39-155	1	30				
Benzene	104	105	83-128	1	30				
1,2-Dichloroethane	115	112	73-136	3	30				
Toluene	103	104	83-127	1	30				
1,2-Dibromoethane	100	100	78-120	0	30				
Ethylbenzene	107	106	82-134	1	30				
Xylene (Total)	108	109	82-130	1	30				
Batch number: P032241AB	Sample	number	(s): 409166	63					
Ethanol	97	103	34-163	6	30				
Methyl Tertiary Butyl Ether	99	99	69-134	0	30				
di-Isopropyl ether	100	102	75-130	2	30				
Ethyl t-butyl ether	103	103	73-123	0	30				

- (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 3 of 4

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 861306

Reported: 08/14/03 at 12:20 PM

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	Max
t-Amyl methyl ether	111	109	77-117	2	30				
t-Butyl alcohol	155	157*	39-155	1	30				
Benzene	104	105	83-128	1	30				
1,2-Dichloroethane	115	112	73-136	3	30				
Toluene	103	104	83-127	1	30				
1,2-Dibromoethane	100	100	78-120	0	30				
Ethylbenzene	107	106	82-134	1	30				
Xylene (Total)	108	109	82-130	1	30				

Surrogate Quality Control

Analysis Name: TPM-GRO - Waters Batch number: 03213A16B

Trifluorotoluene-F

4091656	112
4091657	113
4091658	112
4091659	112
4091660	112
4091661	119
Blank	112
LCS	113
LCSD	116
MS	114

Limits: 57-146

Analysis Name: TPH-GRO - Waters

Batch number: 03218A16A

Trifluorotoluene-F

4091662	119
4091663	112
Blank	112
LCS	115
LCSD	115
MS	116

Limits: 57-146

Analysis Name: BTEX+5 Oxygenates+EDC+EDB+ETOH

Batch number: P032231AB

Dibromofluoromethane

1,2-Dichloroethane-d4

Toluene-d8

4-Bromofluorobenzene

*- 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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98

98

83-113



Page 4 of 4

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 861306

Reported: 08/14/03 at 12:20 PM

Surrogate Quality Control

98

98

85-112

LCS	95	100	100	100
Blank	97	97	101	98
4091663	96	98	100	99
Batch numb	er: P032241AB Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzen
Analysis N	ame: BTEX+5 Oxygenates+ED	C+EDB+ETOH		
Limits:	81-120	82-112	85-112	83-113
MSD	95	96	98	98
MS	96	96	98	98
LCS	95	100	100	100
Blank	95	91	99	97
4091662	96	96	99	100
4091661	95	93	100	98
4091658	97	93	100	98
4091657	97	93	100	94
	ame: BTEX+5 Oxygenates+ED er: P032241AA Dibromofluoromethane	C+EDB+ETOH 1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzen
Limits:	81-120	82-112	85-112	83-113
MSD	94	99	100	99
MS	95	96	99	97
LCS	95	94	102	99
Blank	95	91	99	97
4091660	97	95	100	98
4091659	95 98	93 96	101 101	97 98

96

95

81-120

MS

MSD

Limits:

96

96

82-112



^{*-} 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. TNTC	none detected Too Numerous To Count	BMQL MPN	Below Minimum Quantitation Level Most Probable Number
E A A	International Units	CF Units	cobalt-chloroplatinate units
umhas/cm	micronihes/cm	NIU	nephelomatric turbidity units
kin.	degraes Celsius	F	degrees Fahrenheit
meq	milliequivalents	lo.	pound(s)
Q	gram(s)	ĸĢ	klogram(s)
បថ្ង	microgram(s)	rag	milligram(s)
mi	milliliter(s)	1	filer(s)
m3	cubic metor(s)	and the state of t	microliter(s)

- 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
- J estimated value The result fails within the Method Detection Limit (MDL) and Limit of Quantitation (LOQ).
- ppm parts per million One com 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 commission 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. All other results are reported on an as-received basis

U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualiflers
A	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	W	Duplicate injection precision not met
	Compound quantitated on a diluted sample	Ņ	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	Ų	Compound was not detected
P	Concentration difference between primary and	M	Post digestion spike out of control limits
	confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995
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.

Measurement uncertainty values, as applicable, are available upon request.

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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Chevron California Region Analysis Request/Chain of Custody



73003 - 016 Acct. #: 1088 Sample #: 409/1656-63

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