

RO 464



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

May 8, 2002

MAY 14 2002

Mr. Barney Chan  
Alameda County Health Care Services,  
Department of Environmental Health  
1153 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Subject: *Interim Corrective Action Plan and  
Overpurge Results, First Quarter 2002*  
Chevron Service Station No. 9-1851  
451 Hegenberger Road  
Oakland, California  
Delta Project No. DG91-851

Dear Mr. Chan:

Delta Environmental Consultants, Inc. (Delta) has been authorized by Chevron Products Company (Chevron) to conduct periodic groundwater overpurge events at the above referenced site. The overpurge events were conducted as part of Delta's *Interim Corrective Action Plan*, dated August 1, 2000. The location of the site is shown on Figure 1 and the site features are illustrated on Figure 2.

This report presents the results of the groundwater overpurge events conducted on January 15 and March 5, 2002, which included depth-to-water measurements and sample collection for chemical analysis of dissolved petroleum hydrocarbons. Field work was conducted at the site in accordance with field methods and procedures presented in Enclosure A.

**Groundwater Elevation Measurements**

Groundwater elevations were calculated for monitoring wells MW-1 through MW-7 using depth-to-groundwater measurements. Groundwater elevations and depth-to-water measurements are presented in Table 1. Measurements recorded on January 15, 2002 were used to construct the pre and post purge groundwater elevation contour maps shown on Figures 3 and 4, respectively.

**Groundwater Sampling and Analytical Results**

~~Groundwater samples were collected from monitoring wells MW-4 and MW-7 before and after~~  
The groundwater samples were submitted to a California-certified laboratory for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) using EPA Method 8260B, and total petroleum hydrocarbons as gasoline (TPHg) using the Northern California LUFT Gasoline Method. Cumulative analytical results are compiled in Table 2, and copies of laboratory analytical reports with chain-of-custody documentation for the first quarter overpurge events are included in Enclosure B.

**Volume of Impacted Groundwater Removed**

Approximately 1,150 gallons of impacted groundwater were overpurged from monitoring wells MW-4 and MW-7 during the first quarter 2002. Based on average concentrations of TPHg and MTBE reported in groundwater samples collected from MW-4 and MW-7 during each event, it is estimated that approximately 0.000556 gallons of TPHg and 0.00172 gallons of MTBE were removed from groundwater in the vicinity of the underground storage tank basin during the first quarter 2002. Cumulative volumes of groundwater, TPHg and MTBE removed from the site during the overpurge events are compiled in Table 3.

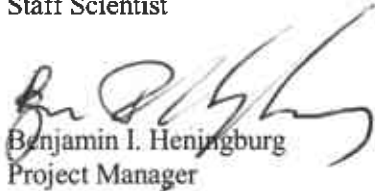
If you have questions or comments regarding this report, please contact me at (916) 536-2623.

Sincerely,

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**



William Slowik  
Staff Scientist



Benjamin I. Henjburg  
Project Manager



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



BIH (Lrp006.9-1851)  
Enclosures

cc: Ms. Karen Streich – Chevron Products Company  
Mr. Jim Brownell – Delta Environmental Consultants, Inc.

**TABLE 1**

**GROUNDWATER ELEVATION DATA  
JANUARY 15, 2002**

Chevron Service Station No. 9-1851  
451 Hegenberger Road  
Oakland, California

Sample ID	Date	Time	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)
<b><u>Pre Purge</u></b>					
MW-1	01/15/02	8:23	8.61	2.52	6.09
MW-2	01/15/02	8:27	9.52	3.45	6.07
MW-3	01/15/02	8:30	9.08	2.57	6.51
MW-4	01/15/02	8:15	9.48	5.00	4.48
MW-5	01/15/02	8:35	8.77	3.68	5.09
MW-6	01/15/02	8:40	11.45	3.89	7.56
MW-7	01/15/02	8:20	10.58	5.18	5.40
<b><u>Post Purge</u></b>					
MW-1	01/15/02	14:31	8.61	2.53	6.08
MW-2	01/15/02	14:34	9.52	3.49	6.03
MW-3	01/15/02	14:37	9.08	2.60	6.48
MW-4	01/15/02	---	9.48	NM	NC
MW-5	01/15/02	14:40	8.77	3.68	5.09
MW-6	01/15/02	14:44	11.45	3.95	7.50
MW-7	01/15/02	---	10.58	NM	NC

TPHg = Total petroleum hydrocarbons as gasoline.

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8260B.

NM = Not measured

NC = Not calculated

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS**

Chevron Service Station No. 9-1851  
 451 Hegenberger Road  
 Oakland, California

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPHg (µg/L)	MTBE (µg/L)
MW-4-853	05/03/01	<2.5	<2.5	<2.5	<2.5	491	2,020 <sup>a</sup> /4,270
MW-4-1505	05/03/01	<2.5	<2.5	<2.5	<2.5	370	3,330 <sup>a</sup> /4,250
MW-7-830	05/03/01	<0.5	<0.5	<0.5	<0.5	191	1,070 <sup>a</sup> /1,190
MW-7-1505	05/03/01	0.619	<0.5	1.65	0.961	201	472 <sup>a</sup> /647
MW-4-745	06/11/01	<5.0	<5.0	<5.0	<5.0	520	4,000 <sup>a</sup> /3,700
MW-4-1500	06/11/01	<5.0	<5.0	<5.0	<5.0	<500	5,900 <sup>a</sup> /3,500
MW-7-730	06/11/01	<5.0	<5.0	<5.0	<5.0	130	730 <sup>a</sup> /690
MW-7-1510	06/11/01	<5.0	<5.0	<5.0	<5.0	130	590 <sup>a</sup> /560
MW-4-825	08/30/01	<1.0	<1.0	<1.0	<1.0	720	3,000
MW-4-1510	08/30/01	<1.0	<1.0	<1.0	<1.0	590	2,600
MW-7-815	08/30/01	<1.0	<1.0	<1.0	<1.0	140	400
MW-7-1520	08/30/01	<1.0	<1.0	<1.0	<1.0	330	97
MW-4-815	01/15/02	<1.0	<1.0	<1.0	<1.0	640	2,800
MW-4-1450	01/15/02	<0.5	<0.5	<0.5	<0.5	290	1,100
MW-7-820	01/15/02	<0.5	<0.5	<0.5	<0.5	89	290
MW-7-1455	01/15/02	<0.5	<0.5	<0.5	<0.5	210	460
MW-4-825	03/05/02	<1.0	<1.0	<1.0	<1.0	420	2,200
MW-4-1510	03/05/02	<3.0	<3.0	<3.0	<3.0	160	1,200
MW-7-815	03/05/02	<0.5	<0.5	<0.5	<0.5	140	440
MW-7-1520	03/05/02	<0.5	<0.5	<0.5	<0.5	540	440

TPHg = Total petroleum hydrocarbons as gasoline.

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8260B.

<sup>a</sup> = analyzed by EPA Method by 8020.

TABLE 3

CUMULATIVE VOLUME OF GROUNDWATER AND TPH AS GASOLINE  
EXTRACTED FROM MW-4 AND MW-7

Chevron Service Station No. 9-1851  
451 Hegenberger Road  
Oakland, California

Date	Extracted Groundwater Per Event (gallons)	Cumulative Extracted Groundwater Volume (gallons)	Extracted TPHg Volume Per Event*	Extracted MTBE Volume Per Event*	Cumulative Extracted TPHg Volume (gallons)	Cumulative Extracted MTBE Volume (gallons)
05/03/01	200	200	0.000086	0.00047	0.000086	0.00047
06/06/01	508	708	0.000222	0.00192	0.000308	0.00239
08/30/01	400	1,108	0.000243	0.00082	0.000551	0.00321
01/15/02	450	1,558	0.000255	0.00071	0.000806	0.00392
03/05/02	700	2,258	0.000301	0.00101	0.001107	0.00403

TPHg = Total petroleum hydrocarbons as gasoline.

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8260B.

\*  $V_{TPH} = V_{gw} [TPH] \rho_{gw} / \rho_{TPH}$

Where:

$V_{TPH}$  = Volume of TPH as gasoline in gallons

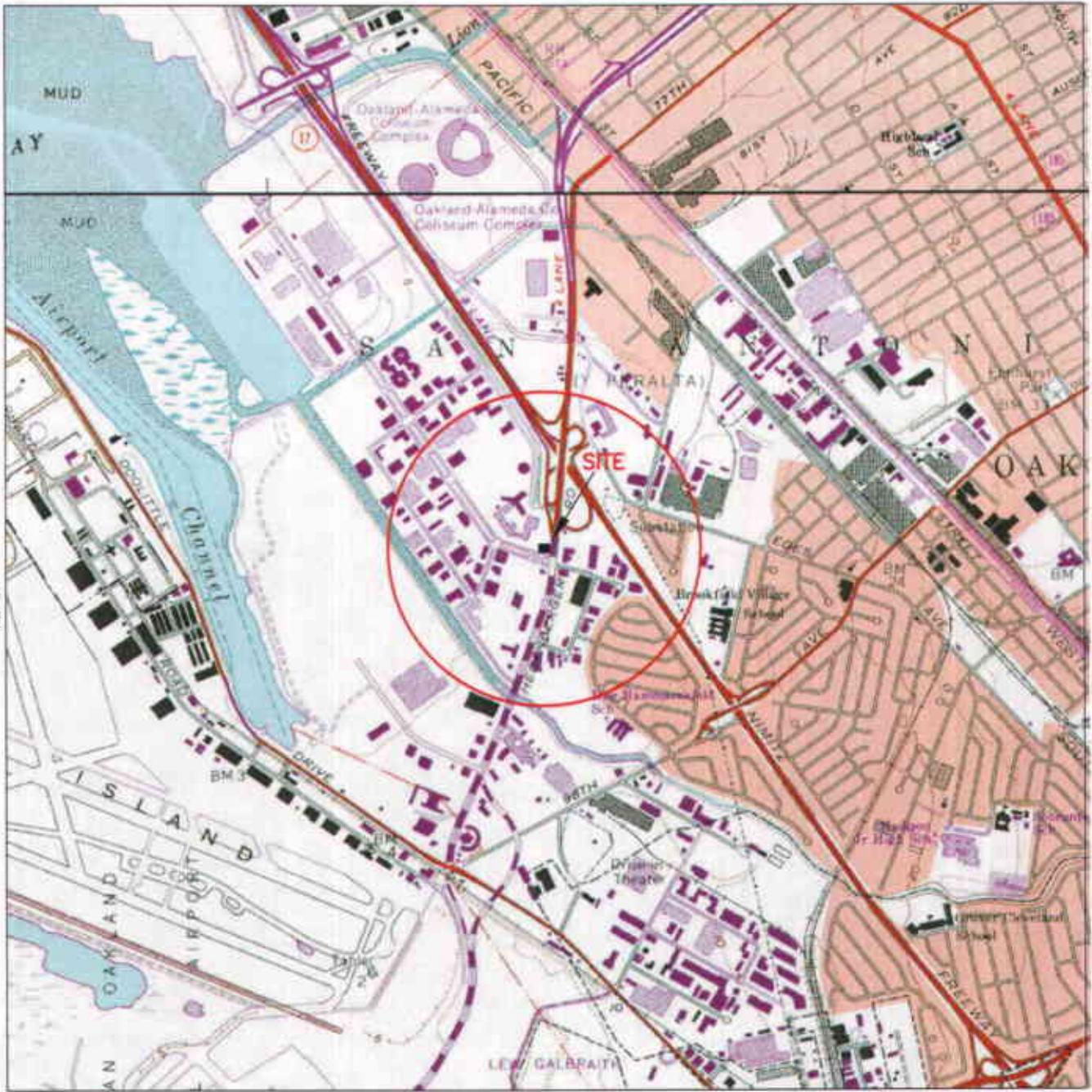
$V_{gw}$  = Volume of groundwater in million gallons

[TPH] = Average TPH as gasoline concentrations in milligrams per liter (mg/L)

$\rho_{gw}$  = density of groundwater = 8.34 lbs/gal.

$\rho_{TPH}$  = density of TPH as gasoline = 6.1 lbs/gal.

$\rho_{MTBE}$  = density of MTBE = 6.16 lbs/gal.



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



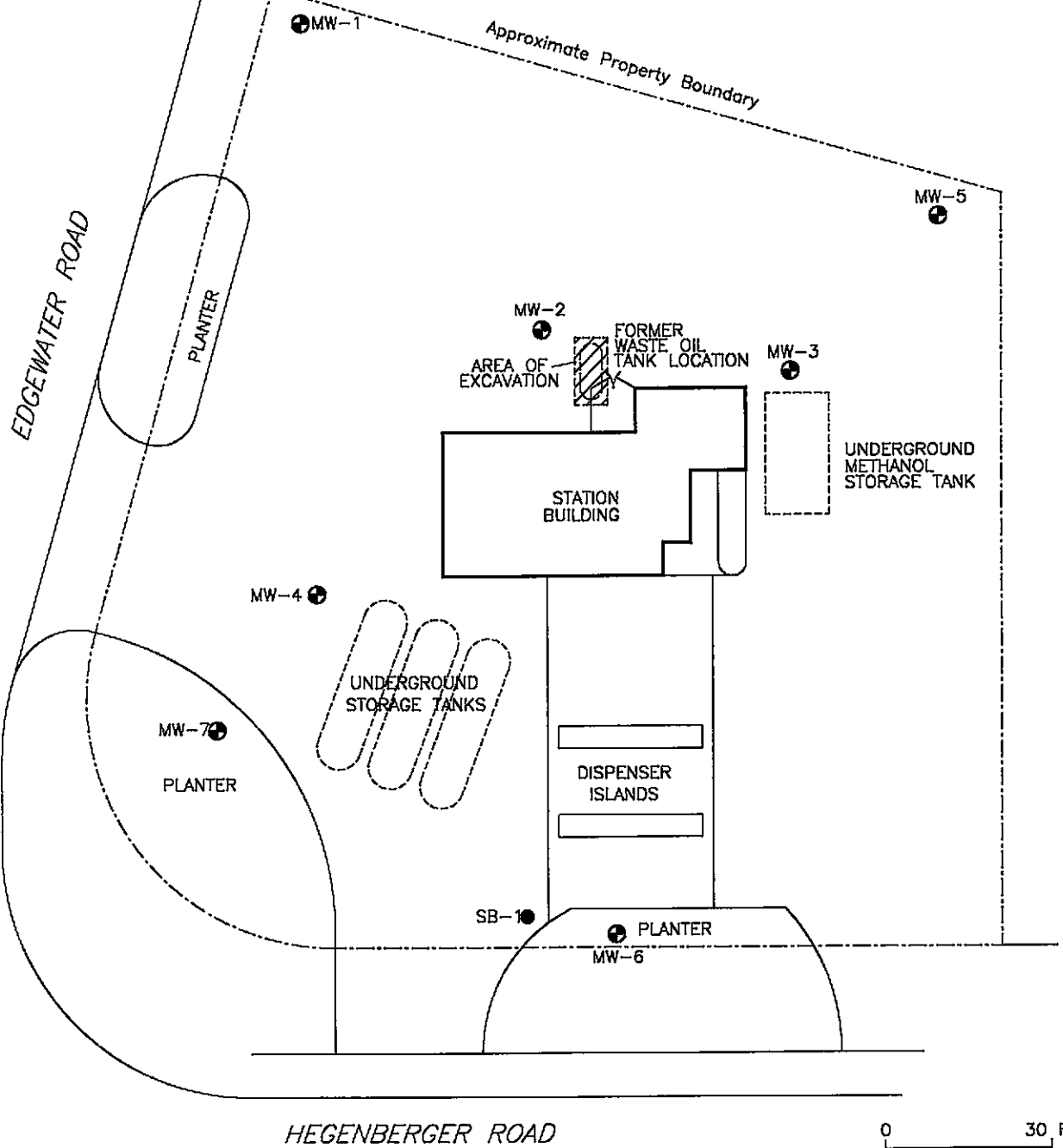
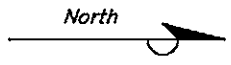
QUADRANGLE LOCATION

FIGURE 1

SITE TOPOGRAPHIC MAP  
 CHEVRON STATION NO. 9-1851  
 451 HEGENBERGER ROAD  
 OAKLAND, CA.

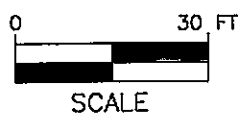
PROJECT NO. -	DRAWN BY TLA 10/24/00
FILE NO. -	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY





**EXPLANATION**


- ⊕ MW-1 MONITORING WELL LOCATION
- SB-1 SOIL BORING LOCATION



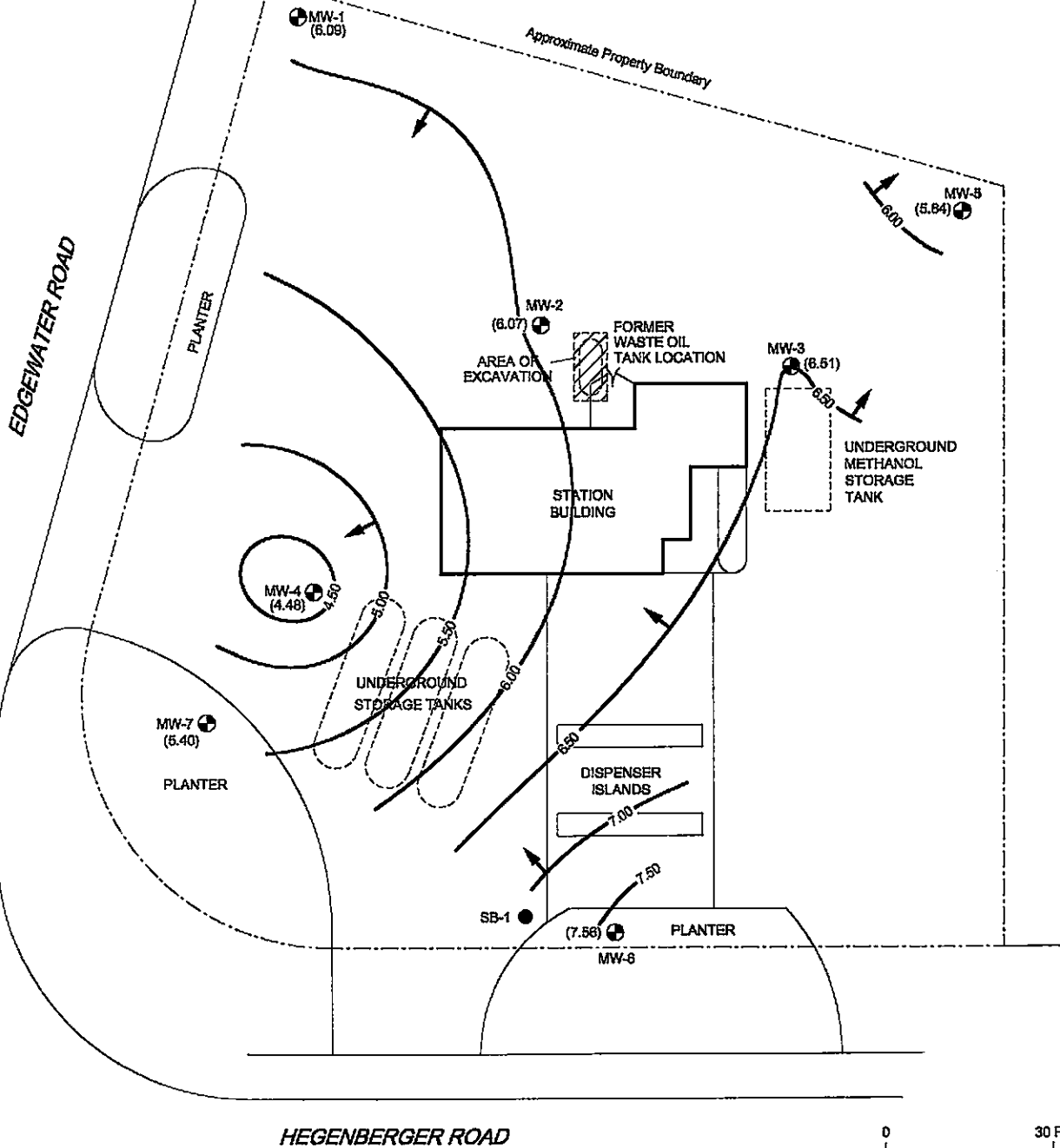
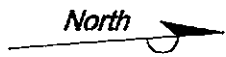
**FIGURE 2  
SITE MAP**

CHEVRON STATION NO. 9-1851  
451 HEGENBERGER ROAD  
OAKLAND, CA.

PROJECT NO. DG91-851	DRAWN BY TLA 10/24/00
FILE NO. DG91851-1	PREPARED BY BIH
REVISION NO. 2	REVIEWED BY



**Delta**  
Environmental  
Consultants, Inc.



**EXPLANATION**

- ⊕ MW-1 MONITORING WELL LOCATION
- SB-1 SOIL BORING LOCATION
- (6.09) GROUNDWATER ELEVATION IN FEET RELATIVE TO AN ASSUMED BENCH MARK
- 6.00— INFERRED WATER TABLE CONTOUR IN FEET RELATIVE TO AN ASSUMED BENCH MARK
- ➔ INFERRED GROUNDWATER FLOW DIRECTION



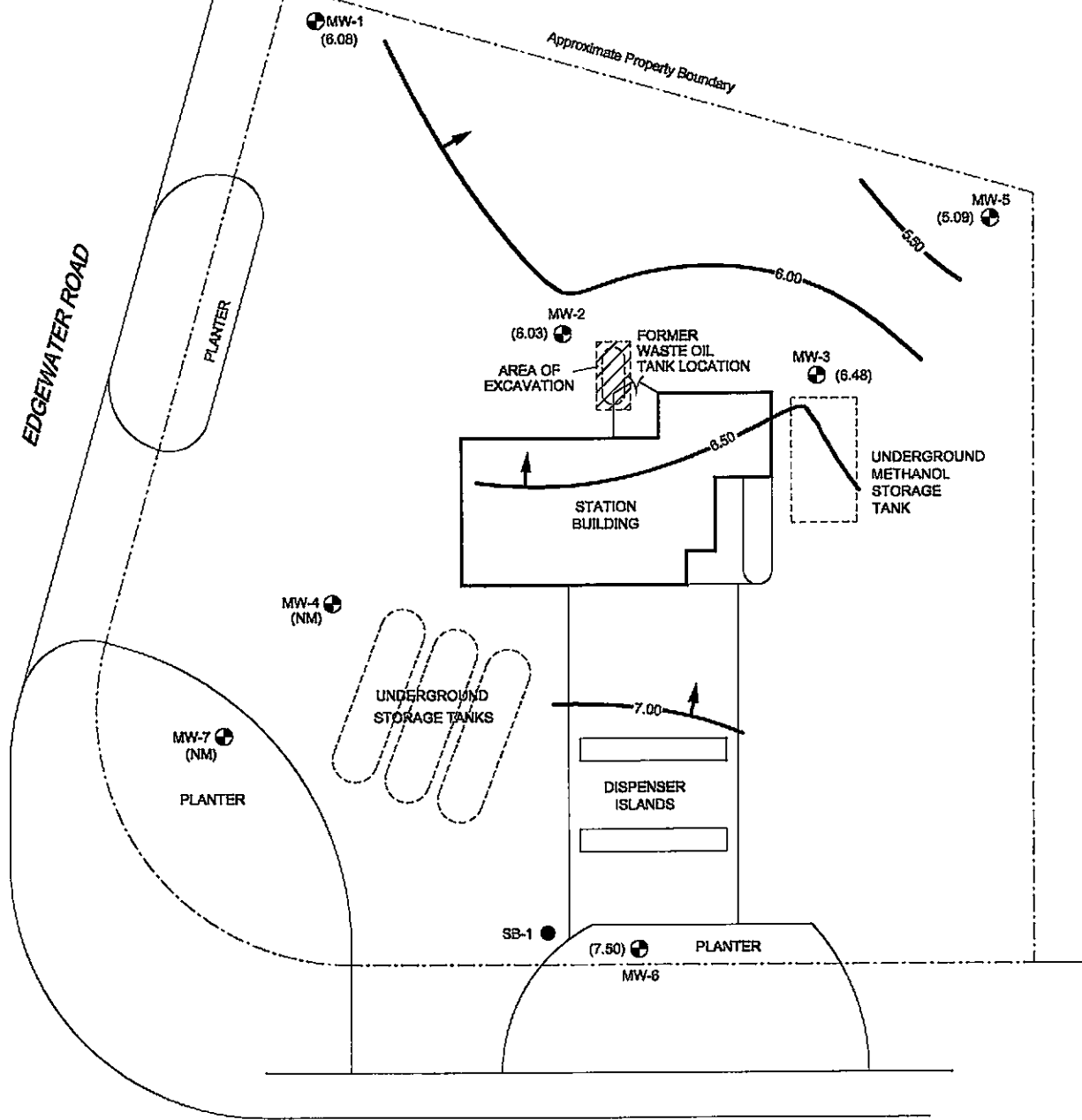
**FIGURE 3**  
**GROUNDWATER ELEVATION CONTOUR MAP**  
**PRE PURGE - JANUARY 15, 2002**  
**CHEVRON STATION NO. 9-1851**  
**451 HEGENBERGER ROAD**  
**OAKLAND, CA.**

PROJECT NO. DG91-861	DRAWN BY M.L. 5/8/02
FILE NO. DG918511	PREPARED BY W.S.
REVISION NO. 2	REVIEWED BY





North



HEGENBERGER ROAD



SCALE

**EXPLANATION**

- MW-1 MONITORING WELL LOCATION
- SB-1 SOIL BORING LOCATION
- (6.08) GROUND WATER ELEVATION IN FEET RELATIVE TO AN ASSUMED BENCH MARK
- 4.50- INFERRED WATER TABLE CONTOUR IN FEET RELATIVE TO AN ASSUMED BENCH MARK
- ➔ INFERRED GROUND WATER FLOW DIRECTION
- NM NOT MEASURED

**FIGURE 4**  
**GROUNDWATER ELEVATION CONTOUR MAP**  
**POST PURGE - JANUARY 15, 2002**

CHEVRON STATION NO. 9-1851  
 451 HEGENBERGER ROAD  
 OAKLAND, CA.

PROJECT NO. DG91-851	DRAWN BY M.L. 4/12/02
FILE NO. DG918511	PREPARED BY BIH
REVISION NO. 1	REVIEWED BY

**Delta**  
Environmental  
Consultants, Inc.

## **FIELD METHODS AND PROCEDURES**

The following describes field procedures that were completed by Delta personnel in the performance of the tasks involved with this project.

### **1.0 GROUNDWATER DEPTH ASSESSMENT**

Depth to groundwater was measured to the nearest 0.01 foot using an electronic hand held water level indicator. The tip of the probe was examined to assess whether liquid-phase petroleum hydrocarbons or hydrocarbon sheen was present. The depth to groundwater was measured from a marked reference point at the top of each well riser. Each reference point has been surveyed relative to a mean sea level or temporary benchmark for correlation of groundwater levels at the site.

### **2.0 MONITORING WELL PURGING AND SAMPLING**

Groundwater was purged from the wells by connecting a manifold vacuum hose, slip-cap and drop tube assembly to the wellhead. Once the assembly was connected, approximately 15 inches of mercury vacuum was applied to the wellhead for enhanced fluid recovery. After the water levels within the wells were allowed to stabilize, a sample was collected with a dedicated, clean, disposable plastic bailer. Samples were sealed in air tight vials, packed on ice, and transported to a California-certified laboratory to be analyzed within the EPA-specified holding time for requested analyses.

Each sample container submitted for analysis had a label affixed to identify the job number, sample date, time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, were recorded on sampling information sheets.

A chain-of-custody form was used to record possession of the sample from the time of collection to its arrival at the laboratory. When the samples were shipped, the person in custody of them relinquished the samples by signing the chain-of-custody form and noting the time. The sample control officer at the laboratory verified sample integrity and confirmed that it was collected in the proper container, preserved correctly, and that there was an adequate volume for analysis. The laboratory then assigns each sample with a unique identification number that will designate a given sample until it is properly destroyed.

**ENCLOSURE B**

Copies of Certified Laboratory Analytical Reports  
With Chain of Custody Documentation



Lancaster Laboratories Sample No. WW 3759794

Collected: 01/15/2002 08:15 by BB

Account Number: 10900

Submitted: 01/17/2002 09:30

Chevron Products Company

Reported: 01/28/2002 at 17:09

6001 Bollinger Canyon Rd

Discard: 02/28/2002

Building L P.O. Box 6004

MW-4-W-020115

Grab Water

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-4

M4115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	640.	50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	2,800.	5.	ug/l	10
05401	Benzene	71-43-2	N.D.	1.	ug/l	2
05407	Toluene	108-88-3	N.D.	1.	ug/l	2
05415	Ethylbenzene	100-41-4	N.D.	1.	ug/l	2
06310	Xylene (Total)	1330-20-7	N.D.	1.	ug/l	2
The reporting limits for the GC/MS volatile compounds were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.						

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	01/20/2002 03:06	Melissa-Ann S McAlpine	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 20:10	Patricia L Nolt	10
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 22:15	Patricia L Nolt	2
01146	GC VOA Water Prep	SW-846 5030B	1	01/20/2002 03:06	Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/17/2002 20:10	Patricia L Nolt	n.a.



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. WW 3759795

Collected: 01/15/2002 08:20 by BB

Account Number: 10900

Submitted: 01/17/2002 09:30

Chevron Products Company

Reported: 01/28/2002 at 17:09

6001 Bollinger Canyon Rd

Discard: 02/28/2002

Building L P.O. Box 6004

MW-7-W-020115

Grab Water

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-7

M7115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	89.		50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.							
01594	BTEX + Oxygenates by 8260B						
02010	Methyl t-butyl ether	1634-04-4	290.		1.	ug/l	2.5
05401	Benzene	71-43-2	N.D.		0.5	ug/l	1
05407	Toluene	108-88-3	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	01/20/2002	03:40	Melissa-Ann S McAlpine	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002	21:50	Patricia L Nolt	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/18/2002	00:36	Marla S Lord	2.5
01146	GC VOA Water Prep	SW-846 5030B	1	01/20/2002	03:40	Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/17/2002	21:50	Patricia L Nolt	n.a.



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. WW 3759796

Collected: 01/15/2002 14:50 by BB

Account Number: 10900

Submitted: 01/17/2002 09:30  
 Reported: 01/28/2002 at 17:09  
 Discard: 02/28/2002  
 MW-4-W-020115

Chevron Products Company  
 6001 Bollinger Canyon Rd  
 Building L P.O. Box 6004  
 San Ramon CA 94583-0904

Grab Water

Facility# 91851 DECR  
 451 HEGENBERGER-OAKLAND T0600102238 MW-4

42115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
01728	TPH-GRO - Waters	n.a.	290.	Detection Limit 50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	1,100.	5.	ug/l	10
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	01/20/2002 04:15	Melissa-Ann S McAlpine	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 20:59	Patricia L Nolt	10
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 22:39	Patricia L Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/20/2002 04:15	Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/17/2002 20:59	Patricia L Nolt	n.a.



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. WW 3759797

Collected: 01/15/2002 14:55 by BB

Account Number: 10900

Submitted: 01/17/2002 09:30

Chevron Products Company

Reported: 01/28/2002 at 17:09

6001 Bollinger Canyon Rd

Discard: 02/28/2002

Building L P.O. Box 6004

MW-7-W-020115

Grab Water

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-7

72115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters 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.	n.a.	210.		50.	ug/l	1
01594	BTEX + Oxygenates by 8260B						
02010	Methyl t-butyl ether	1634-04-4	460.		1.	ug/l	2.5
05401	Benzene	71-43-2	N.D.		0.5	ug/l	1
05407	Toluene	108-88-3	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	01/20/2002 04:49		Melissa-Ann S McAlpine	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 23:04		Patricia L Nolt	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	01/17/2002 23:55		Patricia L Nolt	2.5
01146	GC VOA Water Prep	SW-846 5030B	1	01/20/2002 04:49		Melissa-Ann S McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/17/2002 23:04		Patricia L Nolt	n.a.



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

Facility #: Chevron Service Station # 9-1851  
 Site Address: 451 Hegenberger Road, Oakland  
 Chevron PM: Tom Bauhs Lead Consultant: Delta Env. Consultants, Inc.  
 Consultant/Office: 3164 Gold Camp Drive Suite 200, Rancho Cordova  
 Consultant Prj. Mgr.: Ben Henningburg  
 Consultant Phone #: 916-536-2623 Fax #: 916-638-8385  
 Sampler: Brett Bardsley  
 Service Order #: \_\_\_\_\_  Non SAR: \_\_\_\_\_

Analyses Requested					
Preservation Codes					
8260	8260 + MTBE	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	8260
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>

**Preservative Codes**  
 H = HCl T = Thiosulfate  
 N = HNO<sub>3</sub> B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub> O = Other

J value reporting needed  
 Must meet lowest detection limits possible for 8260 compounds

**8021 MTBE Confirmation**  
 Confirm highest hit by 8260  
 Confirm all hits by 8260  
 Run \_\_\_ oxy's on highest hit  
 Run \_\_\_ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	8260	8260 + MTBE	8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421	BTEX / MTBE only 8260
MW-4	Water			02/1/15	915		X		5				X						X
MW-7	Water			02/1/15	820		X		5				X						X
MW-4	Water			02/1/15	1450		X		5				X						X
MW-7	Water			02/1/15	1455		X		5				X						X

**Comments / Remarks**  
NCL Preserved

**Turnaround Time Requested (TAT)** (please circle)  
STD. TAT 72 hour 48 hour  
 24 hour 4 day 5 day

**Data Package Options** (please circle if required)  
 QC Summary Type I - Full  
 Type VI (Raw Data)  Coelt Deliverable not needed  
 WIP (RWQCB)  
 Disk

Relinquished by: Brett Bardsley Date 1/16/02 Time 930 Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by Commercial Carrier: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 UPS  FedEx Other \_\_\_\_\_ Received by: Devin Miller Date 1/17/02 Time 0930

Temperature Upon Receipt 31.0 °C Custody Seals Intact?  Yes  No



Lancaster Laboratories Sample No. WW 3784062

Collected: 03/05/2002 09:05 by WS

Account Number: 10900

Submitted: 03/07/2002 09:30

Chevron Products Company

Reported: 03/21/2002 at 21:03

6001 Bollinger Canyon Rd

Discard: 04/21/2002

Building L P.O. Box 6004

MW-4-W-020305

Grab

Water

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-4

4A305

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	420.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	2,200.	10.	ug/l	25
05401	Benzene	71-43-2	N.D.	1.	ug/l	2.5
05407	Toluene	108-88-3	N.D.	1.	ug/l	2.5
05415	Ethylbenzene	100-41-4	N.D.	1.	ug/l	2.5
06310	Xylene (Total)	1330-20-7	N.D.	1.	ug/l	2.5
	Due to the level of methyl t-butyl ether, the reporting limits for all GC/MS volatile compounds were raised.					

State of California Lab Certification No. 2116

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/09/2002 22:55	John B Kiser	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002 15:52	Nicole S Albright	25
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/19/2002 15:36	Susan McMahon-Luu	2.5
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2002 22:55	John B Kiser	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/19/2002 15:36	Susan McMahon-Luu	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	2	03/13/2002 15:52	Nicole S Albright	n.a.

Lancaster Laboratories Sample No. WW 3784063

Collected: 03/05/2002 09:20 by WS Account Number: 10900

Submitted: 03/07/2002 09:30

Reported: 03/21/2002 at 21:03

Discard: 04/21/2002

MW-7-W-020305

Grab

Water

Chevron Products Company

6001 Bollinger Canyon Rd

Building L P.O. Box 6004

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-7

7A305

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	140.		50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
01594	BTEX + Oxygenates by 8260B						
02010	Methyl t-butyl ether	1634-04-4	440.		5.	ug/l	10
05401	Benzene	71-43-2	N.D.		0.5	ug/l	1
05407	Toluene	108-88-3	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

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/09/2002	21:44	John B Kiser	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002	11:48	Roy R Mellott Jr	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002	12:15	Roy R Mellott Jr	10
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2002	21:44	John B Kiser	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2002	11:48	Roy R Mellott Jr	n.a.

Lancaster Laboratories Sample No. WW 3784064

Collected: 03/05/2002 15:20 by WS

Account Number: 10900

Submitted: 03/07/2002 09:30

Chevron Products Company

Reported: 03/21/2002 at 21:03

6001 Bollinger Canyon Rd

Discard: 04/21/2002

Building L P.O. Box 6004

MW-4-W-020305

Grab

Water

San Ramon CA 94583-0904

Facility# 91851

DECR

451 HEGENBERGER-OAKLAND T0600102238 MW-4

4B305

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	160.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	1,200.	3.	ug/l	5
05401	Benzene	71-43-2	N.D.	3.	ug/l	5
05407	Toluene	108-88-3	N.D.	3.	ug/l	5
05415	Ethylbenzene	100-41-4	N.D.	3.	ug/l	5
06310	Xylene (Total)	1330-20-7	N.D.	3.	ug/l	5
	The reporting limits for the GC/MS volatile compounds were raised due to sample foaming.					

State of California Lab Certification No. 2116

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/09/2002 22:19	John B Kiser	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002 16:20	Nicole S Albright	5
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2002 22:19	John B Kiser	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2002 16:20	Nicole S Albright	n.a.

Lancaster Laboratories Sample No. WW 3784065

Collected: 03/05/2002 15:15 by WS

Account Number: 10900

Submitted: 03/07/2002 09:30  
Reported: 03/21/2002 at 21:04  
Discard: 04/21/2002  
MW-7-W-020305

Grab Water

Chevron Products Company  
6001 Bollinger Canyon Rd  
Building L P.O. Box 6004  
San Ramon CA 94583-0904Facility# 91851  
451 HEGENBERGER-OAKLAND T0600102238 MW-7

DECR

7B305

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	540.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	440.	5.	ug/l	10
05401	Benzene	71-43-2	2.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	12.	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

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/09/2002 21:07	John B Kiser	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002 12:42	Roy R Mellott Jr	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/13/2002 13:08	Roy R Mellott Jr	10
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2002 21:07	John B Kiser	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2002 12:42	Roy R Mellott Jr	n.a.



For Lancaster Laboratories use only

Acct. #:

Sample #:

SCR#:

Facility #: Chevron Service Station # 9-1851  
 Site Address: 451 Hegenberger Rd, Oakland, CA  
 Chevron PM: Tom Bauhs Lead Consultant: Delta Envtl. Consultants  
 Consultant/Office: 3164 Gold Camp Road, Ste 200 Rancho Cordova, CA  
 Consultant Prj. Mgr.: Ben Henningburg  
 Consultant Phone #: (916) 536-2623 Fax #: (916) 638-8385  
 Sampler: Will Slowik  
 Service Order #: \_\_\_\_\_  Non SAR:

### Analyses Requested

#### Preservation Codes

**Preservative Codes**  
 H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>    B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>   O = Other

- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds

- 8021 MTBE Confirmation**
- Confirm highest hit by 8260
  - Confirm all hits by 8260
  - Run \_\_\_ oxy's on highest hit
  - Run \_\_\_ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month, Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421
MW-4A	WATER			02/3/5	9:05		X		5	X						
MW-7A	WATER			02/3/5	9:20		X		5	X						
MW-4B	WATER			02/3/5	15:20		X		5	X						
MW-7B	WATER			02/3/5	15:15		X		5	X						

H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H

**Comments / Remarks**

**Turnaround Time Requested (TAT) (please circle)**

STD. TAT      72 hour      48 hour  
 24 hour      4 day      5 day

**Data Package Options (please circle if required)**

QC Summary      Type I - Full  
 Type VI (Raw Data)       Coelt Deliverable not needed  
 WIP (RWQCB)  
 Disk

Relinquished by: <u>William Slowik</u>	Date <u>3/6/02</u>	Time <u>11:00</u>	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS <u>FedEx</u> Other _____	Temperature Upon Receipt _____ C°		Received by:	Date	Time
Custody Seals Intact?			Yes	No	