

Third Quarter 2011 Quarterly Groundwater Monitoring Report

RECEIVED

10:18 am, Nov 17, 2011

Alameda County Environmental Health Former Chevron-branded Service Station 91723 9757 San Leandro Street Oakland, California

Submitted to:

Mr. Mark Detterman
Alameda County Health Care
Services Agency
Department of Environmental Health
Services, Environmental Protection
Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Prepared for:

Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583

Submitted by:

Stantec Consulting Corporation 15575 Los Gatos Blvd., Building C Los Gatos, CA 95032

November 15, 2011



David PattenProject Manager
Marketing Business Unit

Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6491 drpatten@chevron.com

November 15, 2011

Mr. Mark Detterman
Alameda County Health Care Services Agency
Department of Environmental Health Services,
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California

Dear Mr. Detterman:

Attached for your review is the *Third Quarter 2011 Quarterly Groundwater Monitoring Report* for former Chevron-branded service station 91723, located at 9757 San Leandro Street in Oakland, California. This report was prepared by Stantec Consulting Corporation (Stantec), upon whose assistance and advice I have relied. I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct, to the best of my knowledge.

If you should have any further questions, please do not hesitate to contact me or the Stantec project manager, Travis Flora, at (408) 356-6124 ext. 238, or travis.flora@stantec.com.

Sincerely,

David Patten

Project Manager

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November 15, 2011

Mr. Mark Detterman
Alameda County Health Care Services Agency
Department of Environmental Health Services, Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California

RE: Third Quarter 2011 Quarterly Groundwater Monitoring Report

Former Chevron-branded Service Station 91723 9757 San Leandro Street Oakland, California

Dear Mr. Detterman:

On behalf of Chevron Environmental Management Company (Chevron), Stantec Consulting Corporation (Stantec) is pleased to submit the *Third Quarter 2011 Quarterly Groundwater Monitoring Report* for former Chevron-branded service station 91723, which was located at 9757 San Leandro Street, Oakland, California (the Site - shown on *Figure 1*). This report is presented in three sections: Site Background, Third Quarter 2011 Groundwater Monitoring and Sampling Program, and Conclusions and Recommendations.

SITE BACKGROUND

The Site is a former Chevron-branded service station located on the western corner at the intersection of San Leandro Street and 98th Avenue in Oakland, Alameda County, California. The Site is currently a large parking area staging semi-trucks for a distribution company. A former Chevron-branded service station operated at the Site from approximately 1946 to 1978. Prior to 1966, three fuel underground storage tanks (USTs) and one fuel dispenser island (first generation) located in the eastern portion of the Site were removed. Second-generation fuel structures (installed between 1966 and 1968) included three fuel USTs located in the central portion of the Site, one waste oil UST located in the western portion of the Site, and five fuel dispenser islands (four located in the central portion of the Site and one located in the southern portion of the Site). In 1978, the service station was closed and the second-generation fuel structures were removed from the Site. Land use near the Site consists primarily of commercial and industrial properties. The Site is bounded on the northwest and southwest by a former food processing plant, on the northeast by San Leandro Street, and on the southeast by 98th Avenue. A Thrifty-branded service station was formerly located southeast of the Site at 9801 San Leandro Street (Case No.: RO0000894) and was granted closure on April 2, 1997.

THIRD QUARTER 2011 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Blaine Tech Services, Inc. (Blaine Tech) performed the Third Quarter 2011 groundwater monitoring and sampling event on September 23, 2011. Blaine Tech's standard operating

Third Quarter 2011 Quarterly Groundwater Monitoring Report Former Chevron-branded Service Station 91723 November 15, 2011 Page 2 of 5

procedures (SOPs) and field data sheets are included in *Attachment A*. Blaine Tech gauged depth-to-groundwater in five Site wells (MW-2, MW-5, MW-6, MW-8, and MW-9) prior to collecting groundwater samples for laboratory analysis.

Investigation-derived waste (IDW) generated during the Third Quarter 2011 groundwater monitoring and sampling event was collected by Blaine Tech and transported under bill-of-lading to Integrated Wastestream Management, Inc. (IWM) facilities in San Jose, California.

Groundwater Elevation and Gradient

Well construction details and an assessment of whether groundwater samples were collected when groundwater elevations were measured across the well screen intervals are presented in *Table 1*. Current groundwater elevation data are presented in *Table 2*. A groundwater elevation contour map (based on Third Quarter 2011 data) is shown on *Figure 2*. The direction of groundwater flow at the time of sampling was generally towards the west at an approximate hydraulic gradient of 0.001 to 0.002 feet per foot (ft/ft). An initial Rose Diagram illustrating the direction of groundwater flow observed in Third Quarter 2011 is shown on *Figure 3*.

Schedule of Laboratory Analysis

Groundwater samples were collected and analyzed for the presence of total petroleum hydrocarbons as gasoline range organics (TPH-GRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), and methyl *tertiary*-butyl ether (MtBE) using United States Environmental Protection Agency (US EPA) Method 8260B (SW-846).

Groundwater Analytical Results

During the Third Quarter 2011 groundwater monitoring and sampling event, groundwater samples were collected from five Site wells (MW-2, MW-5, MW-6, MW-8, and MW-9). Current groundwater analytical results are included in *Table 2*. A figure showing the latest groundwater analytical data plotted on a Site map is included as *Figure 4*. A TPH-GRO isoconcentration map is shown on *Figure 5*. A benzene isoconcentration map is shown on *Figure 6*. An isoconcentration map was not developed for MtBE as all detected concentrations were below the California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) Environmental Screening Level (ESL) of 5 micrograms per liter (µg/L).

Certified laboratory analysis reports and chain-of-custody documents are presented as **Attachment B**. Historical groundwater analytical results are included in **Attachment C**. A summary of Third Quarter 2011 groundwater analytical results follows:

- **TPH-GRO** was detected in three Site wells this quarter, at concentrations of 180 μg/L (well MW-2), 190 μg/L (well MW-5), and 1,900 μg/L (well MW-8).
- **Benzene** was detected in one Site well this quarter, at a concentration of 55 μg/L (well MW-8).
- **Toluene** was detected in one Site well this quarter, at a concentration of 2 μ g/L (well MW-8).

Third Quarter 2011 Quarterly Groundwater Monitoring Report Former Chevron-branded Service Station 91723 November 15, 2011 Page 3 of 5

- **Ethylbenzene** was detected in two Site wells this quarter, at concentrations of 0.6 μg/L (well MW-2) and 10 μg/L (well MW-8).
- **Total Xylenes** were detected in two Site wells this quarter, at concentrations of 0.6 μg/L (well MW-2) and 8 μg/L (well MW-8).
- **MtBE** was detected in two Site wells this quarter, at concentrations of 0.6 μg/L (well MW-2) and 0.7 μg/L (well MW-6).

CONCLUSIONS AND RECOMMENDATIONS

Concentrations of TPH-GRO and benzene were observed above ESLs as follows:

- TPH-GRO concentrations exceed the ESL of 100 $\mu g/L$ in wells MW-2, MW-5, and MW-8; and
- The benzene concentration exceeds the ESL of 1 μg/L in well MW-8.

Maximum concentrations of TPH-GRO and BTEX compounds were observed in well MW-8, which is located in the northern portion of the Site near the former second-generation USTs. TPH-GRO was also detected in well MW-5, near the former first-generation dispenser island, and down-gradient at well MW-2. The maximum concentration of MtBE was observed in well MW-6; however, based on the years in which the former service station operated (1946 to 1978), MtBE detections are likely unrelated to historical service station operations.

Based on concentrations of TPH-GRO and benzene exceeding ESLs, and to further evaluate groundwater quality and the prevailing direction of groundwater flow at the Site, Stantec recommends that the groundwater monitoring and sampling program continue. Though the Alameda County Environmental Health (ACEH) correspondence, dated July 24, 2009, recommended semi-annual groundwater monitoring and sampling during First and Third Quarters, Stantec recommends that quarterly groundwater monitoring and sampling be conducted for a period of one year (through Second Quarter 2012) due to the large gap since the last groundwater monitoring and sampling event (Third Quarter 1998) at the Site. In the ACEH correspondence, it was also requested that reports be submitted to ACEH within 60 days following groundwater monitoring and sampling events.

In addition, Stantec recommends that the following analyses be added to the groundwater monitoring and sampling program beginning Fourth Quarter 2011 for evaluation of intrinsic biodegradation indicators:

- Field measurements of oxidation-reduction potential (ORP) and dissolved oxygen (DO);
- Sulfate (SO₄²⁻⁾ and nitrate (NO₃) by US EPA Method 300.0;
- Ferrous iron (Fe²⁺) by SM20 3500 Fe B Modified;
- Methane (CH₄) by US EPA Method 8015B Modified;
- Sulfide by SM20 4500 S2 D; and
- Alkalinity by US EPA Method 310.1.

Third Quarter 2011 Quarterly Groundwater Monitoring Report Former Chevron-branded Service Station 91723 November 15, 2011 Page 4 of 5

If you have any questions regarding the contents of this report, please contact the Stantec project manager, Travis Flora, at (408) 356-6124 or travis.flora@stantec.com.

Sincerely,

Stantec Consulting Corporation

Travis L. Flora Project Manager

Attachments:

Table 1 – Well Details / Screen Interval Assessment – Third Quarter 2011

Table 2 – Groundwater Monitoring Data and Analytical Results

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contour Map – Third Quarter 2011

Figure 3 – Rose Diagram – Third Quarter 2011

Figure 4 – Site Plan Showing Groundwater Concentrations – Third Quarter 2011

Figure 5 – TPH-GRO Isoconcentration Map – Third Quarter 2011

Figure 6 – Benzene Isoconcentration Map – Third Quarter 2011

Attachment A – Blaine Tech Services, Inc. Groundwater Monitoring Report – Third Quarter 2011

Attachment B – Certified Laboratory Analysis Reports and Chain-of-Custody Documents

Attachment C – Historical Groundwater Analytical Results

CC:

Mr. David Patten, Chevron Environmental Management Company, 6101 Bollinger Canyon Road, San Ramon, CA 94583 – Electronic Copy

Ms. Linda C. Hothem Trust, 104 Caledonia Street, Sausalito, CA 94965

J. Jeannero, Gerber Products, 445 State Street, Fremont, MI 49412

Third Quarter 2011 Quarterly Groundwater Monitoring Report Former Chevron-branded Service Station 91723 November 15, 2011 Page 5 of 5

LIMITATIONS AND CERTIFICATION

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Chevron for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by Stantec.

Prepared by:

Erin O'Malley
Project Engineer

Reviewed by:

Marisa Patterson Associate Engineer

All information, conclusions, and recommendations provided by Stantec in this document regarding the Subject Property have been prepared under the supervision of and reviewed by the Licensed Professional whose signature appears below:

Licensed Approver:

Name: James May, P.G.

Date: 15 NOV 2011

Signature:

Stamp:

MAY NO. 8021

JAMES PATRICK

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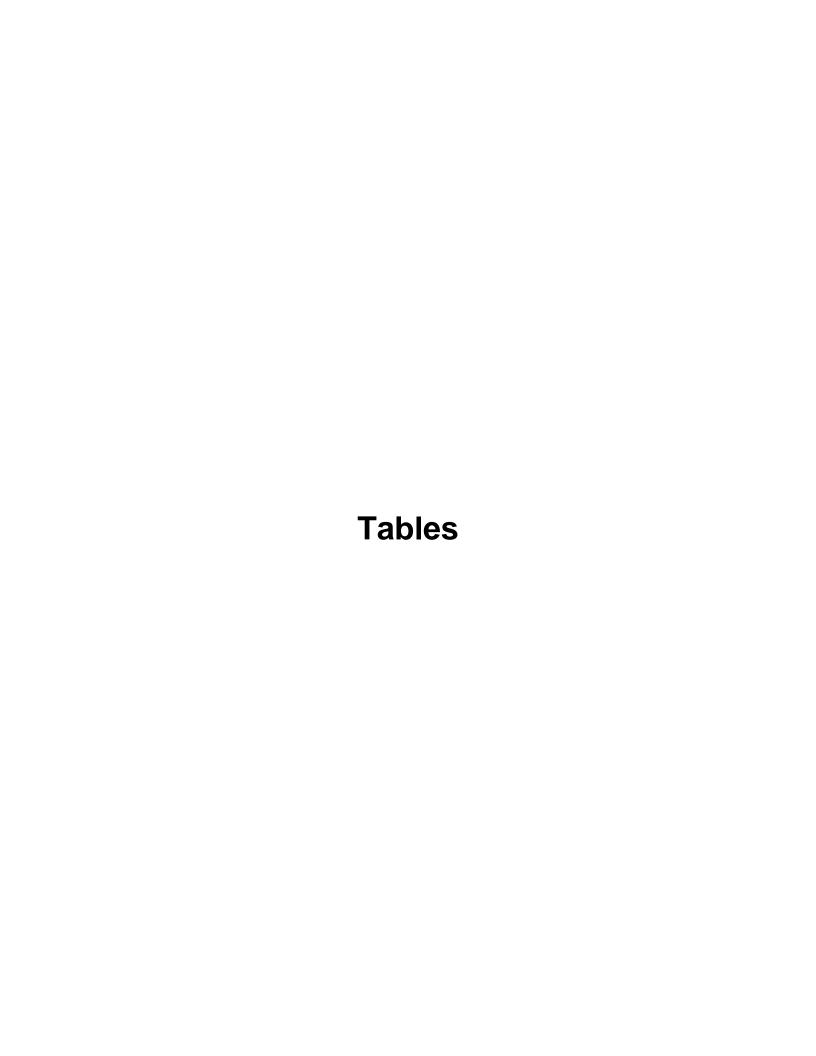


Table 1 Well Details / Screen Interval Assessment Third Quarter 2011

Former Chevron-Branded Service Station 91723 9757 San Leandro Street, Oakland, California

Well ID	Date Installed	Well Type	Casing Diameter (inches)	Top of Casing (feet above msl)	Construction Well Depth (feet bgs)	Current Well Depth ¹ (feet bgs)	Current Depth to Groundwater ¹ (feet below TOC)	Screen Interval	Screen Interval Assessment
MW-2	4/18/1987	Monitoring	2	21.31	22.00	21.45	9.78	12-22	Depth-to-groundwater above screen interval.
MW-5	5/18/1988	Monitoring	2	21.84	20.00	17.68	9.85	7-20	Depth-to-groundwater within screen interval.
MW-6	5/18/1988	Monitoring	2	21.71	20.00	19.62	9.99	7-20	Depth-to-groundwater within screen interval.
MW-8	5/19/1988	Monitoring	2	21.84	20.00	18.42	10.15	7-20	Depth-to-groundwater within screen interval.
MW-9	8/4/1989	Monitoring	4	20.55	20.00	20.35	9.30	5.5-20	Depth-to-groundwater within screen interval.

Notes:

bgs = below ground surface

msl = mean sea level

TOC = top of casing

¹ = As measured prior to groundwater sampling on September 23, 2011.

Table 2 Groundwater Monitoring Data and Analytical Results Former Chevron-Branded Service Station 91723

9757 San Leandro Street, Oakland, California

WELL ID/ DATE	TOC (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (μg/L)	Β (μg/L)	Τ (μg/L)	Ε (μg/L)	Χ (μg/L)	MtBE (μg/L)
MW-2 09/23/11	21.31	9.78	11.53	180	<0.5	<0.5	0.6	0.6	0.6
MW-5 09/23/11	21.84	9.85	11.99	190	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6 09/23/11	21.71	9.99	11.72	<22	<0.5	<0.5	<0.5	<0.5	0.7
MW-8 09/23/11	21.84	10.15	11.69	1,900	55	2	10	8	<0.5
MW-9 09/23/11	20.55	9.30	11.25	<22	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP BLANK QA 09/23/11				<22	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2

Groundwater Monitoring Data and Analytical Results

Former Chevron-Branded Service Station 91723 9757 San Leandro Street, Oakland, California

EXPLANATIONS:

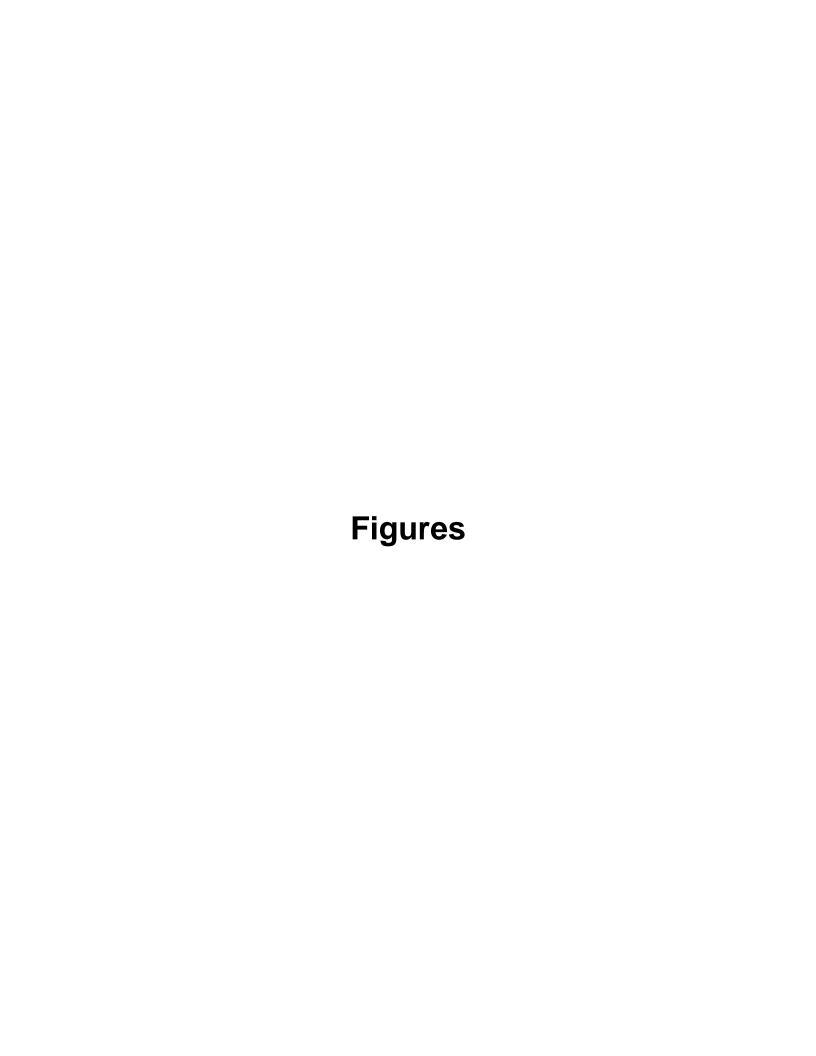
Current groundwater monitoring data provided by Blaine Tech Services, Inc. Current laboratory analytical results provided by Lancaster Laboratories.

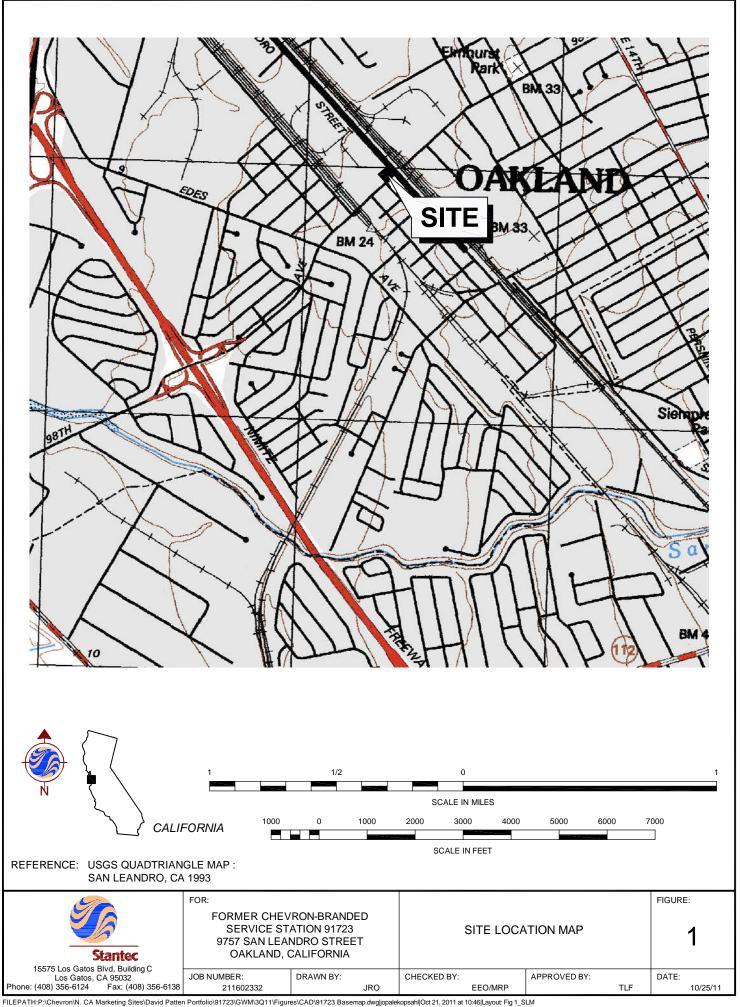
TOC = Top of Casing TPH-GRO = Total Petroleum Hydrocarbons as Gasoline Range Organics

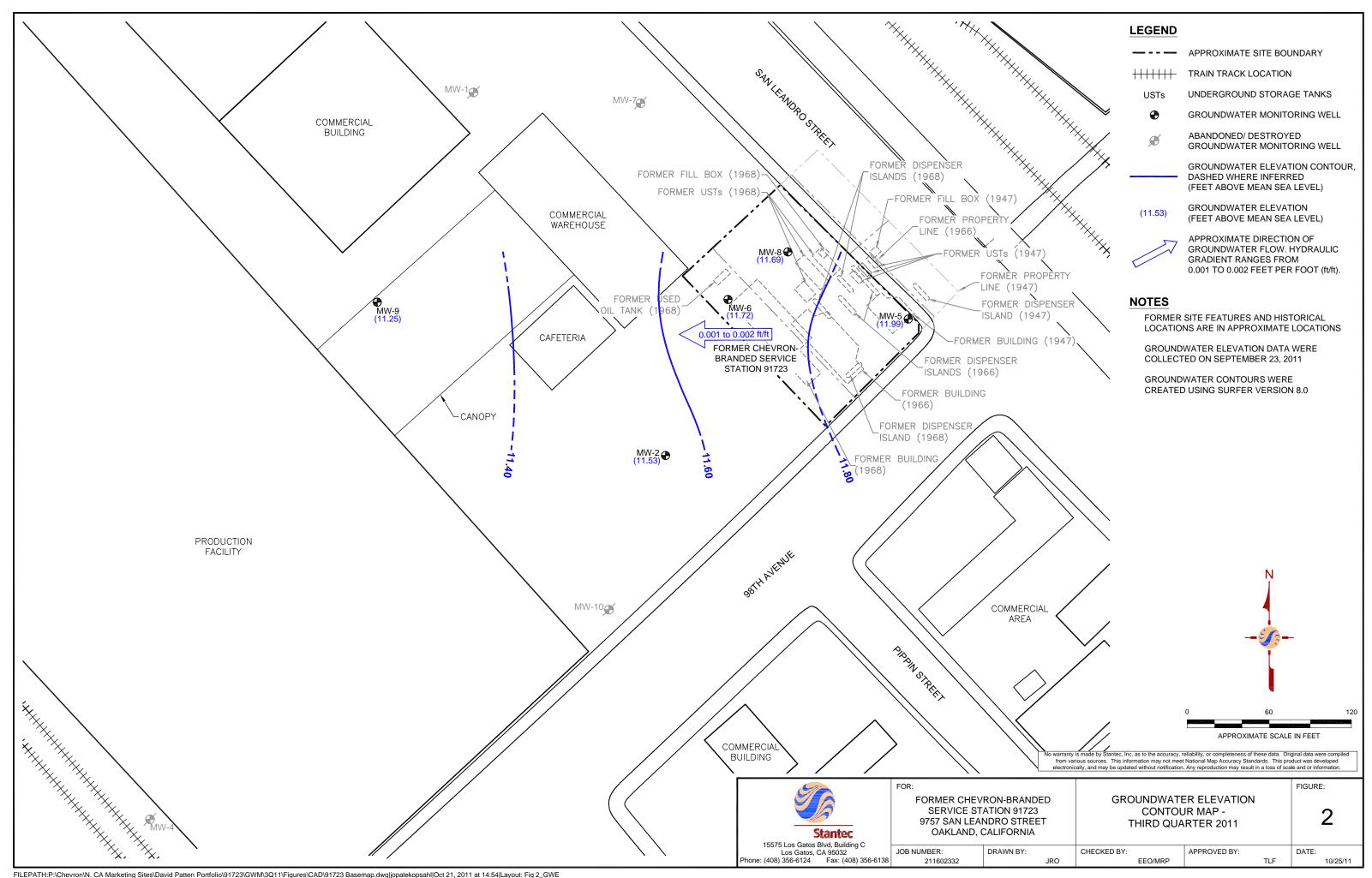
 $(ft.) = Feet \\ DTW = Depth to Water \\ T = Toluene$

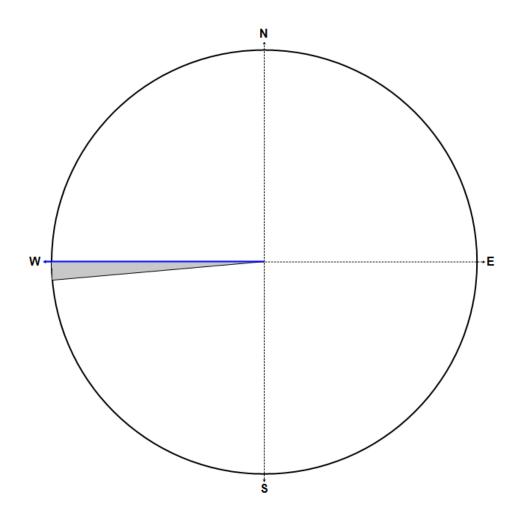
GWE = Groundwater Elevation E = Ethylbenzene (msl) = Mean Sea Level X = Xylenes

MtBE = Methyl tertiary-butyl ether (μg/L) = Micrograms per liter --= Not Measured/Not Analyzed QA = Quality Assurance/Trip Blank









Equal Area Plot

Number of Points 1

Class Size 5

270.00 Vector Mean Vector Magnitude 1.00 **Consistency Ratio** 1.00

NOTE: ROSE DIAGRAM IS BASED ON THE DIRECTION OF GROUNDWATER FLOW BEGINNING THIRD QUARTER 2011.



FORMER CHEVRON-BRANDED **SERVICE STATION 91723** 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA

ROSE DIAGRAM -THIRD QUARTER 2011

DATE:

TLF

FIGURE:

JOB NUMBER:

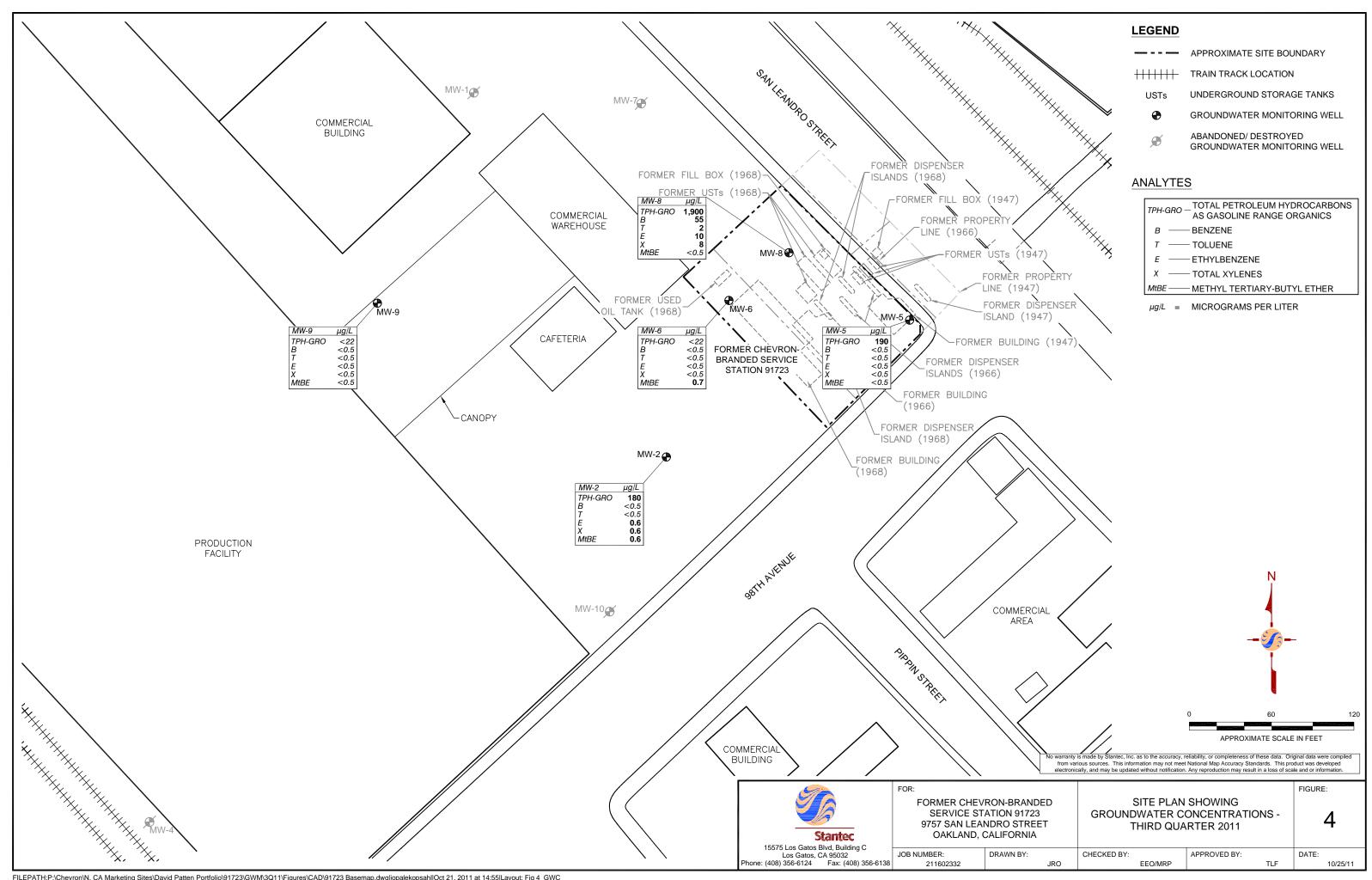
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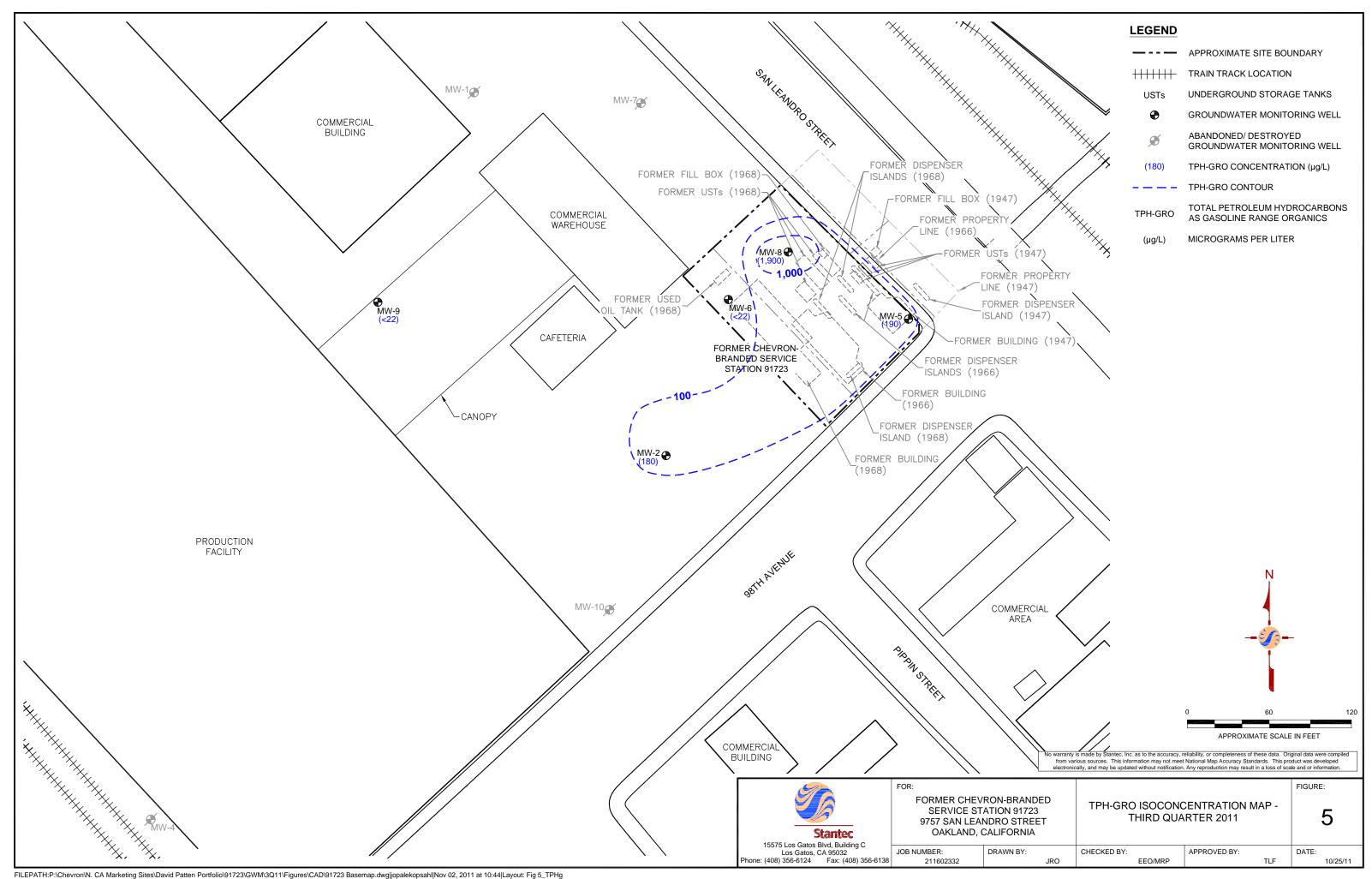
APPROVED BY:

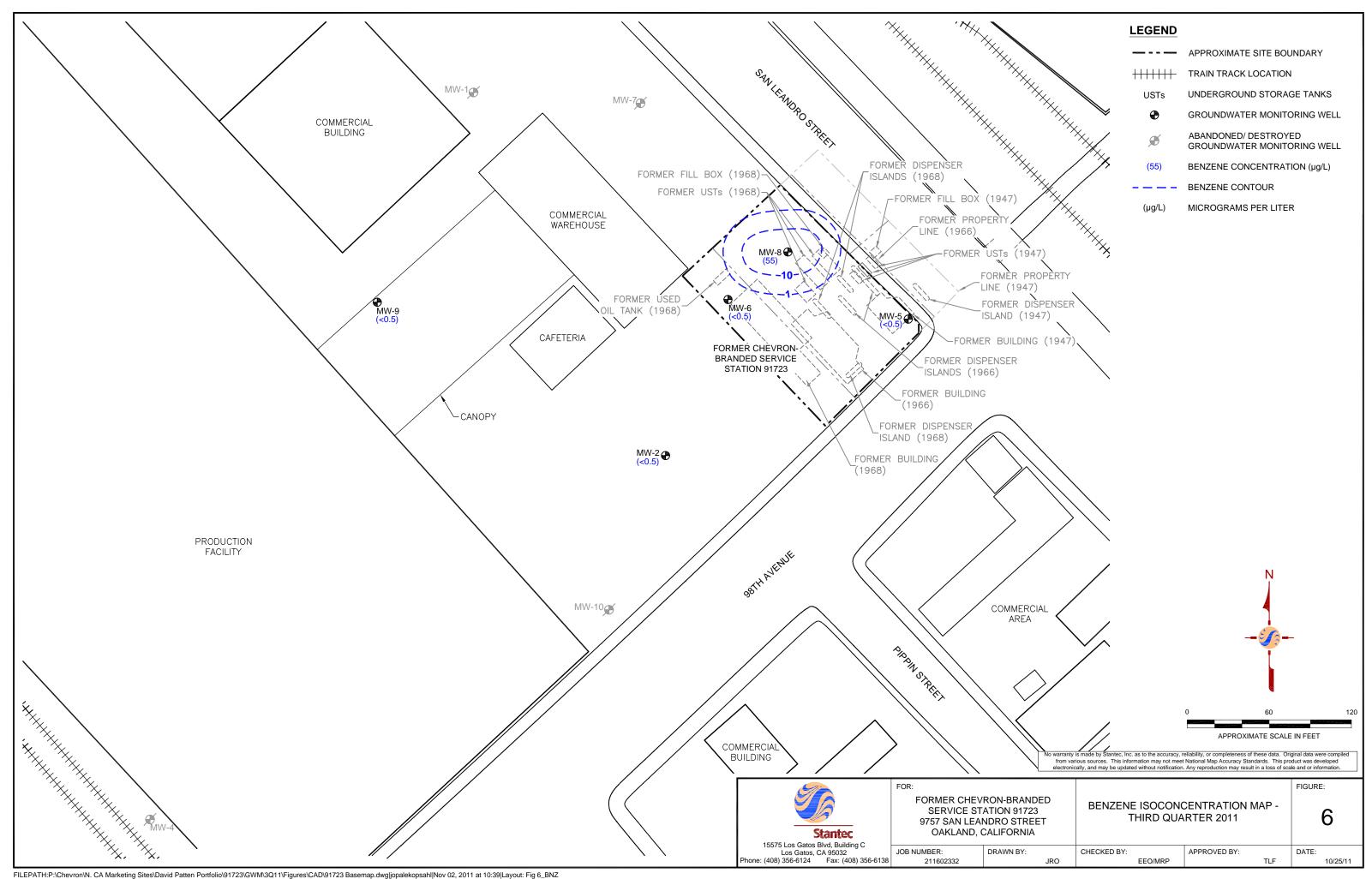
10/25/11

EEO/MRP

CHECKED BY:







Attachment A

Blaine Tech Services, Inc. Groundwater Monitoring Report – Third Quarter 2011



September 29, 2011

Chevron Environmental Management Company Dave Patten 6111 Bollinger Canyon Rd. San Ramon, CA 94583

> Third Quarter 2011 Monitoring at Chevron Service Station 91723 9757 San Leandro Blvd. Oakland, CA

Monitoring performed on September 23, 2011

Blaine Tech Services, Inc. Groundwater Monitoring Event 110923-RP2

This submission covers the routine monitoring of groundwater wells conducted on September 23, 2011 at this location. Five monitoring wells were measured for depth to groundwater (DTW). Five monitoring wells were sampled. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels measurements were collected using an electronic slope indicator. All sampled wells were purged of three case volumes, depending on well recovery, or until water temperature, pH and conductivity stabilized. Purging was accomplished using electric submersible pumps, positive air-displacement pumps or stainless steel, Teflon or disposable bailers. Subsequent sample collection and sample handling was performed in accordance with EPA protocols using disposable bailers. Alternately, where applicable, wells were sampled utilizing no-purge methodology. All reused equipment was decontaminated in an integrated stainless steel sink with de-ionized water supplied Hotsy pressure washer and Liquinox or equivalent.

Samples were delivered under chain-of-custody to Lancaster Laboratories of Lancaster, Pennsylvania, for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill-of-lading to IWM facilities of San Jose, California.

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, and Chain-of-Custody.

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Sincerely,

Dustin Becker

Blaine Tech Services, Inc. Senior Project Manager

200

attachments: SOP

Well Gauging Sheet

Individual Well Monitoring Data Sheets

Chain of Custody

Wellhead Inspection Form

Bill of Lading Calibration Log

cc: Stantec

Attn: Travis Flora

15575 Los Gatos Blvd Building C

Los Gatos, CA 95032

BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT CHEVRON SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for Chevron comply with Chevron's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Chevron site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. GeoTech). No samples are collected from a well containing over two-hundredths of a foot (0.02') of product.

EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be

evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not immediately recharge.

MEASURING RECHARGE

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed approximately 2 hours to recharge prior to sampling or will be sampled at site departure. All wells requiring off-site traffic control in the public right-of-way, the 80% recharge rule may be disregarded in the interests of Health and Safety. The sample may be collected as soon as there is sufficient water. The water level at time of sampling will be noted.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading documentation to a Blaine Tech Services, Inc. facility before being transported to a Chevron approved disposal facility.

SAMPLE COLLECTION DEVICES

All samples are collected using disposable bailers.

SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

TRIP BLANKS

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

DUPLICATES

Duplicates, if requested, may be collected at a site. The Duplicate sample is collected, typically from the well containing the most measurable contaminants. The Duplicate sample is labeled the same as the original.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is detuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

DISSOLVED OXYGEN READINGS

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 550) or HACH field test kits.

The YSI meters are able to collect accurate in-situ readings. The probe allows downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated between wells as per the instructions in the operating manual. The probe is lowered into the water column and the reading is allowed to stabilize prior to collection.

OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

FERROUS IRON MEASUREMENTS

All field measurements are collected at time of sampling with a HACH test kit.

WELL GAUGING DATA

Project #	1109123-1	RPZ	Date 0(73 M	Client	Cheyron	***************************************
Site	9757	L	Leandro	St Oal	Kland	

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)		1	Depth to well bottom (ft.)	Survey Point: TOB or	Notes
MWZ	1015	1					વાહ	21.45	457	
MUS	1053	2					i	(7,68	of Assessment Street, and a second	
MW-6	1029	2					9.85	19.62	arliettoje ri-dragos, og	
MW5 MW6 MW8 MW9	1038	L					10:15			
NW9	10 OS	Y					930	18.42 20.35	V	
				A CONTRACTOR OF THE CONTRACTOR					-	
			majarak di di di dangan pangan di dangan pangan di dangan pangan di dangan d		:-					
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										Villa William

Project #	11097	23-RPZ	,	Station #: $9-1723$						
Sampler:	- "			Date: 0/2	3/11					
Weather:	Clev			Ambient Air T	emperature: 7	4°F				
Well I.D.	: MW-2		-	Well Diameter: 2 3 4 6 8						
Total We	ll Depth:	21.45		Depth to Water: 9.78						
	Free Produ			Thickness of Free Product (feet):						
Reference	ed to:	(FVC)	Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW wit	h 80% Rec	charge [(H	leight of Water	Column x 0.20) + DTW]: \	2.11				
Purge Metho	Bailer Disposable Ba Positive Air D Electric Subm (Gals.) X	arier Displacement dersible		Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65 2" 0.16 6" 1.47						
1 Case Volun	ne Spe	ecified Volum			0.37 Othe	r radius ² * 0.163				
Time	Temp (°F)	рН	Cond. (mS or 🏿 🔊)	Turbidity (NTUs)	Gals. Removed	Observations				
1 2 1	69.7	690	879.6	274	2					
124	69.8	6.72	8B3.0	>1000						
1127	69.3	6.75	8 <i>8</i> 4. ¢	7,000	6					
					` .					
Did well	dewater?	Yes	(No)	Gallons actuall	y evacuated:	6				
Sampling	Date: 9/	23/11	Sampling Time	e: U30	Depth to Water	r: 9.80				
Sample I.	D.: Mh)-2		Laboratory:	Lancaster Ott	her				
Analyzed	for: कृष्म-	BYEX)	MZBE OXYS	Other:						
Duplicate	I.D.:		Analyzed for:	TPH-G BTEX N	MTBE OXYS	Other:				
D.O. (if re	eq'd):		Pre-purge:	mg/L	$^{ m mg}/_{ m L}$					
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:	mV				

Project #	11092	13-CP2		Station #: $9-172-3$						
Sampler:	Franço			Date: 9/	7-3/4					
Weather:	Clev			Ambient Air Temperature: 75° =						
Well I.D.	· Mul-	5		Well Diameter: 2 3 4 6 8						
Total We	ll Depth:	, (7.68	Depth to Water: 9.85						
Depth to	Free Produ	ıct:	* ·	Thickness of Free Product (feet):						
Referenc	ed to:	p√c 'j	Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW wit	h 80% Red	charge [(F	leight of Water	Column x 0.20) + DTW]:	11.4				
Purge Meth	Bailer Risposable B Positive Air I Electric Subm	Displacement nersible	Waterra Peristaltic Extraction Pump Other	Well Diamete	Extraction Port Dedicated Tubing er Multiplier Well 0.04 4"	Diameter Multiplier 0.65				
Case Volun	·	ecified Volum	= 3.9 nes Calculated Vo.	_ Gals. 2" Jume 3"	0.16 6" 0.37 Othe	1.47 r radius ² * 0.163				
Time	Temp (°F)	pН	Cond. (mS or £\$)	Turbidity (NTUs)	Gals. Removed	Observations				
1207-	69.0	6.88	805.6	287-	(.50					
1210	68.7	6.86	80U . U	500	3,0					
1213	68.5	6.84	793.1	S Company	4.5					
		·								
						·				
Did well	dewater?	Yes	<u> </u>	Gallons actuall	y evacuated:	4.5				
Sampling	Date: 9/7	23/4	Sampling Time	e: 1270	Depth to Water	r: 9.98				
Sample I.	D.: Mi	J-5		Laboratory:	(Lancaster Otl	ner				
Analyzed	for: APH	G BTEX	MTBE OXYS	Other:	-					
Duplicate	I.D.:		Analyzed for:	TPH-G BTEX N	MTBE OXYS	Other:				
D.O. (if req'd): Pre-purge:				mg/ ₁	Post-purge:	mg/ _L				
O.R.P. (if req'd): Pre-purge:				mV	Post-purge:	${ m mV}$				

										
Project #	11092	3 (3)		Station #:	7-1723					
Sampler:	R			Date: 🔍	23 (1)					
Weather:	Clev			Ambient Air T	emperature:	150=				
Well I.D		(a		Well Diameter: 2 3 4 6 8						
Total We	ell Depth:	19.67	7	Depth to Water: 999						
Depth to	Free Produ			Thickness of Free Product (feet):						
Referenc	ed to:	(VC)	Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW wi	th 80% Rec	harge [(F	leight of Water	Column x 0.20) + DTW]:	Le Comment				
Purge Meth	Bailer Disposable Ba	isplacement	Waterra Peristaltic Extraction Pump Other		Disposable Bailer Extraction Port Dedicated Tubing					
l . 🙋	_(Gals.) X _ ne Sp	き ecified Volum	= <u></u> 4 , S		er Multiplier Well 0.04 4° 0.16 6" 0.37 Othe	Diameter Multiplier 0.65 1.47 r radius ² * 0.163				
Time	Temp (°F)	٢ 7	Cond.	Turbidity (NTUs)	Gals. Removed	01				
1 11110		pH	(mS or <u>acs</u>)			Observations				
	70.1	<u>6.88</u> 6.77	902.8	71000	1.75					
3	70,7	6.71	900.7	7,000	3.50 £ 25					
1150			100.1	7,000						
					·					
Did well	dewater?	Yes	(No.)	Gallons actuall	y evacuated:	5.75				
Sampling	Date: 9	23/11	Sampling Time	: 1155	Depth to Water					
Sample I.				Laboratory:	Laneaster Otl					
Analyzed		e BIEX	MTB₽ OXYS	Other:						
Duplicate	e I.D.:		Analyzed for:	: TPH-G BTEX MTBE OXYS Other:						
D.O. (if r	eq'd):		Pre-purge:	mg/L	Post-purge:	mg/L				
O.R.P. (it	f req'd):		Pre-purge:	mV	Post-purge:	mV				

			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Project #	: UDS	23 - R	» `L	Station #: 9-1723						
Sampler:	RO			Date: 9/2	3/u					
Weather:	Clear			Ambient Air Temperature: 75° =						
Well I.D	·· NW	45		Well Diameter: 2 3 (4) 6 8						
Total We	ell Depth:	18	.42	Depth to Water: 10.15						
Depth to	Free Produ	ıct:		Thickness of Free Product (feet):						
Referenc	ed to:	EVE3	Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW wi	th 80% Red	charge [(F	leight of Water	Column x 0.20)) + DTW]: \	.80				
Purge Meth	Bailer Disposable Ba	Displacement	Waterra Peristaltic Extraction Pump Other	Well Diamete	Extraction Port Dedicated Tubing Multiplier Well	> Diameter Multiplier				
l Case Volur	_(Gals.) X ne	3 ecified Volun	= 4.2 nes Calculated Vo	_ Gals. 1" 2" 3"	0.04 4" 0.16 6" 0.37 Othe	0.65 1.47 r radius ² * 0.163				
			Cond.	Turbidity						
Time	Temp (°F)	рН	(mS or µS)	(NTUs)	Gals. Removed	Observations				
1217	68,2	6.80	827.2	71000	4.5					
1229	67.8	6.75	829.6	7/000	3.0					
1233	67.5	6.76	830 . /	71000	415					
· · · · · · · · · · · · · · · · · · ·										
Did well	dewater?	Yes	(No)	Gallons actuall	y evacuated:	4.5				
Sampling	Date: 9/2	23/4	Sampling Time	: 1235	Depth to Water	r: 4- 10.20				
Sample I.	D.: MW	-8		Laboratory:	Larieaster Otl	ner				
Analyzed	for: TPH-	G RIEX	MABE OXYS	Other:						
Duplicate	e I.D.:		Analyzed for:	TPH-G BTEX N	ATBE OXYS	Other:				
D.O. (if r	eq'd):		Pre-purge:	$^{mg}/_{\mathrm{L}}$	Post-purge:	$^{ m nng}/_{ m L}$				
O.R.P. (if	freq'd):		Pre-purge:	mV	Post-purge:	mV				

,										
Project #	: 11097	23-682		Station #: 9~						
Sampler:	RP			Date: 9/2						
Weather:	Clev			Ambient Air T	emperature:	73°F				
Well I.D	: MJ-0	of contract of the contract of		Well Diameter: 2 3 4 6 8						
Total We	ell Depth:	20,	35	Depth to Water: 91.30						
Depth to	Free Produ	uct:	**************************************	Thickness of Free Product (feet):						
Referenc	ed to:	PVC	Grade	D.O. Meter (if req'd): YSI HACH						
DTW wit	h 80% Re	charge [(F	leight of Water	Column x 0.20) + DTW]: (1.5				
Purge Meth	Bailer Disposable B	Displacement	Waterra Peristaltic Extraction Pump Other	Sampling Method: Other:	Disposable Bailer Extraction Port Dedicated Tubing	Diameter Multiplier				
	_(Gals.) X	3	= 71.6	Gals. 1"	0.04 4" 0.16 6"	0.65				
1 Case Volur		ecified Volun	nes Calculated Vo))))	0.37 Othe	radius ² * 0.163				
			Cond.	Turbidity						
Time	Temp (°F)	pH	(mS or µS)	(NTUs)	Gals. Removed	Observations				
1056	68.0	7.03	841.2	326	7.5					
(058	645	7.00	853.0	122	15					
(100)	66.4	6.99	850. 7	86	21.5					

						·				
Did well	dewater?	Yes	No	Gallons actuall	y evacuated:	21.5				
Sampling	Date: 97	3/4	Sampling Time	e: 1105	Depth to Water	r: 11.25				
Sample I.	D.: MW-	9		Laboratory:	(Lancaster) Otl	her				
Analyzed	for: TPH	-G BTEX	MTBE OXYS	Other:	A CONTRACTOR OF THE PROPERTY O					
Duplicate	I.D.:		Analyzed for:		ATBE OXYS	Other:				
D.O. (if req'd): Pre-purge:				$^{ m mg}/_{ m L}$	Post-purge:	${ m mg}_{/L}$				
O.R.P. (if req'd): Pre-purge:				mV	Post-purge:	mV				

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

C	hevron	Environ	mental Mana	igement Compar	ıy ∍ 6111 Bol	linger (Canyon	Rd.⊭	Sar	ı Ra	amo	n, C	;A	945	83		CC	c _	of
Chevron Site Number	r: <u>91723</u>			Chevron Consulta	nt: <u>stantec</u>							ļ	NAL	YSE	S RE	QUI	RED		
Chevron Site Global I	D: <u>T060010</u>	<u>01789</u>		Address: 15575 Lo	s Gatos Blvd., Bldg.	C Los G	atos,									-			Preservation Codes
Chevron Site Address	s: <u>9757 Sa</u>	n Leandro St.,		CAConsultant Con-	tact: <u>Travis Flora</u>			9				, , , , , , , , , , , , , , , , , , ,							H =HCL T= Thiosulfate
Oakland, CA				Consultant Phone	No. <u>408-356-6124</u>	<u> </u>		HVOCE	SCREEN				Ľ.		GREASE			***************************************	N =HNO ₃ B = NaOH
Chevron PM: <u>DAVE P</u>	ATTEN			Consultant Project No. No973-RPZ				HC Sc				ALKALINITY		∞)			- Andrews	S = H ₂ SO ₄ O =	
Chevron PM Phone N	io.: <u>(925)5</u> 4	13-1740		Sampling Compar	ny: Blaine Tech Se	ervices		TESI	I			STLC []			10			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Other
☑ Retail and Terminal Business Unit (RTBU) Job ☑ Construction/Retail Job			Sampled By (Print): Byan Go	2105		ENA	ORO			ŧ	EPA 310.1		413.1					
(23 Construction/Retai	& Construction/Actail 300			Sampler Signature	e:			OXYGENATES	Ö			ПСП	EPA		EPA				
(WBS ELEMENTS:		JMBER-0- Wi		Lancaster Laboratories	Other Lab	Temp. Bi Time	lank Check Temp.	MTBEÓS	DRO 🗆		Mn, Na	22 METALS 🛘 T		IIVITY					Special Instructions Must meet lowest
SITE ASSESSMENT: A1L SITE MONITORING: OML				☑ Lancaster, PA Lab Contact; Jill Parker	***************************************	1500	200	M		MTBE	Mg, Mr	22 ME		NDUC.		_			detection limits possible for 8260 Compounds
THIS IS A LEGAL DOC CORRE		L FIELDS MUS COMPLETE		2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300				8250B/GC/MS, GA BTEXT	se GRO	IB BTEX []	6010 Ca, Fe, K, N	EPA6010/7000 TITLE	EPA150.1 PH □	SM2510B SPECIFIC CONDUCTIVITY	1 ТКРН 🗆	ETHANOL	5 TPH-D []		
SAMPLE ID							22.5	8015B	8021B	01	010	20	100	77	260	001			
Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	# of Containers	Conta	iner Type	EPA 82 TPH-G	EPA (EPA (EPA (EPA6	EPA1	SM25	EPA 418.1	EPA 8260	EPA 8015		Notes/Comment s
MW-5	W		010973	1530	6	V	DA.	X											
MW-6			110923	1155	6			X											
mw-2	<u> </u>		110923	30	6			X											
MW-8			110923	1285	6			X											
MW-9	<u> </u>		110923	1105	6		_,	X											~~~
<u> </u>	Ī	HOOR	1/0923	1000	2	<u> </u>	<u>/</u>	X											
								_											
						<u> </u>													
Relinquished By	Comp	nany D	Pate/Time:	Relinquished To	Company	Date/T	ima	لــــــــــــــــــــــــــــــــــــــ		Tur	naroù	nd Ti	ime:						
The same areas and the same areas ar	2 0	3 9/2	3/11/300	JAS C		7/23/11				Sta	ndard ırs⊡ (A	2	4 Hoi er⊟	urs□		48 h	oursl	72
Relinquished By Company Date/Time			Relinguished To	Company	Date/T G(2	ح الا وسور	rode-			nple l				k by	lab (on an	rival)		
Relinquished By	Comp	any D	/IL 1045	Relinquisited to	Company	الا م Date/T	1''	1045		inta	ct:	verteres	On I	ce:		Te	mp:_	~	- '
	me w: 111p	, .			Company	Dater	n i i i									,,,,	1T		

WELLHEAD INSPECTION CHECKLIST

Page of ___

Client	heum						Date	_9/-	13/4	
Site Address		7 6	ion Le	end/o		Dakle	n 0			
Job Number						Tech	nician	Ryn	Prevost	
	1	1	I	I	•	i		/		1
Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12*or less)	WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12"or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-Z		· ·	1					X		
MV-5								X		
100000	Land to the same of the same o									
MW-6 MW 8 MW-9		3.45	E							
1000 G	3.4									
/ / / / / / / / / / / / / / / / / / / /				4						
						A 7			}	

		Acquire minor that			***************************************					Para de la constanta de la con
NOTES:	MW-2:	Missing	Z & 7	Z \oo	lts.					
	MW-5:	Christ	l pox		\	¥ .\$				*
	MU-8:	M:552	2 of 7 1 box 1 ef 7		lts				**	
					<u> </u>	· · · · · · · · · · · · · · · · · · ·				
*				·		· · · · · · · · · · · · · · · · · · ·		**************************************	WW-	

SOURCE RECORD **BILL OF LADING**FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY IWM TO THEIR FACILITY IN SAN JOSE, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Ave. San Jose CA (408)573-0555). Blaine Tech Services, Inc. is authorized by CHEVRON PRODUCTS COMPANY (CHEVRON) to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the CHEVRON facility indicated below and to deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Chevron facility to BTS; from one Chevron facility to BTS via another Chevron facility; or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of CHEVRON.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-1723		Dave Patte	N
CHEVRON#		Chevron Enginee	er
9757 San	Landro St.	Oakland	
street number	street name	city	state

WELL I.D. GALS.	WELL I.D. GALS.
MW-9 121.5	/
MW-2 1 6.0	
MW-6, 5.25	
mw-5145	/
NW-8, 45	/
/	/
added equip. rinse water / Z.75	any other adjustments_/
TOTAL GALS. HH	loaded onto BTS vehicle #
MORTA	me date 5 / 23 ///
signature	Company of the second s
*****	* * * * * * * * * * * * * * * * * * *
REC'D AT BTS	time date \345 9 /23 /1\
unloaded by signature	

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	ME //097	3- MZ		PROJECT NUM	MBER Cheuran	9-1723	3
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:		INITIALS
MITTAMETER 11	6202110	9/23/11/1000	pH 10.06 4.40	7.07. 10.02 4.01		72.6	RP
	,	AVEStallary Assertant	3700 _M S	3911 _m S		722	RP
				e' .			
							_
					·		
					,		

Attachment B

Certified Laboratory Analysis Reports and Chain-of-Custody Documents



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

October 17, 2011

Project: 91723

Submittal Date: 09/29/2011 Group Number: 1269074 PO Number: 0015087639 Release Number: HORNE State of Sample Origin: CA

Client Sample Description	<u>Lancaster Labs (LLI) #</u>
MW-5-W-110923 NA Water	6423696
MW-6-W-110923 NA Water	6423697
MW-2-W-110923 NA Water	6423698
MW-8-W-110923 NA Water	6423699
MW-9-W-110923 NA Water	6423700
QA-T-110923 NA Water	6423701

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Stantec Attn: Laura Viesselman

COPY TO

ELECTRONIC Stantec Attn: Travis Flora

COPY TO



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

Robin C. Runkle Senior Specialist



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Page 1 of 1

Sample Description: MW-5-W-110923 NA Water

Facility# 91723 BTST

9757 San Leandro-Oakland T0600101789 MW-5

LLI Sample # WW 6423696 LLI Group # 1269074

Account # 10869

Project Name: 91723

Collected: 09/23/2011 12:20 by RP ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SL005

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10945	Benzene		71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO		n.a.	190	22	1
10945	Ethylbenzene		100-41-4	N.D.	0.5	1
10945	Methyl Tertiary B	utyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene		108-88-3	N.D.	0.5	1
10945	Xylene (Total)		1330-20-7	N.D.	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 13:02	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 13:02	Daniel H Heller	1



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Page 1 of 1

Sample Description: MW-6-W-110923 NA Water

Facility# 91723 BTST

9757 San Leandro-Oakland T0600101789 MW-6

LLI Sample # WW 6423697 LLI Group # 1269074

Account # 10869

Project Name: 91723

Collected: 09/23/2011 11:55 by RP ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SLO06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/l	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO	n.a.	N.D.	22	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	0.7	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 14:14	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 14:14	Daniel H Heller	1



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Page 1 of 1

Sample Description: MW-2-W-110923 NA Water

LLI Sample # WW 6423698 Facility# 91723 BTST

LLI Group # 1269074 9757 San Leandro-Oakland T0600101789 MW-2 Account # 10869

Project Name: 91723

Collected: 09/23/2011 11:30 by RP ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SLO02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-84	8260B	ug/l	ug/l	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO	n.a.	180	22	1
10945	Ethylbenzene	100-41-4	0.6	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	0.6	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	0.6	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 14:38	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 14:38	Daniel H Heller	1



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Page 1 of 1

Sample Description: MW-8-W-110923 NA Water

Facility# 91723 BTST

9757 San Leandro-Oakland T0600101789 MW-8

LLI Sample # WW 6423699 LLI Group # 1269074

Account # 10869

Project Name: 91723

Collected: 09/23/2011 12:35 by RP ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SLO08

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10945	Benzene		71-43-2	55	0.5	1
10945	C6-C12-TPH-GRO		n.a.	1,900	22	1
10945	Ethylbenzene		100-41-4	10	0.5	1
10945	Methyl Tertiary	Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene		108-88-3	2	0.5	1
10945	Xylene (Total)		1330-20-7	8	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 15:03	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 15:03	Daniel H Heller	1



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Page 1 of 1

LLI Sample # WW 6423700

Sample Description: MW-9-W-110923 NA Water

Facility# 91723 BTST

LLI Group # 1269074 9757 San Leandro-Oakland T0600101789 MW-9 Account # 10869

Project Name: 91723

Collected: 09/23/2011 11:05 by RP ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SLO09

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10945	Benzene		71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO		n.a.	N.D.	22	1
10945	Ethylbenzene		100-41-4	N.D.	0.5	1
10945	Methyl Tertiary E	Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene		108-88-3	N.D.	0.5	1
10945	Xylene (Total)		1330-20-7	N.D.	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 15:26	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 15:26	Daniel H Heller	1



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Page 1 of 1

Sample Description: QA-T-110923 NA Water

Facility# 91723 BTST

9757 San Leandro-Oakland T0600101789 QA

LLI Sample # WW 6423701

LLI Group # 1269074 Account # 10869

Project Name: 91723

Collected: 09/23/2011 10:00 ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/29/2011 22:45 Reported: 10/17/2011 17:30

SLOQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-	846 8260B	ug/l	ug/l	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO	n.a.	N.D.	22	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Et	her 1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10945	GRO/BTEX/MTBE 8260 Water	SW-846 8260B	1	Z112792AA	10/06/2011 15:50	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112792AA	10/06/2011 15:50	Daniel H Heller	1



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Page 1 of 2

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1269074

Reported: 10/17/11 at 05:30 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: Z112792AA	Sample numb	er(s): 642	3696-6423	701				
Benzene	N.D.	0.5	ug/l	99		79-120		
C6-C12-TPH-GRO	N.D.	22.	ug/l	136	142	68-166	4	30
Ethylbenzene	N.D.	0.5	ug/l	106		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	91		76-120		
Toluene	N.D.	0.5	ug/l	99		79-120		
Xylene (Total)	N.D.	0.5	ug/l	105		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: Z112792AA	Sample	number(s): 6423696	-64237	01 UNSF	K: 642369	6		
Benzene	101	110	80-126	9	30				
Ethylbenzene	107	116	71-134	8	30				
Methyl Tertiary Butyl Ether	90	99	72-126	10	30				
Toluene	101	110	80-125	9	30				
Xylene (Total)	106	115	79-125	8	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: UST VOCs + GRO by 8260B-Water

Batch number: Z112792AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6423696	106	96	103	95
6423697	106	100	101	96
6423698	103	99	100	99
6423699	103	95	100	101
6423700	107	99	101	98
6423701	107	100	100	94
Blank	106	99	100	96
LCS	105	101	101	102

*- Outside of specification

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



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Page 2 of 2

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1269074

Reported: 10/17/11 at 05:30 PM

Surrogate Quality Control

				- <u> </u>	
MS	101	97	102	101	
MSD	102	101	103	101	
Limits:	80-116	77-113	80-113	78-113	

^{*-} Outside of specification

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

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

092711-12 CHAIN OF CUSTODY FORM Chevron Environmental Management Company = 6111 Bollinger Canyon Rd. = San Ramon, CA 94583 Chevron Site Number: 91723 Chevron Consultant: STANTEC ANALYSES REQUIRED Preservation Codes Chevron Site Global ID: T0600101789 Address: 15575 Los Gatos Bivd., Bldg. C. Los Gatos, H =HCL T= Chevron Site Address: 9757 San Leandro St., CAConsultant Contact: Travis Flora Thiosulfate HXOC GREASE HC SCREEN EPA 310.1 ALKALINITY Oakland, CA Consultant Phone No. 408-356-6124 N = HNO₃ B = NaOH 110923-RPZ S = H2SO4 O = Chevron PM: DAVE PATTEN Consultant Project No. ೲ ō STLC Chevron PM Phone No.: (925)543-1740 Sampling Company: Blaine Tech Services 413.1 Sampled By (Print): Kyan (1805) ORO ORO ☑ Retail and Terminal Business Unit (RTBU) Job TLC D EPA ☑ Construction/Retail Job Sampler Signature: Temp, Blank Check Charge Code: Other Lab Special Lancaster EPA6010/7000 TITLE 22 METALS □ 8 Time Temp. MIBER **NWRTB 00SITE NUMBER-0-WBS** Mn, Na SM2510B SPECIFIC CONDUCTIVITY Instructions Laboratories Must meet lowest (WBS ELEMENTS: detection limits possible SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L for 8260 Compounds IXI Lancaster, PA SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L K, Mg, Lab Contact: Jill Parker ETHANOL 1 8250B/GC/MS THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT 2425 New Holland Pike. TPH-D BTEX CORRECTLY AND COMPLETELY. EPA 6010 Ca, Fe, Lancaster, PA 17601 **EPA 418.1 TRPH** EPA150.1 PH 🗆 Phone No: (717)656-2300 **EPA 8021B EPA 8015** EPA 8260 SAMPLE ID Notes/Comment # of Containers Date Sample Time **Container Type** Field Point Name Matrix Top Depth (yymmdd) VOA 1270 W MW-5 440923 155 110923 6 MW-6 130 110973 6 1235 110723 6 1105 6 10923 MWJ9 2 ΙÛΛÛ 110923

> 2855AI 1636 FEDEX 2 LLI 9/29/11 7245

Company

BIS

Company

Company

Date/Time

9/23/11 130%

Date/Time

Turnaroond Time: Standard (A)

Hours□!

Intact:

24 Hours□

Sample Integrity: (Check by lab on arrival)

Other□

On Ice:

48 hours□

Temp:

COC#

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Date/Time:

9/23/11 1300

Date/Time

Date/Time

9/27/11

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72

AMENDED

Chevron Environmental Management Company # 6111 Bollinger Canyon Rd.# San Ramon, CA 94583 coc (of Chevron Site Number: 91723 Chevron Consultant: STANTEC **ANALYSES REQUIRED** Chevron Site Global ID: T0600101789 Preservation Codes Address: 15575 Los Gatos Blvd., Bldg. C. Los Gatos, Chevron Site Address: 9757 San Leandro St., H=HCL T= CAConsultant Contact: Travis Flora ПХОСП Thiosulfate GREASE (SCREEN EPA 310.1 ALKALINITY Oakland, CA Consultant Phone No. 408-356-6124 N =HNO₃ B = NaOH Chevron PM: DAVE PATTEN Consultant Project No. 10923-RPZ S = H2SO4 O = 413.1 Oil. & OXYGENATESIT 오 Chevron PM Phone No.: (925)543-1740 Sampling Company: Blaine Tech Services Sampled By (Print): Kum FeJo5 Retail and Terminal Business Unit (RTBU) Job OF O ☑ Construction/Retail Job EPA E C Sampler Signature: Charge Code: Other Lab Lancaster Temp, Blank Check NWRTB COSITE NUMBER-0-WBS MIBER Laboratories SM25108 SPECIFIC CONDUCTIVITY Instructions EPA 6010 Ca, Fe, K, Mg, Mn, Na EPA6010/7000 TITLE 22 METALS (WBS ELEMENTS: Must meet lowest MTBE SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L detection limits possible XI Lancaster, PA SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L for 8260 Compounds Lab Contact: Jill Parker ETHANOL EPA 8021B BTEX [] THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT BIEXT 2425 New Holland Pike, PHO CORRECTLY AND COMPLETELY. Lancaster, PA 17601 **EPA 418.1 TRPH** Phone No: EPA150.1 PH [] (717)656-2300 **EPA 8015** EPA 8260 SAMPLE ID # of Containers Date Sample Time Field Point Name Matrix Top Depth Container Type Notes/Comment (vvmmdd) VOA MW-5 W 1270 **44**0923 155 mw-lo 110923 6 1130 1235 6 Х 1105 X 110973 6 M W _9 ()A 1000 X 110923 2 Relinquished By Company Date/Time: Relinquished To Company Date/Time Turnaround Time: Standardia 24 Hours Other 24 Hours□ 48 hours□ 72 BB 9/23/11 1300 9/23/11 130 SIL. Relinquished By Company Date/Time Relinquished Company Sample Integrity: (Check by lab on arrival) 9/07/11 1045 BIS Intact: On Ice: Relinquished By Ompany Date/Time



Explanation of Symbols and Abbreviations

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

RL N.D.	Reporting Limit none detected	BMQL MPN	Below Minimum Quantitation Level Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	I	liter(s)
m3	cubic meter(s)	ul	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 is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

Increasic Ovelitions

ppb parts per billion

Dry weightbasis
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 Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
Р	Concentration difference between primary and	W	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 meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

Ormania Ovalitiana

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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Attachment C Historical Groundwater Analytical Results

Table 2. Summary of Chemical Results from Ground-water Samples

		ТРИ			ETHAT	XYLENES,	OTKER	DETECTABLE Y	OLATILE COM	POLIND'S
WELL	SAMPLING	(GASOLINE)	BENZEHE	TOLUERE	BENZENE	TOTAL	1,1-DCE	1,1-DCA	1,1,1-TCA	1,2-DCA
NUMBER	DATE	到了	ug/l	ug/l	ug/L	ug/l	ug/l	ug/l	ug/(⊔g/l
HV-1	18-Apr-87	NT	ND(0.5)	ND(0.5)	MD(0.5)	ND(0.5)	61	9.5	93.1	0.5
	03-Jun-88	HT	ND(5)	ND(5)	HD(5)	ND(5)	MD(5)	B	40	MD(5)
	08-Aug-89	ND(0.05)	MD(1)	WD(1)	ND(1)	ND(1)	47	9	21	MD(1)
MN-S	18-Apr-87	КT	76.9	121	93.4	477	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)
	03-Jun-88	NT	54	18	48	60	ND(5)	ND(5)	ND(5)	HD(5)
2	08-Aug-89	1.1	48	9	33	55	MD(1)	ND(1)	ND(1)	MD(1)
KW-4	18-Apr-87	ит	ND(Q.5)	MD(0.5)	ND(0.5)	MD(0.5)	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)
	03-Jun-88	ТИ	ND(S)	MD(5)	ND(5)	ND(5)	ND(5)	MD(S)	ND(5)	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
MW-5	03-Jun-88	NT	93	ND(5)	100	ND(5)	MD(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	MD(0.05)	49	8	15	63	XD(1)	ND(1)	NO(1)	ND(1)
MM-Q	03-Jun-88	NT	110	140	35	210	HD(5)	ND(5)	ND(5)	MD(5)
	08-Aug-89	1.0	45	- 8	15	74	ND(1)	ND(1)	ND(1)	MD(1)
MW-7	03-Jun-88	NT ·	ND(5)	ND(5)	ND(5)	ND(5)	25	5	18	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	39	8	13	ND(1)
HM-2	03-Jun-88	NT	2300	2000	950	4100	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	77	1900	820	1000	3600	ND(1)	ND(1)	ND(1)	ND(1)
MR- 6	08-Aug-89	ND(0.05)	ND(1)	ND(1)	HO(1)	MD(1)	3	ND(1)	ND(1)	ND(1)
MU-10	08-Aug-89	MD(0.05)	ND(1)	ND(1)	HO(1)	ND(1)	ND(1)	(f) dw	ND(1)	MD(1)
Field	88-Jun-88	NT	ND(5)	ND(5)	MD(5)	ND (5)	ND(5)	ND(5)	ND(5)	MD(5)
Blank	08-Aug-89	MD(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	WD(1)	ND(1)	ND(1)	ND(1)

NOTES:

mg/t: milligrams per liter (equivalent to parts per million)

ug/1: micrograms per liter (equivalent to parts per billion)

NT: Not Tested

ND: Not detected; Limit of detection indicated in parenthesis

1,1-DCE: 1,1-Dichloroethene

1,1-DCA: 1,1-Dichloroethane

1,1,1-TCA: 1,1,1-Trichloroethane

1,2-DCA: 1,2-Dichloroethane

Volatile Organics in Water by EPA Method 624

Total Petroleum Hydrocarbons (TPH) as Gasoline
in Aqueous Solutions by EPA Method 8015 (Modified)

Extraction by EPA Method 5030, Purge and Trap

April 18, 1987 Results from Beta Associates (1987) June 3, 1988 Results from Groundwater Technology (1988) August 8, 1989 Results from Curtis & Tompkins, Ltd.

Table 3. Water-Level Elevations

Well Number	144 - J	MN-S	ม ผ-4	MH-5	MA-6	MU-7	MV-8	HW-9	MU-10
Top of Casing Elevation	18.05	18.42	18.74	18.96	18.71	18.05	18.97	17.66	18.36
DATE	DEPTN	TO WATER	(FEET)	FROM TOP	OF CASI	KQ.			
20-Apr-87	10.28	10.38	NA	10.84	NA	на	МA	NA	AH
22 - Jul - 88	10.48	10.71	11.43	10.86	11.00	10.39	11.04	HH	MH
04 - Aug - 89	10.41	NM	MM	10.63	10.91	HM	10.95	ИM	NM
08-Aug-89	10.40	10.56	11.19	10.77	10.89	10.27	10.98	10.11	10.53
DATE	GROUND	-VATER E	LEVATION	(FEET)	ABOVE ME	AN SEA LI	EVEL	***************************************	
20-Apr-87	7.77	8.04	NA	8.12	NA	на	на	МА	KA
22-Jul -88	7.57	7.71	7.31	8.10	7.71	7.66	7.93	MM	ни
04-Aug-89	7.64	MM	MM	8.33	7.80	MM	8.02	MM	NI4
	7.65	7.86	7.55	8.19	7.82	7.78	7.99	7.55	7.83

NOTES:

NA: Not Applicable, Monitoring Well Not Yet Installed

NM: Not Measured

Vertical Mea	asurements	are in feet.			Analytic	al results are in	parts per billio	on (ppb)			
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	MTBE
WW-1					A CONTRACTOR OF THE PARTY OF TH		and the second s				
11/02/93	20.92	10.68	10,24		**	***	N			*-	**
02/10/94	20.92	-44			**		**	**	pa.c.,		
05/12/94	20.92		**	m p							***
08/26/94	20.92	***	**					**		75	50 Ma
NO LONG	ER MONI	TORED OR	SAMPLE	D							
MW-2											
11/02/93	21.31	10.83	10.48						 .	* **	
02/10/94	21.31	~~		**							
05/12/94	21.31	11.94	9.37		390	6.8	2.0	6.3	14		
08/26/94	21.31		**	Sampled biannually	**	***		••		deres	~-
02/01/95	21.31	13.76	7.55	***	78	10	1.2	<0.5	0.51		
08/02/95	21.31	11.53	9.78	~=	100	3.5	<0.5	2.6	4.1		
01/31/96	21.31	14.38	6.93		<50	<0.5	<0.5	<0.5	< 0.5	÷	<2.5
08/01/96	21.31	11.49	9.82		73	<0.5	<0.5	<0.5	< 0.5		610
12/17/96	21.31	12.75	8.56	на .			*				==
02/20/97	21.31	12.30	9.01		280	6.7	0.56	1.5	2.9	# *	11
05/02/97	21.31	11.78	9.53	an an				**		**	***
07/23/97	21.31	11.23	10.08		<50	< 0.5	< 0.5	< 0.5	<0.5		<2.5
02/04/98	21.31	16.06	5.25		<50	1.1	<0.5	<0.5	< 0.5		5.6
07/17/98	21.31	11.71	9.60	with	<50	< 0.5	<0.5	<0.5	<0.5	**	<2.5
E DIAB -											
MW-4											
11/02/93	P=	~*	10.23	**************************************				**	**	••	**
02/10/94		100 SH		~~				**	**		
05/12/94	***			**	***			**	**		
08/26/94		**						No. 144.			

NO LONGER MONITORED OR SAMPLED

Vertical Mea		are in feet.			Analytical results are in parts per billion (ppb)							
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	MTBE	
MW-5												
11/02/93	21.84	11.15	10.69	••	790	43	3.4	22	12	<400	**	
02/10/94	21.84	13.10	8.74		1400	52	3.0	50	40			
05/12/94	21.84	12.40	9.44		1800	87	6.2	77	66			
08/26/94	21.84				au.			**		*	рем	
11/11/94	21.84	13.50	8,34		380	18	<1.0	18	11		M.A.	
02/01/95	21.84	14.32	7.52	**	570	36	0.59	21	11		***	
05/18/95	21.84	12.87	8.97	**	590	29	1.0	16	9.8			
08/02/95	21.84	11.98	9.86		210	9.2	<0.5	4.0	1,2		***	
11/01/95	21.84	11.58	10.26		210	5.6	<0.5	1.9	< 0.5		<2.5	
01/31/96	21.84	14.72	7.12		1200	50	<5.0	19	29	~ -	<25	
05/16/96	21.84	14.22	7.62	**	440	14	<0.5	17	8.6		11	
08/01/96	21.84	11.86	9.98		. 58	1.4	<0.5	< 0.5	<0.5		2.5	
12/17/96	21.84	13.13	8.71	-	300	9.7	< 0.5	11	6.3	***	6.9	
02/20/97	21.84	12,81	9.03	**	350	6.7	<0.5	4.3	1.9		5.0	
05/02/97	21.84	12.50	9.34		270	4.8	<0.5	3.5	1.3		7.3	
07/23/97	21.84	11.70	10.14		290	3.4	<0.5	< 0.5	< 0.5	'	3.1	
11/04/97	21.84	11.69	10.15		180	3.8	< 0.5	1.5	<0.5	44	8.6	
02/04/98	21.84	16.54	5.30	بر =	140	4.3	<0.5	8.5	< 0.5		<2.5	
05/01/98	21.84	12.77	9.07	***	1200	19	<1.0	9.7	1.7		25	
07/17/98	21.84	12.19	9.65	40.40	900	3.6	<2.0	12	2.6		11	

Vertical Mea	surements	are in feet.			Analytic	al results are in	parts per billi	on (ppb)			
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	MTBE
MW-6				n de la companya de La companya de la companya de		AND THE PROPERTY OF THE PROPER	Control of the Contro				Control of the Contro
11/02/93	21.71	10.93	10.78		300	19	1.8	2.5	5.0	<400	
02/10/94	21.71	12.86	8.85	**	200	10	0.9	2.0	4.0		
05/12/94	21,71	12.08	9.63	** ·	210	10	1.1	1.2	3.1	m e	
08/26/94	21.71	10.82	10.89		310	16	1.4	2.3	7.1	-	
11/11/94	21.71	13.25	8.46	~-	<50	1.3	< 0.5	< 0.5	1.0		
02/01/95	21.71	14.02	7.69		<50	1.9	< 0.5	< 0.5	0.51	***	***
05/18/95	21.71	12.43	9.28		<50	8.2	< 0.5	< 0.5	< 0.5	***	
08/02/95	21.71	11.64	10.07		<50	2.3	<0.5	< 0.5	< 0.5		
11/01/95	21.71	11.31	10,40		<50	< 0.5	< 0.5	< 0.5	<0.5		<2.5
01/31/96	21.71	13.63	8.08		<50	0.98	<0.5	< 0.5	< 0.5	24	<2.5
05/16/96	21.71	13.91	7.80	~-	<50	1.6	< 0.5	< 0.5	<0.5	*.*	<2.5
08/01/96	21.71	11.56	10.15		<50	0.82	<0.5	<0.5	<0.5		<2.5
12/17/96	21.71	13.26	8.45		63	2.6	< 0.5	<0.5	< 0.5	**	<2.5
02/20/97	21.71		***	Inaccessible							~-
05/02/97	21.71	**	***	Inaccessible						***	
05/29/97	21.71	11.72	9.99	wo	120	1.8	< 0.5	<0.5	<0.5		2,6
07/23/97	21.71	11.31	10.40	T-4	<50	< 0.5	<0.5	< 0.5	<0.5		<2.5
11/04/97	21.71	11.38	10,33	₹#	63	1.2	<0.5	< 0.5	<0.5	-	<2.5
02/04/98	21.71	16.19	5.52	Ma 44,	<50	<0.5	<0.5	< 0.5	< 0.5		<2.5
05/01/98	21.71	12.40	9.31	m-n	<50	< 0.5	< 0.5	< 0.5	<0.5		<2.5
07/17/98	21.71	11.84	9.87	w	<50	1.0	<0.5	<0.5	<0.5	***	<2.5

Vertical Measurements are in feet,					Analytical results are in parts per billion (ppb)							
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	МТВЕ	
MW-7		MINISTER - 1410 - MANUAL GROOT								Cracewood 779 and Charles and Charles	**************************************	
11/02/93	20.95	10.88	10.07	wie.	7.7	age tales.				***	-	
02/10/94	20.95	**		••	rh str	44-04			77	**		
05/12/94	20.95	44.00			÷***	***	~=	•-	**		-	
08/26/94	20.95		**	₹ *				16 .114				
NO LONG	BER MONI	TORED OR	SAMPLE)								
MW-8	04.04	44.00	40.00		.F.000	2222	440	400	1.400			
11/02/93 02/10/94	21.84 21.84	11.02 12.97	10,82 8.87	***	15,000 6500	2000 1200	440 380	420 25 0	1400 7900	<400	-	
05/12/94	21.84	12.19	9.65		30,000	1400	2900	800	3800			
08/26/94	21.84	10.90	10,94	***	17,000	720	200	330	930	~~	***	
11/11/94	21.84	13.38	8.46		6800	250	170	190	650	**	~	
02/01/95	21.84	14.36	7.48		330	68	2.8	2.7	4.3		•	
05/18/95	21.84	12.54	9.30	***	540	120	12	2.7 11	23			
08/02/95	21.84	11.73	10.11	##	1100	150	9.7	20	40		-	
11/01/95	21.84	11.36	10.48	#- -	1700	120	15	16	39	**	<5.1	
01/31/96	21.84	14.64	7.20		57	5.3	<0.5	<0.5	<0.5		<2.	
05/16/96	21.84	13,99	7.85		2100	260	43	56	130	~~	6	
08/01/96	21.84	11.59	10.25		1100	45	0.92	8.9	25		7.	
12/17/96	21.84	12.95	8.89	**	2000	280	30	51	88	***	2:	
02/20/97	21.84	**		Inaccessible						***	ه	
05/02/97	21.84	~~	**	Inaccessible		-tr-ste				***		
05/29/97	21.84	11.79	10.05		3400	280	31	53	120	37	<5i	
07/23/97	21.84	11.48	10.36		760	20	2.2	2.6	5.0		9.	
11/04/97	21.84	11.49	10.35		1100	150	13	22	39		4	
02/04/98	21.84	16.29	5.55	n=	270	6.8	<0.5	3.3	<0.5		<2.	
05/01/98	21.84	12.62	9.22	но	190	5.3	< 0.5	<0.5	0.75		2.	
07/17/98	21.84	11.89	9.95	w.	1400	210	20	24	54		<2 <2	

Vertical Measurements are in feet.					Analytical results are in parts per billion (ppb)						
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	МТВЕ
MW-9	and the second s			and the state of t		History in Commission of the C	***************************************		Commence of States of the Walter of the States of the Stat	money (Australia Australia) and Alberta and Australia Strategy	and the second second
11/02/93	20.55	10.53	10.02		25 mil	**		erie.	**	••	**
02/10/94	20.55		Arm.		***						40
05/12/94	20.55	11.60	8.95		<50	<0.5	< 0.5	<0.5	<0.5		**
08/26/94	20.55		**	Sampled biannually				40.0	~~	94	
02/01/95	20.55	13.35	7.20	***	< 50	< 0.5	<0.5	<0.5	<0.5		
08/02/95	20.55	11.22	9.33		<50	<0.5	< 0.5	<0.5	< 0.5		
01/31/96	20.55	14.10	6.45	**	<50	< 0.5	< 0.5	< 0.5	< 0.5		<2.5
08/01/96	20.55	11.20	9.35		< 50	<0.5	<0.5	<0.5	<0.5		<2.5
12/17/96	20.55	12.29	8.26			***					
02/20/97	20.55	12.09	8.46	**	55*	1.1	<0.5	< 0.5	< 0.5	***	<2.5
05/02/97	20.55	11.45	9.10		~ -						
07/23/97	20.55	10.95	9.60		<50	<0.5	<0.5	< 0.5	<0.5	~-	<2.5
02/04/98	20.55	15.51	5.04		<50	<0.5	<0.5	<0.5	< 0.5		<2.5
07/17/98	20.55	11.37	9.18		<50	<0.5	<0.5	<0.5	<0.5	do da	<2.5
MW-10											
11/02/93	21.25	10.93	10.32	**		44.40		~~	**		M. W.
02/10/94	21.25	~~	in en	w to	**			~~	400		P-92
05/12/94	21.25			**	~~			***			
08/26/94	21.25								**	r no	

NO LONGER MONITORED OR SAMPLED

^{*} Chromatogram pattern indicates an unidentified hydrocarbon.

Vertical Measurements are in feet.					Analytic	Analytical results are in parts per billion (ppb)					
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	Lead	МТВЕ
TRIP B	LANK		CANADA		DO LOTTI CON LOTTI CONTROLLA CONTROL						THE RESERVE OF THE PARTY OF THE
02/10/94					< 50	<0.5	< 0.5	< 0.5	<0.5		
05/12/94	~ .	***	2-1		<50	< 0.5	< 0.5	< 0.5	< 0.5	**	***
08/26/94		**	**		<50	< 0.5	< 0.5	< 0.5	<0.5		
11/11/94		No. Ser			<50	< 0.5	< 0.5	< 0.5	< 0.5	2.5	
02/01/95	••		**	**	<50	< 0.5	<0.5	< 0.5	<0.5		
05/18/95			***	**	<50	< 0.5	<0.5	<0.5	< 0.5		
08/02/95		Part 400	~ ~		<50	< 0.5	<0.5	< 0.5	< 0.5		
11/01/95			~		<50	< 0.5	<0.5	< 0.5	< 0.5		
01/31/96		***		*-	<50	< 0.5	< 0.5	< 0.5	< 0.5		<2.5
05/16/96					<50	< 0.5	< 0.5	<0.5	<0.5		<2.5
08/01/96	~-				<50	< 0.5	< 0.5	<0.5	<0.5		<2.5
12/17/96				**	<50	<0.5	<0.5	<0.5	< 0.5		<2.5
02/20/97				~~	<50	< 0.5	<0.5	< 0.5	<0.5	*-	<2.5
05/02/97				**	<50	< 0.5	<0.5	<0.5	<0.5		<2.5
07/23/97			~~		<50	< 0.5	<0.5	< 0.5	< 0.5		<2.5
02/04/98		~ ₽	*	~~	<50	< 0.5	<0.5	< 0.5	< 0.5		<2.5
05/01/98		~-	**	les va	<50	<0.5	< 0.5	< 0.5	< 0.5		<2.5
07/17/98		***		**	<50	< 0.5	< 0.5	<0.5	< 0.5	-4	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.

Earlier field data and analytical results are drawn from the September 14, 1994 Groundwater Technology, Inc. report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl t-Butyl Ether