



**The Benham Companies, LLC**  
A Wholly Owned Subsidiary

Marlea Harmon EMC Portfolio  
Chevron Service Station No. 352300  
Third Quarter 2010 Groundwater Monitoring and Sampling Report

November 30, 2010

Ms. Marlea Harmon  
Chevron Environmental Management Company  
6111 Bollinger Canyon Road  
San Ramon, California, 94583

*Subject:* Third Quarter 2010 Groundwater Monitoring and Sampling Report  
Chevron Service Station No. 352300  
State Route 274, Tekoa, Washington

Dear Ms. Harmon:

The Benham Companies LLC (Benham), a Science Applications International Corporation (SAIC) company is pleased to submit the third quarter 2010 groundwater monitoring report for activities completed at the above-referenced site. Quarterly groundwater monitoring and sampling was conducted by Gettler-Ryan, Inc. on September 28, 2010. The Gettler-Ryan Groundwater Monitoring and Sampling Data Package is presented as Attachment A. Benham is performing environmental services under contract to Chevron Environmental Management Company (Chevron).

## FIELD ACTIVITIES

On September 28, 2010, the depth to groundwater was measured in MW-1 through MW-5, and MW-7 (MW-6 had an obstruction in the well casing and could not be gauged or sampled). The groundwater elevation ranged from 2,487.33 (MW-3) to 2,490.19 (MW-7) feet above mean sea level. Groundwater elevation decreased from 0.19 ft (MW-7) to 2.04 ft (MW-5). Groundwater flow is to the northwest at a gradient of approximately 0.025ft/ft.

Once the depth to groundwater was measured at the wells, the wells were purged using Low-Flow (minimal drawdown) technique as discussed in United States Environmental Protection Agency (EPA) Ground Water Issue, publication number EPA/540/S-95/504 April 1996 ("Low-Flow Minimal Drawdown Ground-Water Sampling Procedures"), followed by collection of groundwater samples from Wells MW-1 through MW-5, and MW-7. A duplicate sample was collected from MW-7 and labeled DUP. A sample was not collected from MW-6 due to an obstruction in the well casing. All samples were collected in accordance with the sampling procedures described in Attachment A, and shipped under chain-of-custody protocol to Lancaster Laboratories, Inc. in Lancaster, Pennsylvania. Groundwater samples were submitted for the following analyses:

*The Benham Companies, LLC, an SAIC Company*

405 S. 8th Street, Suite 301 | Boise, Idaho 83702 / tel: (208) 429-3772 / fax: (208) 344-5123 | saic.com

- Diesel- and heavy oil-range hydrocarbons by Washington State Department of Ecology (WDOE) Method NWTPH-Dx with silica gel clean-up;
- Gasoline-range hydrocarbons by WDOE Method NWTPH-Gx;
- Dissolved lead and total lead using EPA Method 6020;
- Polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270C SIM; and
- Volatile Organic Compounds (VOCs) including benzene, toluene, ethylbenzene, total xylenes (BTEX), and naphthalene using EPA Method 8260.

Laboratory analytical results are included as Attachment B and a Groundwater Benzene Concentration Map is shown on Figure 1. Hydrograph figures depicting concentration trends of contaminants of interest over time for selected monitoring wells are provided as Attachment C.

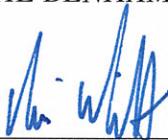
## RESULTS

The results of the Third Quarter 2010 sampling event indicate dissolved-phase hydrocarbon concentrations detected at the groundwater monitoring wells follow a decreasing trend. In addition, the groundwater elevation, flow direction, and gradient are consistent with historical measurements.

Please call Ronald Santos at (208) 429-3772 if you have any questions regarding the contents of this letter.

Sincerely,

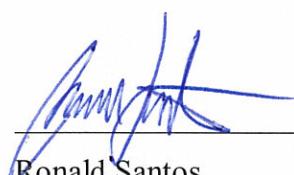
*THE BENHAM COMPANIES, LLC*



Chris Wildt  
Environmental Scientist



Dennis Terzian, LG  
Sr. Project Manager



Ronald Santos  
Project Manager



Dennis M. Terzian

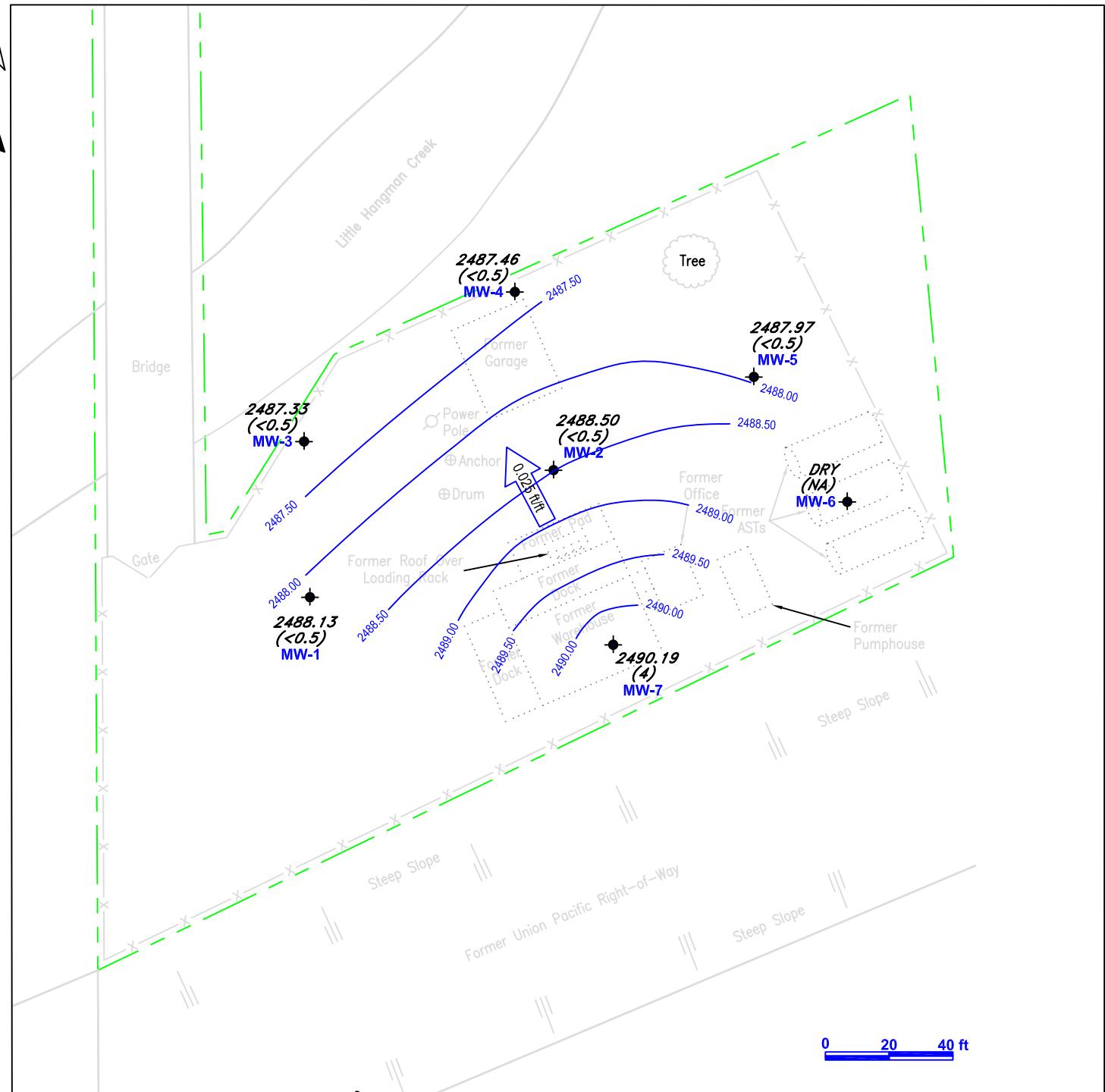
Enclosures:

Attachment A: Gettler-Ryan “Groundwater Monitoring and Sampling Data Package”

Attachment B: Laboratory Analytical Package

Attachment C: Hydrographs

cc: Patty Carter, WA Department of Ecology, Spokane WA.



#### LEGEND

- ◆ = Monitoring Well Location
  - ✖ = Abandoned Monitoring Well Location
  - ↗ = Approximate Groundwater Flow Direction and Gradient
- 99.99 = Groundwater Elevation in feet  
referenced to an assigned benchmark
- (50) = Benzene concentration in ug/L
- = Groundwater elevation contour

**Attachment A:**  
**Gettler-Ryan: Groundwater Monitoring and Sampling Data Package**

---



# GETTLER-RYAN INC.



## TRANSMITTAL

October 7, 2010  
G-R #385853

TO: Mr. Ronald Santos  
SAIC  
405 South 8<sup>th</sup> Street, Suite 301  
Boise, Idaho 83702

FROM: Deanna L. Harding  
Project Coordinator  
  
Gettler-Ryan Inc.  
6747 Sierra Court, Suite J  
Dublin, California 94568

RE: **Chevron Facility #352300**  
**(Former Standard Oil Bulk Plant**  
**#1001152)**  
**State Route 274**  
**Tekoa, Washington**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Event of September 28, 2010

### COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/352300



# *GETTLER-RYAN INC.*

## **CHEVRON - SITE CHECK LIST**

**Facility#:** **Chevron #352300**

Date: 9-28-10

**Address:** State Route 274

**City/St.:** **Tekoa, WA**

Status of Site: VACANT LOT

**DRUMS:** Please list below ALL DRUMS @ site: i.e., drum description, condition, labeling, contents, location of drum:



#	Description	Condition	Labeling	Contents	Location
	no drums				

**WELLS:** Please check the condition of ALL WELLS @ site: i.e., well box condition, well plug, well lock, etc.:



**Additional Comments/Observations:**

## **Standard Operating Procedure, Low-Flow Purging and Sampling**

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - "*Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures.*"

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

### ***Initial Pump Discharge Test Procedures***

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute without the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. If the in-line flow cell is to be used, purging is discontinued once the ODR is determined, and the inline flow cell is connected. Purging is then resumed and the ODR is adjusted to allow for the back pressure of the in-line flow cell.

### ***Purging and Water Quality Parameter Measurement***

Prior to sampling the well, the SWL will be re-measured and documented and purging will be re-initiated using the ODR. The discharge rate will be confirmed by volumetric discharge measurement and the ODR adjusted as necessary. When the ODR has been re-established, the SWL drawdown has stabilized within the acceptable range and at least one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T ( $\pm 10\%$ ), pH ( $\pm 0.1$  unit), and Ec ( $\pm 10$  uS) are required to stabilize. Additional parameters that may be required are DO ( $\pm 0.2$  mg/l) and ORP ( $\pm 20$  mV).

### ***Sample Collection***

When water quality parameters have stabilized, and there is no change in the SWL drawdown, groundwater sample collection may begin. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the

sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #352300  
 Site Address: State Route 274  
 City: Tekoa, WA

Job Number: 385853  
 Event Date: 9-28-10 (inclusive)  
 Sampler: ML

Well ID: MW-1  
 Well Diameter: 2 in.  
 Total Depth: 8.95 ft.  
 Depth to Water: 6.46 ft.

Date Monitored: 9-28-10

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1010

Weather Conditions: SUNNY

Sample Time/Date: 1415 9-28-10

Water Color: Cloudy Odor: Y/N

Approx. Flow Rate: 200 ml/min.

Sediment Description: light

Did well de-water? YES If yes, Time: 1024 Volume: 2.8L DTW @ Sampling: 6.70

Time (2400 hr.)	Volume (ml)	pH	Conductivity (µmhos/cm - US)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1020</u>	<u>2</u>	<u>6.76</u>	<u>429</u>	<u>18.0</u>			<u>8.21</u>
<u>1023</u>	<u>2.4</u>	<u>6.28</u>	<u>432</u>	<u>18.0</u>			<u>8.70</u>
<u>1026</u>	<u>3.2</u>						

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	1 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	1 x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	1 x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS: ONLY ABLE TO COLLECT ONE AMBER EACH FOR TPH-D & PAH'S DUE TO DEWATERING

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #352300**  
 Site Address: **State Route 274**  
 City: **Tekoa, WA**

Job Number: **385853**  
 Event Date: **9-28-10** (inclusive)  
 Sampler: **ML**

Well ID: **MW-2**  
 Well Diameter: **2** in.  
 Total Depth: **8.49** ft.  
 Depth to Water: **6.76** ft.

Volume Factor (VF)	3/4" = 0.02 4" = 0.66	1" = 0.04 5" = 1.02	2" = 0.17 6" = 1.50	3" = 0.38 12" = 5.80
--------------------	--------------------------	------------------------	------------------------	-------------------------

Check if water column is less than 0.50 ft.

xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump  \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump  \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_

Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): **1220**

Weather Conditions: **Sunny**

Sample Time/Date: **1445 19-28-10**

Water Color: **Clear**

Odor: **Y/N**

Approx. Flow Rate: **100 ml** gpm.

Sediment Description: \_\_\_\_\_

Did well de-water? **YES**

If yes, Time: **1234** Volume: **1.4 L** \_\_\_\_\_ DTW @ Sampling: **6.98**

Time (2400 hr.)	Volume <i>(gal)</i>	pH	Conductivity ( $\mu\text{hos}/\text{cm} - \mu\text{s}$ )	Temperature ( $^{\circ}\text{C} / ^{\circ}\text{F}$ )	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<b>1230</b>	<b>1</b>	<b>6.76</b>	<b>420</b>	<b>17.2</b>			<b>7.92</b>
<b>1233</b>	<b>1.3</b>	<b>6.77</b>	<b>422</b>	<b>17.2</b>			<b>8.25</b>

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<b>MW-2</b>	<b>10</b> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	<b>1</b> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	<b>1</b> x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)
	<b>1</b> x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	<b>1</b> x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS: **ONLY ABLE TO COLLECT 6 VOAS AND ONE LITER AMBER FOR TPH-O DUE TO WELL DEWATERING**

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #352300**  
 Site Address: **State Route 274**  
 City: **Tekoa, WA**

Job Number: **385853**  
 Event Date: **9-28-10** (inclusive)  
 Sampler: **ML**

Well ID **MW-3**  
 Well Diameter **2** in.  
 Total Depth **9.67** ft.  
 Depth to Water **6.62** ft.

Date Monitored: **9-28-10**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

xVF =  x3 case volume = Estimated Purge Volume:  gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:

**Purge Equipment:**

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump **X**  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump **X**  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started:  (2400 hrs)  
 Time Completed:  (2400 hrs)  
 Depth to Product:  ft  
 Depth to Water:  ft  
 Hydrocarbon Thickness:  ft  
 Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer:  gal  
 Amt Removed from Well:  gal  
 Water Removed:   
 Product Transferred to:

Start Time (purge): **1045**

Weather Conditions: **SUNNY**

Sample Time/Date: **11:10 19-28-10**

Water Color: **Cloudy** Odor: **Y / N**

Approx. Flow Rate: **200ml** gpm.

Sediment Description: **Light**

Did well de-water? **NO**

If yes, Time:  Volume:  gal. DTW @ Sampling: **7.80**

Time (2400 hr.)	Volume <b> </b>	pH	Conductivity ( $\mu$ hos/cm <b> </b> )	Temperature ( $^{\circ}$ F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<b>10:55</b>	<b>2</b>	<b>6.56</b>	<b>390</b>	<b>51</b>			<b>7.51</b>
<b>10:58</b>	<b>2.4</b>	<b>6.59</b>	<b>392</b>	<b>51</b>			<b>7.76</b>
<b>11:01</b>	<b>3.2</b>	<b>6.60</b>	<b>392</b>	<b>51</b>			<b>7.80</b>

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<b>MW-3</b>	<b>10</b> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	<b>2</b> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<b>2</b> x 1 liter ambers	YES	NaS2O3	LANCASTER	PAH's (8270 SIM)
	<b>1</b> x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	<b>1</b> x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS:

Add/Replaced Lock:

Add/Replaced Plug:

Add/Replaced Bolt:



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #352300**Job Number: **385853**Site Address: **State Route 274**Event Date: **9-28-10** (inclusive)City: **Tekoa, WA**Sampler: **ML**Well ID: **MW- 4**Date Monitored: **9-28-10**Well Diameter: **2** in.

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Total Depth: **10.30** ft.Depth to Water: **6.64** ft. Check if water column is less than 0.50 ft.**xVF** = **x3 case volume = Estimated Purge Volume:** **gal.**Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **ft.****Purge Equipment:**

Disposable Bailer  
Stainless Steel Bailer  
Stack Pump  
Suction Pump  
Grundfos  
Peristaltic Pump  
QED Bladder Pump  
Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer  
Pressure Bailer  
Discrete Bailer  
Peristaltic Pump  
QED Bladder Pump  
Other: \_\_\_\_\_

Time Started: **(2400 hrs)**  
Time Completed: **(2400 hrs)**

Depth to Product: **ft**Depth to Water: **ft**Hydrocarbon Thickness: **ft**

Visual Confirmation/Description: \_\_\_\_\_

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: **gal**Amt Removed from Well: **gal**

Water Removed: \_\_\_\_\_

Product Transferred to: \_\_\_\_\_

Start Time (purge): **1130**Sample Time/Date: **1155 19-28-10**Approx. Flow Rate: **200 ml** gpm.Did well de-water? **NO** If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: **8.20**Weather Conditions: **SUNNY**Water Color: **clear**Odor: **Y/N** \_\_\_\_\_Sediment Description: **light** \_\_\_\_\_

Time (2400 hr.)	Volume <del>488L</del>	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1140	2	6.21	681	17.5			8.06
1143	2.6	6.24	6816	17.5			8.11
1146	3.2	6.25	687	17.4			8.20

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 4	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	1 x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	1 x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS: **ONLY ABLE TO COLLECT ONE LITER AMBER FOR PAH'S DUE TO WELL DEWATERING DURING SAMPLING. RETURNED LATER TO COLLECT LAST AMBER, WELL HAD NOT RECOVERED.**

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #352300**  
 Site Address: **State Route 274**  
 City: **Tekoa, WA**

Job Number: **385853**  
 Event Date: **9-28-10** (inclusive)  
 Sampler: **ML**

Well ID: **MW-5**  
 Well Diameter: **2** in.  
 Total Depth: **9.22** ft.  
 Depth to Water: **7.19** ft.

Date Monitored: **9-28-10**  

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

**xVF** = **x3 case volume = Estimated Purge Volume:** **gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **7.19**

**Purge Equipment:**

Disposable Bailer  
 Stainless Steel Bailer  
 Stack Pump  
 Suction Pump  
 Grundfos  
 Peristaltic Pump  
 QED Bladder Pump  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer  
 Pressure Bailer  
 Discrete Bailer  
 Peristaltic Pump  
 QED Bladder Pump  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_

Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): **1350**

Sample Time/Date: **1530/9-28-10**

Approx. Flow Rate: **100 ml** gpm.

Did well de-water? **YES** If yes, Time: **1.4 L** DTW @ Sampling: **7.29**

Weather Conditions: **Sunny**

Water Color: **Clear** Odor: Y / N

Sediment Description: **none**

Time (2400 hr.)	Volume <del>1.4 L</del>	pH	Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Temperature ( $^{\circ}\text{C} / \text{F}$ )	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<b>1400</b>	<b>1</b>	<b>7.01</b>	<b>399</b>	<b>16.9</b>			<b>8.87</b>
<b>1403</b>	<b>1.3</b>	<b>7.02</b>	<b>400</b>	<b>16.9</b>			<b>9.10</b>
<b>140</b>							

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<b>MW-5</b>	<b>6</b> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	<b>1</b> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	<b>1</b> x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)
	<b>x 500ml poly</b>	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	<b>x 500ml poly</b>	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS: **WELL DEWATERED RETURNED LATER TO SAMPLE. ONLY ABLE TO COLLECT 6 VOA'S AND ONE LITER AMBER FOR TPH-D DUE TO WELL DEWATERING.**

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_



**GETTLER - RYAN INC.**

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/Facility#: **Chevron #352300**  
Site Address: **State Route 274**  
City: **Tekoa, WA**

Job Number: **385853**  
Event Date: **9-28-10** (inclusive)  
Sampler: **LLC**

Well ID: **MW-6**  
Well Diameter: **2** in.  
Total Depth: **9.75** ft.  
Depth to Water: **-** ft.

Date Monitored: **9-28-10**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

**xVF** = **x3 case volume = Estimated Purge Volume:** **\_\_\_\_\_ gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **\_\_\_\_\_**

**Purge Equipment:**

Disposable Bailer  
Stainless Steel Bailer  
Stack Pump  
Suction Pump  
Grundfos  
Peristaltic Pump  
QED Bladder Pump  
Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer  
Pressure Bailer  
Discrete Bailer  
Peristaltic Pump  
QED Bladder Pump  
Other: \_\_\_\_\_

Time Started: **\_\_\_\_\_** (2400 hrs)

Time Completed: **\_\_\_\_\_** (2400 hrs)

Depth to Product: **\_\_\_\_\_** ft

Depth to Water: **\_\_\_\_\_** ft

Hydrocarbon Thickness: **\_\_\_\_\_** ft

Visual Confirmation/Description: \_\_\_\_\_

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: **\_\_\_\_\_** gal

Amt Removed from Well: **\_\_\_\_\_** gal

Water Removed: **\_\_\_\_\_**

Product Transferred to: **\_\_\_\_\_**

Start Time (purge): **\_\_\_\_\_**

Sample Time/Date: **/**

Approx. Flow Rate: **\_\_\_\_\_ gpm.**

Did well de-water? **If yes, Time:** **\_\_\_\_\_**

**Weather Conditions:**

Water Color: **\_\_\_\_\_** Odor: **Y / N** **\_\_\_\_\_**

**Sediment Description:**

Volume: **\_\_\_\_\_ gal.** DTW @ Sampling: **\_\_\_\_\_**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ( $\mu$ hos/cm - $\mu$ s)	Temperature ( C / F )	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)
	x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)

COMMENTS: **OBSTRUCTION IN WELL, UNABLE TO MONITOR/SAMPLE.**

Add/Replaced Lock: **\_\_\_\_\_**

Add/Replaced Plug: **\_\_\_\_\_**

Add/Replaced Bolt: **\_\_\_\_\_**



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #352300  
 Site Address: State Route 274  
 City: Tekoa, WA

Job Number: 385853  
 Event Date: 9-28-10 (inclusive)  
 Sampler: ML

Well ID: MW-7  
 Well Diameter: 2 in.  
 Total Depth: 10.15 ft.  
 Depth to Water: 5.47 ft.

Date Monitored: 9-28-10

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: (2400 hrs)  
 Time Completed: (2400 hrs)  
 Depth to Product: ft  
 Depth to Water: ft  
 Hydrocarbon Thickness: ft

Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: gal  
 Amt Removed from Well: gal  
 Water Removed: gal  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1255

Sample Time/Date: 1320 19-28-10

Approx. Flow Rate: 200 ml gpm.

Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 8.0

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm - <u>0.5</u> )	Temperature ( <u>0</u> / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1305</u>	<u>2</u>	<u>7.16</u>	<u>396</u>	<u>17.1</u>			<u>7.48</u>
<u>1308</u>	<u>2.6</u>	<u>7.13</u>	<u>399</u>	<u>17.0</u>			<u>7.79</u>
<u>1311</u>	<u>3.2</u>	<u>7.13</u>	<u>399</u>	<u>17.0</u>			<u>8.0</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/VOC's(8260)	
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg	
	<u>2</u> x 1 liter ambers	YES	Na2S2O3	LANCASTER	PAH's (8270 SIM)	
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)	
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	DISSOLVED LEAD (ICP/MS 6020)	

COMMENTS: DUPPLICATE SAMPLE (DUP) COLLECTED FROM THIS WELL.  
UNABLE TO COLLECT 2 AMBERS FOR PAH'S & 2 POLYS FOR DUP DUE  
TO WELL DEWATERING

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_



**Attachment B:**  
**Laboratory Analytical Package**

---



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

# Analysis Report

## ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

October 14, 2010

Project: 352300

Submittal Date: 10/01/2010  
Group Number: 1214391  
PO Number: 0015061824  
Release Number: HUNTER  
State of Sample Origin: WA

### Client Sample Description

QA NA Water  
MW-1 Grab Water  
MW-1 Filtered Grab Water  
MW-2 Grab Water  
MW-3 Grab Water  
MW-3 Filtered Grab Water  
MW-4 Grab Water  
MW-4 Filtered Grab Water  
MW-5 Grab Water  
MW-7 Grab Water  
MW-7 Filtered Grab Water  
DUP Grab Water

### Lancaster Labs (LLI) #

6100741  
6100742  
6100743  
6100744  
6100745  
6100746  
6100747  
6100748  
6100749  
6100750  
6100751  
6100752

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

ELECTRONIC      SAIC c/o Gettler-Ryan  
COPY TO  
ELECTRONIC      SAIC  
COPY TO  
ELECTRONIC      SAIC  
COPY TO

Attn: Rachelle Munoz  
Attn: Mike Lange  
Attn: Ron Santos

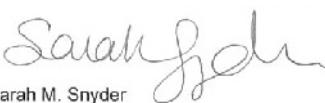


2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • [www.lancasterlabs.com](http://www.lancasterlabs.com)

## ***Analysis Report***

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

Respectfully Submitted,



A handwritten signature in black ink, appearing to read "Sarah Snyder".

Sarah M. Snyder  
Senior Specialist



# Analysis Report

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

Page 1 of 1

**Sample Description:** QA NA Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100741  
LLI Group # 1214391  
Account # 11260

**Project Name:** 352300

Collected: 09/28/2010

Chevron

Submitted: 10/01/2010 09:15

6001 Bollinger Canyon Road  
L4310

Reported: 10/14/2010 16:38

San Ramon CA 94583

Discard: 11/14/2010

274QA

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	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D102761AA	10/03/2010 21:27	Florida A Cimino	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D102761AA	10/03/2010 21:27	Florida A Cimino	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 18:47	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 18:47	Marie D John	1

**Sample Description:** MW-1 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100742  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 14:15 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M1

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	N.D.	1	1
10903	sec-Butylbenzene	135-98-8	N.D.	1	1
10903	tert-Butylbenzene	98-06-6	N.D.	1	1
10903	Carbon Disulfide	75-15-0	1	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	N.D.	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	N.D.	1	1
10903	p-Isopropyltoluene	99-87-6	N.D.	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	N.D.	1	1
10903	n-Propylbenzene	103-65-1	N.D.	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-1 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100742  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 14:15 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	N.D.	0.5	1
10903	o-Xylene	95-47-6	N.D.	0.5	1
10903	Xylene (Total)	1330-20-7	N.D.	0.5	1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Acenaphthene	83-32-9	N.D.	0.0097	1
08357	Acenaphthylene	208-96-8	N.D.	0.0097	1
08357	Anthracene	120-12-7	N.D.	0.0097	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0097	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0097	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0097	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0097	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0097	1
08357	Chrysene	218-01-9	N.D.	0.0097	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0097	1
08357	Fluoranthene	206-44-0	N.D.	0.0097	1
08357	Fluorene	86-73-7	N.D.	0.0097	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0097	1
08357	Naphthalene	91-20-3	0.096	0.0097	1
08357	Phenanthrene	85-01-8	N.D.	0.0097	1
08357	Pyrene	129-00-0	N.D.	0.0097	1

The GC/MS semivolatile surrogate recoveries are outside of QC limits in this sample. Sufficient sample was unavailable to repeat the analysis.

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
08273	NWTPH-Gx water C7-C12	n.a.	72	50	1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
02211	DRO C12-C24 w/Si Gel	n.a.	290	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	260	71	1

DRO was detected in the method blank at a concentration of 38 ug/l. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.



# Analysis Report

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

Page 3 of 3

**Sample Description:** MW-1 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100742  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 14:15 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals 06035	SW-846 6020 Lead	7439-92-1	ug/l 223	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 20:14	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 20:14	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	10275WAD026	10/05/2010 12:43	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	10275WAD026	10/04/2010 09:35	Denise L Trimby	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 19:30	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 19:30	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102770024A	10/06/2010 16:33	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	102770024A	10/05/2010 10:45	Roza S Goslawska	1
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:16	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Connors	1



# Analysis Report

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

Page 1 of 1

Sample Description: MW-1 Filtered Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100743  
LLI Group # 1214391  
Account # 11260

Project Name: 352300

Collected: 09/28/2010 14:15 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals Dissolved 06035 Lead	SW-846 6020 7439-92-1		ug/l N.D.	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

This sample was filtered in the lab for dissolved metals.

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:18	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Conners	1

**Sample Description:** MW-2 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100744  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 14:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M2

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	1	1	1
10903	sec-Butylbenzene	135-98-8	9	1	1
10903	tert-Butylbenzene	98-06-6	1	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	1	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	13	1	1
10903	p-Isopropyltoluene	99-87-6	N.D.	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	3	1	1
10903	n-Propylbenzene	103-65-1	19	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-2 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100744  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 14:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	16	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	N.D.	0.5	1
10903	o-Xylene	95-47-6	N.D.	0.5	1
10903	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC Volatiles ECY 97-602 NWTPH-Gx</b>					
08273	NWTPH-Gx water C7-C12	n.a.	1,600	50	1
<b>GC Extractable TPH w/Si Gel</b>					
<b>ECY 97-602 NWTPH-Dx modified</b>					
02211	DRO C12-C24 w/Si Gel	n.a.	1,300	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	310	69	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 20:37	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 20:37	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 19:52	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 19:52	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102770024A	10/06/2010 16:54	Melissa McDermott	1



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

# Analysis Report

Page 3 of 3

**Sample Description:** MW-2 Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100744  
LLI Group # 1214391  
Account # 11260

**Project Name:** 352300

Collected: 09/28/2010 14:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M2

---

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02135	Extraction - DRO Water Special	ECY 97-602 NWTPh- Dx 06/97	1	102770024A	10/05/2010 10:45	Roza S Goslawska	1

**Sample Description:** MW-3 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100745  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 11:10 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M3

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	N.D.	1	1
10903	sec-Butylbenzene	135-98-8	2	1	1
10903	tert-Butylbenzene	98-06-6	N.D.	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	N.D.	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	N.D.	1	1
10903	p-Isopropyltoluene	99-87-6	N.D.	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	N.D.	1	1
10903	n-Propylbenzene	103-65-1	N.D.	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-3 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100745  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 11:10 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	N.D.	0.5	1
10903	o-Xylene	95-47-6	N.D.	0.5	1
10903	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Acenaphthene	83-32-9	N.D.	0.0098	1
08357	Acenaphthylene	208-96-8	N.D.	0.0098	1
08357	Anthracene	120-12-7	N.D.	0.0098	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0098	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0098	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0098	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0098	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0098	1
08357	Chrysene	218-01-9	N.D.	0.0098	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0098	1
08357	Fluoranthene	206-44-0	N.D.	0.0098	1
08357	Fluorene	86-73-7	N.D.	0.0098	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0098	1
08357	Naphthalene	91-20-3	0.28	0.0098	1
08357	Phenanthrene	85-01-8	N.D.	0.0098	1
08357	Pyrene	129-00-0	N.D.	0.0098	1

Surrogate recoveries are outside of QC limits for the initial GC/MS semivolatile analysis. The analysis was repeated outside of the required hold time and the surrogate recoveries are within the limits. The data reported is from the initial extraction of the sample.

GC Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	180	50
<b>GC Extractable TPH w/Si Gel modified</b>				
02211	DRO C12-C24 w/Si Gel	n.a.	200	31
02211	HRO C24-C40 w/Si Gel	n.a.	160	73

# **Analysis Report**

Page 3 of 3

**Sample Description:** MW-3 Grab Water  
 Facility# 352300 Job# 385853  
 State Route 274 - Tekoa, WA

LLI Sample # WW 6100745  
 LLI Group # 1214391  
 Account # 11260

**Project Name:** 352300

Collected: 09/28/2010 11:10 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals 06035	SW-846 6020 Lead	7439-92-1	ug/l 42.8	ug/l 0.052	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 21:01	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 21:01	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	10275WAD026	10/05/2010 13:15	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	10275WAD026	10/04/2010 09:35	Denise L Trimby	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 20:14	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 20:14	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102820010A	10/11/2010 17:31	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	102820010A	10/11/2010 08:40	Karen R Rettew	1
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:23	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Connors	1



# Analysis Report

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

Page 1 of 1

Sample Description: MW-3 Filtered Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100746  
LLI Group # 1214391  
Account # 11260

Project Name: 352300

Collected: 09/28/2010 11:10 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals Dissolved 06035 Lead	SW-846 6020 7439-92-1		ug/l N.D.	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

This sample was filtered in the lab for dissolved metals.

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:25	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Conners	1

**Sample Description:** MW-4 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100747  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 11:55 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M4

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	N.D.	1	1
10903	sec-Butylbenzene	135-98-8	N.D.	1	1
10903	tert-Butylbenzene	98-06-6	N.D.	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	N.D.	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	N.D.	1	1
10903	p-Isopropyltoluene	99-87-6	N.D.	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	N.D.	1	1
10903	n-Propylbenzene	103-65-1	N.D.	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-4 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100747  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 11:55 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	N.D.	0.5	1
10903	o-Xylene	95-47-6	N.D.	0.5	1
10903	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Acenaphthene	83-32-9	N.D.	0.0099	1
08357	Acenaphthylene	208-96-8	N.D.	0.0099	1
08357	Anthracene	120-12-7	0.018	0.0099	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0099	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0099	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0099	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0099	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0099	1
08357	Chrysene	218-01-9	N.D.	0.0099	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0099	1
08357	Fluoranthene	206-44-0	N.D.	0.0099	1
08357	Fluorene	86-73-7	N.D.	0.0099	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0099	1
08357	Naphthalene	91-20-3	0.051	0.0099	1
08357	Phenanthrene	85-01-8	N.D.	0.0099	1
08357	Pyrene	129-00-0	N.D.	0.0099	1
<b>GC Volatiles ECY 97-602 NWTPH-Gx</b>					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>GC Extractable TPH w/Si Gel modified</b>					
02211	DRO C12-C24 w/Si Gel	n.a.	230	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	280	70	1
<b>Metals SW-846 6020</b>					
06035	Lead	7439-92-1	80.2	0.052	1

**Sample Description:** MW-4 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100747  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 11:55 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M4

---

#### **General Sample Comments**

State of Washington Lab Certification No. C259

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

#### **Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 21:24	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 21:24	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	10275WAD026	10/05/2010 13:47	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	10275WAD026	10/04/2010 09:35	Denise L Trimby	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 20:36	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 20:36	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102820010A	10/11/2010 17:52	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	102820010A	10/11/2010 08:40	Karen R Rettew	1
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:27	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Conners	1



# Analysis Report

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

Page 1 of 1

Sample Description: MW-4 Filtered Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100748  
LLI Group # 1214391  
Account # 11260

Project Name: 352300

Collected: 09/28/2010 11:55 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals Dissolved 06035 Lead	SW-846 6020 7439-92-1		ug/l N.D.	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

This sample was filtered in the lab for dissolved metals.

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:29	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Conners	1

**Sample Description:** MW-5 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100749  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 15:30 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M5

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	N.D.	1	1
10903	sec-Butylbenzene	135-98-8	N.D.	1	1
10903	tert-Butylbenzene	98-06-6	N.D.	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	N.D.	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	N.D.	1	1
10903	p-Isopropyltoluene	99-87-6	N.D.	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	N.D.	1	1
10903	n-Propylbenzene	103-65-1	N.D.	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-5 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100749  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 15:30 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>	<b>SW-846 8260B</b>		ug/l	ug/l	
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	N.D.	0.5	1
10903	o-Xylene	95-47-6	N.D.	0.5	1
10903	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC Volatiles</b>	<b>ECY 97-602 NWTPH-Gx</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>GC Extractable TPH w/Si Gel</b>	<b>ECY 97-602 NWTPH-Dx modified</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	240	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	510	69	1

DRO was detected in the method blank at a concentration of 38 ug/l. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.

#### **General Sample Comments**

State of Washington Lab Certification No. C259

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

#### **Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 21:48	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 21:48	Emily R Styer	1
08273	NWTPH-Gx water C7-C12 Gx	ECY 97-602 NWTPH-	1	10278B20A	10/05/2010 20:57	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 20:57	Marie D John	1



# Analysis Report

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

Page 3 of 3

**Sample Description:** MW-5 Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100749  
LLI Group # 1214391  
Account # 11260

**Project Name:** 352300

Collected: 09/28/2010 15:30 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M5

---

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH- Dx modified	1	102770024A	10/06/2010 19:40	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH- Dx 06/97	1	102770024A	10/05/2010 10:45	Roza S Goslawska	1

**Sample Description:** MW-7 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100750  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 13:20 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M7

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	4	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	2	1	1
10903	sec-Butylbenzene	135-98-8	13	1	1
10903	tert-Butylbenzene	98-06-6	1	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	3	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	18	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	24	1	1
10903	p-Isopropyltoluene	99-87-6	6	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	2	1	1
10903	n-Propylbenzene	103-65-1	34	1	1
10903	Styrene	100-42-5	N.D.	1	1

**Sample Description:** MW-7 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100750  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 13:20 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	59	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	2	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	8	0.5	1
10903	o-Xylene	95-47-6	3	0.5	1
10903	Xylene (Total)	1330-20-7	11	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Acenaphthene	83-32-9	0.042	0.0098	1
08357	Acenaphthylene	208-96-8	0.022	0.0098	1
08357	Anthracene	120-12-7	N.D.	0.0098	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0098	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0098	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0098	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0098	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0098	1
08357	Chrysene	218-01-9	N.D.	0.0098	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0098	1
08357	Fluoranthene	206-44-0	N.D.	0.0098	1
08357	Fluorene	86-73-7	0.064	0.0098	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0098	1
08357	Naphthalene	91-20-3	N.D.	0.0098	1
08357	Phenanthrene	85-01-8	N.D.	0.0098	1
08357	Pyrene	129-00-0	N.D.	0.0098	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.					
<b>GC Volatiles ECY 97-602 NWTPH-Gx</b>					
08273	NWTPH-Gx water C7-C12	n.a.	3,500	50	1
<b>GC Extractable TPH w/Si Gel modified</b>					
02211	DRO C12-C24 w/Si Gel	n.a.	2,100	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	490	68	1
<b>Metals SW-846 6020</b>					



# Analysis Report

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

Page 3 of 3

**Sample Description:** MW-7 Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route** 274 - Tekoa, WA

**LLI Sample #** WW 6100750  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 13:20 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274M7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals 06035	SW-846 6020 Lead	7439-92-1	ug/l 67.3	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 22:11	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 22:11	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	10275WAD026	10/05/2010 14:18	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	10275WAD026	10/04/2010 09:35	Denise L Trimby	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 23:30	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 23:30	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102770024A	10/06/2010 17:36	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	102770024A	10/05/2010 10:45	Roza S Goslawska	1
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:30	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Connors	1



# Analysis Report

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

Page 1 of 1

Sample Description: MW-7 Filtered Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100751  
LLI Group # 1214391  
Account # 11260

Project Name: 352300

Collected: 09/28/2010 13:20 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals Dissolved 06035 Lead	SW-846 6020 7439-92-1		ug/l N.D.	ug/l 0.052	1

## General Sample Comments

State of Washington Lab Certification No. C259

This sample was filtered in the lab for dissolved metals.

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	102776050005A	10/08/2010 09:32	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	102776050005	10/05/2010 09:25	Denise K Conners	1

**Sample Description:** DUP Grab Water  
**Facility#** 352300 **Job#** 385853  
**State Route 274 - Tekoa, WA**

**LLI Sample #** WW 6100752  
**LLI Group #** 1214391  
**Account #** 11260

**Project Name:** 352300

Collected: 09/28/2010 by ML

Chevron

Submitted: 10/01/2010 09:15

6001 Bollinger Canyon Road

Reported: 10/14/2010 16:38

L4310

Discard: 11/14/2010

San Ramon CA 94583

274DU

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	
10903	Acetone	67-64-1	N.D.	6	1
10903	Benzene	71-43-2	3	0.5	1
10903	Bromobenzene	108-86-1	N.D.	1	1
10903	Bromochloromethane	74-97-5	N.D.	1	1
10903	Bromodichloromethane	75-27-4	N.D.	1	1
10903	Bromoform	75-25-2	N.D.	1	1
10903	Bromomethane	74-83-9	N.D.	1	1
10903	2-Butanone	78-93-3	N.D.	3	1
10903	n-Butylbenzene	104-51-8	2	1	1
10903	sec-Butylbenzene	135-98-8	11	1	1
10903	tert-Butylbenzene	98-06-6	1	1	1
10903	Carbon Disulfide	75-15-0	N.D.	1	1
10903	Carbon Tetrachloride	56-23-5	N.D.	1	1
10903	Chlorobenzene	108-90-7	N.D.	0.8	1
10903	Chloroethane	75-00-3	N.D.	1	1
10903	Chloroform	67-66-3	N.D.	0.8	1
10903	Chloromethane	74-87-3	N.D.	1	1
10903	2-Chlorotoluene	95-49-8	N.D.	1	1
10903	4-Chlorotoluene	106-43-4	N.D.	1	1
10903	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10903	Dibromochloromethane	124-48-1	N.D.	1	1
10903	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10903	Dibromomethane	74-95-3	N.D.	1	1
10903	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10903	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10903	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10903	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10903	1,1-Dichloroethane	75-34-3	N.D.	1	1
10903	1,2-Dichloroethane	107-06-2	4	0.5	1
10903	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10903	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10903	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10903	1,2-Dichloropropane	78-87-5	N.D.	1	1
10903	1,3-Dichloropropane	142-28-9	N.D.	1	1
10903	2,2-Dichloropropane	594-20-7	N.D.	1	1
10903	1,1-Dichloropropene	563-58-6	N.D.	1	1
10903	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10903	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10903	Ethylbenzene	100-41-4	16	0.5	1
10903	Hexachlorobutadiene	87-68-3	N.D.	2	1
10903	2-Hexanone	591-78-6	N.D.	3	1
10903	Isopropylbenzene	98-82-8	21	1	1
10903	p-Isopropyltoluene	99-87-6	5	1	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10903	Methylene Chloride	75-09-2	N.D.	2	1
10903	Naphthalene	91-20-3	2	1	1
10903	n-Propylbenzene	103-65-1	27	1	1
10903	Styrene	100-42-5	N.D.	1	1

# **Analysis Report**

Page 2 of 3

**Sample Description:** DUP Grab Water  
 Facility# 352300 Job# 385853  
 State Route 274 - Tekoa, WA

LLI Sample # WW 6100752  
 LLI Group # 1214391  
 Account # 11260

**Project Name:** 352300

Collected: 09/28/2010 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 10/01/2010 09:15

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274DU

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10903	Tetrachloroethene	127-18-4	N.D.	0.8	1
10903	Toluene	108-88-3	N.D.	0.5	1
10903	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10903	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10903	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10903	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10903	Trichloroethene	79-01-6	N.D.	1	1
10903	Trichlorofluoromethane	75-69-4	N.D.	2	1
10903	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10903	1,2,4-Trimethylbenzene	95-63-6	48	1	1
10903	1,3,5-Trimethylbenzene	108-67-8	3	1	1
10903	Vinyl Chloride	75-01-4	N.D.	1	1
10903	m+p-Xylene	179601-23-1	7	0.5	1
10903	o-Xylene	95-47-6	3	0.5	1
10903	Xylene (Total)	1330-20-7	10	0.5	1
<b>GC Volatiles ECY 97-602 NWTPH-Gx</b>					
08273	NWTPH-Gx water C7-C12	n.a.	2,700	50	1
<b>GC Extractable TPH w/Si Gel</b>					
<b>ECY 97-602 NWTPH-Dx modified</b>					
02211	DRO C12-C24 w/Si Gel	n.a.	2,600	60	2
02211	HRO C24-C40 w/Si Gel	n.a.	570	140	2

### **General Sample Comments**

State of Washington Lab Certification No. C259

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

### **Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Solvent Compound - Water	SW-846 8260B	1	W102802AA	10/07/2010 22:58	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W102802AA	10/07/2010 22:58	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10278B20A	10/05/2010 23:52	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10278B20A	10/05/2010 23:52	Marie D John	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	102770024A	10/07/2010 22:05	Melissa McDermott	2



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

# Analysis Report

Page 3 of 3

**Sample Description:** DUP Grab Water  
Facility# 352300 Job# 385853  
State Route 274 - Tekoa, WA

LLI Sample # WW 6100752  
LLI Group # 1214391  
Account # 11260

**Project Name:** 352300

Collected: 09/28/2010 by ML

Chevron

6001 Bollinger Canyon Road  
L4310

Submitted: 10/01/2010 09:15

San Ramon CA 94583

Reported: 10/14/2010 16:38

Discard: 11/14/2010

274DU

---

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02135	Extraction - DRO Water Special	ECY 97-602 NWTPh- Dx 06/97	1	102770024A	10/05/2010 10:45	Roza S Goslawska	1

## **Quality Control Summary**

Client Name: Chevron  
 Reported: 10/14/10 at 04:38 PM

Group Number: 1214391

Matrix QC may not be reported if 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.

## **Laboratory Compliance Quality Control**

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: D102761AA			Sample number(s): 6100741					
Benzene	N.D.	0.5	ug/l	93		79-120		
Ethylbenzene	N.D.	0.5	ug/l	96		79-120		
Toluene	N.D.	0.5	ug/l	96		79-120		
Xylene (Total)	N.D.	0.5	ug/l	98		80-120		
Batch number: W102802AA			Sample number(s): 6100742, 6100744-6100745, 6100747, 6100749-6100750, 6100752					
Acetone	N.D.	6.	ug/l	104		49-234		
Benzene	N.D.	0.5	ug/l	100		79-120		
Bromobenzene	N.D.	1.	ug/l	99		80-120		
Bromochloromethane	N.D.	1.	ug/l	91		80-120		
Bromodichloromethane	N.D.	1.	ug/l	92		80-120		
Bromoform	N.D.	1.	ug/l	81		61-120		
Bromomethane	N.D.	1.	ug/l	73		44-120		
2-Butanone	N.D.	3.	ug/l	94		66-151		
n-Butylbenzene	N.D.	1.	ug/l	104		74-120		
sec-Butylbenzene	N.D.	1.	ug/l	104		78-120		
tert-Butylbenzene	N.D.	1.	ug/l	102		80-120		
Carbon Disulfide	N.D.	1.	ug/l	99		62-120		
Carbon Tetrachloride	N.D.	1.	ug/l	94		75-123		
Chlorobenzene	N.D.	0.8	ug/l	99		80-120		
Chloroethane	N.D.	1.	ug/l	84		49-129		
Chloroform	N.D.	0.8	ug/l	96		77-122		
Chloromethane	N.D.	1.	ug/l	85		60-129		
2-Chlorotoluene	N.D.	1.	ug/l	101		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	102		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	83		66-120		
Dibromochloromethane	N.D.	1.	ug/l	91		80-120		
1,2-Dibromoethane	N.D.	0.5	ug/l	96		80-120		
Dibromomethane	N.D.	1.	ug/l	96		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	98		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	98		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	99		80-120		
Dichlorodifluoromethane	N.D.	2.	ug/l	73		47-120		
1,1-Dichloroethane	N.D.	1.	ug/l	98		79-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	97		70-130		
1,1-Dichloroethene	N.D.	0.8	ug/l	94		74-123		
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	97		80-120		
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	95		80-120		
1,2-Dichloropropane	N.D.	1.	ug/l	100		78-120		
1,3-Dichloropropane	N.D.	1.	ug/l	102		80-120		
2,2-Dichloropropane	N.D.	1.	ug/l	92		77-124		
1,1-Dichloropropene	N.D.	1.	ug/l	100		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	92		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	95		79-120		
Ethylbenzene	N.D.	0.5	ug/l	101		79-120		
Hexachlorobutadiene	N.D.	2.	ug/l	78		58-120		

\*- 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.

## Quality Control Summary

Client Name: Chevron

Group Number: 1214391

Reported: 10/14/10 at 04:38 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
2-Hexanone	N.D.	3.	ug/l	98		65-136		
Isopropylbenzene	N.D.	1.	ug/l	99		77-120		
p-Isopropyltoluene	N.D.	1.	ug/l	102		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	98		76-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	90		70-121		
Methylene Chloride	N.D.	2.	ug/l	94		80-120		
Naphthalene	N.D.	1.	ug/l	84		62-120		
n-Propylbenzene	N.D.	1.	ug/l	107		80-120		
Styrene	N.D.	1.	ug/l	100		80-120		
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	96		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	99		71-120		
Tetrachloroethene	N.D.	0.8	ug/l	92		80-121		
Toluene	N.D.	0.5	ug/l	102		79-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	84		65-120		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	87		67-120		
1,1,1-Trichloroethane	N.D.	0.8	ug/l	93		75-127		
1,1,2-Trichloroethane	N.D.	0.8	ug/l	99		80-120		
Trichloroethene	N.D.	1.	ug/l	97		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	90		64-129		
1,2,3-Trichloropropane	N.D.	1.	ug/l	94		80-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	104		74-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	105		75-120		
Vinyl Chloride	N.D.	1.	ug/l	98		65-125		
m+p-Xylene	N.D.	0.5	ug/l	101		80-120		
o-Xylene	N.D.	0.5	ug/l	98		80-120		
Xylene (Total)	N.D.	0.5	ug/l	100		80-120		
Batch number: 10275WAD026			Sample number(s): 6100742, 6100745, 6100747, 6100750					
Acenaphthene	N.D.	0.010	ug/l	85	83	74-109	3	30
Acenaphthylene	N.D.	0.010	ug/l	87	84	70-110	3	30
Anthracene	N.D.	0.010	ug/l	91	87	66-111	4	30
Benzo(a)anthracene	N.D.	0.010	ug/l	85	79	72-114	7	30
Benzo(a)pyrene	N.D.	0.010	ug/l	79	76	64-115	4	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	76	77	69-123	1	30
Benzo(g,h,i)perylene	N.D.	0.010	ug/l	89	87	68-125	2	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	78	75	72-122	4	30
Chrysene	N.D.	0.010	ug/l	97	94	76-116	3	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	86	84	71-125	2	30
Fluoranthene	N.D.	0.010	ug/l	92	89	75-116	3	30
Fluorene	N.D.	0.010	ug/l	92	90	75-114	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	88	87	69-124	2	30
Naphthalene	N.D.	0.010	ug/l	82	79	72-109	3	30
Phenanthrene	N.D.	0.010	ug/l	93	90	76-111	3	30
Pyrene	N.D.	0.010	ug/l	99	96	69-118	3	30
Batch number: 10278B20A			Sample number(s): 6100741-6100742, 6100744-6100745, 6100747, 6100749-6100750, 6100752					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	91	75-135	10	30
Batch number: 102770024A			Sample number(s): 6100742, 6100744, 6100749-6100750, 6100752					
DRO C12-C24 w/Si Gel	38	30.	ug/l	76		50-100		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 102820010A			Sample number(s): 6100745, 6100747					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	73	83	50-100	13	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 102776050005A			Sample number(s): 6100742-6100743, 6100745-6100748, 6100750-6100751					

\*- 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.

## Quality Control Summary

Client Name: Chevron

Group Number: 1214391

Reported: 10/14/10 at 04:38 PM

<u>Analysis Name</u>	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Lead	N.D.	0.052	ug/l	105		90-115		

## 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

<u>Analysis Name</u>	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD <u>RPD</u>	BKG <u>MAX</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: D102761AA			Sample number(s): 6100741 UNSPK: P099149					
Benzene	99	88	80-126	12	30			
Ethylbenzene	101	91	71-134	10	30			
Toluene	100	90	80-125	11	30			
Xylene (Total)	102	91	79-125	12	30			
Batch number: W102802AA			Sample number(s): 6100742, 6100744-6100745, 6100747, 6100749-6100750, 6100752 UNSPK: P101720					
Acetone	81	81	52-139	0	30			
Benzene	107	107	80-126	0	30			
Bromobenzene	101	102	82-115	1	30			
Bromochloromethane	95	95	83-123	0	30			
Bromodichloromethane	98	98	78-125	1	30			
Bromoform	83	82	60-121	2	30			
Bromomethane	80	77	38-149	4	30			
2-Butanone	86	86	57-138	0	30			
n-Butylbenzene	108	109	73-128	1	30			
sec-Butylbenzene	109	111	79-125	2	30			
tert-Butylbenzene	104	105	81-121	1	30			
Carbon Disulfide	108	109	67-135	1	30			
Carbon Tetrachloride	103	105	81-138	2	30			
Chlorobenzene	103	103	87-124	1	30			
Chloroethane	93	89	51-145	4	30			
Chloroform	103	103	81-134	0	30			
Chloromethane	92	91	67-154	2	30			
2-Chlorotoluene	102	106	82-118	3	30			
4-Chlorotoluene	105	106	84-122	1	30			
1,2-Dibromo-3-chloropropane	80	83	66-121	4	30			
Dibromochloromethane	94	92	74-116	2	30			
1,2-Dibromoethane	99	99	77-116	0	30			
Dibromomethane	100	97	83-119	3	30			
1,2-Dichlorobenzene	100	100	84-119	0	30			
1,3-Dichlorobenzene	100	102	86-121	2	30			
1,4-Dichlorobenzene	101	101	85-121	0	30			
Dichlorodifluoromethane	84	79	52-129	6	30			
1,1-Dichloroethane	106	106	84-129	0	30			
1,2-Dichloroethane	103	101	66-141	1	30			
1,1-Dichloroethene	105	107	85-142	1	30			
cis-1,2-Dichloroethene	103	104	85-125	0	30			
trans-1,2-Dichloroethene	103	104	87-126	1	30			
1,2-Dichloropropane	105	106	83-124	1	30			
1,3-Dichloropropane	106	103	81-120	3	30			
2,2-Dichloropropane	101	103	81-135	3	30			
1,1-Dichloropropene	109	111	86-137	2	30			
cis-1,3-Dichloropropene	95	95	75-125	1	30			

\*- 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.

## Quality Control Summary

Client Name: Chevron  
 Reported: 10/14/10 at 04:38 PM

Group Number: 1214391

### **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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
trans-1,3-Dichloropropene	97	97	74-119	0	30			
Ethylbenzene	108	108	71-134	0	30			
Hexachlorobutadiene	83	87	56-134	4	30			
2-Hexanone	94	93	55-127	1	30			
Isopropylbenzene	106	107	75-128	1	30			
p-Isopropyltoluene	107	107	76-123	1	30			
Methyl Tertiary Butyl Ether	101	101	72-126	0	30			
4-Methyl-2-pentanone	90	90	63-123	0	30			
Methylene Chloride	97	97	79-120	1	30			
Naphthalene	82	84	52-125	2	30			
n-Propylbenzene	111	114	74-134	3	30			
Styrene	105	104	78-125	1	30			
1,1,1,2-Tetrachloroethane	99	98	82-119	1	30			
1,1,2,2-Tetrachloroethane	98	99	73-119	1	30			
Tetrachloroethene	101	99	80-128	1	30			
Toluene	109	109	80-125	0	30			
1,2,3-Trichlorobenzene	83	86	69-119	3	30			
1,2,4-Trichlorobenzene	87	89	70-124	2	30			
1,1,1-Trichloroethane	103	104	80-143	1	30			
1,1,2-Trichloroethane	102	102	77-124	0	30			
Trichloroethene	106	104	88-133	2	30			
Trichlorofluoromethane	102	98	73-152	4	30			
1,2,3-Trichloropropane	97	95	76-118	1	30			
1,2,4-Trimethylbenzene	108	109	72-130	2	30			
1,3,5-Trimethylbenzene	108	110	72-131	1	30			
Vinyl Chloride	111	107	66-133	4	30			
m+p-Xylene	107	106	79-125	0	30			
o-Xylene	105	104	79-125	1	30			
Xylene (Total)	106	106	79-125	0	30			

Batch number: 10278B20A

Sample number(s): 6100741-6100742, 6100744-6100745, 6100747, 6100749-6100750, 6100752 UNSPK: 6100747  
 91 57-157

NWTPH-Gx water C7-C12

Batch number: 102770024A

Sample number(s): 6100742, 6100744, 6100749-6100750, 6100752 BKG: P101646  
 DRO C12-C24 w/Si Gel 1,200 1,300 8 (1) 20  
 HRO C24-C40 w/Si Gel N.D. N.D. 0 (1) 20

Batch number: 102776050005A

Sample number(s): 6100742-6100743, 6100745-6100748, 6100750-6100751 UNSPK: P097037  
 BKG: P097037

Lead

106 104 83-120 1 20 2.5 2.4 2 (1) 20

### **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 by 8260B - Water  
 Batch number: D102761AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

\*- Outside of specification

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

## **Quality Control Summary**

Client Name: Chevron  
 Reported: 10/14/10 at 04:38 PM

Group Number: 1214391

### **Surrogate Quality Control**

6100741	100	97	99	101
Blank	101	98	100	100
LCS	100	97	100	103
MS	99	96	98	101
MSD	99	100	99	102
<hr/>				
Limits:	80-116	77-113	80-113	78-113

Analysis Name: VOCs by 8260B - Water  
 Batch number: W102802AA

Dibromofluoromethane    1,2-Dichloroethane-d4    Toluene-d8    4-Bromofluorobenzene

6100742	97	100	101	98
6100744	97	99	101	103
6100745	96	100	101	98
6100747	97	98	101	98
6100749	98	99	101	97
6100750	96	100	106	100
6100752	96	98	106	100
Blank	96	99	102	99
LCS	96	99	103	102
MS	97	98	103	103
MSD	97	103	103	103
<hr/>				
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM  
 Batch number: 10275WAD026

Nitrobenzene-d5    2-Fluorobiphenyl    Terphenyl-d14

6100742	103	84	51*
6100745	68	63*	48*
6100747	106	96	71
6100750	149*	129	74
Blank	100	91	95
LCS	104	100	96
LCSD	102	96	94
<hr/>			
Limits:	64-147	68-132	53-129

Analysis Name: NWTPH-Gx water C7-C12  
 Batch number: 10278B20A  
 Trifluorotoluene-F

6100741	86
6100742	86
6100744	86
6100745	85
6100747	86
6100749	86
6100750	122
6100752	117
Blank	86
LCS	118
LCSD	113
MS	115

\*- 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.

**Quality Control Summary**

Client Name: Chevron  
Reported: 10/14/10 at 04:38 PM

Group Number: 1214391

**Surrogate Quality Control**

---

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 102770024A  
Orthoterphenyl

---

6100742	85
6100744	73
6100749	91
6100750	109
6100752	78
Blank	95
DUP	73
LCS	106

---

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 102820010A  
Orthoterphenyl

---

6100745	67
6100747	81
Blank	97
LCS	95
LCSD	107

---

Limits: 50-150

\*- 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.

# Chevron Northwest Region Analysis Request/Chain of Custody



Where quality is a science.

Please forward the lab results directly to the Lead Consultant and cc: G-R.

For Lancaster Laboratories use only  
Acct. #: 11260 Sample #: 6100741-52 SCR#:

Grp # 1214391

Facility #:	SS#352300-OML G-R#385853		
Site Address:	State Route 274, TEKOA, WA		
Chevron PM:	BH	Lead Consultant:	SAICRS Santos
Consultant/Office:	G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568		
Consultant Prj. Mgr.:	Deanna L. Harding	(deanna@grinc.com)	
Consultant Phone #:	925-551-7555	Fax #:	925-551-7899
Sampler:	Mike Lombard		
Service Order #:	<input type="checkbox"/> Non SAR:		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE	8260 full scan	Oxygenates	TPH GX	TPH D	Extended Ring Silica Gel Cleanup	Lead Total	Diss.	NWTPH H HCID	VPMEPH	VOC's (8260)	PAH's (8276 SIM)	Total LEAD (6260)
			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
QA	9-28-10		X	X	X	X	X	X	2	X	X	X	X	X	X	X	X	X	X	X	X	
MW-1		1415	X	X	X	X	X	X	10	X	X	X	X	X	X	X	X	X	X	X	X	
MW-2		1445	X	X	X	X	X	X	7	X	X	X	X	X	X	X	X	X	X	X	X	
MW-3		1110	X	X	X	X	X	X	12	X	X	X	X	X	X	X	X	X	X	X	X	
MW-4		1155	X	X	X	X	X	X	11	X	X	X	X	X	X	X	X	X	X	X	X	
MW-5		1530	X	X	X	X	X	X	7	X	X	X	X	X	X	X	X	X	X	X	X	
MW-7		1320	X	X	X	X	X	X	12	X	X	X	X	X	X	X	X	X	X	X	X	
DUP			X	X	X	X	X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	

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

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

Relinquished by:	Date	Time	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 FedEx Other _____	Received by:			Date 10/11/10	Time 0915
Temperature Upon Receipt: 18-32°C	Custody Seals Intact? Yes No				

## Data Package Options (please circle if required)

EDF/EDD

QC Summary  
Type VI (Raw Data)  
WIP (RWQCB)  
Disk

Type I - Full  
Disk / EDD  
Standard Format  
Other.

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>ug</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>ml</b>	milliliter(s)	<b>l</b>	liter(s)
<b>m3</b>	cubic meter(s)	<b>ul</b>	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		
<b>J</b>	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).		
<b>ppm</b>	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.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns  $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

### Inorganic Qualifiers

- B** Value is <CRDL, but  $\geq$ IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- \* Duplicate analysis not within control limits
- + Correlation coefficient for MSA  $<0.995$

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

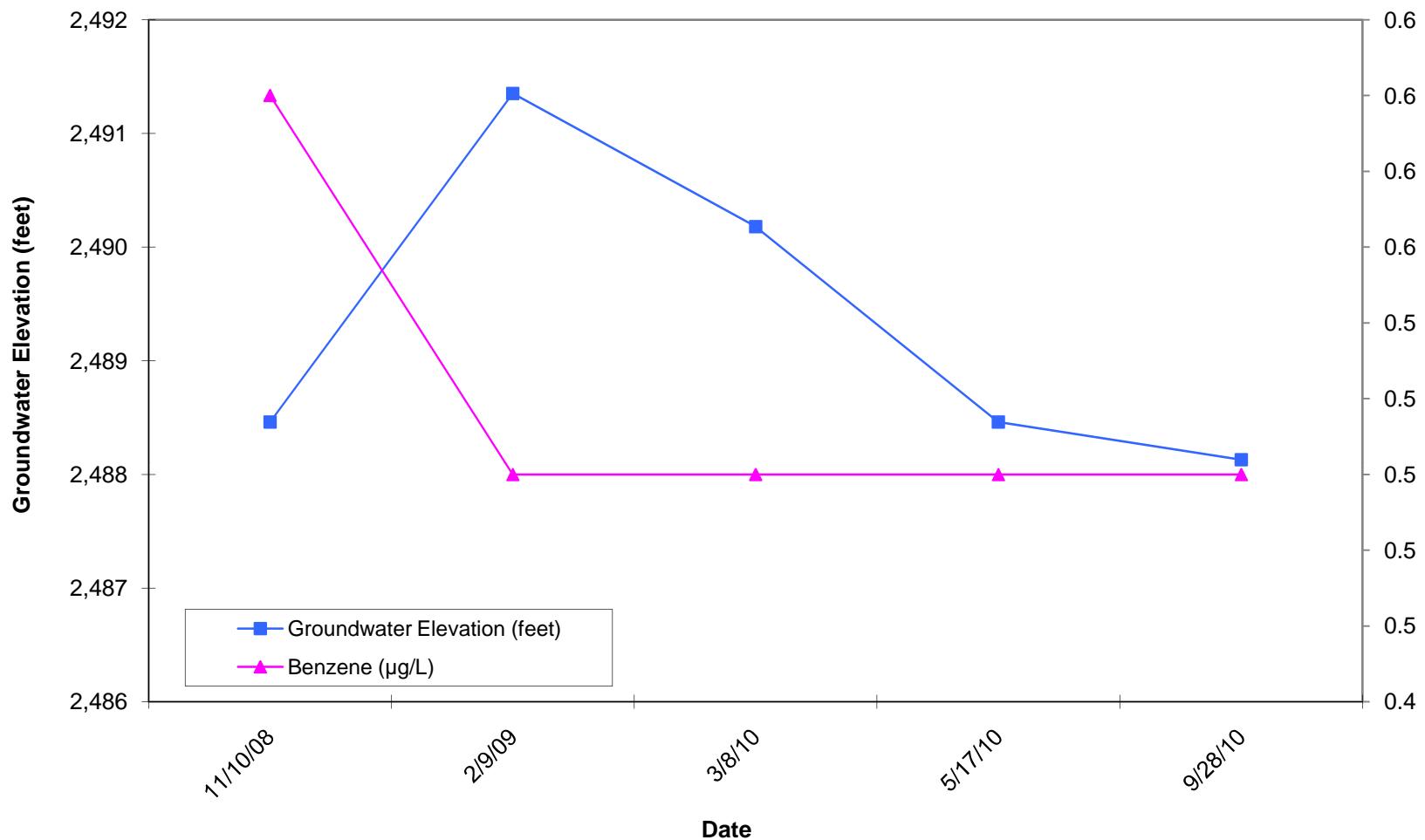
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have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

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

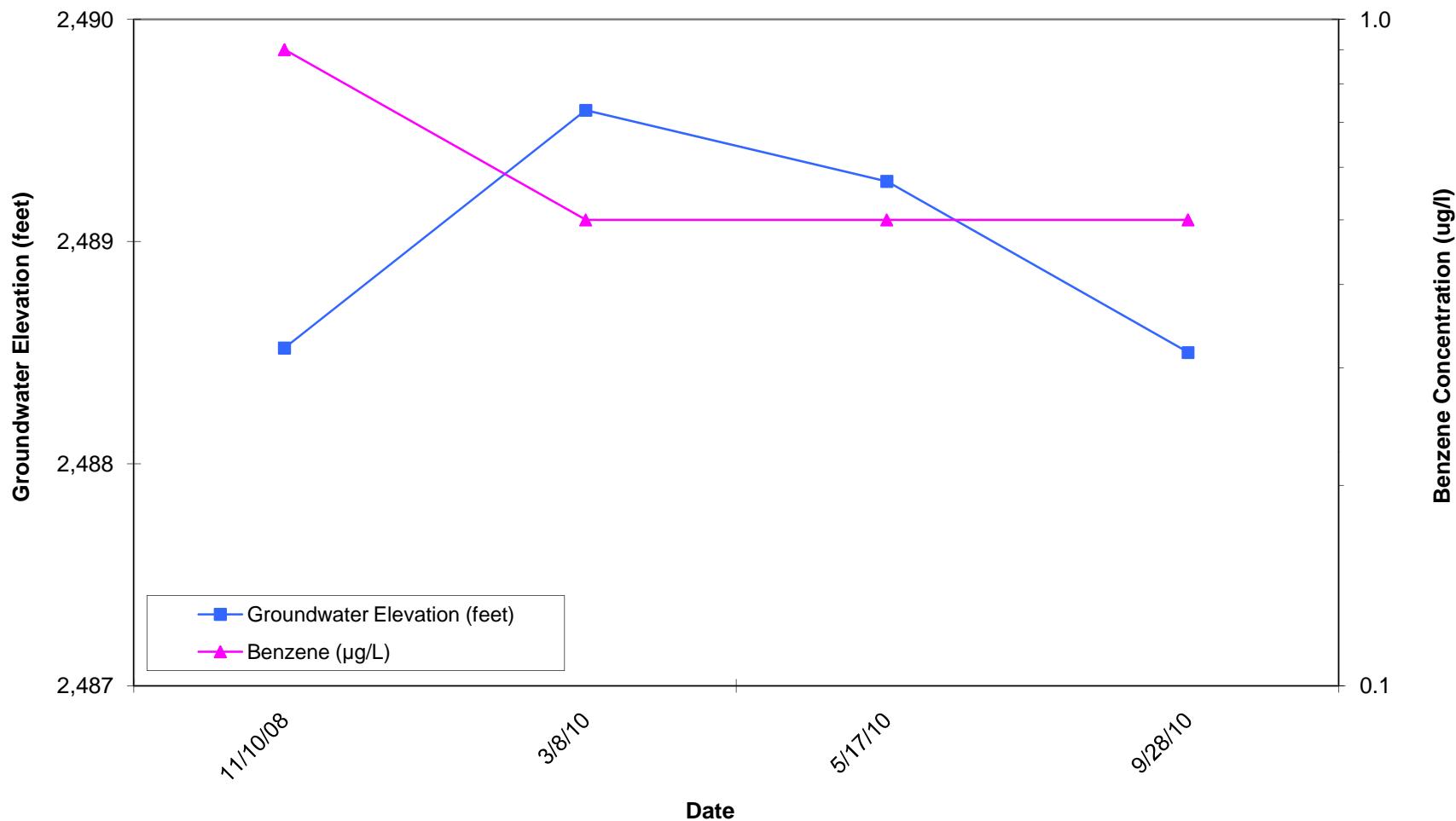
**Attachment C:**  
**Hydrographs**

---

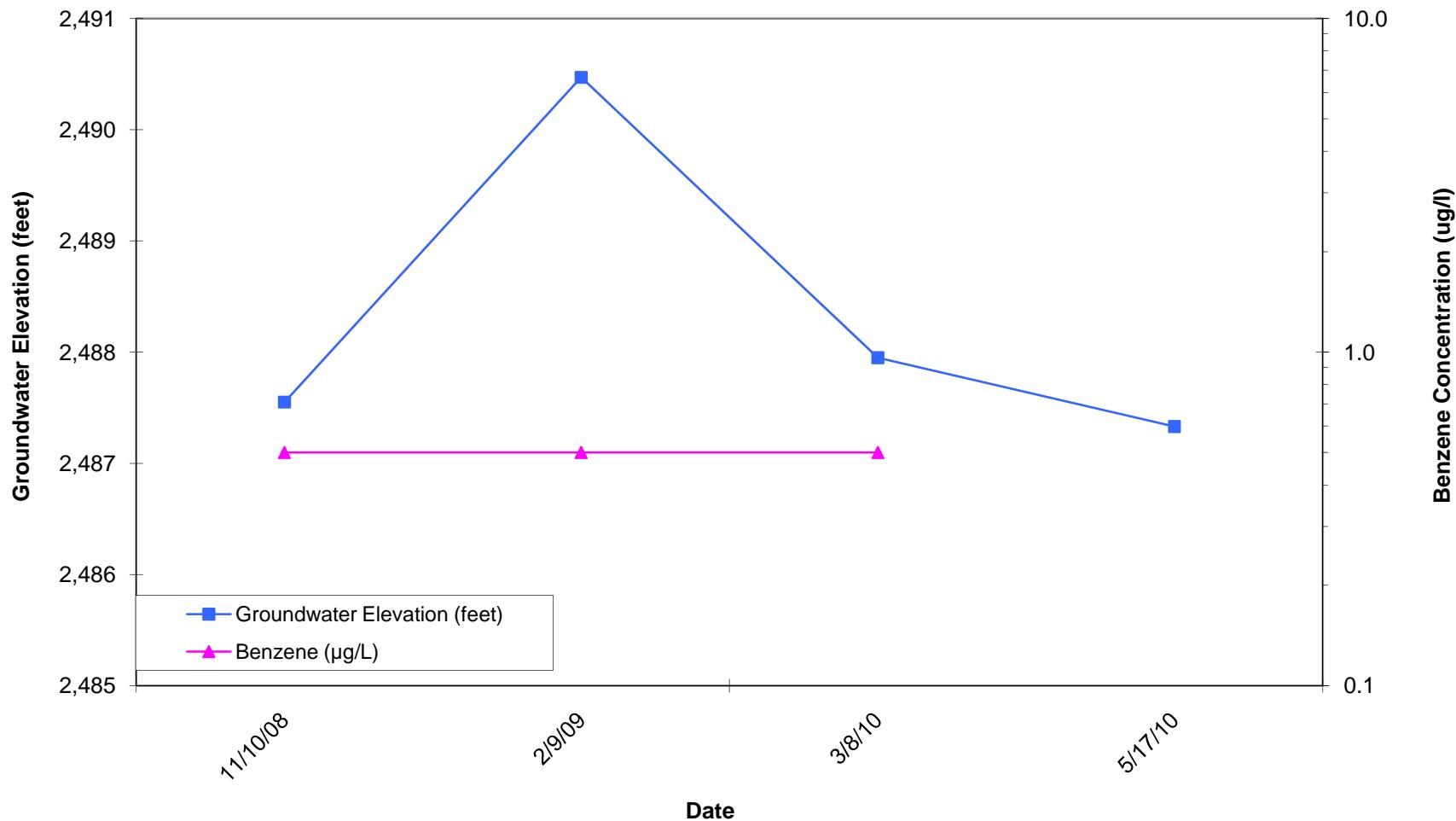
**Well MW-1 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



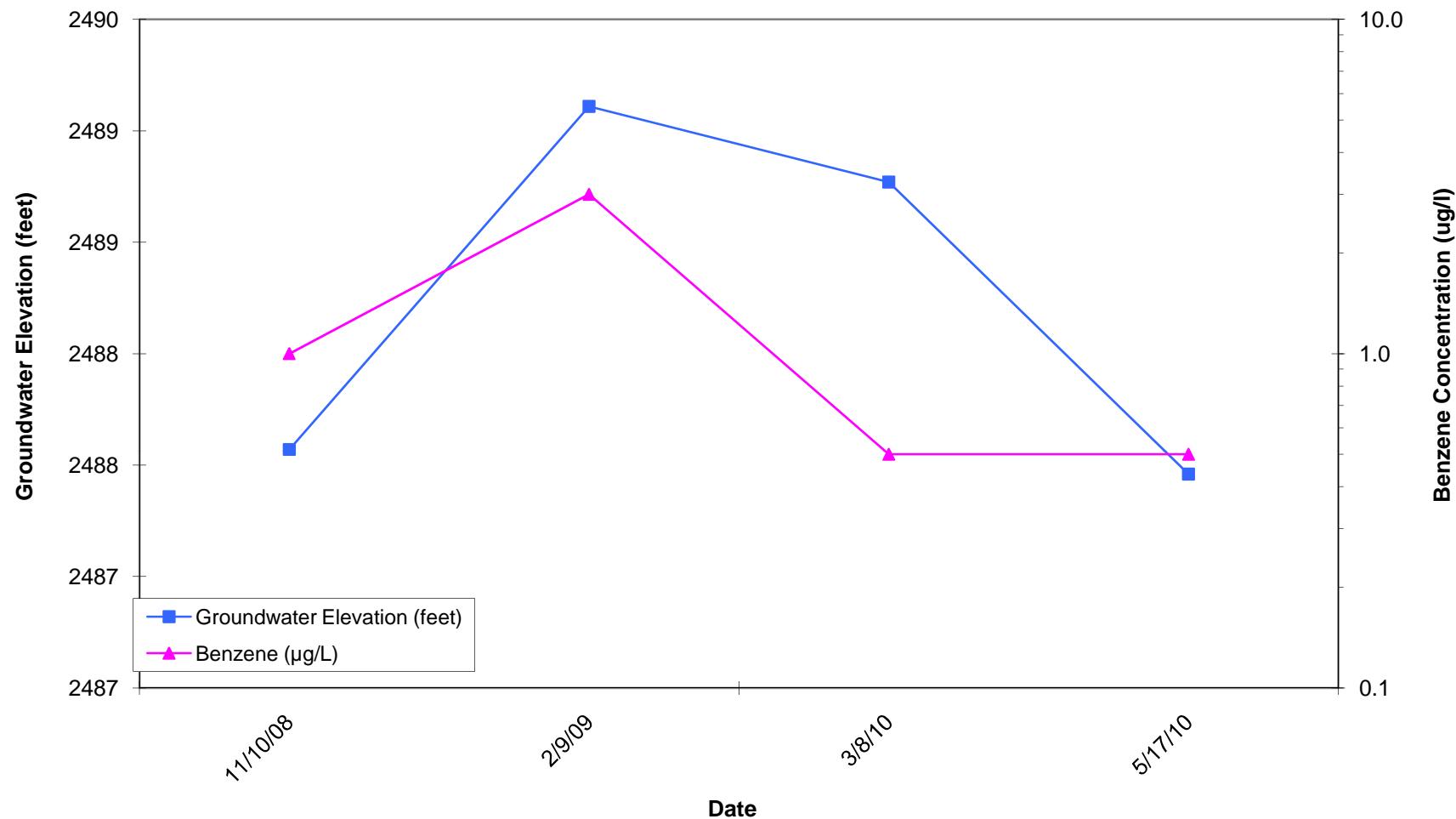
**Well MW-2 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



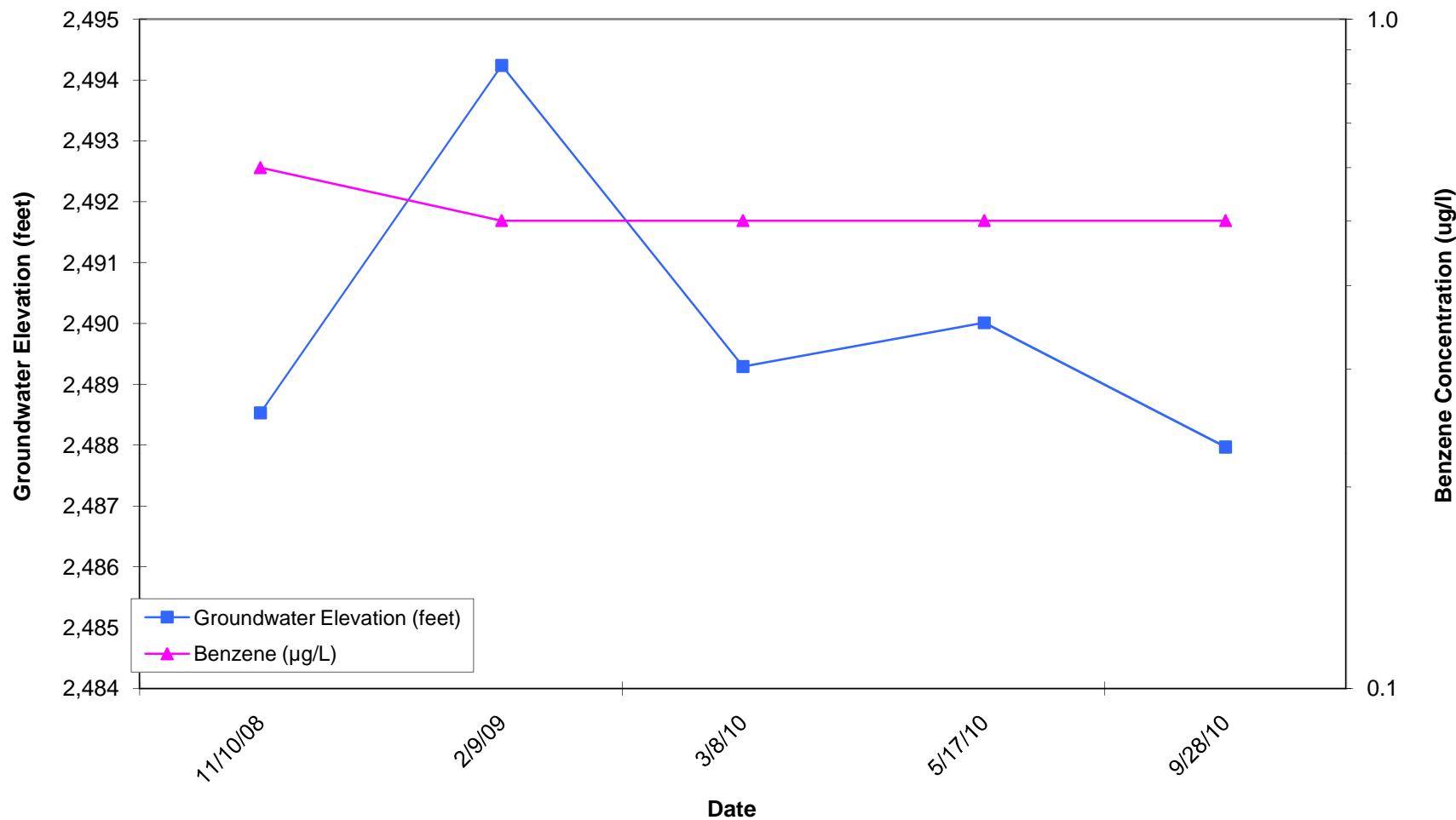
**Well MW-3 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



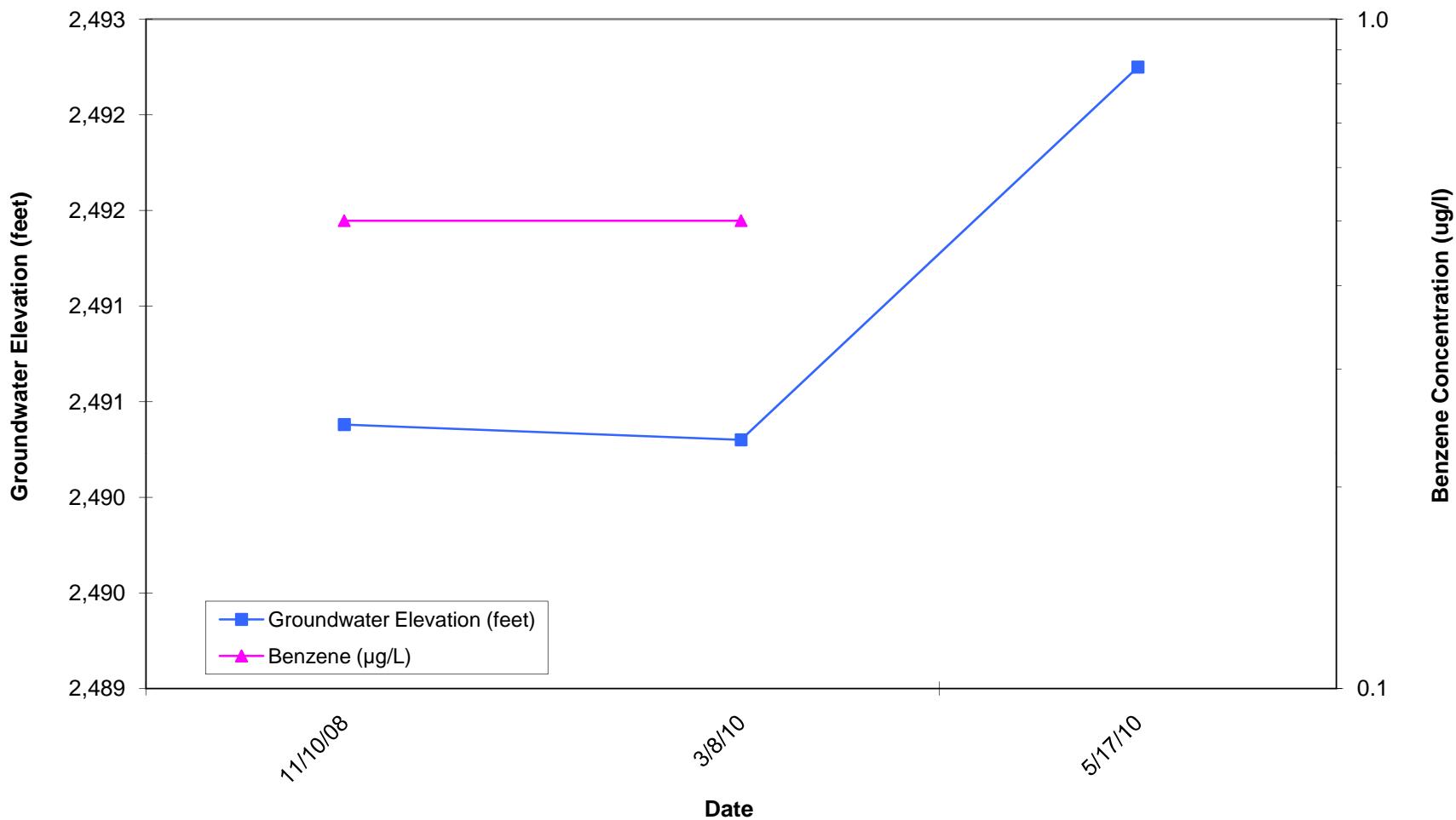
**Well MW-4 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



**Well MW-5 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



**Well MW-6 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**



**Well MW-7 Hydrograph**  
**Chevron Station No. 352-300**  
**State Route 274, Tekoa, Washington**

