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February 05, 2013

Mr. Mark Horne
Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, California 94583-5186

*Subject:* **Fourth Quarter 2012 Groundwater Monitoring and Sampling Report**
**Former Chevron Service Station No. 20-9335**
1225 North 45th Street
Seattle, Washington

Dear Mr. Horne:

SAIC Energy, Environment & Infrastructure, LLC (SAIC), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the fourth quarter 2012 groundwater monitoring and sampling event at former Chevron Service Station No. 20-9335 (the site) located in Seattle, Washington (Figure 1).

## FIELD ACTIVITIES

Gettler-Ryan Inc. (Gettler-Ryan) conducted the groundwater monitoring and sampling field event on December 27, 2012. Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons (SPH) in monitoring wells MW-6, MW-7, MW-8, MW-9, and MW-10. SPH were observed in monitoring well MW-7. Groundwater flow is to the southeast at a gradient of approximately 0.007 to 0.003 feet per foot. A potentiometric map is provided on Figure 2.

Groundwater samples were collected from four monitoring wells and submitted under chain of custody (COC) procedures to Eurofins Lancaster Laboratories, Inc. for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics by Northwest Method NWTPH-Gx;
- TPH as diesel-range organics and TPH as heavy oil-range organics by Northwest Method NWTPH-Dx extended with silica-gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes by United States Environmental Protection Agency (USEPA) Method 8021B; and
- Total Lead by USEPA Method 6020.

*SAIC Energy, Environment & Infrastructure, LLC*
18912 North Creek Parkway | Suite 101 | Bothell, WA 98011 | tel: (425) 485-5800 | fax: (425) 485-5566 | saic.com\eeandi

Field data sheets and COC documentation are provided in the Gettler-Ryan groundwater monitoring and sampling data package (Attachment A).

## RESULTS

Historical groundwater elevation data, SPH thickness data, and laboratory analytical results are summarized in Table 1. The laboratory analysis report is provided as Attachment B. Below is a summary of analytical results.

- SPH were detected in monitoring well MW-7 at a thickness of 0.19 feet, which is consistent with historical data.
- All analytes were below their respective Model Toxic Cleanup Act (MTCA) Method A cleanup levels or the laboratory reporting limits in all other monitoring wells.

The results of the fourth quarter 2012 sampling event indicate that petroleum-hydrocarbon constituent concentrations continue to fluctuate above and below MTCA Method A cleanup levels with seasonal changes in groundwater elevation.

Gettler-Ryan will continue to perform groundwater monitoring and sampling on a quarterly basis. If you have any questions or comments, please contact Ruth Otteman at (425) 482-3328 or via email at ottemanr@saic.com.

Sincerely,

**SAIC Energy, Environment & Infrastructure, LLC**

Ruth Otteman, LG
Project Manager

Stuart Brown
Environmental Scientist

Enclosures:

Figure 1 – Vicinity Map

Figure 2 – Potentiometric Map

Table 1 – Groundwater Monitoring Data and Analytical Results

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

cc: Mr. Roger Nye – Ecology, Toxics Cleanup Program
3190 160th Ave SE, Bellevue, WA 98008-5452

Mr. Larry Hard – Seattle Housing Authority
190 Queen Anne Avenue North, P.O Box 19028, Seattle, WA 98109-1028

Ms. Veronica Redstone – Bellwether
1651 Bellevue Avenue, Seattle, WA 98122-2014

Project File

## REPORT LIMITATIONS

This technical document was prepared on behalf of Chevron and is intended for its sole use and for use by the local, state or federal regulatory agency that the technical document was sent to by SAIC. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and that SAIC shall have no responsibility or liability for the consequences thereof.

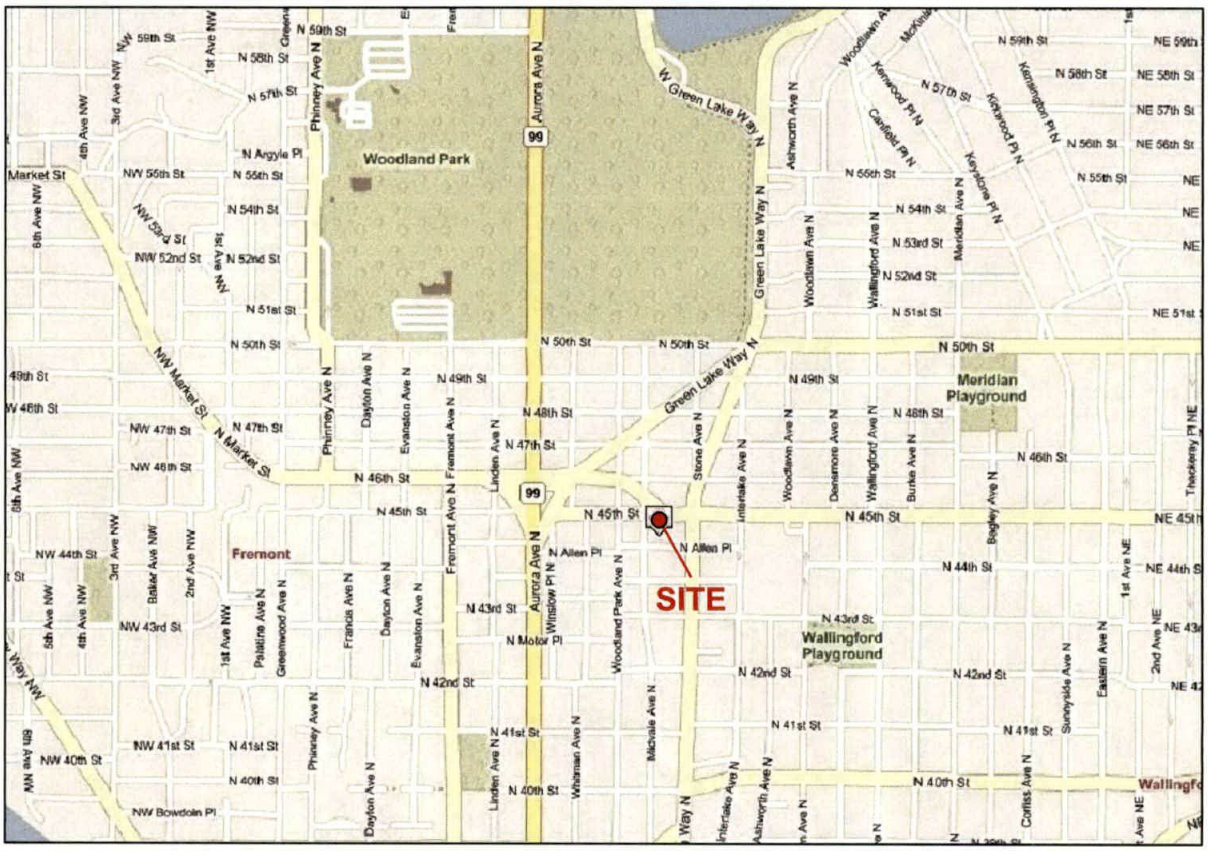
Site history and background information provided in this technical document are based on sources that may include interviews with environmental regulatory agencies and property management personnel and a review of acquired environmental regulatory agency documents and property information obtained from CEMC and others. SAIC has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information beyond that described in this technical document.

Recognizing reasonable limits of time and cost, this technical document cannot wholly eliminate uncertainty regarding the vertical and lateral extent of impacted environmental media.

Opinions and recommendations presented in this technical document apply only to site conditions and features as they existed at the time of SAIC's site visits or site work and cannot be applied to conditions and features of which SAIC is unaware and has not had the opportunity to evaluate.

All sources of information on which SAIC has relied in making its conclusions (including direct field observations) are identified by reference in this technical document or in appendices attached to this technical document. Any information not listed by reference or in appendices has not been evaluated or relied upon by SAIC in the context of this technical document. The conclusions, therefore, represent our professional opinion based on the identified sources of information.






Maps Provided by Seattle.gov

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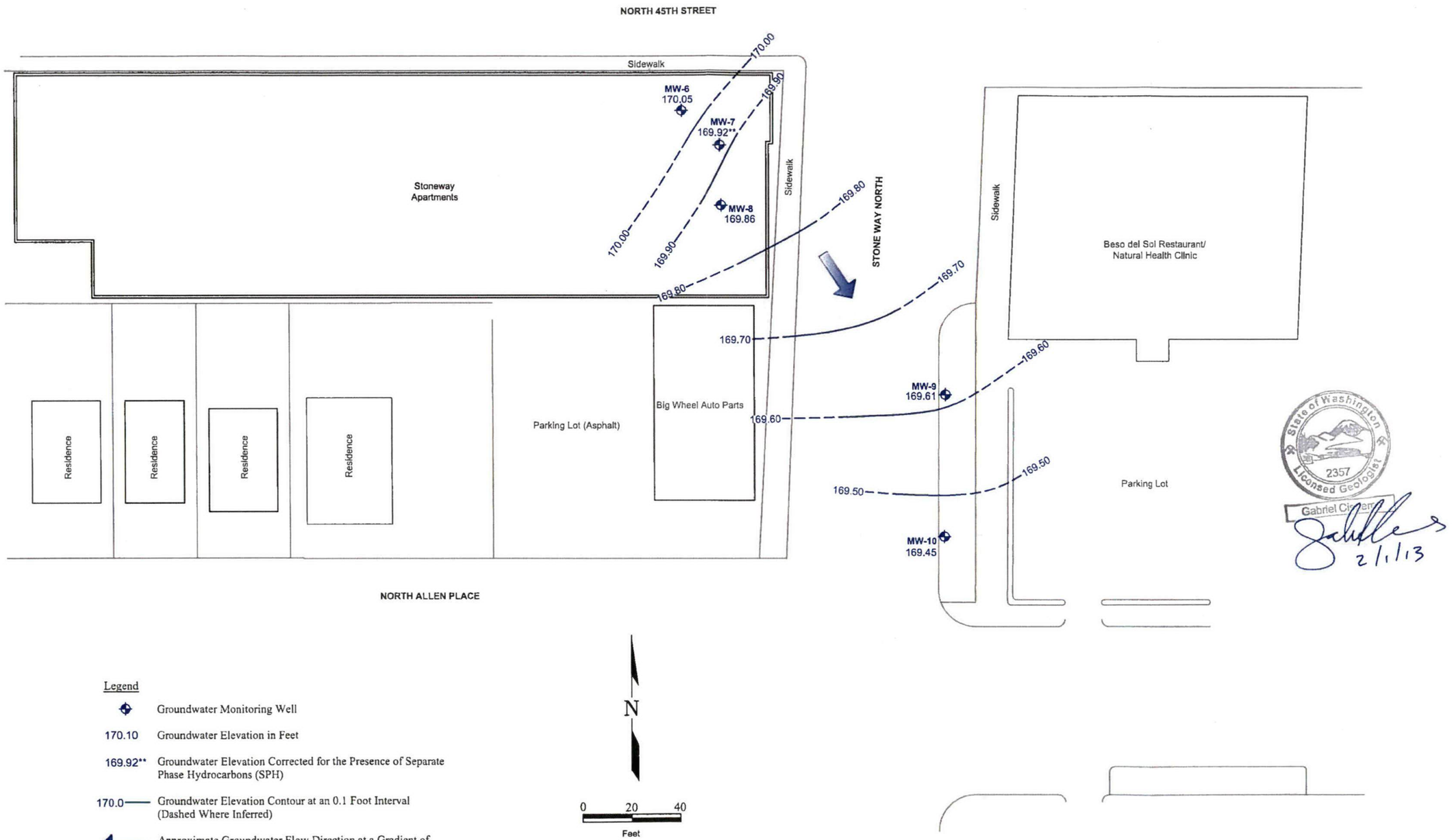
| | | |
|---|---|---|
| Former Chevron Service Station No. 20-9335<br>1225 North 45th Street<br>Seattle, Washington | FIGURE 1<br>Vicinity Map | |
| | FILE NAME: 209335 Vicinity Map.dwg | DATE: 9/13/2012 |

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Former Chevron Service Station No. 20-9335
1225 North 45th Street
Seattle, Washington

**FIGURE 2**
Potentiometric Map
December 27, 2012

DATE: 1/31/2013 | DRAWING: 209335 Site Map.dwg

**TABLE 1**

**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**

**FORMER CHEVRON SERVICE STATION NO. 20-9335**

**1225 North 45th Street**

**Seattle, Washington**

**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6** | | | | | | | | | | | | | | | |
| 02/09/06 | | 197.18 | -- | 36.74 | 0.00 | 160.44 | **680** | 98 | **1,500** | <0.5 | 0.7 | 1.2 | 37 | -- | -- |
| 05/03/07 | | 197.18 | -- | 36.74 | 0.00 | 160.44 | **1,000** | 130 | 380 | **29** | 1 | 4 | 30 | -- | -- |
| 06/16/09 | | 197.18 | INACCESSIBLE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07/01/09 | NP | 197.18 | -- | 27.46 | 0.00 | 169.72 | 270 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **22.9** |
| 12/11/09 | NP | 197.18 | -- | 27.55 | 0.00 | 169.63 | 35 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 0.76 |
| 06/09/10 | NP | 197.18 | -- | 26.84 | 0.00 | 170.34 | 360 | <340 | **5,900** | <0.5 | <0.5 | <0.5 | 350 | -- | 13.2 |
| 11/19/10 | NP | 197.18 | -- | 26.97 | 0.00 | 170.21 | 240 | 81 | 750 | <0.5 | <0.5 | <0.5 | 11 | -- | 3.7 |
| 06/21/11 | NP | 197.18 | -- | 25.77 | 0.00 | 171.41 | 270 | 88 | **2,400** | <0.5 | <0.5 | 0.6 | 9.2 | -- | 3.2 |
| 09/22/11 | NP | 197.18 | -- | 25.90 | 0.00 | 171.28 | <29 | <69 | 660 | <0.5 | <0.5 | <0.5 | 4.1 | -- | 3.3 |
| 12/09/11 | NP | 197.18 | -- | 27.34 | 0.00 | 169.84 | <29 | <69 | 64 | **140** | 0.5 | <0.5 | <1.5 | -- | 0.44 |
| 03/30/12 | NP | 197.18 | -- | 26.80 | 0.00 | 170.38 | <30 | <69 | 90 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 2.5 |
| 06/20/12 | NP | 197.18 | -- | 26.56 | 0.00 | 170.62 | <30 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | <0.034 |
| 10/05/12 | NP | 197.18 | -- | 27.08 | 0.00 | 170.10 | <32 | <74 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 1.2 |
| 12/27/12 | NP | 197.18 | -- | 27.13 | 0.00 | 170.05 | <29 | <67 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 2.0 |
| **MW-7** | | | | | | | | | | | | | | | |
| 02/09/06 | | 197.42 | 37.87 | 38.17 | 0.30 | 159.49 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05/03/07 | | 197.42 | 26.55 | 27.80 | 0.00 | 169.62 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 06/16/09 | | 197.42 | INACCESSIBLE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07/01/09[6] | | 197.42 | 27.39 | --[7] | --[7] | --[7] | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 12/11/09[6] | | 197.42 | 27.50 | --[7] | --[7] | --[7] | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 06/09/10[6] | | 197.42 | 27.03 | 28.20 | 1.17 | 170.16 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 11/19/10 | | 197.42 | 27.08 | 28.34 | 1.26 | 170.09 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | | | -- | |
| 06/21/11 | | 197.42 | -- | 26.12 | 0.00 | 171.30 | **11,000** | <1,800 | **150,000** | **45** | **4,800** | **2,600** | **18,000** | -- | **310** |
| 09/22/11 | | 197.42 | -- | 26.25 | 0.00 | 171.17 | **2,000** | <340 | **100,000** | **29** | **4,300** | **1,900** | **17,000** | -- | **94.4** |
| 12/09/11 | | 197.42 | 27.45 | 27.80 | 0.35 | 169.90 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 03/30/12 | | 197.42 | 27.15 | 27.35 | 0.20 | 170.23 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 06/20/12 | | 197.42 | 26.90 | 27.05 | 0.15 | 170.49 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 10/05/12 | | 197.42 | 27.38 | 27.76 | 0.38 | 169.96 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 12/27/12 | | 197.42 | 27.46 | 27.65 | 0.19 | 169.92 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |



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**TABLE 1**
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**
**FORMER CHEVRON SERVICE STATION NO. 20-9335**
**1225 North 45th Street**
**Seattle, Washington**
**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-8** | | | | | | | | | | | | | | | |
| 02/09/06 | | 197.35 | -- | 36.74 | 0.00 | 160.61 | 280 | <96 | 440 | <0.5 | 1.1 | 3.3 | 28 | -- | -- |
| 05/03/07 | | 197.35 | -- | 36.74 | 0.00 | 160.61 | **940** | <200 | **2,600** | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| 06/16/09 | | 197.35 | INACCESSIBLE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07/01/09 | NP | 197.35 | -- | 27.84 | 0.00 | 169.51 | 390 | <700 | 430 | <0.5 | <0.5 | <0.5 | 2.2 | -- | 3.5 |
| 12/11/09 | NP | 197.35 | -- | 27.91 | 0.00 | 169.44 | 300 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 7.3 |
| 06/09/10 | NP | 197.35 | -- | 27.21 | 0.00 | 170.14 | 280 | 180 | 350 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **16.5** |
| 11/19/10 | NP | 197.35 | -- | 27.34 | 0.00 | 170.01 | 320 | 120 | 94 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 3.4 |
| 06/21/11 | NP | 197.35 | -- | 26.18 | 0.00 | 171.17 | 94 | 150 | 54 | <0.5 | <0.5 | 1.0 | <1.5 | -- | 3.6 |
| 09/22/11 | NP | 197.35 | -- | 26.30 | 0.00 | 171.05 | <29 | <68 | 140 | <0.5 | <0.5 | 2.9 | 1.70 | -- | 1.8 |
| 12/09/11 | NP | 197.35 | -- | 27.70 | 0.00 | 169.65 | 70 | <69 | 320 | <2.0 | <2.0 | <0.5 | 3.0 | -- | 0.30 |
| 03/30/12 | NP | 197.35 | -- | 27.20 | 0.00 | 170.15 | <30 | <70 | **2,000** | 3.0 | 3.9 | 45 | 120 | -- | 2.9 |
| 06/20/12 | NP | 197.35 | -- | 27.00 | 0.00 | 170.35 | <30 | <70 | 170 | 0.7 | 0.7 | 1.3 | 2.2 | -- | 1.8 |
| 10/05/12 | NP | 197.35 | -- | 27.49 | 0.00 | 169.86 | <31 | <71 | 490 | 1.0 | 1.7 | 19 | 32 | -- | 1.3 |
| 12/27/12 | NP | 197.35 | -- | 27.49 | 0.00 | 169.86 | <29 | <68 | 280 | 0.6 | 0.7 | 4.7 | 6.8 | -- | 1.1 |
| **MW-9** | | | | | | | | | | | | | | | |
| 05/03/07 | | 208.11 | -- | 36.74 | 0.00 | 171.37 | <400 | <500 | <50 | <0.5 | <0.5 | 4 | 18 | -- | -- |
| 06/16/09 | | 208.11 | -- | 38.72 | 0.00 | 169.39 | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **19.3** |
| 07/01/09 | NP | 208.11 | -- | 38.03 | 0.00 | 170.08 | <31 | <71 | -- | -- | -- | -- | -- | -- | -- |
| 12/11/09 | NP | 208.11 | -- | 38.86 | 0.00 | 169.25 | 76 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 14.5 |
| 06/09/10 | NP | 208.11 | -- | 38.17 | 0.00 | 169.94 | 42 | 110 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **21.2** |
| 11/19/10 | NP | 208.11 | -- | 38.23 | 0.00 | 169.88 | <29 | 130 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **18.7** |
| 06/21/11 | NP | 208.11 | -- | 37.15 | 0.00 | 170.96 | <30 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 4.7 |
| 09/22/11 | NP | 208.11 | -- | 37.25 | 0.00 | 170.86 | <300 | <700 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 12.4 |
| 12/09/11 | NP | 208.11 | -- | 38.66 | 0.00 | 169.45 | <29 | <68 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 2.8 |
| 03/30/12 | NP | 208.11 | -- | 29.60 | 0.00 | 178.51 | <29 | <68 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **114** |
| 06/20/12 | NP | 208.11 | -- | 38.00 | 0.00 | 170.11 | <30 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 3.8 |
| 10/05/12 | NP | 208.11 | -- | 38.44 | 0.00 | 169.67 | <30 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 10.6 |
| 12/27/12 | NP | 208.11 | -- | 38.50 | 0.00 | 169.61 | <31 | <73 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 5.3 |



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**TABLE 1**

**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**
**FORMER CHEVRON SERVICE STATION NO. 20-9335**
**1225 North 45th Street**
**Seattle, Washington**
**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-10** | | | | | | | | | | | | | | | |
| 05/03/07 | | 207.29 | -- | 36.74 | 0.00 | 170.55 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| 06/16/09 | | 207.29 | INACCESSIBLE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07/01/09 | NP | 207.29 | -- | 38.72 | 0.00 | 168.57 | <30 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 10.9 |
| 12/11/09 | NP | 207.29 | -- | 35.91 | 0.00 | 171.38 | 49 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 13.4 |
| 06/09/10 | NP | 207.29 | -- | 37.48 | 0.00 | 169.81 | 50 | 88 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 7.2 |
| 11/19/10 | NP | 207.29 | -- | 37.53 | 0.00 | 169.76 | <29 | 74 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **18.8** |
| 06/21/11 | NP | 207.29 | -- | 36.46 | 0.00 | 170.83 | <31 | 180 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 5.7 |
| 09/22/11 | NP | 207.29 | -- | 36.60 | 0.00 | 170.69 | <300 | <700 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 6.6 |
| 12/09/11 | NP | 207.29 | -- | 35.71 | 0.00 | 171.58 | <29 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 2.1 |
| 03/30/12 | NP | 207.29 | -- | 29.80 | 0.00 | 177.49 | <30 | <69 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | **110** |
| 06/20/12 | NP | 207.29 | -- | 37.35 | 0.00 | 169.94 | <31 | <71 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 0.23 |
| 10/05/12 | NP | 207.29 | -- | 37.79 | 0.00 | 169.50 | 45 | <70 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 3.7 |
| 12/27/12 | NP | 207.29 | -- | 37.84 | 0.00 | 169.45 | <29 | <67 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | 2.2 |
| **MW-1** | | | | | | | | | | | | | | | |
| 10/11/00 | | 97.95 | -- | 34.50 | -- | 63.45 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/16/00 | | 97.95 | -- | 35.91 | 0.00 | 62.04 | ND | ND | 74.4 | ND | ND | ND | ND | ND | ND |
| 03/26/01 | | 97.95 | -- | 36.54 | 0.00 | 61.41 | ND | ND | ND | ND | ND | ND | ND | ND | -- |
| 06/25/01 | | 97.95 | -- | 36.78 | 0.00 | 61.17 | <281 | <842 | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 09/24/01 | | 97.95 | -- | 37.14 | 0.00 | 60.81 | <250 | <500 | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 12/13/01 | | 97.95 | -- | 37.25 | 0.00 | 60.70 | <250 | <500 | <80.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 03/08/02 | NP | 97.95 | -- | 36.79 | 0.00 | 61.16 | <250 | <750 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 05/29/02 | | 97.95 | -- | 36.44 | 0.00 | 61.51 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 09/16/02 | NP | 97.95 | -- | 36.71 | 0.00 | 61.24 | <250 | <250 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 12/05/02 | | 97.95 | -- | 37.09 | 0.00 | 60.86 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 03/04/03 | NP | 97.95 | -- | 37.26 | 0.00 | 60.69 | <250 | <250 | 100 | <0.50 | <0.50 | <0.50 | <3.0 | -- | -- |
| 06/03/03 | | 97.95 | -- | 37.09 | 0.00 | 60.86 | SAMPLED SEMI-ANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 10/27/03 | | 97.95 | -- | 37.42 | 0.00 | 60.53 | NOT SAMPLED DUE TO INSUFFICIENT WATER | | | | | -- | -- | -- | -- |
| 03/31/04 | NP | 97.95 | -- | 37.12 | 0.00 | 60.83 | <800 | <1,000 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/28/04 | | 97.95 | -- | 37.14 | 0.00 | 60.81 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 09/29/04 | | 97.95 | -- | 37.50 | 0.00 | 60.45 | NOT SAMPLED DUE TO INSUFFICIENT WATER | | | | | -- | -- | -- | -- |
| 01/04/05 | | 97.95 | -- | 37.61 | 0.00 | 60.34 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| ABANDONED | | | | | | | | | | | | | | | |



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**TABLE 1**
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**
**FORMER CHEVRON SERVICE STATION NO. 20-9335**
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**Seattle, Washington**
**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-2** | | | | | | | | | | | | | | | |
| 10/11/00 | | 98.70 | -- | 34.50 | -- | 64.20 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/16/00 | | 98.70 | -- | 36.46 | 0.00 | 62.24 | **1,000** | ND | **28,100** | **283** | **2,560** | 693 | **4,020** | ND | 0.00194 |
| 03/26/01 | | 98.70 | -- | 37.12 | 0.00 | 61.58 | **1,180** | ND | **17,000** | **143** | **1,450** | 378 | **2,180** | ND | -- |
| 06/25/01 | | 98.70 | -- | 37.37 | 0.00 | 61.33 | 418 | <750 | **11,700** | **92.3** | 547 | 181 | **1,010** | -- | -- |
| 09/24/01 | | 98.70 | -- | 37.72 | 0.00 | 60.98 | **4,840** | <557 | **22,100** | **120** | **1,380** | 658 | **4,100** | -- | -- |
| 12/13/01 | | 98.70 | -- | 37.89 | 0.00 | 60.81 | **5,540** | <500 | **84,000** | **185** | **3,960** | **1,590** | **9,950** | -- | -- |
| 03/08/02 | | 98.70 | 37.24 | 38.00 | 0.76 | 61.31 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 05/29/02 | | 98.70 | 36.81 | 37.54 | 0.73 | 61.74 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 09/16/02 | | 98.70 | 37.19 | 37.61 | 0.42 | 61.43 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 10/15/02 | | 98.70 | 37.24 | 37.68 | 0.44 | 61.37 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11/22/02 | | 98.70 | 37.12 | 37.63 | 0.51 | 61.48 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/05/02 | | 98.70 | 37.51 | 38.10 | 0.59 | 61.07 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 01/28/03 | | 98.70 | 36.77 | 37.33 | 0.56 | 61.82 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/13/03 | | 98.70 | 37.44 | 38.02 | 0.58 | 61.14 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/04/03 | | 98.70 | INACCESSIBLE - VEHICLE PARKED OVER WELL | | | | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 04/21/03 | | 98.70 | 37.21 | 37.78 | 0.57 | 61.38 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05/08/03 | | 98.70 | 37.43 | 37.94 | 0.51 | 61.17 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 06/03/03 | | 98.70 | 37.37 | 37.91 | 0.54 | 61.22 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 07/06/03 | | 98.70 | 36.96 | 37.51 | 0.55 | 61.63 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 08/18/03 | | 98.70 | 37.49 | 38.02 | 0.53 | 61.10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10/27/03 | | 98.70 | 37.54 | 39.98 | 2.44 | 60.67 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 11/17/03 | | 98.70 | 37.10 | 37.58 | 0.48 | 61.50 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/31/03 | | 98.70 | 36.18 | 38.19 | 2.01 | 62.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/09/04 | | 98.70 | 37.00 | 37.49 | 0.49 | 61.60 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/04/04 | | 98.70 | 35.85 | 37.06 | 1.21 | 62.61 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/31/04 | | 98.70 | 37.32 | 39.05 | 1.73 | 61.03 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 06/28/04 | | 98.70 | 37.32 | 39.05 | 1.73 | 61.03 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 09/11/04 | | 98.70 | 37.65 | 39.10 | 1.45 | 60.76 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/29/04 | | 98.70 | 37.71 | 39.39 | 1.68 | 60.65 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 11/22/04 | | 98.70 | 36.89 | 38.16 | 1.27 | 61.56 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01/04/05 | | 98.70 | 37.88 | 39.80 | 1.92 | 60.44 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 01/14/05 | | 98.70 | 37.49 | 39.02 | 1.53 | 60.90 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ABANDONED | | | | | | | | | | | | | | | |



SAIC

**TABLE 1**

**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**

**FORMER CHEVRON SERVICE STATION NO. 20-9335**

**1225 North 45th Street**

**Seattle, Washington**

**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | | | | | | | | | | | | | | | |
| 10/11/00 | | 98.76 | -- | 34.00 | -- | 64.76 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/16/00 | | 98.76 | -- | 36.39 | 0.00 | 62.37 | ND | ND | ND | ND | 0.612 | ND | 1.95 | ND | ND |
| 03/26/01 | | 98.76 | -- | 37.05 | 0.00 | 61.71 | ND | ND | ND | ND | ND | ND | ND | ND | -- |
| 06/25/01 | | 98.76 | -- | 37.29 | 0.00 | 61.47 | <250 | <750 | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 09/24/01 | | 98.76 | -- | 37.64 | 0.00 | 61.12 | <250 | <500 | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 12/13/01 | | 98.76 | -- | 37.78 | 0.00 | 60.98 | <250 | <500 | <80.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 03/08/02 | NP | 98.76 | -- | 37.28 | 0.00 | 61.48 | <250 | <750 | 320 | <0.50 | 0.64 | 2.1 | 15 | -- | -- |
| 05/29/02 | | 98.76 | -- | 36.92 | 0.00 | 61.84 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 09/16/02 | NP | 98.76 | -- | 37.21 | 0.00 | 61.55 | <250 | <250 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 12/05/02 | | 98.76 | -- | 37.58 | 0.00 | 61.18 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 03/04/03 | NP | 98.76 | -- | 37.79 | 0.00 | 60.97 | <250 | <250 | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 06/03/03 | | 98.76 | -- | 37.68 | 0.00 | 61.08 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 10/27/03 | NP | 98.76 | -- | 38.00 | 0.00 | 60.76 | <250 | <250 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 03/31/04 | NP | 98.76 | -- | 37.65 | 0.00 | 61.11 | <800 | <1,000 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/28/04 | | 98.76 | -- | 37.68 | 0.00 | 61.08 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| 09/29/04 | NP | 98.76 | -- | 38.01 | 0.00 | 60.75 | <250 | <250 | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 01/04/05 | | 98.76 | -- | 38.19 | 0.00 | 60.57 | SAMPLED SEMIANNUALLY | | | -- | -- | -- | -- | -- | -- |
| ABANDONED | | | | | | | | | | | | | | | |
| **MW-4** | | | | | | | | | | | | | | | |
| 10/11/00 | | 98.52 | -- | 35.00 | -- | 63.52 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/16/00 | | 98.52 | -- | 36.35 | 0.00 | 62.17 | ND | ND | **58,200** | **326** | **5,520** | **1,430** | **8,520** | ND | 0.0123 |
| 03/26/01 | | 98.52 | -- | 37.00 | 0.00 | 61.52 | 266 | ND | **27,200** | **178** | **2,160** | **785** | **4,160** | ND | -- |
| 06/25/01 | | 98.52 | -- | 37.25 | 0.00 | 61.27 | <250 | <750 | **12,300** | **69.0** | 654 | 416 | **1,910** | -- | -- |
| 09/24/01 | | 98.52 | -- | 37.60 | 0.00 | 60.92 | <250 | <500 | **4,130** | **30.1** | 154 | 197 | 684 | -- | -- |
| 12/13/01 | | 98.52 | -- | 37.72 | 0.00 | 60.80 | <250 | <500 | **5,490** | **30.3** | 175 | 177 | 679 | -- | -- |
| 03/08/02 | NP | 98.52 | -- | 38.36 | 0.00 | 60.16 | <250 | <750 | **9,000** | <50 | 150 | 170 | 710 | -- | -- |
| 05/29/02 | NP | 98.52 | -- | 36.86 | 0.00 | 61.66 | <250 | <750 | **6,700** | **22** | 150 | 190 | 780 | -- | -- |
| 08/07/02 | | 98.52 | -- | 36.92 | 0.00 | 61.60 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/16/02 | NP | 98.52 | -- | 37.16 | 0.00 | 61.36 | <250 | <250 | **7,500** | **46** | 230 | 240 | 630 | -- | -- |
| 12/05/02 | NP | 98.52 | -- | 37.53 | 0.00 | 60.99 | <250 | <250 | **14,000** | **73** | 400 | 540 | **1,500** | -- | -- |
| 03/04/03 | | 98.52 | 36.68 | 36.71 | 0.03 | 61.83 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 06/03/03 | | 98.52 | 36.59 | 36.63 | 0.04 | 61.92 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 07/06/03 | | 98.52 | 36.90 | 36.93 | 0.03 | 61.61 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 08/18/03 | | 98.52 | 36.76 | 36.80 | 0.04 | 61.75 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10/27/03 | NP | 98.52 | -- | 37.96 | 0.00 | 60.56 | <400 | <500 | **2,200** | **16** | 55 | 76 | 170 | -- | -- |



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**TABLE 1**
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**
**FORMER CHEVRON SERVICE STATION NO. 20-9335**
**1225 North 45th Street**
**Seattle, Washington**
**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4 (cont.)** | | | | | | | | | | | | | | | |
| 11/17/03 | | 98.52 | 36.34 | 36.37 | 0.03 | 62.17 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/31/03 | | 98.52 | -- | 36.88 | 0.00 | 61.64 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/09/04 | | 98.52 | 36.14 | 36.17 | 0.03 | 62.37 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/04/04 | | 98.52 | -- | 36.74 | 0.00 | 61.78 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/31/04 | NP | 98.52 | -- | 37.59 | 0.00 | 60.93 | <250 | <250 | **3,900** | **14** | 96 | 110 | 340 | -- | -- |
| 06/28/04 | NP | 98.52 | -- | 37.54 | 0.00 | 60.98 | <250 | <250 | **1,600** | **8.5** | 15 | 59 | 110 | -- | -- |
| 09/11/04 | | 98.52 | 37.78 | 37.81 | 0.03 | 60.73 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/29/04 | NP | 98.52 | -- | 37.86 | 0.00 | 60.66 | <250 | <250 | **1,500** | **18** | 40 | 76 | 170 | -- | -- |
| 11/22/04 | | 98.52 | -- | 36.81 | 0.00 | 61.71 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01/04/05 | NP | 98.52 | -- | 38.11 | 0.00 | 60.41 | **1,600** | <250 | **1,600** | **10** | 13 | 60 | 110 | -- | -- |
| 01/14/05 | | 98.52 | -- | 37.58 | 0.00 | 60.94 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ABANDONED | | | | | | | | | | | | | | | |
| **MW-5** | | | | | | | | | | | | | | | |
| 10/11/00 | | 99.42 | -- | 34.50 | -- | 64.92 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/16/00 | | 99.42 | -- | 37.18 | 0.00 | 62.24 | **5,080** | ND | **146,000** | ND | **15,100** | **4,160** | **24,100** | ND | 0.0200 |
| 03/26/01 | | 99.42 | -- | 37.91 | 0.00 | 61.51 | **77,900** | ND | **149,000** | **256** | **10,600** | **4,000** | **24,200** | ND | -- |
| 06/25/01 | | 99.42 | -- | 38.14 | 0.00 | 61.28 | **109,000** | <18,100 | **127,000** | **210** | **9,580** | **3,730** | **21,500** | -- | -- |
| 09/24/01 | | 99.42 | 38.40 | 38.44 | 0.04 | 61.01 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 12/13/01 | | 99.42 | 38.55 | 38.59 | 0.04 | 60.86 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 03/08/02 | | 99.42 | 37.96 | 38.46 | 0.50 | 61.36 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 05/29/02 | | 99.42 | 37.60 | 38.05 | 0.45 | 61.73 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 08/07/02 | | 99.42 | 37.73 | 38.12 | 0.39 | 61.61 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/16/02 | | 99.42 | 38.00 | 38.39 | 0.39 | 61.34 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 10/15/02 | | 99.42 | 38.09 | 38.47 | 0.38 | 61.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11/22/02 | | 99.42 | 37.84 | 38.26 | 0.42 | 61.50 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/05/02 | | 99.42 | 38.42 | 38.78 | 0.36 | 60.93 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 01/28/03 | | 99.42 | 37.88 | 38.24 | 0.36 | 61.47 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/13/03 | | 99.42 | 38.33 | 38.68 | 0.35 | 61.02 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/04/03 | | 99.42 | 37.54 | 37.89 | 0.35 | 61.81 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 04/21/03 | | 99.42 | 37.96 | 38.29 | 0.33 | 61.39 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05/08/03 | | 99.42 | 38.50 | 38.82 | 0.32 | 60.86 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 06/03/03 | | 99.42 | 37.42 | 37.76 | 0.34 | 61.93 | NOT SAMPLED DUE TO THE PRESENCE OF SPH | | | | | -- | -- | -- | -- |
| 07/06/03 | | 99.42 | 37.77 | 38.11 | 0.34 | 61.58 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 08/18/03 | | 99.42 | 38.54 | 38.86 | 0.32 | 60.82 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10/27/03 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |



SAIC

**TABLE 1**

**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**

**FORMER CHEVRON SERVICE STATION NO. 20-9335**

**1225 North 45th Street**

**Seattle, Washington**

**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-5 (cont.)** | | | | | | | | | | | | | | | |
| 11/17/03 | | 99.42 | 37.87 | 38.17 | 0.30 | 61.49 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/31/03 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/09/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/04/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/31/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 06/28/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/11/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/29/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11/22/04 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01/04/05 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01/14/05 | | 99.42 | WELL DRY/OBSTRUCTED | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ABANDONED | | | | | | | | | | | | | | | |
| **TRIP BLANK** | | | | | | | | | | | | | | | |
| 12/16/00 | | -- | -- | -- | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND | -- |
| 03/26/01 | | -- | -- | -- | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND | -- |
| 06/25/01 | | -- | -- | -- | -- | -- | -- | -- | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 09/24/01 | | -- | -- | -- | -- | -- | -- | -- | <50.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 12/13/01 | | -- | -- | -- | -- | -- | -- | -- | <80.0 | <0.500 | <0.500 | <0.500 | <1.00 | -- | -- |
| 03/08/02 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 05/29/02 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 09/16/02 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 12/05/02 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 03/04/03 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.50 | <0.50 | <0.50 | <1.5 | -- | -- |
| 10/27/03 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| **QA** | | | | | | | | | | | | | | | |
| 03/31/04 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/28/04 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 09/29/04 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 01/04/05 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/16/09 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 07/01/09 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 12/11/09 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/09/10 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 11/19/10 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/21/11 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |



SAIC

**TABLE 1**

**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]**

**FORMER CHEVRON SERVICE STATION NO. 20-9335**

**1225 North 45th Street**

**Seattle, Washington**

**Concentrations reported in µg/L**

| Well ID/ Date | Purge Method | TOC[2] (ft.) | DTP (ft.) | DTW (ft.) | SPHT (ft.) | GWE[3] (ft.) | TPH-DRO | TPH-HRO | TPH-GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | T. Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QA (cont.) | | | | | | | | | | | | | | | |
| 09/22/11 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 12/09/11 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 03/30/12 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 06/20/12 | | QA Vials Not Received by the Laboratory | | | | | | | | | | | | | |
| 10/05/12 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| 12/27/12 | | -- | -- | -- | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- |
| Standard Laboratory Reporting Limits | | | | | | | -- | -- | 50 | 0.5 | 0.5 | 0.5 | 1.5 | -- | 0.00100 |
| MTCA Method A Cleanup Levels | | | | | | | 500 | 500 | 800/1,000 | 5 | 1,000 | 700 | 1,000 | 20 | 15 |
| Current Method[5]: | | | | | | | NWTPH-Dx + Extended[4] | | NWTPH-Gx | USEPA 8021B | | | | | USEPA 6020 |

**Abbreviations:**

DTP = Depth to Product
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
SPH = Separate Phase Hydrocarbons
MTBE = Methyl Tertiary Butyl Ether
MTCA = Model Toxics Control Act Cleanup Regulations
ND = Not Detected
NP = No Purge
QA = Quality Assurance/Trip Blank
SPH = Separate Phase Hydrocarbon
SPHT = Separate Phase Hydrocarbon Thickness
T. Lead = Total Lead
TOC = Top of Casing
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
USEPA = United States Environmental Protection Agency
µg/L = Micrograms per liter
-- = Not Measured/Not Analyzed

**Notes:**

1 Analytical results in bold font indicate concentrations exceed MTCA Method A Cleanup Levels.
2 TOC elevations have been surveyed in feet relative to the 1988 North American Vertical Datum. MW-1 through MW-5 TOC Elevation are reference to an arbitrary benchmark of 100 feet.
3 When SPH is present, GWE has been corrected using the following formula: GWE = [(TOC - DTW) + (SPHT x 0.80)].
4 Analyzed with silica-gel cleanup.
5 Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.
6 Skimmer in well.
7 Interface probe could not detect LNAPL/Groundwater Interface, unable to gauge hydrocarbon thickness and calculate corrected GWE.



SAIC

**Attachment A:**
**Groundwater Monitoring and Sampling Data Package**

# GETTLER-RYAN INC.

## TRANSMITTAL

January 7, 2013
G-R #386750

TO: Ms. Ruth A. Otteman
SAIC
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

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

RE: **Former Chevron Service Station**
**#209335**
**1225 North 45th Street**
**Seattle, Washington**

WE HAVE ENCLOSED THE FOLLOWING:

| COPIES | DESCRIPTION |
|---|---|
| VIA PDF | Groundwater Monitoring and Sampling Data Package<br>**Fourth Quarter Event of December 27, 2012** |

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/209335

# GETTLER-RYAN INC.

## CHEVRON - SITE CHECK LIST

| | | | |
|---|---|---|---|
| Facility#: | **Chevron #209335** | Date: | 12-27-12 |
| Address: | **1225 N. 45Th Street** | | |
| City/St.: | **Seattle, WA** | | |
| Status of Site: | SIDEWALK & APARTMENT COMPLEX PARKING | | |

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

| # | Description | Condition | Labeling | Contents/Capacity | Location |
|---|---|---|---|---|---|
| | NO DRUMS | | | | |
| | | | | | |
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**WELLS:** Please check the condition of ALL WELLS @ site: i.e., well box condition, gaskets, bolts, well plug, well lock, etc.:

| Well ID | Gaskets (M) Missing (R) Replaced | Bolts (M) Missing (R) Replaced | Replaced Plug Y/N | Replaced Lock Y/N | Well Box Manufacturer/Size/# of Bolts | Other |
|---|---|---|---|---|---|---|
| MW-6 | GOOD | | | → | 81 MORRIS X3 | |
| MW-7 | GOOD | | | → | ↓ | |
| MW-8 | GOOD | | | → | | |
| MW-9 | GOOD | | | → | | |
| MW-10 | GOOD | | | → | | |
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Additional Comments/Observations: _____

# STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize. Purge water is treated by filtering the water through granular activated carbon and is subsequently discharged to the ground surface at the site.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. 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. 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. 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 #209335** Job Number: **386750**

Site Address: **1225 N. 45Th Street** Event Date: 12.27.12 (inclusive)

City: **Seattle, WA** Sampler: A.P

Well ID **MW-6** Date Monitored: 12.27.12

Well Diameter **2**

Total Depth 34.20 ft.

Depth to Water 27.13 ft.

| 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 then 0.50 ft.

7.07 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 x
Pressure Bailer
Metal Filters
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: gal
Product Transferred to:

Start Time (purge): 0930 Weather Conditions: SUN

Sample Time/Date: 0945 / 12.27.12 Water Color: CLEAR Odor: (Y) / N MILD

Approx. Flow Rate: — gpm. Sediment Description: NONE

Did well de-water? No If yes, Time: — Volume: — gal. DTW @ Sampling: 27.13

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (µmhos/cm µS) | Temperature (C) / F | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
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### LABORATORY INFORMATION

| SAMPLE ID | (#) CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| MW-6 | 3 x voa vial | YES | HCL | LANCASTER | NWTPH-Gx/BTEX(8021) |
| | 2 x 1 liter ambers | YES | HCL | LANCASTER | NWTPH-Dx w/sgc |
| | 1 x 250ml poly | YES | HNO3 | LANCASTER | TOTAL LEAD (6020) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

COMMENTS: No Purge Sample

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #209335** Job Number: **386750**

Site Address: **1225 N. 45Th Street** Event Date: 12.27.12 (inclusive)

City: **Seattle, WA** Sampler: VP

Well ID **MW-7** Date Monitored: 12.27.12

Well Diameter **2**

Total Depth 33.60 ft.

Depth to Water 27.65 ft.

| 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 then 0.50 ft.

5.95 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: x
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

**Sampling Equipment:**

- Disposable Bailer: x
- Pressure Bailer
- Metal Filters
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: 1040 (2400 hrs)

Time Completed: 1040 (2400 hrs)

Depth to Product: 27.46 ft

Depth to Water: 27.65 ft

Hydrocarbon Thickness: .19 ft

Visual Confirmation/Description: YELLOWISH

~~Skimmer / Absorbant Sock (circle one)~~

Amt Removed from Skimmer: Φ gal

Amt Removed from Well: Φ gal

Water Removed: Φ gal

Product Transferred to: Φ

Start Time (purge): — Weather Conditions: —

Sample Time/Date: / Water Color: — Odor: Y / N —

Approx. Flow Rate: — gpm. Sediment Description: —

Did well de-water? — If yes, Time: — Volume: — gal. DTW @ Sampling: —

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (µmhos/cm - µS) | Temperature ( C / F ) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| | | | | | | |
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### LABORATORY INFORMATION

| SAMPLE ID | (#) CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| MW- | x voa vial | YES | HCL | LANCASTER | NWTPH-Gx/BTEX(8021) |
| | x 1 liter ambers | YES | HCL | LANCASTER | NWTPH-Dx w/sgc |
| | x 250ml poly | YES | HNO3 | LANCASTER | TOTAL LEAD (6020) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

COMMENTS: SPH

Add/Replaced Lock: — Add/Replaced Plug: — Add/Replaced Bolt: —

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 12.27.12 (inclusive)
City: Seattle, WA Sampler: J.P

Well ID MW-8 Date Monitored: 12.27.12
Well Diameter 2
Total Depth 36.65 ft.
Depth to Water 27.49 ft.

| 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 then 0.50 ft.

7.56 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 X
Pressure Bailer
Metal Filters
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: gal
Product Transferred to:

Start Time (purge): 1000 Weather Conditions: SUN
Sample Time/Date: 1015 / 12.27.12 Water Color: CLEAR Odor: (Y) / N MILD
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? No If yes, Time: — Volume: — gal. DTW @ Sampling: 27.49

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (µmhos/cm - µS) | Temperature ( C / F ) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| | | | | | | |
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### LABORATORY INFORMATION

| SAMPLE ID | (#) CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| MW-8 | 3 x voa vial | YES | HCL | LANCASTER | NWTPH-Gx/BTEX(8021) |
| | 2 x 1 liter ambers | YES | HCL | LANCASTER | NWTPH-Dx w/sgc |
| | 1 x 250ml poly | YES | HNO3 | LANCASTER | TOTAL LEAD (6020) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

COMMENTS: NO PURGE SAMPLE

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #209335** Job Number: **386750**

Site Address: **1225 N. 45Th Street** Event Date: 12.27.12 (inclusive)

City: **Seattle, WA** Sampler: J.P

Well ID **MW-9** Date Monitored: 12.27.12

Well Diameter **2**

Total Depth 44.10 ft.

Depth to Water 38.50 ft.

| 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 then 0.50 ft.

5.60 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 x
Pressure Bailer
Metal Filters
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: gal
Product Transferred to:

Start Time (purge): 0000 Weather Conditions: SUN

Sample Time/Date: 0915/12.27.12 Water Color: CLEAR Odor: Y / (N)

Approx. Flow Rate: — gpm. Sediment Description: NONE

Did well de-water? No If yes, Time: — Volume: — gal. DTW @ Sampling: 38.60

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (µmhos/cm - µS) | Temperature ( C / F ) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
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**LABORATORY INFORMATION**

| SAMPLE ID | (#) CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| MW-9 | 3 x voa vial | YES | HCL | LANCASTER | NWTPH-Gx/BTEX(8021) |
| | 2 x 1 liter ambers | YES | HCL | LANCASTER | NWTPH-Dx w/sgc |
| | 1 x 250ml poly | YES | HNO3 | LANCASTER | TOTAL LEAD (6020) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

COMMENTS: No Purge Sample

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 12.27.12 (inclusive)
City: Seattle, WA Sampler: J.P

Well ID MW-10 Date Monitored: 12.27.12
Well Diameter 2
Total Depth 44.50 ft.
Depth to Water 37.84 ft. ☐ Check if water column is less then 0.50 ft.

| 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 |

6.66 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 X
Pressure Bailer
Metal Filters
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: gal
Product Transferred to:

Start Time (purge): 0000 Weather Conditions: SUN
Sample Time/Date: 0845 12.27.12 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 37.84

| Time (2400 hr.) | Volume (gal.) | pH | Conductivity (µmhos/cm - µS) | Temperature ( C / F ) | D.O. (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| | | | | | | |
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**LABORATORY INFORMATION**

| SAMPLE ID | (#) CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| MW-10 | 3 x voa vial | YES | HCL | LANCASTER | NWTPH-Gx/BTEX(8021) |
| | 2 x 1 liter ambers | YES | HCL | LANCASTER | NWTPH-Dx w/sgc |
| | 1 x 250ml poly | YES | HNO3 | LANCASTER | TOTAL LEAD (6020) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**COMMENTS:** NO PURGE SAMPLE

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

# Chevron Northwest Region Analysis Request/Chain of Custody

**Lancaster Laboratories**

For Lancaster Laboratories use only

Acct. #: _____ Group #: _____ Sample #: _____

SCR #: _____

~~SS#209335-OML G-R#386750~~

Facility #: ~~1225 N. 45th Street, SEATTLE, WA~~ WBS: _____

Site Address: MHO SAICRO Otteman

Chevron PM: _____ Lead Consultant: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant/Office: _____

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: J. PAYNE

**Matrix**

**Analyses Requested**

**Preservation Codes**

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water (☐ Potable ☐ NPDES) | Oil ☐ Air ☐ | Total Number of Containers | BTEX + ~~MTBE~~ 8021 ☐ 8260 ☐ Naphth ☐ | 8260 full scan | Oxygenates ___ | NWTPH GX | NWTPH DX ☐ Silica Gel Cleanup ☐ | Lead Total ☐ Diss. ☐ Method 6020 | ☐ WAVPH ☐ WAEPH | NWTPH H HCID ☐ quantification | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.A | 12.7.17 | | X | | | X | | 2 | X | | | X | | | | | | | | |
| MW-6 | | 0945 | X | | | X | | 6 | X | | | X | X | X | | | | | | |
| MW-8 | | 1015 | X | | | X | | 6 | X | | | X | X | X | | | | | | |
| MW-9 | | 0815 | X | | | X | | 6 | X | | | X | X | X | | | | | | |
| MW-10 | | 0845 | X | | | X | | 6 | X | | | X | X | X | | | | | | |

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

**Comments /Remarks**

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

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

STD. TAT 72 hour 48 hour

24 hour 4 day 5 day

EDF/EDD

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

QC Summary Type I – Full

Type VI (Raw Data)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| | 12.7.17 | ~~1200~~ | 1330 | | |
| 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 | Time |
| Temperature Upon Receipt _____ C° | | | Custody Seals Intact? Yes No | | |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300

Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

3468.02

**Attachment B:**
**Laboratory 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

January 10, 2013

Project: 209335

Submittal Date: 12/28/2012
Group Number: 1358866
PO Number: 0015103600
Release Number: HORNE
State of Sample Origin: WA

| Client Sample Description | Lancaster Labs (LLI) # |
|---|---|
| QA Water | 6907542 |
| MW-6 Grab Water | 6907543 |
| MW-8 Grab Water | 6907544 |
| MW-9 Grab Water | 6907545 |
| MW-10 Grab Water | 6907546 |

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

| | | |
|---|---|---|
| ELECTRONIC COPY TO | SAIC c/o Gettler-Ryan | Attn: Rachelle Munoz |
| ELECTRONIC COPY TO | SAIC | Attn: Jamalyn Green |
| ELECTRONIC COPY TO | SAIC | Attn: Ruth Otteman |

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

Respectfully Submitted,

Jill M. Parker

Jill M. Parker
Senior Specialist

(717) 556-7262

eurofins | Lancaster Laboratories

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

# Analysis Report

**Sample Description:** QA Water
Facility# 209335 Job# 386750
1225 N 45th St - Seattle, WA

LLI Sample # WW 6907542
LLI Group # 1358866
Account # 11260

**Project Name: 209335**

Collected: 12/27/2012

Submitted: 12/28/2012 09:30
Reported: 01/10/2013 12:53

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC Volatiles** | **ECY 97-602 NWTPH-Gx** | | **ug/l** | **ug/l** | |
| 08274 | NWTPH-Gx water C7-C12 | n.a. | N.D. | 50 | 1 |
| **GC Volatiles** | **SW-846 8021B** | | **ug/l** | **ug/l** | |
| 02102 | Benzene | 71-43-2 | N.D. | 0.5 | 1 |
| 02102 | Ethylbenzene | 100-41-4 | N.D. | 0.5 | 1 |
| 02102 | Toluene | 108-88-3 | N.D. | 0.5 | 1 |
| 02102 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | 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 |
|---|---|---|---|---|---|---|---|
| 08274 | NWTPH-Gx water C7-C12 | ECY 97-602 NWTPH-Gx | 1 | 12366A94A | 01/02/2013 17:41 | Marie D John | 1 |
| 02102 | Method 8021 Water Master | SW-846 8021B | 1 | 12366A94A | 01/02/2013 17:41 | Marie D John | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 12366A94A | 01/02/2013 17:41 | Marie D John | 1 |

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# Analysis Report

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

**Sample Description:** MW-6 Grab Water
Facility# 209335 Job# 386750
1225 N 45th St - Seattle, WA

LLI Sample # WW 6907543
LLI Group # 1358866
Account # 11260

**Project Name:** 209335

Collected: 12/27/2012 09:45 by JP

Submitted: 12/28/2012 09:30
Reported: 01/10/2013 12:53

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45SM6

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC Volatiles** | **ECY 97-602 NWTPH-Gx** | | **ug/l** | **ug/l** | |
| 08274 | NWTPH-Gx water C7-C12 | n.a. | N.D. | 50 | 1 |
| **GC Volatiles** | **SW-846 8021B** | | **ug/l** | **ug/l** | |
| 02102 | Benzene | 71-43-2 | N.D. | 0.5 | 1 |
| 02102 | Ethylbenzene | 100-41-4 | N.D. | 0.5 | 1 |
| 02102 | Toluene | 108-88-3 | N.D. | 0.5 | 1 |
| 02102 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | 1 |
| **GC Petroleum Hydrocarbons w/Si** | **ECY 97-602 NWTPH-Dx modified** | | **ug/l** | **ug/l** | |
| 12005 | DRO C12-C24 w/Si Gel | n.a. | N.D. | 29 | 1 |
| 12005 | HRO C24-C40 w/Si Gel | n.a. | N.D. | 67 | 1 |
| | The reverse surrogate, capric acid, is present at <1%. | | | | |
| **Metals** | **SW-846 6020** | | **ug/l** | **ug/l** | |
| 06035 | Lead | 7439-92-1 | 2.0 | 0.047 | 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 |
|---|---|---|---|---|---|---|---|
| 08274 | NWTPH-Gx water C7-C12 | ECY 97-602 NWTPH-Gx | 1 | 12366A94A | 01/02/2013 18:06 | Marie D John | 1 |
| 02102 | Method 8021 Water Master | SW-846 8021B | 1 | 12366A94A | 01/02/2013 18:06 | Marie D John | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 12366A94A | 01/02/2013 18:06 | Marie D John | 1 |
| 12005 | NWTPH-Dx water w/ 10g Si Gel | ECY 97-602 NWTPH-Dx modified | 1 | 123640006A | 01/04/2013 17:45 | Christine E Dolman | 1 |
| 12007 | NW Dx water w/ 10g column | ECY 97-602 NWTPH-Dx 06/97 | 1 | 123640006A | 01/02/2013 10:00 | Elizabeth A Sholder | 1 |
| 06035 | Lead | SW-846 6020 | 1 | 123636050003A | 01/03/2013 07:18 | Choon Y Tian | 1 |
| 06050 | ICP/MS SW-846 Water Digest | SW-846 3010A modified | 1 | 123636050003 | 12/30/2012 09:03 | James L Mertz | 1 |

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# Analysis Report

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

**Sample Description:** MW-8 Grab Water
Facility# 209335 Job# 386750
1225 N 45th St - Seattle, WA

LLI Sample # WW 6907544
LLI Group # 1358866
Account # 11260

**Project Name: 209335**

Collected: 12/27/2012 10:15 by JP

Submitted: 12/28/2012 09:30
Reported: 01/10/2013 12:53

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45SM8

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC Volatiles** | **ECY 97-602 NWTPH-Gx** | | **ug/l** | **ug/l** | |
| 08274 | NWTPH-Gx water C7-C12 | n.a. | 280 | 50 | 1 |
| **GC Volatiles** | **SW-846 8021B** | | **ug/l** | **ug/l** | |
| 02102 | Benzene | 71-43-2 | 0.6 | 0.5 | 1 |
| 02102 | Ethylbenzene | 100-41-4 | 4.7 | 0.5 | 1 |
| 02102 | Toluene | 108-88-3 | 0.7 | 0.5 | 1 |
| 02102 | Total Xylenes | 1330-20-7 | 6.8 | 1.5 | 1 |
| **GC Petroleum Hydrocarbons w/Si** | **ECY 97-602 NWTPH-Dx modified** | | **ug/l** | **ug/l** | |
| 12005 | DRO C12-C24 w/Si Gel | n.a. | N.D. | 29 | 1 |
| 12005 | HRO C24-C40 w/Si Gel | n.a. | N.D. | 68 | 1 |
| | The reverse surrogate, capric acid, is present at <1%. | | | | |
| **Metals** | **SW-846 6020** | | **ug/l** | **ug/l** | |
| 06035 | Lead | 7439-92-1 | 1.1 | 0.047 | 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 |
|---|---|---|---|---|---|---|---|
| 08274 | NWTPH-Gx water C7-C12 | ECY 97-602 NWTPH-Gx | 1 | 12366A94A | 01/02/2013 18:32 | Marie D John | 1 |
| 02102 | Method 8021 Water Master | SW-846 8021B | 1 | 12366A94A | 01/02/2013 18:32 | Marie D John | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 12366A94A | 01/02/2013 18:32 | Marie D John | 1 |
| 12005 | NWTPH-Dx water w/ 10g Si Gel | ECY 97-602 NWTPH-Dx modified | 1 | 130020015A | 01/05/2013 21:30 | Christine E Dolman | 1 |
| 12007 | NW Dx water w/ 10g column | ECY 97-602 NWTPH-Dx 06/97 | 1 | 130020015A | 01/03/2013 07:50 | Catherine R Wiker | 1 |
| 06035 | Lead | SW-846 6020 | 1 | 123636050003A | 01/03/2013 07:20 | Choon Y Tian | 1 |
| 06050 | ICP/MS SW-846 Water Digest | SW-846 3010A modified | 1 | 123636050003 | 12/30/2012 09:03 | James L Mertz | 1 |

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# Analysis Report

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

**Sample Description:** MW-9 Grab Water
Facility# 209335 Job# 386750
1225 N 45th St - Seattle, WA

LLI Sample # WW 6907545
LLI Group # 1358866
Account # 11260

**Project Name: 209335**

Collected: 12/27/2012 08:15 by JP

Submitted: 12/28/2012 09:30
Reported: 01/10/2013 12:53

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45SM9

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC Volatiles** | **ECY 97-602 NWTPH-Gx** | | **ug/l** | **ug/l** | |
| 08274 | NWTPH-Gx water C7-C12 | n.a. | N.D. | 50 | 1 |
| **GC Volatiles** | **SW-846 8021B** | | **ug/l** | **ug/l** | |
| 02102 | Benzene | 71-43-2 | N.D. | 0.5 | 1 |
| 02102 | Ethylbenzene | 100-41-4 | N.D. | 0.5 | 1 |
| 02102 | Toluene | 108-88-3 | N.D. | 0.5 | 1 |
| 02102 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | 1 |
| **GC Petroleum Hydrocarbons w/Si** | **ECY 97-602 NWTPH-Dx modified** | | **ug/l** | **ug/l** | |
| 12005 | DRO C12-C24 w/Si Gel | n.a. | N.D. | 31 | 1 |
| 12005 | HRO C24-C40 w/Si Gel | n.a. | N.D. | 73 | 1 |
| The reverse surrogate, capric acid, is present at <1%. | | | | | |
| **Metals** | **SW-846 6020** | | **ug/l** | **ug/l** | |
| 06035 | Lead | 7439-92-1 | 5.3 | 0.047 | 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 |
|---|---|---|---|---|---|---|---|
| 08274 | NWTPH-Gx water C7-C12 | ECY 97-602 NWTPH-Gx | 1 | 12366A94A | 01/02/2013 18:57 | Marie D John | 1 |
| 02102 | Method 8021 Water Master | SW-846 8021B | 1 | 12366A94A | 01/02/2013 18:57 | Marie D John | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 12366A94A | 01/02/2013 18:57 | Marie D John | 1 |
| 12005 | NWTPH-Dx water w/ 10g Si Gel | ECY 97-602 NWTPH-Dx modified | 1 | 130020015A | 01/05/2013 21:52 | Christine E Dolman | 1 |
| 12007 | NW Dx water w/ 10g column | ECY 97-602 NWTPH-Dx 06/97 | 1 | 130020015A | 01/03/2013 07:50 | Catherine R Wiker | 1 |
| 06035 | Lead | SW-846 6020 | 1 | 123636050003A | 01/03/2013 07:21 | Choon Y Tian | 1 |
| 06050 | ICP/MS SW-846 Water Digest | SW-846 3010A modified | 1 | 123636050003 | 12/30/2012 09:03 | James L Mertz | 1 |

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# Analysis Report

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

**Sample Description:** MW-10 Grab Water
Facility# 209335 Job# 386750
1225 N 45th St - Seattle, WA

LLI Sample # WW 6907546
LLI Group # 1358866
Account # 11260

**Project Name:** 209335

Collected: 12/27/2012 08:45 by JP

Submitted: 12/28/2012 09:30
Reported: 01/10/2013 12:53

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45S10

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC Volatiles** | **ECY 97-602 NWTPH-Gx** | | **ug/l** | **ug/l** | |
| 08274 | NWTPH-Gx water C7-C12 | n.a. | N.D. | 50 | 1 |
| **GC Volatiles** | **SW-846 8021B** | | **ug/l** | **ug/l** | |
| 02102 | Benzene | 71-43-2 | N.D. | 0.5 | 1 |
| 02102 | Ethylbenzene | 100-41-4 | N.D. | 0.5 | 1 |
| 02102 | Toluene | 108-88-3 | N.D. | 0.5 | 1 |
| 02102 | Total Xylenes | 1330-20-7 | N.D. | 1.5 | 1 |
| **GC Petroleum Hydrocarbons w/Si** | **ECY 97-602 NWTPH-Dx modified** | | **ug/l** | **ug/l** | |
| 12005 | DRO C12-C24 w/Si Gel | n.a. | N.D. | 29 | 1 |
| 12005 | HRO C24-C40 w/Si Gel | n.a. | N.D. | 67 | 1 |
| | The reverse surrogate, capric acid, is present at <1%. | | | | |
| **Metals** | **SW-846 6020** | | **ug/l** | **ug/l** | |
| 06035 | Lead | 7439-92-1 | 2.2 | 0.047 | 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 |
|---|---|---|---|---|---|---|---|
| 08274 | NWTPH-Gx water C7-C12 | ECY 97-602 NWTPH-Gx | 1 | 12366A94A | 01/02/2013 19:22 | Marie D John | 1 |
| 02102 | Method 8021 Water Master | SW-846 8021B | 1 | 12366A94A | 01/02/2013 19:22 | Marie D John | 1 |
| 01146 | GC VOA Water Prep | SW-846 5030B | 1 | 12366A94A | 01/02/2013 19:22 | Marie D John | 1 |
| 12005 | NWTPH-Dx water w/ 10g Si Gel | ECY 97-602 NWTPH-Dx modified | 1 | 130020015A | 01/05/2013 22:15 | Christine E Dolman | 1 |
| 12007 | NW Dx water w/ 10g column | ECY 97-602 NWTPH-Dx 06/97 | 1 | 130020015A | 01/03/2013 07:50 | Catherine R Wiker | 1 |
| 06035 | Lead | SW-846 6020 | 1 | 123636050003A | 01/03/2013 07:23 | Choon Y Tian | 1 |
| 06050 | ICP/MS SW-846 Water Digest | SW-846 3010A modified | 1 | 123636050003 | 12/30/2012 09:03 | James L Mertz | 1 |

## Quality Control Summary

Client Name: Chevron Group Number: 1358866
Reported: 01/10/13 at 12:53 PM

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

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

### Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 12366A94A | Sample number(s): 6907542-6907546 | | | | | | | |
| Benzene | N.D. | 0.5 | ug/l | 100 | 96 | 80-120 | 4 | 30 |
| Ethylbenzene | N.D. | 0.5 | ug/l | 102 | 98 | 80-120 | 4 | 30 |
| NWTPH-Gx water C7-C12 | N.D. | 50. | ug/l | 92 | 90 | 75-135 | 2 | 30 |
| Toluene | N.D. | 0.5 | ug/l | 101 | 97 | 80-120 | 4 | 30 |
| Total Xylenes | N.D. | 1.5 | ug/l | 102 | 99 | 80-120 | 3 | 30 |
| Batch number: 123640006A | Sample number(s): 6907543 | | | | | | | |
| DRO C12-C24 w/Si Gel | N.D. | 30. | ug/l | 72 | 74 | 50-120 | 3 | 20 |
| HRO C24-C40 w/Si Gel | N.D. | 70. | ug/l | | | | | |
| Batch number: 130020015A | Sample number(s): 6907544-6907546 | | | | | | | |
| DRO C12-C24 w/Si Gel | N.D. | 30. | ug/l | 64 | 67 | 50-120 | 3 | 20 |
| HRO C24-C40 w/Si Gel | N.D. | 70. | ug/l | | | | | |
| Batch number: 123636050003A | Sample number(s): 6907543-6907546 | | | | | | | |
| Lead | N.D. | 0.047 | ug/l | 110 | | 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

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 123636050003A | Sample number(s): 6907543-6907546 UNSPK: P907396 BKG: P907396 | | | | | | | | |
| Lead | 108 | 105 | 83-120 | 2 | 20 | 5.8 | 5.5 | 5 | 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: Method 8021 Water Master
Batch number: 12366A94A

| | Trifluorotoluene-P | Trifluorotoluene-F |
|---|---|---|
| 6907542 | 87 | 75 |

*- 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: 1358866
Reported: 01/10/13 at 12:53 PM

### Surrogate Quality Control

| | | |
|---|---|---|
| 6907543 | 87 | 74 |
| 6907544 | 90 | 92 |
| 6907545 | 88 | 75 |
| 6907546 | 87 | 74 |
| Blank | 87 | 75 |
| LCS | 88 | 86 |
| LCSD | 88 | 88 |
| Limits: | 51-120 | 63-135 |

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 123640006A

| | Orthoterphenyl |
|---|---|
| 6907543 | 91 |
| Blank | 89 |
| LCS | 102 |
| LCSD | 105 |
| Limits: | 50-150 |

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 130020015A

| | Orthoterphenyl |
|---|---|
| 6907544 | 82 |
| 6907545 | 92 |
| 6907546 | 81 |
| Blank | 79 |
| LCS | 87 |
| LCSD | 93 |
| 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

**Lancaster Laboratories**

Acct. #: 11260 — For Lancaster Laboratories use only — Group #: 1358866 Sample #: 6907542-46

Facility #: SS#209335-OML G-R#386750 WBS:
Site Address: 1225 N. 45th Street, SEATTLE, WA
Chevron PM: MHO Lead Consultant: SAICRO Otteman
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: V. PAYNE

SCR #:

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Matrix: Soil | Matrix: Water | Matrix: Oil ☐ Air ☐ | Total Number of Containers | BTEX + ☐ 8260 ☐ Naphth ☐ 8021 | 8260 full scan | Oxygenates ___ | NWTPH GX | NWTPH DX ☐ Silica Gel Cleanup | Lead ☐ Total ☐ Diss. ☐ Method 6020 | ☐ WAVPH ☐ WAEPH | NWTPH H HCID ☐ quantification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.A | 12.27.12 | | X | | | X | | 2 | X | | | X | | | | |
| MW-6 | | 0945 | X | | | X | | 6 | X | | | X | X | X | | |
| MW-8 | | 1015 | X | | | X | | 6 | X | | | X | X | X | | |
| MW-9 | | 0815 | X | | | X | | 6 | X | | | X | X | X | | |
| MW-10 | | 0845 | X | | | X | | 6 | X | | | X | X | X | | |

**Analyses Requested** — **Preservation Codes**

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

**Comments /Remarks**

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

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

STD. TAT — 72 hour — 48 hour — 24 hour — 4 day — 5 day — EDF/EDD

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

QC Summary — Type I – Full — Type VI (Raw Data)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| | 12.27.12 | 1330 | | | |
| 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: Pat Eyl | 12/28/12 | 0930 |
| Temperature Upon Receipt 1.0 C° | | | Custody Seals Intact? Yes No | | |

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# Explanation of Symbols and Abbreviations

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

| | | | |
|---|---|---|---|
| **RL** | Reporting Limit | **BMQL** | Below Minimum Quantitation Level |
| **N.D.** | none detected | **MPN** | Most Probable Number |
| **TNTC** | Too Numerous To Count | **CP Units** | cobalt-chloroplatinate units |
| **IU** | International Units | **NTU** | nephelometric turbidity units |
| **umhos/cm** | micromhos/cm | **ng** | nanogram(s) |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **meq** | milliequivalents | **lb.** | pound(s) |
| **g** | gram(s) | **kg** | kilogram(s) |
| **µg** | microgram(s) | **mg** | milligram(s) |
| **mL** | milliliter(s) | **L** | liter(s) |
| **m3** | cubic meter(s) | **µL** | microliter(s) |
| | | **pg/L** | picogram/liter |

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

**>** greater than

**J** estimated value -- The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

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

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

*U.S. EPA CLP Data Qualifiers:*

**Organic Qualifiers**

| | |
|---|---|
| **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 ≥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.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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