

August 19, 2015



Mr. Craig Rankine  
Washington Department of Ecology  
Toxics Cleanup Program  
Vancouver Field Office  
2108 Grand Boulevard, Vancouver, WA 98661

*Subject:*       **Remedial Investigation Report**  
                  **Former Chevron Bulk Plant No. 207407**  
                  612 SE Union Avenue  
                  Camas, Washington

Dear Mr. Rankine,

Leidos Engineering, LLC (Leidos), on behalf of Chevron Environmental Management Company (CEMC), is submitting for your review the enclosed Remedial Investigation Report for the above-referenced site.

Please contact me at (503) 220-1646 or [alex.d.shook@leidos.com](mailto:alex.d.shook@leidos.com) if you have any questions regarding the contents of the attached report.

Sincerely,

**Leidos Engineering, LLC**

A handwritten signature in black ink that reads "Alex Shook". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Alex Shook  
Project Manager

cc:     Mr. Eric Roehl, Chevron Environmental Management Company  
          145 S State College Blvd, Brea, California 92821  
  
          Project File

**REMEDIAL INVESTIGATION  
REPORT  
FORMER CHEVRON BULK PLANT NO. 207407  
612 Union Street  
Camas, Washington**

**August 19, 2015**

**Prepared for:  
Washington State Department of Ecology  
PO Box 47775  
Olympia, Washington 98504-7774**

**Prepared by:  
Leidos Engineering, LLC  
1001 SW 5<sup>th</sup> Avenue, Suite 1100  
Portland, Oregon 97204**

**On behalf of:  
Chevron Environmental Management Company  
6101 Bollinger Canyon Road  
San Ramon, California 94583**

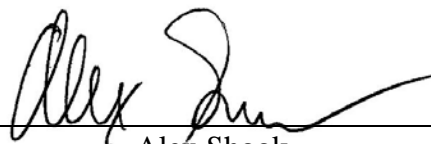
**REMEDIAL INVESTIGATION REPORT  
FORMER CHEVRON BULK PLANT NO. 207407  
612 Union Street  
Camas, Washington**

**August 12, 2015**

Prepared for:  
Washington State Department of Ecology  
PO Box 47775  
Olympia, Washington 98504-7774

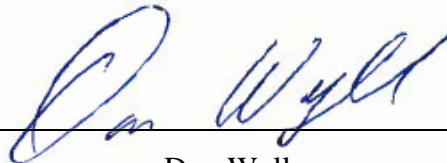
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San Ramon, California 94583



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Alex Shook  
Project Manager



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Senior Project Manager

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**REMEDIAL INVESTIGATION REPORT  
FORMER CHEVRON BULK PLANT NO. 1001875**

**1. INTRODUCTION**

**1.1 OBJECTIVE**

Leidos Engineering, LLC (Leidos), formerly SAIC Energy, Environment & Infrastructure, LLC (SAIC), on behalf of Chevron Environmental Management Company (Chevron), prepared this report to document the activities and findings of a Remedial Investigation (RI) at Former Chevron Facility No. 207407 located at 612 Union Street, Camas, Washington (site).

This report is intended to fulfill the requirements of the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Washington Administrative Code (WAC) 173-340-350[7, 8] and WAC 173-340-360, and is being submitted in accordance with Agreed Order No. 02TCP SR-3991.

The Agreed Order states in section 2b: *“Once all RI work is complete, Chevron shall perform a Risk Assessment and focused Feasibility Study (in the event that site media exceed cleanup standards that are appropriate for the use of the property.)”*. As demonstrated in this report and based on an evaluation of all site data collected during the RI, there are no exceedances of cleanup standards for site media. Therefore, this report is being submitted solely as an RI report.

**2. SITE BACKGROUND**

**2.1 SITE DESCRIPTION**

Former Chevron Bulk Terminal No. 207407 is a decommissioned bulk fuel facility located on a 1.5-acre irregularly shaped lot at the southeast corner of the intersection of SE Sixth Avenue and SE Union Street in Camas, Washington.

The site is bounded to the north by a railroad mainline. The east side of the site was formerly bordered by a railroad spur, and is currently bordered by a post office. The site is bounded to the south by the Tidland Corporation a light industrial company and land use to the west of the site across Union Avenue is residential. The site is located approximately 800 feet southeast of the Washougal River and 1,700 feet north of the Columbia River. The City of Camas (City) municipal well No. 6 is located approximately 250 feet north of the site. The City municipal well No. 5 is located approximately 1,000 feet southeast of the site. A site map is presented on Figure 1.

**2.2 SITE HISTORY**

The former facility operated as a bulk fuel storage plant from the 1920s to 1983. In 1918 Standard Oil (Chevron) acquired a large lot encompassing the current site. From 1918 to 1919 pieces of this large lot were sold until Standard Oil owned only the current property. The site was decommissioned in 1983 and all above ground storage tanks (ASTs) and associated piping were removed. All site buildings and warehouses were removed in 1984 except for the office building located in the southern portion of the site. Chevron sold the property in November 1994 to Triangle Resources who uses the property for wood recycling.

## **2.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS AND REMEDIAL ACTIONS**

Between 1987 and 1994, several rounds of site investigations were conducted. The results of the investigations were reported by Rittenhouse-Zeman & Associates, Inc. (RZA) in 1987, 1988, and 1991 and by Hart Crowser in 1994.

In December 1987 two soil borings (B-1 and B-2) were completed to approximately 20 to 23 feet below ground surface (bgs; RZA, 1987).

In September 1988, four monitoring wells (MW-1 through MW-4) were completed to approximately 20 to 23 feet bgs (RZA, 1988).

Between January and February 1990, three monitoring wells (MW-5 through MW-7) were completed to approximately 45 feet bgs (RZA, 1991).

In February 1990, a heating-oil underground storage tank (UST) located in the southern corner of the site was removed (RZA, 1991).

In September 1994, 19 test pits (TP-1 through TP-19) were completed at the site at depths varying from 1.5 to 14.5 feet bgs. One sump containing an oil/water mixture was discovered at that time (Hart Crowser, 1994a).

In November 1994, a remedial excavation was completed at the site to depths ranging from approximately 2 to 16 feet bgs. Approximately 830 cubic yards of petroleum impacted soil were excavated. The previously discovered sump was also excavated. Monitoring wells MW-1 through MW-4 were abandoned (Hart Crowser, 1994b).

A timeline of site investigation activities completed under the Agreed Order is detailed below.

Between July and August, 2004, three soil borings (SB-1 through SB-3) to depths of approximately 25 feet bgs and seven groundwater monitoring wells (MW-8 through MW-14) to depths between approximately 49.7 and 53 feet bgs were completed at the site. Monitoring well MW-7 was abandoned at this time. During this site investigation, TPH-G was detected in soil borings SB-1 at depths between 6 and 14 feet bgs and SB-2 at depths between 19 and 24 feet bgs. TPH-D was also detected in soil boring SB-2 at a depth of 19 feet bgs (SAIC, 2012).

In July 2008, two groundwater monitoring wells (MW-15 and MW-16) were completed to approximately 49.2 feet bgs. During this site investigation, no contaminants of concern were detected at concentrations above MTCA Method A CULs in any of the soil samples (SAIC, 2012).

Between August and September 2014, three soil borings (SB-4, SB-5, and SB-6) were completed to approximately 22 and 36 feet bgs. The objective of this investigation was to determine the magnitude of petroleum-impacted soil remaining in the vadose zone from areas previously identified as having the highest contaminant concentrations on site and to assess the extent of natural attenuation in these areas over time. In addition, MTCA Method B site-specific total petroleum hydrocarbon (TPH) CULs were recalculated using analytical results from soil samples collected during this investigation. No contaminants of concern were detected at concentrations above the newly recalculated site-specific MTCA Method B CULs in any of the soil samples (Leidos, 2014).

Groundwater monitoring was performed at the site from February 1990 through November 1995 and was resumed in 2004. The most recent groundwater monitoring event was conducted in June 2015.

Historical soil and groundwater analytical data are included in Tables 1 through 3.

### 3. SUBSURFACE CONDITIONS

#### 3.1 GEOLOGY

Soil borings indicate that lithology is consistent across the site. The site subsurface soil typically consists of gravelly silt between ground surface and 3 to 5 feet bgs. Underlying this layer is very dense gravelly silt and sandy gravel with cobbles and boulders (up to 4 feet in diameter) to a depth of approximately 20 feet bgs. The cobble and boulder content decreases as the sand content increases from approximately 20 to 50 feet bgs. Well logs for City municipal water wells show that the gravel layer continues to about 80 to 85 feet bgs where a harder rock layer is encountered. This layer is likely weathered basalt.

#### 3.2 HYDROGEOLOGY

Groundwater occurs in a shallow aquifer which is used in the area as a source of irrigation and drinking water. The groundwater depths range between approximately 26 and 45 feet bgs with historical groundwater flow direction to the northeast, northwest, and south-southwest. Results from a rose diagram created using historical groundwater flow direction data and municipal well No. 6 operation records; indicate that operations of the municipal well No. 6 have influenced groundwater flow direction at the site. During the municipal well No. 6 operations the groundwater flow at the site trends in a north-northeast direction. In contrast, when the well is not operating, the groundwater flow trends in a westerly direction.

An analysis of groundwater flow was conducted by Ecology and documented in a June 24, 2013 letter *Agency Comments on July 26, 2012 Draft Final Remedial Investigation/Feasibility Study Report* (Ecology, 2013). Ecology's analysis states: "*The five-year (2007-2011) prevailing groundwater flow direction-including times when No. 6 well was operating-is towards the west (azimuth bearing of 275°)*". The evaluation concluded that "*Clearly, the probability of groundwater beneath the source area transporting contaminants to the Camas City Well No. 6 is minimal.*"

### 4. CONCEPTUAL SITE MODEL

In order to more fully understand the relationship between contaminants, affected environmental media, indoor media, and human receptors, a conceptual site model was developed. MTCA defines a conceptual site model as "a conceptual understanding of a site that identifies potential or suspected sources of hazardous substances, types and concentrations of hazardous substances, potentially impacted media, and actual and potential exposure pathways and receptors." These components will be discussed in the sections below, as an introduction to presenting the conceptual site model.

#### 4.1 CONTAMINANTS OF CONCERN

MTCA defines a contaminant as "any hazardous substance that does not occur naturally or occurs at greater than natural background levels." Contaminants of concern (COCs) include



those hazardous substances that are known to be present at a site, or which are suspected to be present based on information regarding the nature of a known release or past operations at a site.

Sampling data from past environmental investigations and cleanup actions have confirmed the presence of the following COCs for each of the impacted media at the site:

COCs	Groundwater	Soil
Total petroleum hydrocarbons (TPH) Gasoline Range	•	•
TPH Diesel Range	•	•
TPH Heavy-Oil Range	•	•

## 4.2 POTENTIAL EXPOSURE PATHWAYS AND RECEPTORS

MTCA (WAC 173-340-200) defines an exposure pathway as “the path a hazardous substance takes or could take from a source to an exposed organism. An exposure pathway describes the mechanism by which an individual or population is exposed, or has the potential to be exposed, to hazardous substances at or originating from a site.” Primary exposure pathways are those routes that are known to be currently transporting petroleum contaminants to or within a certain medium (such as soil impacts to groundwater). Secondary exposure pathways are those routes that (a) have transported contaminants in the past, but may not be currently (such as releases from ASTs); or (b) may transport contaminants in the future, but do not currently. Precluded exposure pathways are those that are not possible at any time based on physical evidence, and are therefore considered closed pathways.

Petroleum constituents have been detected in soil and groundwater samples collected at the site. Therefore, soil and groundwater are impacted media but may also be considered secondary contaminant sources. The potential exposure pathways associated with each medium/source are discussed below, along with the rationale for excluding or including that pathway.

### 4.2.1 Soil

Petroleum-impacted soil has the potential to serve as a source of hazardous substance exposure through the following exposure pathways:

Potential Exposure Pathways – Contaminated Soil	
Potential Soil Exposure Pathway/Scenario	Applicability
Direct contact: ingestion of, or dermal contact with, contaminated soil	<b>Precluded</b> – The site is covered by pavement and soil data indicates that contaminate concentrations do not pose a risk to human health or the environment.

Potential Exposure Pathways – Contaminated Soil	
Potential Soil Exposure Pathway/Scenario	Applicability
Leaching to Groundwater: contamination of groundwater by hazardous substances leaching from soil	<b>Precluded</b> – Empirical data from current groundwater conditions (which are below Method A cleanup levels) and recent soil analytical data (which are below the site-specific MTCA Method B CUL for protection of groundwater) demonstrate that soil conditions are protective of groundwater.
Vapor Intrusion: inhalation of hazardous substances that have volatilized from contaminated soil and migrated to indoor air	<b>Precluded</b> – The site is paved and soil data indicates that contaminate concentrations do not pose a risk to human health or the environment.
Ecological: direct contact with soil for ecological receptors	<b>Precluded</b> – Results of a terrestrial ecological evaluation shows there is no risk of direct contact for ecological receptors.

#### 4.2.2 Groundwater

Petroleum-impacted groundwater has the potential to serve as a source of hazardous substance exposure through the following exposure pathways:

Potential Exposure Pathways – Contaminated Groundwater	
Potential Groundwater Exposure Pathway/Scenario	Applicability
Drinking Water: ingestion of contaminated groundwater	<b>Precluded</b> – Concentrations of constituents of concern in groundwater have consistently been below MTCA Method A CULs (8 or more quarters). The proximity of the municipal water wells to the site combined with a very low groundwater gradient limits the possibility of site groundwater reaching the water supply. Ecology’s assessment of site groundwater flow direction (Ecology, 2013) indicated that the probability of groundwater transporting contaminants of concern to the City well is minimal.
Direct Contact: dermal contact with contaminated groundwater	<b>Precluded</b> – Groundwater is encountered at depths below 26 feet bgs and therefore could not be encountered during routine site development or utility construction activities. In addition, groundwater concentrations of COCs are all below MTCA Method A CULs.
Surface Water: contamination of surface water by hazardous substance migration through groundwater	<b>Precluded</b> – The distance from the site eliminates the possibility of contaminated groundwater reaching to surface water bodies and sediments. Therefore, surface water is not considered to be a receptor of concern.
Vapor Intrusion: inhalation of hazardous substances that have volatilized from contaminated groundwater and LNAPL and migrated to indoor air	<b>Precluded</b> – The depth to groundwater, low contaminant levels, and paved site surface eliminates the possibility of contaminated groundwater vapors reaching indoor air.

### 4.3 TERRESTRIAL ECOLOGICAL EVALUATION

In addition to evaluation of human health risk, MTCA (WAC 173-340-7490) requires that one of the following actions be taken after the release of hazardous substances to the soil at a site to determine the potential impacts to terrestrial organisms at the site:

- Documentation of an exclusion from any further terrestrial ecological evaluation (TEE) using the criteria outlined in WAC 173-340-7491.
- Completion of a simplified TEE as specified in WAC 173-340-7492.
- Completion of a site-specific TEE as specified in WAC 173-340-7493.

A site may be excluded from the requirement for a TEE if any of the following criteria are met at the site:

- All soil contaminated with hazardous substance is, or will be located below the point of compliance established under WAC 173-340-7490(4).
- All soil contaminated with hazardous substance is, or will be, covered by buildings, paved roads, pavement, or other physical barriers that will prevent plants or wildlife from being exposed to the soil contamination.
- There is less than 0.25 acre of contiguous undeveloped land on or within 500 feet of any area of the site contaminated with chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene.
- There is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of any area of the site and the contamination at the site does not include any of the contaminants listed in the preceding bullet.

The site is not excluded from the simplified TEE requirement (WAC 173-340-7490) based on the following:

- There are greater than 4 acres of contiguous undeveloped land within 500 feet of the site.

The simplified terrestrial ecological evaluation was ended based on WAC 173-340-7492 2(a) (i). The total area of contamination above the point of compliance is less than 350 square feet. TEE Documentation Form and Table 749-1 are included as Appendix A.

### 4.4 CLEANUP LEVELS

Under MTCA (WAC 173-340-200), a cleanup level is defined as “the concentration of a hazardous substance in soil, water, air, or sediment that is determined to be protective of human health and the environment under specified exposure conditions.” Cleanup levels, in combination with points of compliance, typically define the area or volume of soil, water, air, or sediment at a site that must be cleaned up.

#### 4.4.1 Soil Cleanup Levels and Points of Compliance

MTCA provides three approaches for establishing soil cleanup levels: Method A, Method B, and Method C. MTCA states that cleanup levels shall be based on the reasonable maximum exposure expected to occur during both current and future land use. By default, MTCA further

states that residential land use represents the reasonable maximum exposure. Therefore, cleanup levels must be protective of residential or unrestricted land use.

Method A may be used on sites involving relatively few hazardous substances or where cleanup action may be routine. Under Method A, cleanup levels are determined by the most stringent criteria specified under state and federal laws and Tables 720-1, 740-1, and 745-1 of MTCA.

Method B is the universal method for determining cleanup levels at all sites. For sites contaminated with TPH, Method B cleanup levels are determined by using the fractionated analytical approach for petroleum. This approach involves testing of the samples to determine the LNAPL composition. Cleanup levels must consider the measured or predicted ability of the fractions to migrate from one medium to other media. When multiple exposure pathways are identified for a single media, the most stringent cleanup level is selected.

Method C is used in situations such as industrial sites. Site cleanups under Method C will require restrictions placed on the property to ensure future protection of human health and the environment.

For this site MTCA Method B has been selected for determining cleanup levels.

The site-specific MTCA Method B cleanup level for TPH in soil was calculated for the site using data collected during the 2014 investigation. Method B cleanup levels were calculated individually from soil data collected from borings SB-4-15, SB-5-16, and SB-6-19. Calculated results for the direct contact pathway from each sample location are listed below.

- SB-4-15: 2,453 milligrams per kilogram (mg/kg).
- SB-5-16: 2,603 mg/kg.
- SB-6-19: 2,840 mg/kg.

As recommended in the Ecology *Guidance for Remediation of Petroleum Contaminated Sites* September 2001, the median value of these results, 2,603 mg/kg, will be used as the site-specific MTCA Method B cleanup level for direct contact with TPH in soil (Ecology, 2001).

The site-specific Method B cleanup levels for TPH for protection of groundwater quality (leaching) pathway was also calculated from the same sample data and are listed below.

- SB-4-15: 72,000 mg/kg (100% NAPL)
- SB-5-16: 72,000 mg/kg (100% NAPL)
- SB-6-19: 2,006 mg/kg

While the median value for this pathway is 72,000, or 100% NAPL, the calculated value of 2,006 mg/kg from sample SB-6-19 will be utilized as a conservative site-specific cleanup level for protection of groundwater.

The MTCA Method B calculation sheets and associated analytical data are presented in Appendix B.

The soil cleanup levels combined with the point of compliance determines the cleanup standard for the site. Under MTCA, the point of compliance is pathway dependent. Potential pathways for exposure to contaminants in the soil are discussed below.

The point of compliance for protection of human exposure via direct contact/incidental ingestion is in the soils throughout the site to a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface during site development activities (i.e., ground surface to 15 feet bgs).

The standard point of compliance for protection of ecological receptors is in the soils throughout the site from ground surface to 15 feet bgs (the reasonable depth of soil that could be excavated during site development and could result in exposure to ecological organisms).

The point of compliance for protection of groundwater is throughout the site.

#### **4.4.2 Groundwater Cleanup Levels and Points of Compliance**

MTCA requires that groundwater cleanup levels be based on the highest beneficial use and reasonable maximum exposure under both current and future land use at a site. For groundwater, MTCA specifies that drinking water is the highest beneficial use and that ingestion of drinking water represents the reasonable maximum exposure. Therefore Method A cleanup levels for groundwater are applicable to this site.

MTCA states that groundwater CULs shall be attained in all groundwater from the point of compliance to the outer boundary of the hazardous substance plume. The standard point of compliance as defined by MTCA is throughout a site from the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be affected by a site.

### **5. NATURE AND EXTENT OF IMPACTS**

#### **5.1 NATURE AND EXTENT OF SOIL IMPACTS**

Soil impacts exceeding MTCA Method A Cleanup Levels (CULs) were previously identified in the central portion of the site and appeared to be located in the area of the former product lines and ASTs at depths ranging from approximately 10.5 feet bgs to 20 feet bgs.

During the 1994 remedial excavation most areas of impacted soil were removed with the exception of six locations (B-2, TP-13, ES-3, ES-4, ES-5, and ES-7) where petroleum-impacted soil was left in place (Hart Crowser, 1994).

During the 2004 site investigation, TPH-G was detected in soil borings SB-1 at depths between 6 and 14 feet bgs and SB-2 at depths between 19 and 24 feet bgs. TPH-D was also detected in soil boring SB-2 at 19 feet bgs. Both borings were located in close proximity to the former ASTs and associated product lines. Boring SB-1 was located within the area excavated in 1994. Boring SB-2 was located within the 1994 excavation, but below the excavation depth (SAIC, 2012).

The soil data discussed above were collected at the site approximately 10 and 20 years ago, therefore, are not representative of the current site conditions. Additional soil investigations completed at the site in 2008 and 2014 characterize existing soil conditions and supersede historical data (SAIC, 2012; Leidos, 2014).

During the 2008 site investigation, no COCs were detected at concentrations above the MTCA Method A CULs in any of the soil samples (SAIC, 2012).

During the 2014 additional site investigation, TPH-G was detected in soil borings SB-4, SB-5, and SB-6 at depths of 15 feet bgs, 16 feet bgs, and 19 feet bgs, respectively, at concentrations

exceeding the MTCA Method A CUL. However, no COCs were detected at concentration above the site-specific MTCA Method B CULs in any of the soil samples. Soil analytical results from the 2014 investigation are presented on Figure 2 (Leidos, 2014).

## 5.2 NATURE AND EXTENT OF GROUNDWATER IMPACTS

Concentrations of contaminants in all monitoring wells have been below the MTCA Method A CULs for eight quarters or more. Groundwater analytical results are summarized in Table 3. Groundwater analytical results for most recent monitoring events are presented on Figure 3. Hydrographs depicting concentrations trends over time for monitoring wells are provided as Appendix C.

## 6. CONCLUSIONS

As discussed above, soil and groundwater beneath the site were historically impacted by the bulk plant operations. This remedial investigation delineated the nature and extent of soil and groundwater impacts and evaluated the potential of risk to current and likely future receptors. As discussed in section 4.4, MTCA Method B cleanup levels are proposed as final cleanup standards for site soil and MTCA Method A cleanup levels are proposed as cleanup criteria for groundwater.

Site soil and groundwater conditions have been evaluated compared against the proposed cleanup levels and points of compliance established in this RI. This comparison clearly shows that this site meets MTCA requirements since all exposure pathways have been eliminated and soil and groundwater concentrations do not exceed established cleanup levels.

Because there are no exceedances of applicable cleanup standards and additional cleanup of the site is not necessary there is no reason to complete a Feasibility Study. In addition, based on the results and conclusions of this remedial investigation, a No Further Action determination is requested.

Following acceptance of this RI by Ecology, a draft Cleanup Action Plan (CAP) will be prepared per MTCA requirements. This Draft CAP will recommend no further action at the site.

## 7. REFERENCES

- Ecology, 2013. *Agency Comments on July 26, 2012 Draft Final Remedial Investigation/Feasibility Study Report*. June 24.
- \_\_\_\_\_, 2001. *Guidance for Remediation of Petroleum Contaminated Sites*. September.
- Hart Crowser, 1994a. *Subsurface Soil Characterization Report, Former Chevron Bulk Terminal, No. 100-1840, SE 6<sup>th</sup> and Union Avenues, Camas, Washington*. December 14.
- \_\_\_\_\_, 1994b. *Soil Remediation Report, Former Chevron Bulk Terminal, No. 100-1840, SE 6<sup>th</sup> and Union Avenues, Camas, Washington*. December 28.
- Leidos, 2014. *Additional Soil Investigation Report, Former Chevron Bulk Terminal No. 207407, 612 SE Union Street, Camas, Washington*. December 3.
- RZA, 1987. *Subsurface Petroleum Hydrocarbon Contamination Evaluation, Chevron Bulk Plant, Camas, Washington*. November.

\_\_\_\_\_, 1988. *Subsurface Petroleum Hydrocarbon Evaluation, Former Chevron Bulk Fuels Terminal, Camas, Washington*. November.

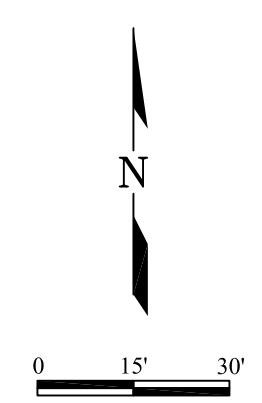
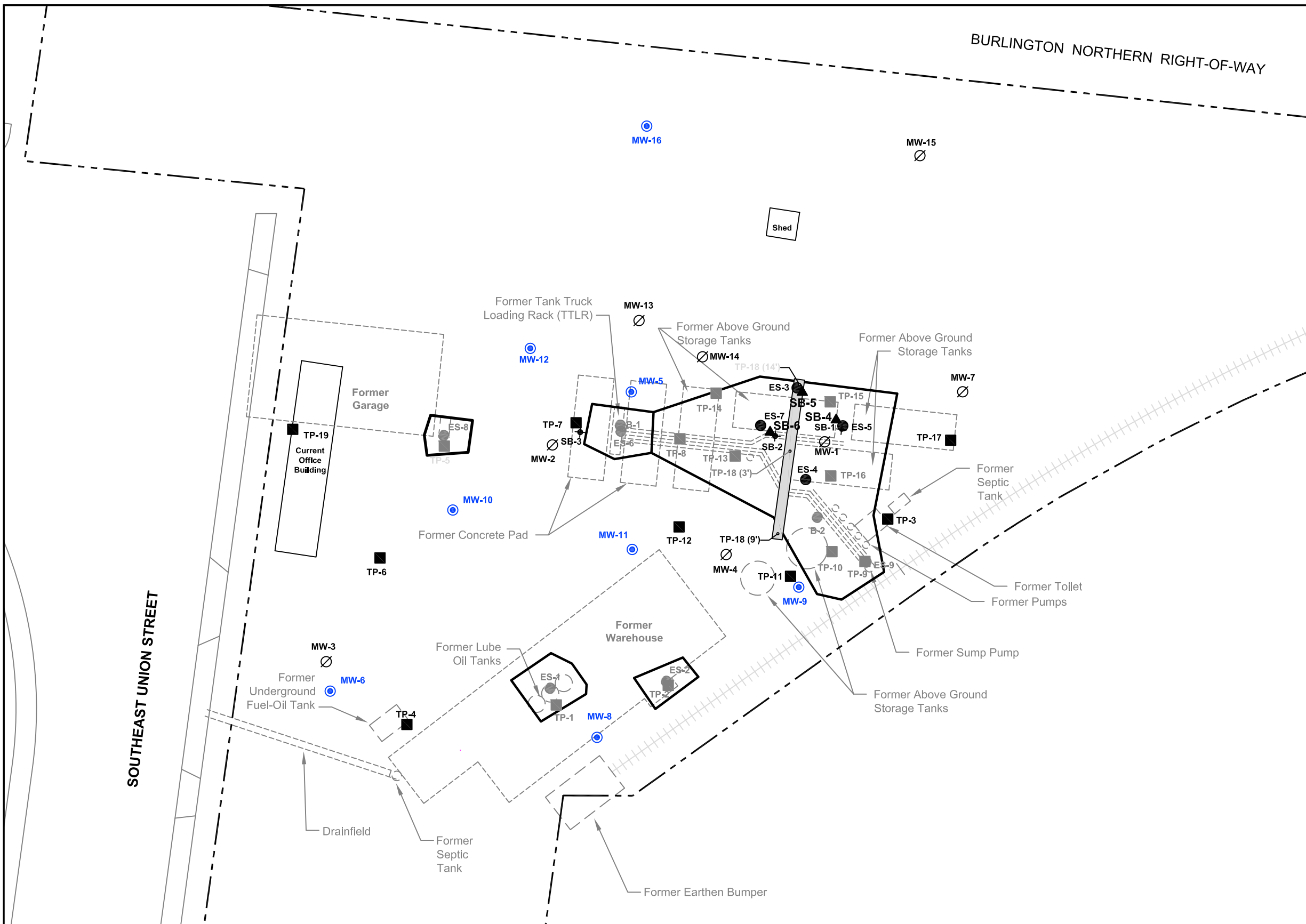
\_\_\_\_\_, 1991. *Additional Subsurface Petroleum Hydrocarbon Evaluation, Former Chevron Bulk Fuel Terminal, Camas, Washington*. January.

SAIC, 2012. *Draft Final Remedial Investigation/Feasibility Study Report, Chevron Site 207407, Former Chevron Bulk Plant, 612 Union Street, Camas, Washington*. July 25.

## **Figures**

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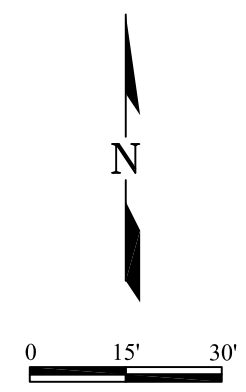
- LEGEND**
- MW-5** Existing Monitoring Well Location
  - MW-1** Abandoned or Destroyed Monitoring Well
  - SB-1** Remedial Investigation Soil Boring Location
  - TP-1** Test Pit Location (Gray Indicates Location Removed During the 1994 Excavation)
  - B-1/ES-1** Historic Soil Boring / Excavation Sampling Location (Gray Indicates Location Removed During the 1994 Excavation)
  - SB-4** Soil Boring Location
  - Approximate Remedial Excavation Extents
  - Property Boundary
  - Former Railroad Line
  - Former Buildings, Equipment and Piping



Site Map  
 Former Chevron Bulk Terminal No. 207407  
 612 SE Union Street  
 Camas, Washington  
 Date: 11/24/2014 Revised By: JA

FIGURE  
**1**

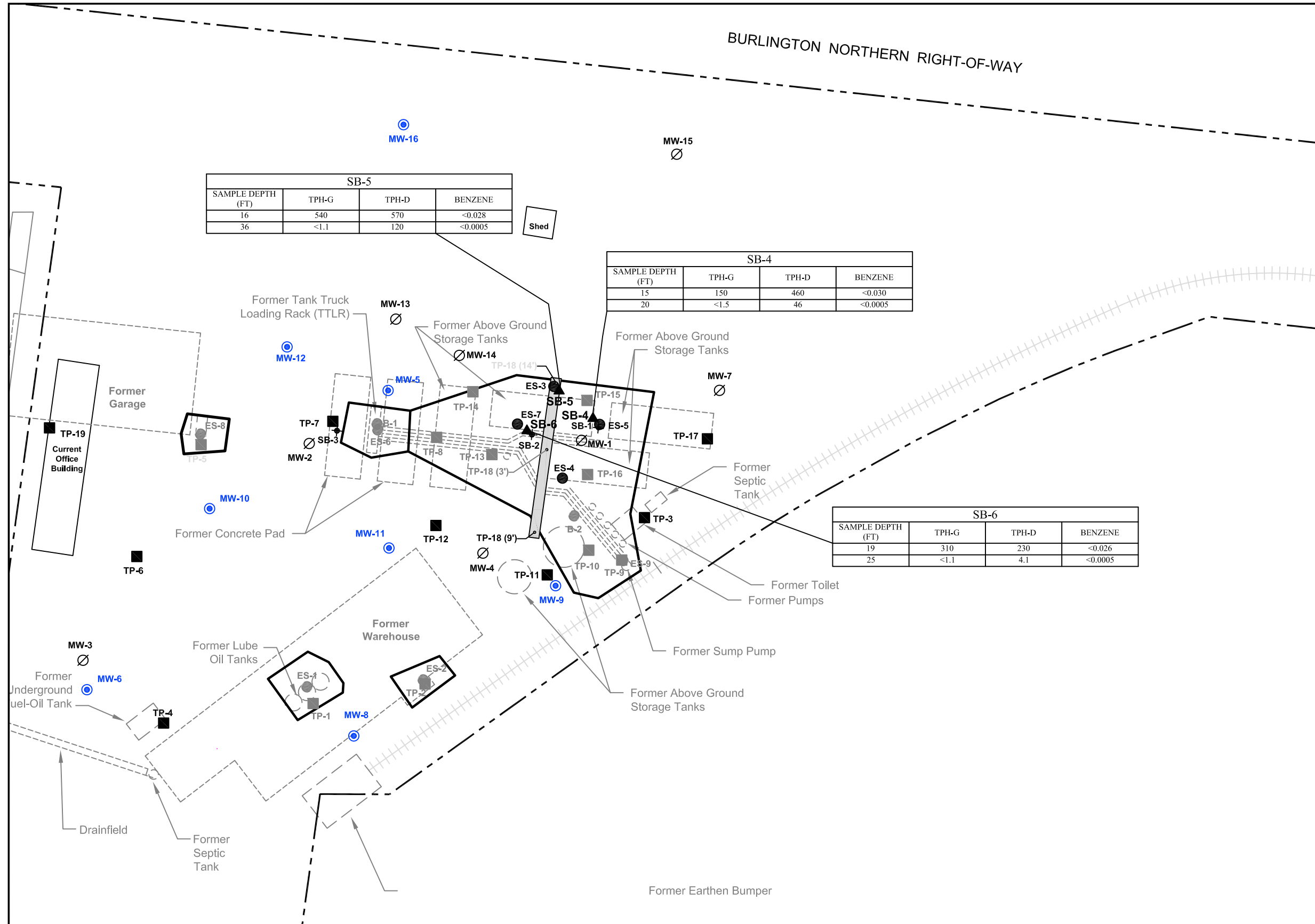
BURLINGTON NORTHERN RIGHT-OF-WAY



SB-5			
SAMPLE DEPTH (FT)	TPH-G	TPH-D	BENZENE
16	540	570	<0.028
36	<1.1	120	<0.0005

SB-4			
SAMPLE DEPTH (FT)	TPH-G	TPH-D	BENZENE
15	150	460	<0.030
20	<1.5	46	<0.0005

SB-6			
SAMPLE DEPTH (FT)	TPH-G	TPH-D	BENZENE
19	310	230	<0.026
25	<1.1	4.1	<0.0005



**LEGEND**

- MW-5 Existing Monitoring Well Location
- MW-1 Abandoned or Destroyed Monitoring Well
- ◆ SB-1 Remedial Investigation Soil Boring Location
- TP-1 Test Pit Location (Gray Indicates Location Removed During the 1994 Excavation)
- B-1/ES-1 Historic Soil Boring / Excavation Sampling Location (Gray Indicates Location Removed During the 1994 Excavation)
- ▲ SB-4 Soil Boring Location
- Approximate Remedial Excavation Extents
- - - Property Boundary
- + + + + + Former Railroad Line
- - - - - Former Buildings, Equipment and Piping

**ANALYTES**

- TPH-G Gasoline-Range Hydrocarbon concentration in milligrams per kilogram (mg/kg)
- TPH-D Diesel-Range Hydrocarbon concentration in milligrams per kilogram (mg/kg) (analyzed by method NWTPH-Dx without silica-gel cleanup)
- BENZENE Benzene-Range Hydrocarbon concentration in milligrams per kilogram (mg/kg)



Former Chevron Bulk Terminal No. 207407  
612 SE Union Street  
Camas, Washington

**FIGURE 2**  
**Soil Analytical Results**  
**September 21, 2014**

BURLINGTON NORTHERN RIGHT-OF-WAY

MW-16	10/2/14	12/1/14	3/2/15	6/2/15
TPH-G	--	<50	--	<50
TPH-D	--	<29	--	<29
B	--	<0.5	--	<0.5

MW-12	10/2/14	12/1/14	3/2/15	6/2/15
TPH-G	--	<50	<50	<50
TPH-D	--	<29	<29	<29
B	--	<0.5	<0.5	<0.5

MW-5	10/2/14	12/1/14	3/2/15	6/2/15
TPH-G	<50	<50	130	380
TPH-D	<29	<29	37	120
B	<0.5	<0.5	<0.5	<0.5

MW-10	10/2/14	12/1/14	3/2/15	6/2/15
TPH-G	--	<50	--	<50
TPH-D	--	<29	--	<29
B	--	<0.5	--	<0.5

MW-9	10/2/14	12/1/14	3/2/15	6/1/15
TPH-G	--	<50	--	<50
TPH-D	--	<28	--	<29
B	--	<0.5	--	<0.5

MW-6	10/2/14	12/1/14	3/2/15	6/2/15
TPH-G	<50	<50	<50	<50
TPH-D	<29	<30	<29	<29
B	<0.5	<0.5	<0.5	<0.5

MW-11	10/2/14	12/1/14	3/2/15	6/1/15
TPH-G	--	<50	--	<50
TPH-D	--	<29	--	<29
B	--	<0.5	--	<0.5

MW-8	10/2/14	12/1/14	3/2/15	6/1/15
TPH-G	--	<50	--	<50
TPH-D	--	<29	--	<29
B	--	<0.5	--	<0.5

LEGEND

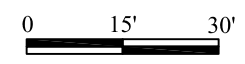
- MW-5 Existing Monitoring Well Location
- ⊘ MW-1 Abandoned or Destroyed Monitoring Well
- Approximate Remedial Excavation Extents
- - - Property Boundary
- + + + Former Railroad Line
- - - Former Buildings, Equipment and Piping

ANALYTES

WELL ID	DATE
TPH-G	GASOLINE-RANGE HYDROCARBONS
TPH-D	DIESEL-RANGE HYDROCARBONS
B	BENZENE

Units in Micrograms per Liter (µg/L)

- <1.0 Less than Indicated Laboratory Reporting Limits
- Not Analyzed



Former Chevron Bulk Terminal No. 207407  
612 SE Union Street  
Camas, Washington

FIGURE 3  
Groundwater Analytical Results

## **Tables**

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**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street, Camas, Washington**  
**Concentrations reported in mg/kg**

Sample ID	Sample Depth (feet)	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-GRO	TPH-DRO	TPH-HRO	Total TPH
B-1 (0-5)*	0-5	10/12/87	0.007	3.045	--	21.365	--	--	--	7,870
B-1 (5-10)*	5-10	10/12/87	0.010	0.743	--	12.995	--	--	--	6,870
B-1 (10-15)*	10-15	10/12/87	U	0.009	--	0.133	--	--	--	2,240
B-1 (15-20)*	15-20	10/12/87	U	0.005	--	0.164	--	--	--	429
B-2 (0-5)	0-5	10/13/87	U	U	--	U	--	--	--	549
B-2 (5-10)	5-10	10/13/87	U	0.007	--	3.92	--	--	--	1,420
B-2 (10-15)	10-15	10/13/87	U	0.080	--	7.135	--	--	--	881
B-2 (15-20)	15-20	10/13/87	0.151	4.960	--	21.945	--	--	--	1,200
MW-1 (8.5-9.5)*	8.5-9.5	09/01/88	U	U	U	U	--	--	--	552
MW-1 (22-23)	22-23	09/01/88	U	U	U	U	--	--	--	552
MW-2 (3.5-4.0)	3.5-4.0	09/02/88	U	U	U	U	--	--	--	<5.0
MW-2 (22.5-23.5)	22.5-23.5	09/02/88	U	U	U	U	--	--	--	<5.0
MW-3 (8.5-9.5)	8.5-9.5	09/06/88	U	U	U	U	--	--	--	111
MW-3 (22.5-24.0)	22.5-24	09/06/88	U	U	U	U	--	--	--	<5.0
MW-4 (3.5-4.0)	3.5-4.0	09/07/88	U	U	U	U	--	--	--	24
MW-4 (16-17)	16-17	09/07/88	U	U	U	U	--	--	--	8.6
MW-4A (16-17) (D)	16-17	09/07/88	U	U	U	U	--	--	--	11.0
MW-5 (20)	20	02/08/90	<0.05	<0.05	<0.05	<0.05	--	--	--	7.0
MW-5 (25.5)	25.5	02/08/90	<0.05	<0.05	<0.05	<0.05	--	--	--	<5.0
MW-5 (39.5)	39.5	02/08/90	<0.05	<0.05	<0.05	<0.05	--	--	--	10
MW-6 (21)	21	02/09/90	<0.05	<0.05	<0.05	<0.05	--	--	--	13
MW-6 (25.5)	25.5	02/09/90	<0.05	<0.05	<0.05	<0.05	--	--	--	<5.0
MW-6 (35)	35	02/09/90	<0.05	<0.05	<0.05	<0.05	--	--	--	10
MW-7 (20.5)	20.5	02/23/90	<0.05	<0.05	<0.05	<0.05	--	--	--	11
MW-7 (25)	25	02/23/90	<0.05	<0.05	<0.05	<0.05	--	--	--	<5.0
MW-7 (34.5)	34.5	02/23/90	<0.05	<0.05	<0.05	<0.05	--	--	--	5.4
TP-1 (1.5-2.0)*	1.5-2.0	09/08/94	--	--	--	--	--	380	820	1,200
TP-1 (5.5-6.0)*	5.5-6.0	09/08/94	--	--	--	--	--	92	168	260
TP-2 (1.5-2.0)*	1.5-2.0	09/08/94	--	--	--	--	--	130	310	440
TP-3 (1.5-2.0)	1.5-2.0	09/08/94	--	--	--	--	--	45	115	160
TP-3 (8.0-8.5)	8.0-8.5	09/08/94	--	--	--	--	--	--	--	--
TP-4 (1.5-2.0)	1.5-2.0	09/08/94	--	--	--	--	--	--	--	--
TP-4 (5.0-5.5)	5.0-5.5	09/08/94	--	--	--	--	--	--	--	--

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street, Camas, Washington**  
**Concentrations reported in mg/kg**

Sample ID	Sample Depth (feet)	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-GRO	TPH-DRO	TPH-HRO	Total TPH
TP-5 (1.5-2.0)*	1.5-2.0	09/08/94	<0.031	<0.031	0.30	1.3	590	13,000	14,000	27,590
TP-5 (9.0-9.5)*	9.0-9.5	09/08/94	<0.030	<0.030	0.37	1.3	720	4,900	11,100	16,720
TP-6 (1.5-2.0)	1.5-2.0	09/08/94	--	--	--	--	--	--	--	--
TP-7 (1.5-2.0)	1.5-2.0	09/08/94	<0.027	<0.027	<0.027	<0.027	<5.5	220	1,080	1,300
TP-7 (5.5-6.0)	5.5-6.0	09/08/94	--	--	--	--	--	120	370	490
TP-8 (1.5-2.0)*	1.5-2.0	09/08/94	--	--	--	--	--	70	400	470
TP-8 (5.5-6.0)*	5.5-6.0	09/08/94	--	--	--	--	--	27	103	130
TP-9 (1.5-2.0)*	1.5-2.0	09/09/94	<0.027	<0.027	<0.027	<0.027	25	2,500	1,200	3,725
TP-10 (1.5-2.0)*	1.5-2.0	09/09/94	--	--	--	--	--	400	180	580
TP-10 (6.5-7.0)*	6.5-7.0	09/09/94	--	--	--	--	--	<22	79	79
TP-11 (2.5-3.0)*	2.5-3.0	09/09/94	--	--	--	--	--	--	--	--
TP-11 (6.0-6.5)*	6.0-6.5	09/09/94	--	--	--	--	--	24	54	78
TP-12 (2.0-2.5)	2.0-2.5	09/09/94	--	--	--	--	--	--	--	--
TP-13 (1.5-2.0)	1.5-2.0	09/09/94	<0.029	<0.029	5.7	24.0	87	530	60	677
TP-13 (10.0-10.5)	10.0-10.5	09/09/94	<0.030	<0.030	0.095	0.46	300	--	--	300
TP-14 (2.0-2.5)	2.0-2.5	09/09/94	--	--	--	--	--	67	233	300
TP-14 (7.5-8.0)	7.5-8.0	09/09/94	--	--	--	--	--	27	113	140
TP-15 (1.5-2.0)*	1.5-2.0	09/09/94	<0.027	<0.027	<0.027	0.37	300	1,500	500	2,300
TP-15 (7.0-7.5)*	7.0-7.5	09/09/94	<0.028	<0.028	<0.028	1.5	350	2,000	300	2,650
TP-16 (2.0-2.5)*	2.0-2.5	09/09/94	--	--	--	--	--	130	80	210
TP-16 (7.0-7.5)*	7.0-7.5	09/09/94	--	--	--	--	--	260	80	340
TP-17 (1.5-2.0)	1.5-2.0	09/09/94	--	--	--	--	--	--	--	--
TP-17 (5.5-6.0)	5.5-6.0	09/09/94	--	--	--	--	--	110	180	290
TP-18 (3.0-3.5)*	3.0-3.5	09/09/94	<0.030	<0.030	0.75	2.3	1,200	7,500	600	9,300
TP-18 (9.0-9.5)	9.0-9.5	09/09/94	<0.029	<0.029	<0.029	0.075	57	420	80	557
TP-18 (14.0-14.5)*	14.0-14.5	09/09/94	<0.030	<0.030	0.80	1.9	1,100	7,100	900	9,100
TP-19 (2.0-2.5)	2.0-2.5	09/09/94	--	--	--	--	--	--	--	--
ES-1 (6)*	6	11/07/94	<0.031	<0.031	<0.031	<0.031	<6.2	<25	<120	0
ES-2 (4)*	4	11/07/94	<0.030	<0.030	<0.030	<0.030	<6.0	<24	<120	0
ES-3 (16)**	16	11/07/94	<0.034	<0.034	0.51	1.6	400	3,600	<140	4,000
ES-4 (15)**	15	11/07/94	<0.029	<0.029	1.8	8.3	510	2,600	<120	3,110
ES-5 (15)**	15	11/08/94	<0.035	<0.035	5.9	47	1,800	2,000	<140	3,800
ES-6 (11)*	11	11/08/94	<0.030	<0.030	<0.030	<0.035	10	1,000	200	1,210

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street, Camas, Washington**  
**Concentrations reported in mg/kg**

Sample ID	Sample Depth (feet)	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-GRO	TPH-DRO	TPH-HRO	Total TPH
ES-7 (15)**	15	11/08/94	<0.030	<0.030	1.9	7.9	1,700	2,900	<120	4,600
ES-8 (11)*	11	11/08/94	<0.029	<0.029	<0.029	<0.029	<5.9	28	<120	28
ES-9 (5.5)*	5.5	11/08/94	<0.029	<0.029	<0.029	<0.029	<5.7	74	<110	74
SB-1-6**	6	07/16/04	<0.05	<0.05	<0.2	<1.5	1,600	960	<100	2,560
SB-1-14**	14	07/16/04	<0.005	<0.005	<0.02	<0.2	400	880	<100	1,280
SB-1-19**	19	07/16/04	<0.005	<0.005	<0.02	<0.2	69	110	12	191
SB-1-24**	24	07/16/04	<0.005	<0.005	<0.02	<0.2	<1.0	110	19	129
SB-2-19**	19	08/22/04	<0.2	<0.2	<0.4	4.9	3,300	3,700	<200	7,000
SB-2-24**	24	08/22/04	<0.005	<0.005	<0.005	0.03	110	390	37	537
SB-3-14	14	08/22/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
SB-3-19	19	08/22/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-8-24	24	08/20/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-8-29	29	08/20/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-9-19	19	07/16/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-10-29	29	08/22/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-11-19	19	08/21/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-12-19	19	07/18/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-13-24	24	07/17/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-13-44	44	07/17/04	<0.005	<0.005	<0.005	<0.02	<1.0	4.8	<10	4.8
MW-14-24	24	07/19/04	<0.005	<0.005	<0.005	<0.02	<1.0	<3.0	<10	0
MW-15-30	30	07/30/08	<0.0006	<0.001	<0.001	<0.001	<1	<3.4	<11	0
MW-15-35	35	07/30/08	<0.0004	<0.0008	<0.0008	<0.0008	<0.9	<3.2	<11	0
MW-15-40	40	07/30/08	<0.0005	<0.0009	<0.0009	<0.0009	<1.2	<3.4	<11	0
MW-15-45	45	07/30/08	<0.0005	<0.001	<0.001	<0.001	<1.1	<3.3	<11	0
MW-15-50	50	07/30/08	<0.0005	<0.001	<0.001	<0.001	<1.4	<3.5	<12	0
MW-16-25	25	07/31/08	<0.0004	<0.0009	<0.0009	<0.0009	<1	<3.3	<11	0
MW-16-30	30	07/31/08	<0.0005	<0.001	<0.001	<0.001	<1	4.1	<12	4.1
MW-16-35	35	07/31/08	<0.0005	<0.0009	<0.0009	<0.0009	<1.2	<3.2	<11	0
MW-16-40	40	07/31/08	<0.0005	<0.0009	<0.0009	<0.0009	<1.2	<3.4	<11	0
MW-16-45	45	07/31/08	<0.0005	<0.0009	<0.0009	<0.0009	<1.2	<3.2	<11	0
MW-16-50	50	07/31/08	<0.0006	<0.001	<0.001	<0.001	<0.9	<3.4	<11	0
SB-4-15	15	09/21/14	<0.030	<0.0610	<0.0610	<0.122	150	360/460 <sup>1</sup>	<11/<11 <sup>1</sup>	610
SB-4-20	20	09/21/14	<0.0005	<0.001	<0.001	<0.001	<1.5	38/46 <sup>1</sup>	<11/<11 <sup>1</sup>	46

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street, Camas, Washington**  
**Concentrations reported in mg/kg**

Sample ID	Sample Depth (feet)	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-GRO	TPH-DRO	TPH-HRO	Total TPH
SB-5-16	16	09/21/14	<0.028	<0.0598	0.061	2.10	540	480/570 <sup>1</sup>	<11<23 <sup>1</sup>	1,110
SB-5-36	36	09/21/14	<0.0005	<0.001	<0.001	<0.001	<1.1	83/120 <sup>1</sup>	<11/19 <sup>1</sup>	139
SB-6-19	19	09/21/14	<0.026	<0.052	<0.053	<0.052	310	210/230 <sup>1</sup>	56/88 <sup>1</sup>	318
SB-6-25	25	09/21/14	<0.0005	<0.001	<0.001	<0.001	<1.1	6.1/4.1 <sup>1</sup>	<11<11 <sup>1</sup>	6.1
MTCA Method A CULs			0.03	7	6	9	30/100	2,000	2,000	-
MTCA Method B CULs			18	6,400	8,000	16,000	-	-	-	2,603

**EXPLANATIONS:**

MTCA Method B cleanup levels for Direct Contact, Unrestricted Land Uses.

TPH prior to 1994 measured by Method 418.1; recent values are the sum of Gasoline, Diesel, and Lube oil-range Hydrocarbons.

1 Results for TPH-DRO and TPH-HRO analyzed by Northwest Method NWTPH-Dx with silica-gel cleanup / Northwest Method NWTPH-Dx without silica-gel cleanup.

CULs = Cleanup levels

(D) = Duplicate

mg/kg = Milligrams per kilogram

MTCA = Model Toxics Control Act

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

U = The analyte was not detected at or above the laboratory detection limit

\* = locations removed during the 1994 soil excavation.

\*\* = Data not used for characterizing existing conditions. More recent data supercedes these values.

-- = Not Measured/Not Analyzed

- = Not Established



**TABLE 2**  
**SOIL ANALYTICAL RESULTS - Lead, MTBE, and PAHs**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street, Camas, Washington**  
**Concentrations reported in mg/kg**

Sample ID	Sample Depth (feet)	Sample Date	Lead	MTBE	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benze(k) fluoranthene	Benzo(a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz(a,h) anthracene	Naphthalene	n-hexane	EDB	EDC
SB-1-6	6	07/16/04	54.2	<0.5	0.003	0.008	0.005	<0.003	<0.003	<0.003	<0.003	0.12	--	<0.13	<0.13
SB-1-14	14	07/16/04	4.34	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.024	--	<0.12	<0.12
SB-1-19	19	07/16/04	3.10	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.010	--	<0.12	<0.12
SB-1-24	24	07/16/04	--	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.010	--	--	--
SB-2-19	19	08/22/04	4.88	<2.0	0.004	0.009	<0.003	<0.003	<0.003	<0.003	<0.003	0.19	<0.13	<0.13	<0.13
SB-2-24	24	08/22/04	4.43	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	<0.001	<0.001
SB-3-19	19	08/22/04	--	<0.05	--	--	--	--	--	--	--	<0.001	<0.001	--	--
MW-13-44	44	07/17/04	--	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	--	--	--
SB-4-15	15	09/21/14	--	<0.030	<0.00076	0.0020	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	0.0018	<0.061	<0.061	<0.061
SB-5-16	16	09/21/14	--	<0.028	0.0057	0.012	0.0023	<0.00076	0.0016	<0.00076	<0.00076	0.12	<0.056	<0.056	<0.056
SB-6-19	19	09/21/14	--	<0.026	0.0035	0.0090	0.0051	0.0017	0.0033	0.0017	<0.00072	0.043	<0.052	<0.052	<0.052
MTCA Method A CULs			250	0.1	-	-	-	-	0.1	-	-	5	-	0.005	-
MTCA Method B CULs			-	556	1.37	-	1.37	13.7	0.137	1.37	0.137	1,600	-	0.5	-

**EXPLANATIONS:**

MTCA Method B cleanup levels for Direct Contact, Unrestricted Land Uses.

PAHs = Polycyclic aromatic hydrocarbons

CULs = Cleanup levels

EDB = Ethylene dibromide (1,2-dibromoethane)

EDC = Ethylene dichloride (1,2-dichloroethane)

mg/kg = Milligrams per kilogram

MTBE = Methyl Tertiary Butyl Ether

MTCA = Model Toxics Control Act

-- = Not Measured/Not Analyzed

- = Not Established

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-5	02/22/90		--	--	--	--	--	--	--	--	--	--	--	6.2	--	
	12/30/93		--	--	--	--	--	670	7.0	--	61	1.4	--	6.4	--	
	03/03/94		--	--	--	--	--	<b>1,000</b>	11	--	54	0.8	--	--	--	
	08/17/94		--	--	--	--	--	--	--	--	--	--	--	--	--	
	11/29/94		--	--	--	--	--	<b>3,600</b>	19	--	120	11	--	--	--	
	05/25/95		--	--	--	--	--	770	0.83	--	5.7	--	--	--	--	
	11/27/95		--	--	--	--	--	--	--	--	--	--	--	--	--	
	08/23/04		50.47	DRY	--	--	--	--	--	--	--	--	--	--	--	--
	11/08/04		50.47	38.78	11.69	260	130	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	02/03/05		50.47	37.86	12.61	200	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	04/11/05		50.47	37.66	12.81	150	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	07/19/05		50.47	38.30	12.17	370	<99	79	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	06/22/06	LFP	50.47	31.25	19.22	200	340	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/21/06		50.47	43.02	7.45	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	--	--	--
	12/05/06	LFP	50.47	35.58	14.89	<b>2,200</b>	<500	100	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	03/15/07	LFP	50.47	34.42	16.05	380	<b>1,100</b>	63	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	06/21-22/07	LFP	50.47	36.25	14.22	<960	<b>3,100</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/25/07		50.47	43.32	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	--	--	
	12/06-07/07	LFP	50.47	34.05	16.42	450	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	03/20-21/08	LFP	50.47	35.85	14.62	<b>3,900</b>	<b>3,500</b>	74	<0.5	<0.5	<0.5	<1.5	<0.5	--	--	1.1
	06/24/08	LFP	50.47	30.96	19.51	<77	<96	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/19-20/08		44.72	43.10	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	--	--	
	12/13-14/08	LFP	44.72	38.65	6.07	<b>2,500</b>	440	200	<0.5	<0.5	<0.5	<1.5	<0.5	--	--	0.48
	03/27-28/09	LFP	44.72	36.70	8.02	280	<69	340	<0.5	<0.5	<0.5	<1.5	<0.5	--	--	0.34
	06/12/09	LFP	44.72	30.80	13.92	100	250	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/18/09		44.72	42.80	1.92	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	--	--	
	12/09/09	LFP	44.72	39.33	5.39	<b>7,900</b>	<690	460	<0.5	<0.5	<0.5	<1.5	<0.5	--	--	0.68
12/09/09 (D)		--	--	--	<b>5,100</b>	<700	550	<0.5	<0.5	<0.5	<1.5	<0.5	--	--	0.69	
03/26/10		44.72	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	
06/16/10		44.72	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	
09/24/10		44.72	42.80	1.92	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	--	--		
12/15/10		44.72	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	
03/25/11		44.72	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	
06/30/11	LFP	44.72	26.28	18.44	81	<b>680</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-5 (cont.)	09/30/11	LFP	44.72	41.30	3.42	91	<67	170	<2.0	<0.5	<0.5	<1.5	<0.5	--	0.57
	12/06/11	LFP	44.72	37.90	6.82	<30	<69	61	<0.5	<0.5	<0.5	<1.5	<0.5	--	0.15
	03/05/12	LFP	44.72	36.45	8.27	160	<70	330	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/04/12	LFP	44.72	32.00	12.72	<30	140	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12	LFP	44.72	40.05	4.67	130	<72	380	<0.5	<2.0	<0.5	<1.5	--	--	--
	12/03/12	LFP	44.72	34.09	10.63	38	<72	230	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13	LFP	44.72	36.97	7.75	65	90	210	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/03/13	LFP	44.72	32.33	12.39	<30	130	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/03/13	LFP	44.72	42.51	2.21	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/02/13	LFP	44.72	37.33	7.39	99	<67	250	<0.5	<0.5	<0.5	1.6	--	--	--
	03/03/14	LFP	44.72	35.41	9.31	61	<67	280	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/02/14	LFP	44.72	29.56	15.16	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	10/02/14	LFP	44.72	42.79	1.93	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/01/14	LFP	44.72	34.08	10.64	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/02/15	LFP	44.72	35.10	9.62	37	<67	130	<0.5	<0.5	<0.5	<1.5	--	--	--
06/02/15	LFP	44.72	37.63	7.09	120	<68	380	<0.5	<0.5	<0.5	<1.5	--	--	--	
MW-6	02/22/90		--	--	--	--	--	--	--	--	--	--	--	--	--
	12/30/93		--	--	--	--	--	--	--	--	--	--	--	<6.0	--
	03/03/94		--	--	--	--	--	--	--	--	--	--	--	5.4	--
	08/17/94		--	--	--	--	--	--	--	--	--	--	--	--	--
	11/29/94		--	--	--	--	--	--	--	--	--	--	--	--	--
	05/25/95		--	--	--	--	--	--	--	--	--	--	--	--	--
	11/27/95		--	--	--	--	--	--	--	--	--	--	--	--	--
	08/23/04		50.00	44.07	5.93	--	--	--	--	--	--	--	--	--	--
	11/08/04		50.00	38.36	11.64	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		50.00	37.42	12.58	<78	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		50.00	37.24	12.76	<75	<94	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/19/05		50.00	37.86	12.14	100	<100	<48	<0.5	0.6	<0.5	<1.5	--	--	--
	06/22/06	LFP	50.00	30.76	19.24	<81	190	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06	LFP	50.00	42.57	7.43	<b>2,500</b>	<b>12,000</b>	<48	<0.5	0.5	<0.5	<1.5	--	--	--
	12/05/06	LFP	50.00	35.17	14.83	<82	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
03/15/07	LFP	50.00	34.03	15.97	<160	<b>1,100</b>	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
06/21-22/07	LFP	50.00	35.70	14.30	<85	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
09/25/07		50.00	DRY	--	--	--	--	--	--	--	--	--	--	--	
12/06-07/07	LFP	50.00	33.68	16.32	<76	330	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-6 (cont.)	03/20-21/08	LFP	50.00	35.41	14.59	<79	210	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/24/08	LFP	50.00	30.35	19.65	120	<95	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/19-20/08	LFP	44.24	42.69	1.55	<b>35,000</b>	<b>210,000</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/13-14/08	LFP	44.24	38.20	6.04	110	380	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/27-28/09	LFP	44.24	36.30	7.94	<30	<69	65	<0.5	<0.5	<0.5	<1.5	<0.5	--	<0.050
	06/12/09	LFP	44.24	30.25	13.99	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/18/09	LFP	44.24	42.35	1.89	<b>2,000</b>	<b>7,600</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/09/09	LFP	44.24	38.91	5.33	220	<b>600</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/26/10	LFP	44.24	38.50	5.74	44	300	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/16/10	LFP	44.24	27.97	16.27	39	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/24/10	LFP	44.24	42.02	2.22	<31	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/15/10	LFP	44.24	32.38	11.86	77	450	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/25/11	LFP	44.24	32.09	12.15	350	<b>1,800</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/30/11	LFP	44.24	25.86	18.38	<150	<b>760</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/30/11	LFP	44.24	40.95	3.29	280	450	71	<0.5	<0.5	<0.5	<1.5	<0.5	--	<0.080
	12/06/11	LFP	44.24	37.46	6.78	<30	170	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/05/12	LFP	44.24	36.00	8.24	58	<b>950</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/05/12 (D)	LFP	44.24	36.00	8.24	<30	330	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/04/12	LFP	44.24	31.55	12.69	120	<b>850</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/04/12 (D)	LFP	44.24	31.55	12.69	110	<b>810</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12	LFP	44.24	39.60	4.64	51	390	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12 (D)	LFP	44.24	39.60	4.64	<29	80	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/03/12	LFP	44.24	33.75	10.49	79	<b>640</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/03/12 (D)	LFP	44.24	33.75	10.49	46	480	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13	LFP	44.24	36.59	7.65	<28	220	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13 (D)	LFP	44.24	36.59	7.65	43	410	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/03/13	LFP	44.24	31.50	12.74	100	<b>640</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/03/13 (D)	LFP	44.24	31.50	12.74	49	290	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/03/13	LFP	44.24	42.38	1.86	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/03/13 (D)	LFP	44.24	42.38	1.86	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
12/02/13	LFP	44.24	37.11	7.13	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
12/02/13 (D)	LFP	44.24	37.11	7.13	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/03/14	LFP	44.24	34.97	9.27	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/03/14 (D)	LFP	44.24	34.97	9.27	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	

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**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-6 (cont.)	06/02/14	LFP	44.24	29.10	15.14	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/02/14 (D)	LFP	44.24	29.10	15.14	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	10/02/14	LFP	44.24	42.38	1.86	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	10/02/14 (D)	LFP	44.24	42.38	1.86	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/01/14	LFP	44.24	33.71	10.53	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/01/14 (D)	LFP	44.24	33.71	10.53	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/02/15	LFP	44.24	36.22	8.02	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/02/15 (D)	LFP	44.24	36.22	8.02	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/02/15	LFP	44.24	37.26	6.98	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/02/15 (D)	LFP	44.24	37.26	6.98	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-8	08/23/04		50.70	45.33	5.37	<92	210	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	08/23/04		50.70	45.33	5.37	<160	<200	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	11/08/04		50.70	39.00	11.70	<77	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		50.70	38.08	12.62	<78	<97	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		50.70	37.88	12.82	<75	<94	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/20/05		50.70	38.54	12.16	<78	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/22/06	LFP	50.70	31.35	19.35	100	<110	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06	LFP	50.70	43.15	7.55	<75	<94	<48	0.6	1	<0.5	<1.5	--	--	--
	12/05/06	LFP	50.70	35.83	14.87	<77	<97	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/15/07	LFP	50.70	34.66	16.04	<78	<97	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/21-22/07	LFP	50.70	36.44	14.26	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/25/07	LFP	50.70	45.42	5.28	<76	<95	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06-07/07	LFP	50.70	34.29	16.41	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/20-21/08	LFP	50.70	36.00	14.70	330	<98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/24/08	LFP	50.70	31.09	19.61	210	<96	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/19-20/08	LFP	44.96	43.32	1.64	<83	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/13-14/08	LFP	44.96	38.85	6.11	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/27-28/09	LFP	44.96	36.95	8.01	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/12/09	LFP	44.96	30.98	13.98	70	<74	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/18/09	LFP	44.96	42.95	2.01	<31	<73	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
12/09/09	LFP	44.96	39.54	5.42	150	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/26/10	LFP	44.96	39.13	5.83	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
06/16/10	LFP	44.96	28.60	16.36	40	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
09/24/10	LFP	44.96	42.55	2.41	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
12/15/10	LFP	44.96	32.95	12.01	85	470	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/25/11	LFP	44.96	32.72	12.24	31	190	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-8 (cont.)	06/30/11	LFP	44.96	26.57	18.39	<31	140	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/30/11	LFP	44.96	41.55	3.41	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06/11	LFP	44.96	38.18	6.78	<30	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/05/12		44.96	35.50	9.46	--	--	--	--	--	--	--	--	--	--
	06/04/12	LFP	44.96	32.20	12.76	<30	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12		44.96	40.23	4.73	--	--	--	--	--	--	--	--	--	--
	12/03/12	LFP	44.96	38.47	6.49	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13		44.96	36.60	8.36	--	--	--	--	--	--	--	--	--	--
	06/03/13	LFP	44.96	32.52	12.44	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/03/13		44.96	43.48	1.48	--	--	--	--	--	--	--	--	--	--
	12/02/13	LFP	44.96	37.65	7.31	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/03/14		44.96	40.99	3.97	--	--	--	--	--	--	--	--	--	--
	06/02/14		44.96	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
	10/02/14		44.96	DRY											
	12/01/14		44.96	34.13	10.83	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
03/02/15		44.96	36.81	8.15	--	--	--	--	--	--	--	--	--	--	
06/01/15	LFP	44.96	37.83	7.13	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
MW-9	08/23/04		51.22	45.83	5.39	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	11/08/04		51.22	39.50	11.72	<79	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		51.22	38.58	12.64	<77	<96	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		51.22	38.38	12.84	<74	<93	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/19/05		51.22	39.02	12.20	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/22/06	LFP	51.22	30.63	20.59	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06	LFP	51.22	43.63	7.59	<76	<95	<48	0.7	1.1	<0.5	<1.5	--	--	--
	12/05/06	LFP	51.22	36.31	14.91	<79	<99	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/15/07	LFP	51.22	35.15	16.07	110	<99	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/21-22/07	LFP	51.22	36.98	14.24	250	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/25/07	LFP	51.22	43.50	7.72	93	130	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06-07/07	LFP	51.22	34.78	16.44	<79	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/20-21/08	LFP	51.22	36.52	14.70	<79	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/24/08	LFP	51.22	31.65	19.57	<77	<96	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/19-20/08	LFP	45.48	43.83	1.65	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/13-14/08	LFP	45.48	39.36	6.12	<27	<64	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/27-28/09	LFP	45.48	37.44	8.04	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
06/12/09	LFP	45.48	31.51	13.97	51	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-9 (cont.)	09/18/09	LFP	45.48	43.44	2.04	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/09/09		45.48	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
	03/26/10	LFP	45.48	38.97	6.51	<29	77	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/16/10	LFP	45.48	29.09	16.39	30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/24/10	LFP	45.48	43.05	2.43	<29	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/15/10	LFP	45.48	33.41	12.07	97.0	440	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/15/10 (D)		--	--	--	<30	170	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/25/11	LFP	45.48	33.22	12.26	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/30/11	LFP	45.48	27.05	18.43	<150	<b>600</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/30/11	LFP	45.48	42.00	3.48	<30	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06/11	LFP	45.48	38.66	6.82	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/05/12			45.48	34.40	11.08	--	--	--	--	--	--	--	--	--
	06/04/12	LFP	45.48	32.70	12.78	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12			45.48	40.72	4.76	--	--	--	--	--	--	--	--	--
	12/03/12	LFP	45.48	34.83	10.65	<31	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13			45.48	37.06	8.42	--	--	--	--	--	--	--	--	--
	06/03/13	Monitoring Well Damaged				--	--	--	--	--	--	--	--	--	--
	09/03/13			45.48	43.52	1.96	--	--	--	--	--	--	--	--	--
	12/02/13	LFP	45.48	38.12	7.36	<31	<73	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/03/14			45.48	40.88	4.60	--	--	--	--	--	--	--	--	--
06/02/14	LFP	45.48	30.26	15.22	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
10/02/14			45.48	42.77	2.71	--	--	--	--	--	--	--	--	--	
12/01/14	LFP	45.48	34.82	10.66	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/02/15			45.48	37.11	8.37	--	--	--	--	--	--	--	--	--	
06/01/15	LFP	45.48	37.99	7.49	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
MW-10	08/23/04		50.14	44.86	5.28	<160	<200	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	11/08/04		50.14	38.48	11.66	<79	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		50.14	37.55	12.59	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		50.14	37.35	12.79	<77	<96	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/19/05		50.14	38.03	12.11	<79	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/22/06	LFP	50.14	30.99	19.15	<78	130	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06	LFP	50.14	42.68	7.46	<75	120	<48	0.7	0.9	<0.5	<1.5	--	--	--
	12/05/06	LFP	50.14	35.28	14.86	140	<99	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/15/07	LFP	50.14	34.12	16.02	<78	<97	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/21-22/07	LFP	50.14	35.93	14.21	210	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--

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**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-10 (cont.)	09/25/07	LFP	50.14	44.92	5.22	110	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06-07/07	LFP	50.14	33.77	16.37	<78	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/20-21/08	LFP	50.14	35.51	14.63	250	370	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/24/08	LFP	50.14	30.62	19.52	97	<98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/19-20/08	LFP	44.41	42.84	1.57	<75	<94	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	44.41	38.35	6.06	<31	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	44.41	36.41	8.00	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	44.41	30.50	13.91	31	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09	LFP	44.41	42.46	1.95	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/09/09	LFP	44.41	39.03	5.38	67	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10	LFP	44.41	38.60	5.81	<29	88	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/16/10	LFP	44.41	28.09	16.32	61	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/24/10	LFP	44.41	42.06	2.35	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/15/10	LFP	44.41	32.51	11.90	240	<b>1,600</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11	LFP	44.41	32.21	12.20	130	<b>530</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/30/11	LFP	44.41	26.04	18.37	<31	<72	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/30/11	LFP	44.41	41.05	3.36	<30	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06/11	LFP	44.41	37.62	6.79	<76	420	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/05/12			44.41	36.20	8.21	--	--	--	--	--	--	--	--	--	--
	06/04/12	LFP	44.41	32.20	12.21	<30	230	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/04/12			44.41	39.76	4.65	--	--	--	--	--	--	--	--	--	--
	12/03/12	LFP	44.41	33.81	10.60	<28	140	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	03/04/13			44.41	36.58	7.83	--	--	--	--	--	--	--	--	--	--
	06/03/13	LFP	44.41	32.00	12.41	<31	<73	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/03/13			44.41	41.93	2.48	--	--	--	--	--	--	--	--	--	--
	12/02/13	LFP	44.41	37.02	7.39	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	03/03/14			44.41	33.10	11.31	--	--	--	--	--	--	--	--	--	--
	06/02/14	LFP	44.41	29.23	15.18	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
10/02/14			44.41	DRY												
12/01/14	LFP	44.41	33.80	10.61	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	
03/02/15			44.41	36.38	8.03	--	--	--	--	--	--	--	--	--	--	
06/02/15	LFP	44.41	37.30	7.11	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	
MW-11	08/23/04		50.73	45.35	5.38	<77	<96	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	11/08/04		50.73	39.05	11.68	<77	<96	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	02/03/05		50.73	38.13	12.60	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	



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**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-11 (cont.)	04/11/05		50.73	37.90	12.83	<78	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	07/19/05		50.73	38.58	12.15	<77	<97	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/22/06	LFP	50.73	31.50	19.23	<79	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/21/06	LFP	50.73	43.21	7.52	<75	<94	<48	0.8	1.1	<0.5	<1.5	--	--	--	
	12/05/06	LFP	50.73	35.86	14.87	<85	<110	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/15/07	LFP	50.73	34.71	16.02	<90	<110	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/21-22/07	LFP	50.73	36.52	14.21	290	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/25/07	LFP	50.73	45.49	5.24	87	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06-07/07	LFP	50.73	34.33	16.40	87	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/20-21/08	LFP	50.73	36.04	14.69	<88	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/24/08	LFP	50.73	31.21	19.52	140	<95	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/19-20/08	LFP	45.00	43.40	1.60	<78	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	45.00	38.92	6.08	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	45.00	36.98	8.02	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	45.00	31.06	13.94	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09	LFP	45.00	43.00	2.00	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/09/09	LFP	45.00	39.58	5.42	39	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10	LFP	45.00	39.17	5.83	<29	98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/16/10	LFP	45.00	28.65	16.35	70	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/24/10	LFP	45.00	42.61	2.39	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/15/10	LFP	45.00	32.97	12.03	<32	<75	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11	LFP	45.00	32.77	12.23	<29	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/30/11	LFP	45.00	26.60	18.40	<59	320	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/30/11	LFP	45.00	41.60	3.40	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06/11	LFP	45.00	38.21	6.79	<74	210	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/05/12		45.00	36.30	8.70	--	--	--	--	--	--	--	--	--	--	--
	06/04/12	LFP	45.00	32.25	12.75	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
	09/04/12		45.00	40.30	4.70	--	--	--	--	--	--	--	--	--	--	--
12/03/12	LFP	45.00	34.38	10.62	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	
03/04/13		45.00	36.61	8.39	--	--	--	--	--	--	--	--	--	--	--	
06/03/13	LFP	45.00	32.58	12.42	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	
09/03/13		45.00	41.80	3.20	--	--	--	--	--	--	--	--	--	--	--	
12/02/13	LFP	45.00	37.64	7.36	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	
03/03/14		45.00	41.33	3.67	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-11 (cont.)	06/02/14	LFP	45.00	29.79	15.21	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	10/02/14		45.00	DRY												
	12/01/14	LFP	45.00	34.31	10.69	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/02/15		45.00	36.88	8.12	--	--	--	--	--	--	--	--	--	--	
	06/01/15	LFP	45.00	37.41	7.59	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
MW-12	08/23/04		50.11	44.82	5.29	<160	<200	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	11/08/04		50.11	38.43	11.68	<78	<98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	02/03/05		50.11	37.50	12.61	<79	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	04/11/05		50.11	37.33	12.78	<82	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	07/20/05		50.11	37.99	12.12	97	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/22/06	LFP	50.11	30.94	19.17	<78	110	<48	<0.5	1.5	<0.5	<1.5	--	--	--	
	09/21/06	LFP	50.11	42.71	7.40	180	<100	<48	0.8	1.2	<0.5	<1.5	--	--	--	
	12/05/06	LFP	50.11	35.22	14.89	<79	260	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/15/07	LFP	50.11	34.09	16.02	<79	130	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/21-22/07	LFP	50.11	35.84	14.27	100	140	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/25/07	LFP	50.11	44.89	5.22	<76	100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06-07/07	LFP	50.11	33.67	16.44	95	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/20-21/08	LFP	50.11	35.52	14.59	<b>1,200</b>	<b>880</b>	53	<0.5	<0.5	<0.5	<1.5	<5 <sup>8</sup>	--	<0.050	
	06/24/08	LFP	50.11	30.62	19.49	98	<98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/19-20/08	LFP	44.32	42.72	1.60	<78	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/19-20/08 (D)		--	--	--	<78	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	44.32	38.25	6.07	<b>5,800</b>	<b>12,000</b>	<50	<0.5	0.8	<0.5	<1.5	--	--	--	
	12/13-14/08 (D)		--	--	--	<b>3,400</b>	<b>7,200</b>	<50	<0.5	1.4	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	44.32	36.31	8.01	69	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09 (D)		--	--	--	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	44.32	30.44	13.88	140	290	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09 (D)		--	--	--	130	300	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09	LFP	44.32	42.34	1.98	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09 (D)		--	--	--	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/09/09			44.32	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
	03/26/10	LFP	44.32	38.48	5.84	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10 (D)		--	--	--	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
06/16/10	LFP	44.32	27.97	16.35	160	230	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		
06/16/10 (D)		--	--	--	32	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		
09/24/10	LFP	44.32	41.96	2.36	35	220	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		

**TABLE 3  
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>  
FORMER CHEVRON BULK TERMINAL NO. 207407**

612 SE Union Street  
Camas, Washington

Concentrations reported in µg/L

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-12 (cont.)	09/24/10 (D)		--	--	--	160	<b>600</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/15/10	LFP	44.32	32.32	12.00	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11	LFP	44.32	32.11	12.21	<150	<b>730</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11 (D)		--	--	--	<b>700</b>	<b>1,400</b>	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/30/11	LFP	44.32	25.93	18.39	<30	250	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/30/11 (D)		--	--	--	<30	170	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/30/11	LFP	44.32	40.90	3.42	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06/11	LFP	44.32	37.55	6.77	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/05/12	LFP	44.32	36.00	8.32	<30	190	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/04/12	LFP	44.32	31.55	12.77	<32	<76	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/04/12	LFP	44.32	39.65	4.67	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/03/12	LFP	44.32	33.68	10.64	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/04/13	LFP	44.32	36.60	7.72	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/03/13	LFP	44.32	31.95	12.37	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/03/13	LFP	44.32	42.47	1.85	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/02/13	LFP	44.32	36.87	7.45	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/03/14	LFP	44.32	34.96	9.36	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/02/14	LFP	44.32	29.15	15.17	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	10/02/14			44.32	DRY											
	12/01/14	LFP	44.32	33.68	10.64	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/02/15	LFP	44.32	34.67	9.65	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		
06/02/15	LFP	44.32	37.81	6.51	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		
MW-13	08/23/04		50.41	45.12	5.29	150	<95	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	11/08/04		50.41	38.73	11.68	440	<98	670	<0.5	<0.5	1.0	<1.5	--	--	--	
	02/03/05		50.41	37.80	12.61	320	<96	<b>1,000</b>	<0.5	<0.5	1.7	<1.5	--	--	--	
	04/11/05		50.41	37.60	12.81	<b>720</b>	<95	<b>1,100</b>	<2.0	<0.5	<2.0	<1.5	--	--	--	
	07/20/05		50.41	38.33	12.08	<b>720</b>	<96	540	<2.0	<0.5	0.5	<1.5	--	--	--	
	07/20/05 (D)		--	--	--	<b>1,000</b>	120	520	<2.0	<0.5	0.5	<1.5	--	--	--	
	06/22/06 <sup>9</sup>	LFP	50.41	31.33	19.08	<b>2,000</b>	<b>2,500</b>	160	<0.5	11	<0.5	<1.5	--	--	--	
	09/21/06 <sup>9</sup>	LFP	50.41	43.10	7.31	<b>4,200</b>	<b>5,300</b>	690	1.7	45	0.5	<1.5	--	--	--	
	09/21/06 (D)		--	--	--	<b>3,000</b>	<b>4,800</b>	630	<2.0	45	0.5	<1.5	--	--	--	
	12/05/06	LFP	50.41	35.53	14.88	<b>650</b>	<b>710</b>	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/05/06 (D)		--	--	--	<b>500</b>	<b>1,600</b>	<48	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/15/07	LFP	50.41	34.42	15.99	140	460	<48	<0.5	<0.5	<0.5	<1.5	--	--	--		
03/15/07 (D)		--	--	--	290	<b>1,100</b>	<48	<0.5	<0.5	<0.5	<1.5	--	--	--		

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
MW-13 (cont.)	06/21-22/07	LFP	50.41	36.22	14.19	380	270	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/21-22/07 (D)		--	--	--	360	240	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/25/07	LFP	50.41	45.18	5.23	<82	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/25/07 (D)		--	--	--	<91	<110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06-07/07	LFP	50.41	34.02	16.39	180	190	61	<0.5	<0.5	<0.5	<1.5	<0.5	0.11	--
	12/06-07/07 (D)		--	--	--	200	160	85	<0.5	<0.5	<0.5	<1.5	<0.5	0.11	--
	03/20-21/08	LFP	50.41	35.64	14.77	<82	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/20-21/08 (D)		--	--	--	<76	230	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/24/08	LFP	50.41	30.90	19.51	84	160	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/24/08 (D)		--	--	--	96	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/19-20/08		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	12/13-14/08		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	03/27-28/09		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	06/12/09		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	09/18/09		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	12/09/09		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	03/26/10		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	06/16/10		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	09/24/10		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
	12/15/10		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
03/25/11		44.60	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--	
06/30/11		44.60	DAMAGED	--	--	--	--	--	--	--	--	--	--	--	
09/30/11		44.60	DAMAGED	--	--	--	--	--	--	--	--	--	--	--	
12/07/11		Monitoring Well Decommissioned													
MW-14	08/23/04		50.59	45.30	5.29	<b>1,100</b>	100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	11/08/04		50.59	38.90	11.69	300	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		50.59	37.97	12.62	<81	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		50.59	37.97	12.62	<78	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		50.59	37.78	12.81	<81	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/19/05		50.59	38.43	12.16	300	<110	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/22/06	LFP	50.59	31.41	19.18	<87	<110	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06	LFP	50.59	43.23	7.36	150	310	<48	<0.5	0.7	<0.5	<1.5	--	--	--
	12/05/06	LFP	50.59	35.73	14.86	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/15/07	LFP	50.59	34.55	16.04	<78	<98	<48	<0.5	<0.5	<0.5	<1.5	--	--	--

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**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-14 (cont.)	06/21-22/07	LFP	50.59	36.40	14.19	120	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/25/07	LFP	50.59	45.35	5.24	<82	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/06-07/07	LFP	50.59	34.18	16.41	<81	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/20-21/08	LFP	50.59	35.90	14.69	<78	<98	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/24/08	LFP	50.59	31.11	19.48	<76	<95	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/19-20/08	LFP	44.86	43.25	1.61	<78	<97	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	44.86	38.79	6.07	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	44.86	36.85	8.01	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	44.86	30.98	13.88	87	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09	LFP	44.86	42.86	2.00	34	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/09/09	LFP	44.86	39.43	5.43	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10	LFP	44.86	39.00	5.86	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/16/10	LFP	44.86	28.51	16.35	180	120	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/24/10	LFP	44.86	42.47	2.39	75	110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/15/10	LFP	44.86	32.81	12.05	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11	LFP	44.86	32.65	12.21	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/30/11		44.86	DAMAGED		--	--	--	--	--	--	--	--	--	--	--
	09/30/11		44.86	DAMAGED		--	--	--	--	--	--	--	--	--	--	--
12/07/11		44.86	DAMAGED		--	--	--	--	--	--	--	--	--	--	--	
12/07/11		Monitoring Well Decommissioned														
MW-15	09/19-20/08	LFP	45.45	43.79	1.66	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	45.45	39.31	6.14	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	45.45	37.36	8.09	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	45.45	31.60	13.85	<30	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	05/10/13		Monitoring Well Decommissioned													
MW-16	09/18/09		45.45	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	
	12/09/09	LFP	45.45	39.97	5.48	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10	LFP	45.45	39.52	5.93	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/16/10	LFP	45.45	29.05	16.40	33	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/24/10		45.45	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	
	12/15/10		45.45	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	
	03/25/11		45.45	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	
	06/30/11	LFP	45.45	27.04	18.41	<59	300	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
09/30/11		45.45	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--		

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead	
MW-16 (cont.)	12/06/11	LFP	45.45	38.60	6.85	<30	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/05/12		45.45	32.10	13.35	--	--	--	--	--	--	--	--	--	--	
	06/04/12	LFP	45.45	32.65	12.80	<31	<72	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/04/12	LFP	45.45	40.68	4.77	--	--	--	--	--	--	--	--	--	--	
	12/03/12		Monitoring Well Damaged													
	09/19-20/08	LFP	44.35	42.75	1.60	<79	<99	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/13-14/08	LFP	44.35	38.28	6.07	31	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/27-28/09	LFP	44.35	36.31	8.04	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/12/09	LFP	44.35	30.52	13.83	99	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/18/09	LFP	44.35	42.36	1.99	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/09/09	LFP	44.35	38.93	5.42	45	<72	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/26/10	LFP	44.35	38.49	5.86	35	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	06/16/10	LFP	44.35	28.00	16.35	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/24/10	LFP	44.35	41.96	2.39	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	12/15/10	LFP	44.35	32.27	12.08	<32	82	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/25/11	LFP	44.35	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
	06/30/11	LFP	44.35	25.96	18.39	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/30/11		44.34	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
	12/06/11	LFP	44.35	37.50	6.85	<31	<72	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/05/12		44.35	35.50	8.85	--	--	--	--	--	--	--	--	--	--	--
	06/04/12	LFP	44.35	31.60	12.75	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/04/12	LFP	44.35	40.10	4.25	--	--	--	--	--	--	--	--	--	--	
	12/03/12	LFP	44.35	33.70	10.65	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/04/13		44.35	37.01	7.34	--	--	--	--	--	--	--	--	--	--	--
	06/03/13	LFP	44.35	31.95	12.40	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	09/03/13		44.35	42.44	1.91	--	--	--	--	--	--	--	--	--	--	--
	12/02/13	LFP	44.35	36.86	7.49	<31	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	03/03/14		44.35	34.98	9.37	--	--	--	--	--	--	--	--	--	--	--
	06/02/14	LFP	44.35	29.90	14.45	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
	10/02/14		44.35	DRY												
12/01/14	LFP	44.35	34.83	9.52	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		
03/02/15		44.35	36.27	8.08	--	--	--	--	--	--	--	--	--	--	--	
06/02/15	LFP	44.35	38.33	6.02	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--		

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
PURGE <sup>8</sup>	09/30/11		--	--	--	<31	<72	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	12/06/11		--	--	--	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.080
	03/05/12		--	--	--	39	<67	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.080
	06/04/12		--	--	--	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.080
	09/04/12		--	--	--	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.034
	12/03/12		--	--	--	<28	<65	110	<0.5	<0.5	<0.5	<0.5	--	--	<0.047
	03/04/13		--	--	--	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.047
	06/03/13		--	--	--	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.30
	09/03/13		--	--	--	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.085
	12/02/13		--	--	--	<31	<72	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.00040
	03/03/14		--	--	--	<29	<68	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.00080
	06/03/14		--	--	--	<29	<68	<50	<0.5	<0.5	<0.5	<0.5	--	--	1.2
	10/02/14		--	--	--	41	<67	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.18
	12/01/14		--	--	--	<29	<68	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.082
TRIP BLANK QA	08/22/04		--	--	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
	02/03/05		--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	04/11/05		--	--	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
	07/20/05		--	--	--	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/22/06		--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/21/06		--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/05/06		--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/15/07		--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/21-22/07		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/25/07		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06-07/07		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/20-21/08 <sup>7</sup>		--	--	--	--	--	--	--	--	--	--	--	--	--
	06/24/08		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/19-20/08		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/13-14/08		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/27-28/09		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/12/09		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/18/09		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
12/09/09		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
03/26/10		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
06/16/10		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
09/24/10		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	

**TABLE 3**  
**GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS<sup>1</sup>**  
**FORMER CHEVRON BULK TERMINAL NO. 207407**  
**612 SE Union Street**  
**Camas, Washington**  
**Concentrations reported in µg/L**

Well ID	Date	Purge Method	TOC <sup>2</sup> (ft.)	DTW (ft.)	GWE <sup>3</sup> (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	T. Lead	D. Lead
TRIP BLANK QA (cont.)	12/15/10		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/25/11		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/30/11		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/06/11		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/05/12		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/04/12		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/04/12		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/03/12		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/04/13		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/03/13		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	09/03/13		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/02/13		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	03/03/14		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	06/02/14		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	10/02/14		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
	12/01/14		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
03/02/15		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
06/01/15		--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	
Standard Laboratory Reporting Limits:						--	--	50	0.5	0.5	0.5	1.5	0.5	0.050	0.050
MTCA Method A Cleanup Levels:						500	500	800/1,000	5	1,000	700	1,000	20	15	15
Current Method <sup>5</sup> :						NWTPH-Dx + Extended <sup>4</sup>		NWTPH-Gx	USEPA 8021B				USEPA 8260	USEPA 6020	USEPA 6020

**Abbreviations:**

(D) = Duplicate	MTBE = Methyl Tertiary Butyl Ether	TPH-DRO = TPH as Diesel-Range Organics
D. Lead = Dissolved Lead	MTCA = Model Toxics Control Act	TPH-GRO = TPH as Gasoline-Range Organics
DTW = Depth to Water	QA = Quality Assurance/Trip Blank	TPH-HRO = TPH as Heavy Oil-Range Organics
(ft.) = Feet	T. Lead = Total Lead	USEPA = United States Environmental Protection Agency
GWE = Groundwater Elevation	TOC = Top of Casing	µg/L = Micrograms per liter
LFP = Low Flow Purge	TPH = Total Petroleum Hydrocarbons	-- = Not Measured/Not Analyzed

**Notes:**

- Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.
- TOC Elevations surveyed August 18, 2008. Elevations based on benchmark #242 "Lacamas-19" Elevation = 39.03 feet.
- Groundwater Elevations relative to site datum, surveyed in December 2003.
- Analyzed with silica-gel cleanup.
- 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.
- Unable to take duplicate sample due to the close proximity of a truck filled with mulch. The equipment was moved for safety purposes.
- Laboratory unable to run QA, vials not received.
- Purge water BTEX constituents analyzed by USEPA Method 8260.



**Appendix A:**  
**Terrestrial Ecological Evaluation**

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## Terrestrial Ecological Evaluation Process- Simplified Evaluation

### Documentation Form

Criteria # (Concern)	Criteria	Response (Circle One)
1 (exposure)	Is the total area of soil contamination at the site less than or equal to 350 square feet	<b>Yes (End TEE) / No</b>
2 (exposure)	Does land use at the site and surrounding area make substantial wildlife exposure unlikely based on completion of <a href="#">Table 749-1</a> ?	<b>Yes (End TEE) / No</b>
3 (pathway)	Is there a potential exposure pathway from soil contamination to soil biota, plants, or wildlife?	<b>Yes / No (End TEE)</b>
4 (contaminant)	Are the hazardous substances at your site listed in <a href="#">Table 749-2</a> and is (or will) their location in the soil at your site be at a depth not exceeding the point of compliance, and at concentrations that do not exceed the values provided in <a href="#">Table 749-2</a> .	<b>Yes (End TEE) / No</b>  <b>Note: You must perform bioassays for contaminants at your site if no table value is provided.</b>
5 (contaminant)	Will hazardous substances listed in <a href="#">Table 749-2</a> be present in the soil at your site within 6 feet of the ground surface at concentrations likely to be toxic, or with the potential to bioaccumulate, based on bioassays using methods approved by the department.	<b>Yes / No (End TEE)</b>

[\[Exclusions Main\]](#) [\[TEE Definitions\]](#) [\[Simplified or Site-Specific?\]](#) [\[Simplified Ecological Evaluation\]](#)  
[\[Site-Specific Ecological Evaluation\]](#) [\[WAC 173-340-7493\]](#) [\[Index of Tables\]](#)

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**Table 749-1**

**Simplified Terrestrial Ecological Evaluation-Exposure Analysis Procedure**

Estimate the area of contiguous (connected) <u>undeveloped land</u> on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre).																						
1) From the table below, find the number of points corresponding to the area and enter this number in the field to the right.																						
	<table border="1"> <thead> <tr> <th style="text-align: center;">Area (acres)</th> <th style="text-align: center;">Points</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">0.25 or less</td><td style="text-align: center;">4</td></tr> <tr><td style="text-align: center;">0.5</td><td style="text-align: center;">5</td></tr> <tr><td style="text-align: center;">1.0</td><td style="text-align: center;">6</td></tr> <tr><td style="text-align: center;">1.5</td><td style="text-align: center;">7</td></tr> <tr><td style="text-align: center;">2.0</td><td style="text-align: center;">8</td></tr> <tr><td style="text-align: center;">2.5</td><td style="text-align: center;">9</td></tr> <tr><td style="text-align: center;">3.0</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">3.5</td><td style="text-align: center;">11</td></tr> <tr><td style="text-align: center;">4.0 or more</td><td style="text-align: center;">12</td></tr> </tbody> </table>	Area (acres)	Points	0.25 or less	4	0.5	5	1.0	6	1.5	7	2.0	8	2.5	9	3.0	10	3.5	11	4.0 or more	12	12
Area (acres)	Points																					
0.25 or less	4																					
0.5	5																					
1.0	6																					
1.5	7																					
2.0	8																					
2.5	9																					
3.0	10																					
3.5	11																					
4.0 or more	12																					
2) Is this an <u>industrial</u> or <u>commercial</u> property? If yes, enter a score of 3. If no, enter a score of 1		3																				
3) <sup>a</sup> Enter a score in the box to the right for the habitat quality of the site, using the following rating system <sup>b</sup> . High=1, Intermediate=2, Low=3		3																				
4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2. <sup>c</sup>		1																				
5) Are there any of the following soil contaminants present: Chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.		4																				
6) Add the numbers in the boxes on lines 2-5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.		11																				

**Notes for Table 749-1**

<sup>a</sup> It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score of (1) for questions 3 and 4.

<sup>b</sup> **Habitat rating system.** Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:

**Low:** Early successional vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.

**High:** Area is ecologically significant for one or more of the following reasons: Late-[successional](#) native plant communities present; relatively high species diversity; used by an uncommon or rare species; [priority habitat](#) (as defined by the Washington Department of fish and Wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.

**Intermediate:** Area does not rate as either high or low.

<sup>c</sup> Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use b mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.

[\[Area Calculation Aid\]](#) [\[Aerial Photo with Area Designations\]](#) [\[TEE Table 749-1\]](#) [\[Index of Tables\]](#)

[\[Exclusions Main\]](#) [\[TEE Definitions\]](#) [\[Simplified or Site-Specific?\]](#) [\[Simplified Ecological Evaluation\]](#) [\[Site-Specific Ecological Evaluation\]](#) [\[WAC 173-340-7493\]](#)

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**Appendix B:**  
**MTCA Method B Cleanup Level Calculations**

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## A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750

### 1. Enter Site Information

Date: 10/03/14

Site Name: 207407 Camas, WA

Sample Name: SB-4-15

### 2. Enter Soil Concentration Measured

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc dry basis mg/kg	Composition Ratio %
<b><u>Petroleum EC Fraction</u></b>		
AL_EC >5-6	0	0.00%
AL_EC >6-8	1.525	0.26%
AL_EC >8-10	8.56	1.44%
AL_EC >10-12	35	5.91%
AL_EC >12-16	260	43.88%
AL_EC >16-21	150	25.32%
AL_EC >21-34	12	2.03%
AR_EC >8-10	8.819	1.49%
AR_EC >10-12	1.4982	0.25%
AR_EC >12-16	21.9911	3.71%
AR_EC >16-21	83	14.01%
AR_EC >21-34	9.9961	1.69%
Benzene	0	0.00%
Toluene	0	0.00%
Ethylbenzene	0.0305	0.01%
Total Xylenes	0.0305	0.01%
Naphthalene	0.0018	0.00%
1-Methyl Naphthalene	0.0036	0.00%
2-Methyl Naphthalene	0.0053	0.00%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.00038	0.00%
Benzo(b)fluoranthene	0.00038	0.00%
Benzo(k)fluoranthene	0.00038	0.00%
Benzo(a)pyrene	0.00038	0.00%
Chrysene	0.002	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0.00038	0.00%
<b>Sum</b>	<b>592.465</b>	<b>100.00%</b>

### 3. Enter Site-Specific Hydrogeological Data

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.00112	Unitless
Dilution Factor:	20	Unitless

### 4. Target TPH Ground Water Concentration (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here:  ug/L

Notes for Data Entry

Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared previously

#### REMARK:

- 1) Half detection limits used for AL\_EC>6-8, total xylenes, ethylbenzene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene.
- 2) The following parameters have never been detected on the site so a value of zero was entered: benzene, MTBE, toluene, n-hexane, EDB, EDC, AL\_EC>5-6, and dibenz(a,h)anthracene.
- 3) double counting was avoided for E-C fractions
- 4) default value were used for total porosity and soil bulk density.
- 5) A dilution factor of 20 was entered for unsaturated soil zones.

**A2 Soil Cleanup Levels: Calculation and Summary of Results.** Refer to WAC 173-340-720, 740, 745, 747, 750

**Site Information**

Date: 10/3/2014
Site Name: 207407 Camas, WA
Sample Name: SB-4-15
Measured Soil TPH Concentration, mg/kg: <b>592.465</b>

**1. Summary of Calculation Results**

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
			RISK @	HI @	
Protection of Soil Direct Contact: Human Health	Method B	2,453	5.32E-09	2.42E-01	Pass
	Method C	30,511	1.32E-09	1.94E-02	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	100% NAPL	6.61E-12	1.33E-01	Pass
	NA	NA	NA	NA	NA

Warning! Check to determine if a simplified or site-specific Terrestrial Ecological Evaluation may be required (Refer to WAC 173-340-7490 through ~7494).

**2. Results for Protection of Soil Direct Contact Pathway: Human Health**

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	<b>2,452.61</b>	<b>30,510.68</b>
Most Stringent Criterion	<b>HI =1</b>	<b>HI =1</b>

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI =1	YES	2.45E+03	2.20E-08	1.00E+00	YES	3.05E+04	6.81E-08	1.00E+00
Total Risk=1E-5	NO	1.11E+06	1.00E-05	4.54E+02	NO	4.48E+06	1.00E-05	1.47E+02
Risk of Benzene= 1E-6	NA	NA	NA	NA	<b>NA</b>			
Risk of cPAHs mixture= 1E-6	NO	1.11E+05	1.00E-06	4.54E+01				
EDB	NA	NA	NA	NA				
EDC	NA	NA	NA	NA				

**3. Results for Protection of Ground Water Quality (Leaching Pathway)**

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	<b>NA</b>
Protective Ground Water Concentration, ug/L	<b>NA</b>
Protective Soil Concentration, mg/kg	<b>Soil-to-Ground Water is not a critical pathway!</b>

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	YES	1.10E+02	6.48E-12	1.65E-01	100% NAPL
Total Risk = 1E-5	YES	1.10E+02	6.48E-12	1.65E-01	100% NAPL
Total Risk = 1E-6	YES	1.10E+02	6.48E-12	1.65E-01	100% NAPL
Risk of cPAHs mixture= 1E-5	YES	1.10E+02	6.48E-12	1.65E-01	100% NAPL
Benzene MCL = 5 ug/L	NA	NA	NA	NA	NA
MTBE = 20 ug/L	NA	NA	NA	NA	NA

Note: 100% NAPL is 71000 mg/kg TPH.

3.2 Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
NA	NA	NA	NA	<b>NA</b>

**A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750**

**1. Enter Site Information**

Date: 10/06/14

Site Name: 207407 Camas, WA

Sample Name: SB-5-16

**2. Enter Soil Concentration Measured**

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc dry basis mg/kg	Composition Ratio %
<b><u>Petroleum EC Fraction</u></b>		
AL_EC >5-6	0	0.00%
AL_EC >6-8	6.63	0.37%
AL_EC >8-10	106	5.85%
AL_EC >10-12	110	6.08%
AL_EC >12-16	540	29.82%
AL_EC >16-21	440	24.30%
AL_EC >21-34	41	2.26%
AR_EC >8-10	103.839	5.73%
AR_EC >10-12	39.88	2.20%
AR_EC >12-16	113.5	6.27%
AR_EC >16-21	260	14.36%
AR_EC >21-34	40.97764	2.26%
Benzene	0	0.00%
Toluene	0	0.00%
Ethylbenzene	0.061	0.00%
Total Xylenes	2.1	0.12%
Naphthalene	0.12	0.01%
1-Methyl Naphthalene	2.7	0.15%
2-Methyl Naphthalene	3.8	0.21%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.0057	0.00%
Benzo(b)fluoranthene	0.0023	0.00%
Benzo(k)fluoranthene	0.00038	0.00%
Benzo(a)pyrene	0.0016	0.00%
Chrysene	0.012	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0.00038	0.00%
<b>Sum</b>	<b>1810.63</b>	<b>100.00%</b>

Notes for Data Entry

Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared previously

REMARK:

- 1) half detection limits used for Benzo(k)fluoranthene and Indeno(1,2,3-cd)pyrene.
- 2) The following parameters have never been detected on the site so a value of zero was entered: benzene, MTBE, toluene, n-hexane, EDB, EDC, AL\_EC>5-6, and dibenz(a,h)anthracene.
- 3) double counting was avoided for E-C fractions
- 4) default value were used for total porosity and soil bulk density.
- 5) A dilution factor of 20 was entered for unsaturated soil zones.

**3. Enter Site-Specific Hydrogeological Data**

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.00112	Unitless
Dilution Factor:	20	Unitless

**4. Target TPH Ground Water Concentration (if adjusted)**

If you adjusted the target TPH ground water

concentration, enter adjusted value here:  ug/L



**A2 Soil Cleanup Levels: Calculation and Summary of Results.** Refer to WAC 173-340-720, 740, 745, 747, 750

**Site Information**

Date: 10/6/2014
Site Name: 207407 Camas, WA
Sample Name: SB-5-16
Measured Soil TPH Concentration, mg/kg: <b>1,810.630</b>

**1. Summary of Calculation Results**

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
			RISK @	HI @	
Protection of Soil Direct Contact: Human Health	Method B	2,603	2.50E-08	6.95E-01	Pass
	Method C	34,200	6.22E-09	5.29E-02	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	100% NAPL	1.60E-11	7.43E-01	Pass
	NA	NA	NA	NA	NA

Warning! Check to determine if a simplified or site-specific Terrestrial Ecological Evaluation may be required (Refer to WAC 173-340-7490 through ~7494).

Warning! Check Residual Saturation (WAC340-747(10)).

**2. Results for Protection of Soil Direct Contact Pathway: Human Health**

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	<b>2,603.23</b>	<b>34,200.41</b>
Most Stringent Criterion	<b>HI =1</b>	<b>HI =1</b>

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI =1	YES	2.60E+03	3.60E-08	1.00E+00	YES	3.42E+04	1.17E-07	1.00E+00
Total Risk=1E-5	NO	7.23E+05	1.00E-05	2.78E+02	NO	2.91E+06	1.00E-05	8.51E+01
Risk of Benzene= 1E-6	NA	NA	NA	NA	<b>NA</b>			
Risk of cPAHs mixture= 1E-6	NO	7.23E+04	1.00E-06	2.78E+01				
EDB	NA	NA	NA	NA				
EDC	NA	NA	NA	NA				

**3. Results for Protection of Ground Water Quality (Leaching Pathway)**

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	<b>NA</b>
Protective Ground Water Concentration, ug/L	<b>NA</b>
Protective Soil Concentration, mg/kg	<b>Soil-to-Ground Water is not a critical pathway!</b>

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	YES	3.89E+02	1.58E-11	7.90E-01	100% NAPL
Total Risk = 1E-5	YES	3.89E+02	1.58E-11	7.90E-01	100% NAPL
Total Risk = 1E-6	YES	3.89E+02	1.58E-11	7.90E-01	100% NAPL
Risk of cPAHs mixture= 1E-5	YES	3.89E+02	1.58E-11	7.90E-01	100% NAPL
Benzene MCL = 5 ug/L	NA	NA	NA	NA	NA
MTBE = 20 ug/L	NA	NA	NA	NA	NA

Note: 100% NAPL is 72000 mg/kg TPH.

3.2 Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
NA	NA	NA	NA	<b>NA</b>

**A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750**

**1. Enter Site Information**

Date: 10/06/14

Site Name: 207407 Camas, WA

Sample Name: SB-6-19

**2. Enter Soil Concentration Measured**

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc dry basis mg/kg	Composition Ratio %
<b><u>Petroleum EC Fraction</u></b>		
AL_EC >5-6	0	0.00%
AL_EC >6-8	8.52	1.47%
AL_EC >8-10	127	21.95%
AL_EC >10-12	72	12.44%
AL_EC >12-16	81	14.00%
AL_EC >16-21	68	11.75%
AL_EC >21-34	39	6.74%
AR_EC >8-10	86.021	14.87%
AR_EC >10-12	6.957	1.20%
AR_EC >12-16	16.73	2.89%
AR_EC >16-21	46	7.95%
AR_EC >21-34	25.9757	4.49%
Benzene	0	0.00%
Toluene	0	0.00%
Ethylbenzene	0.053	0.01%
Total Xylenes	0.026	0.00%
Naphthalene	0.043	0.01%
1-Methyl Naphthalene	0.51	0.09%
2-Methyl Naphthalene	0.76	0.13%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.0035	0.00%
Benzo(b)fluoranthene	0.0051	0.00%
Benzo(k)fluoranthene	0.0017	0.00%
Benzo(a)pyrene	0.0033	0.00%
Chrysene	0.009	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0.0017	0.00%
<b>Sum</b>	<b>578.62</b>	<b>100.00%</b>

**3. Enter Site-Specific Hydrogeological Data**

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.00112	Unitless
Dilution Factor:	20	Unitless

**4. Target TPH Ground Water Concentration (if adjusted)**

If you adjusted the target TPH ground water concentration, enter adjusted value here:  ug/L

Notes for Data Entry

Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared previously

REMARK:

- 1) Half detection limits used for Total Xylenes.
- 2) The following parameters have never been detected on the site so a value of zero was entered: benzene, MTBE, toluene, n-hexane, EDB, EDC, AL\_EC>5-6, and dibenz(a,h)anthracene.
- 3) double counting was avoided for E-C fractions
- 4) default value were used for total porosity and soil bulk density.
- 5) A dilution factor of 20 was entered for unsaturated soil zones.

**A2 Soil Cleanup Levels: Calculation and Summary of Results.** Refer to WAC 173-340-720, 740, 745, 747, 750

**Site Information**

Date: 10/6/2014
Site Name: 207407 Camas, WA
Sample Name: SB-6-19
Measured Soil TPH Concentration, mg/kg: <b>578.620</b>

**1. Summary of Calculation Results**

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
			RISK @	HI @	
Protection of Soil Direct Contact: Human Health	Method B	2,840	4.43E-08	2.04E-01	Pass
	Method C	43,128	1.10E-08	1.34E-02	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	2,006	5.10E-11	8.83E-01	Pass
	NA	NA	NA	NA	NA

Warning! Check to determine if a simplified or site-specific Terrestrial Ecological Evaluation may be required (Refer to WAC 173-340-7490 through ~7494).

**2. Results for Protection of Soil Direct Contact Pathway: Human Health**

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	<b>2,839.86</b>	<b>43,128.01</b>
Most Stringent Criterion	<b>HI =1</b>	<b>HI =1</b>

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI =1	YES	2.84E+03	2.17E-07	1.00E+00	YES	4.31E+04	8.19E-07	1.00E+00
Total Risk=1E-5	NO	1.31E+05	1.00E-05	4.60E+01	NO	5.26E+05	1.00E-05	1.22E+01
Risk of Benzene= 1E-6	NA	NA	NA	NA	<b>NA</b>			
Risk of cPAHs mixture= 1E-6	NO	1.31E+04	1.00E-06	4.60E+00				
EDB	NA	NA	NA	NA				
EDC	NA	NA	NA	NA				

**3. Results for Protection of Ground Water Quality (Leaching Pathway)**

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	<b>HI=1</b>
Protective Ground Water Concentration, ug/L	<b>670.40</b>
Protective Soil Concentration, mg/kg	<b>2005.63</b>

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	YES	6.70E+02	4.84E-11	1.00E+00	2.01E+03
Total Risk = 1E-5	NO	7.11E+02	4.74E-11	1.05E+00	100% NAPL
Total Risk = 1E-6	NO	7.11E+02	4.74E-11	1.05E+00	100% NAPL
Risk of cPAHs mixture= 1E-5	NO	7.11E+02	4.74E-11	1.05E+00	100% NAPL
Benzene MCL = 5 ug/L	NA	NA	NA	NA	NA
MTBE = 20 ug/L	NA	NA	NA	NA	NA

Note: 100% NAPL is 70000 mg/kg TPH.

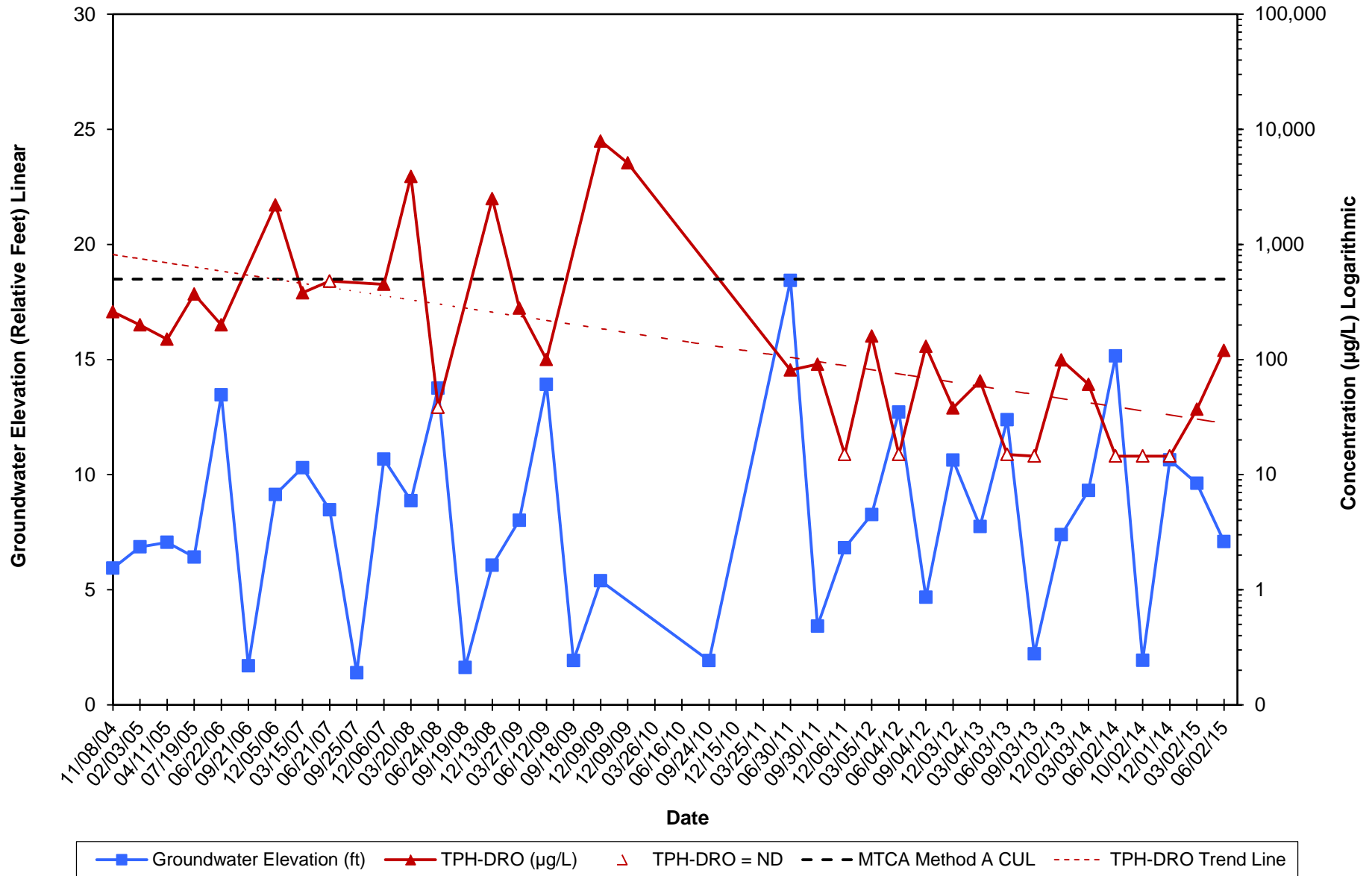
3.2 Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
NA	NA	NA	NA	NA

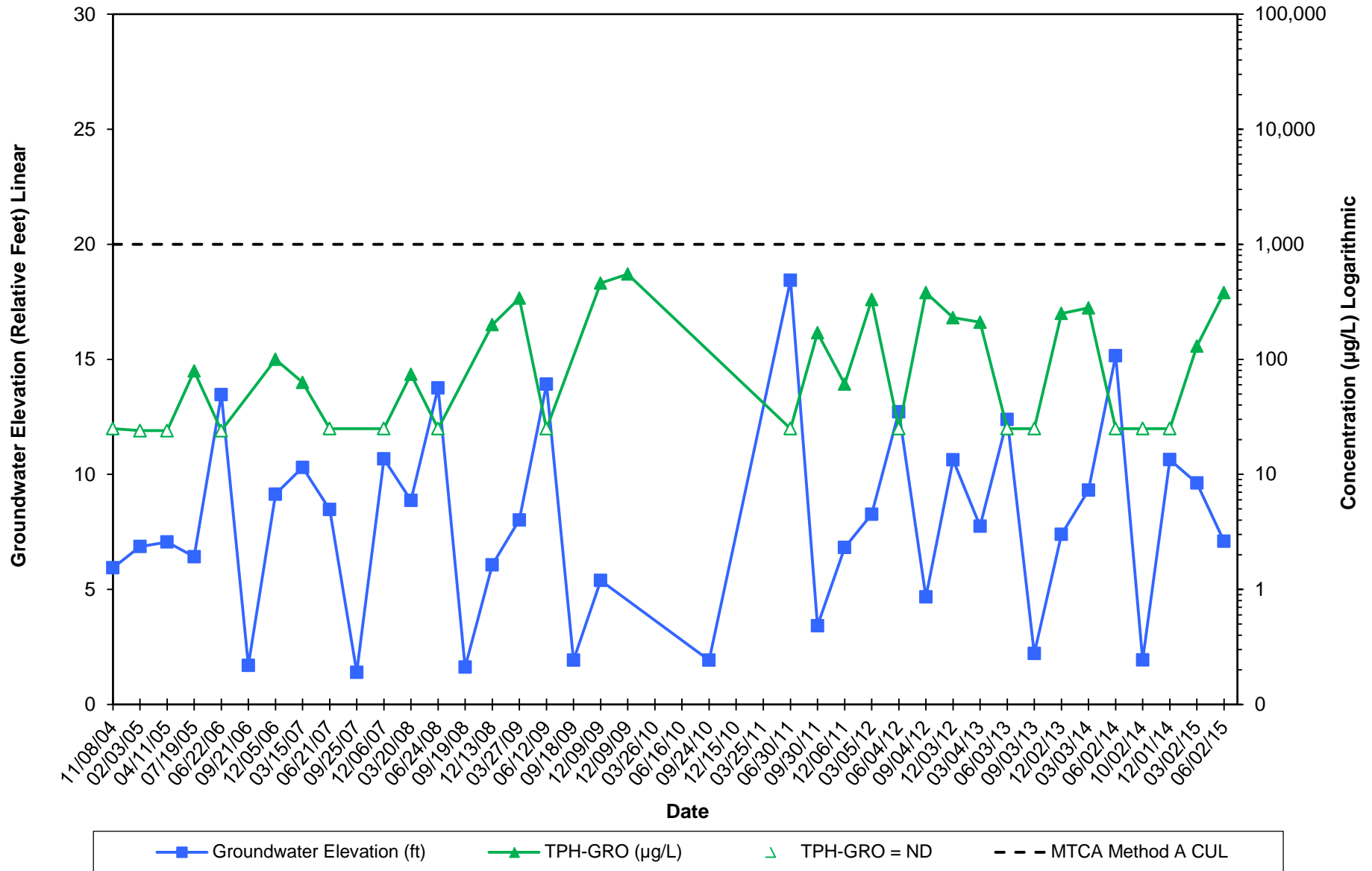
## **Appendix C: Hydrographs**

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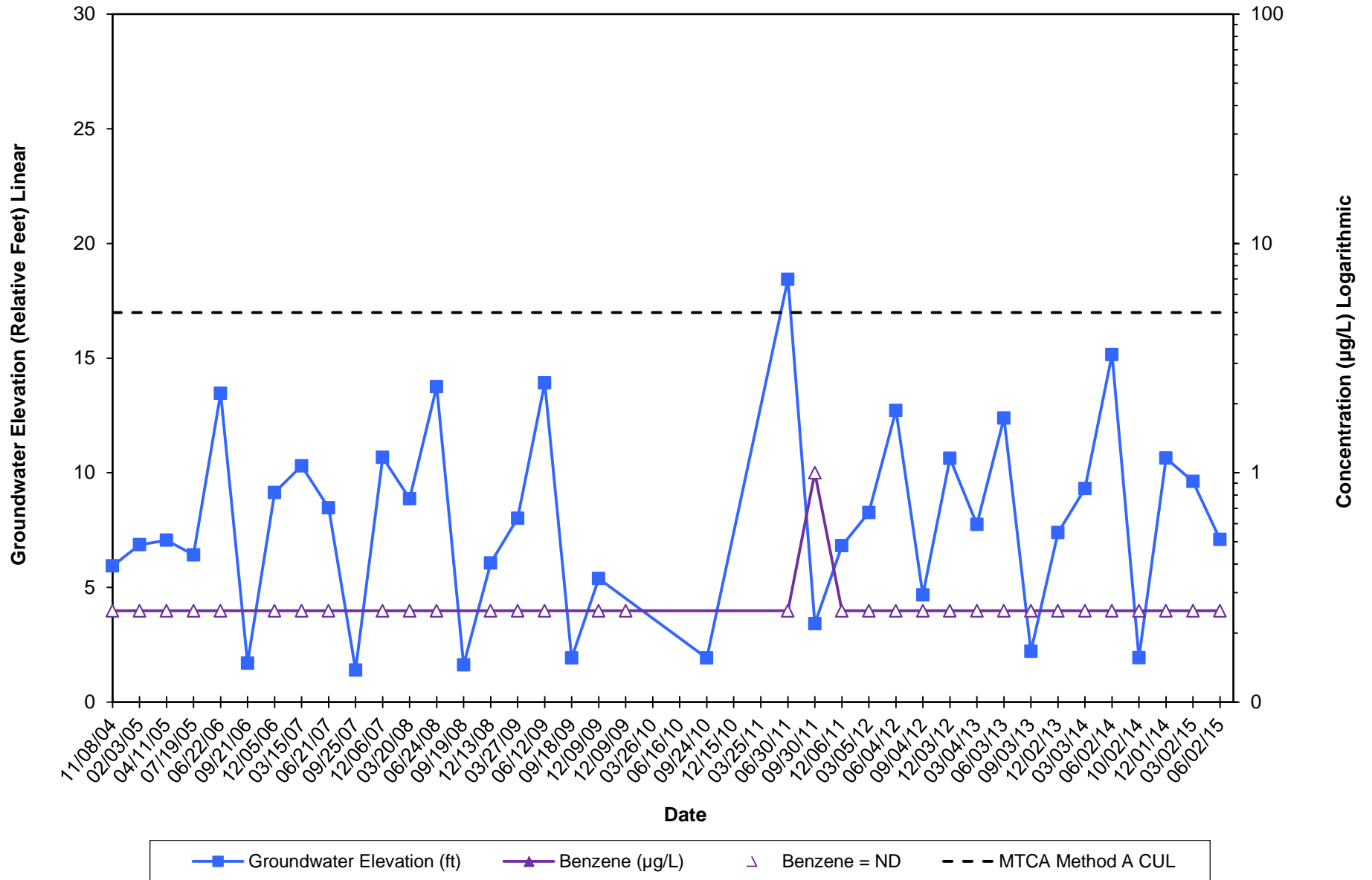
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**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



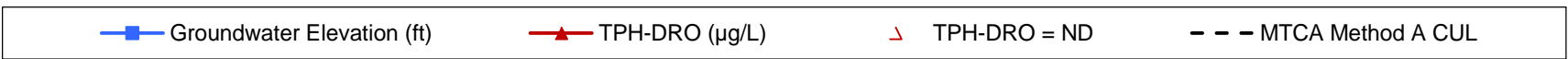
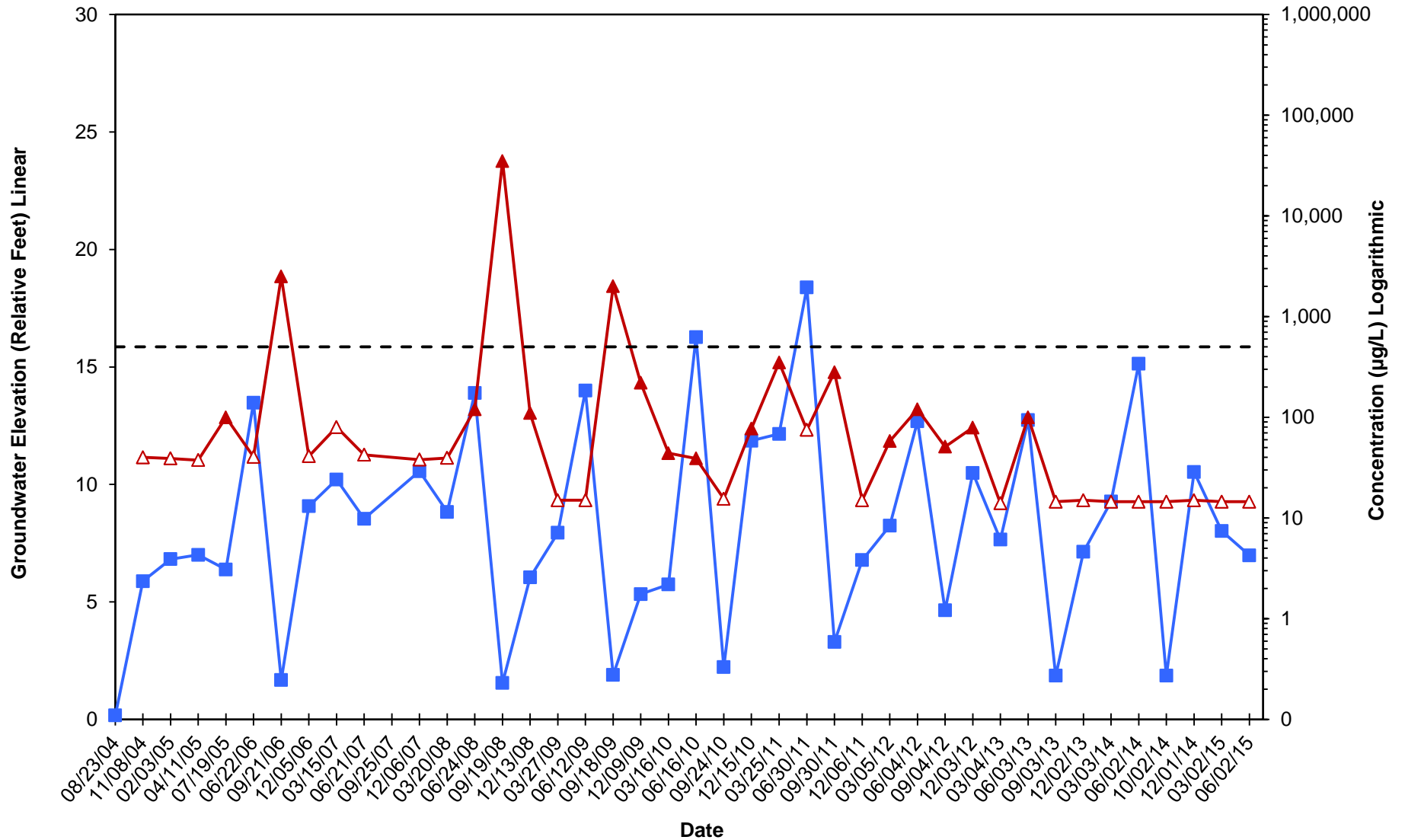
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Hydrograph - Gasoline-Range Hydrocarbons  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**



**Well MW-5  
Hydrograph - Benzene Hydrocarbons  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**

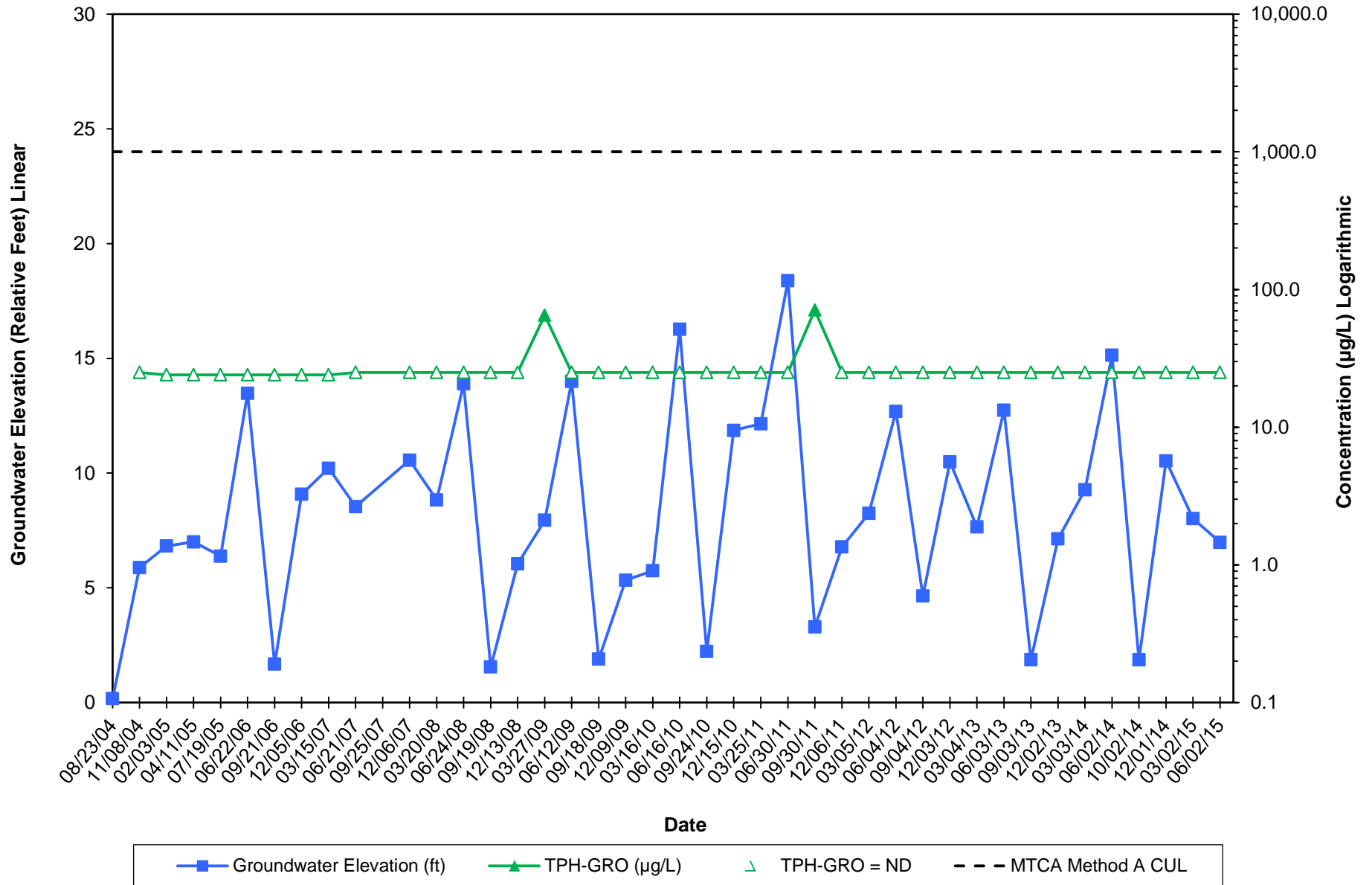


**Well MW-6**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**

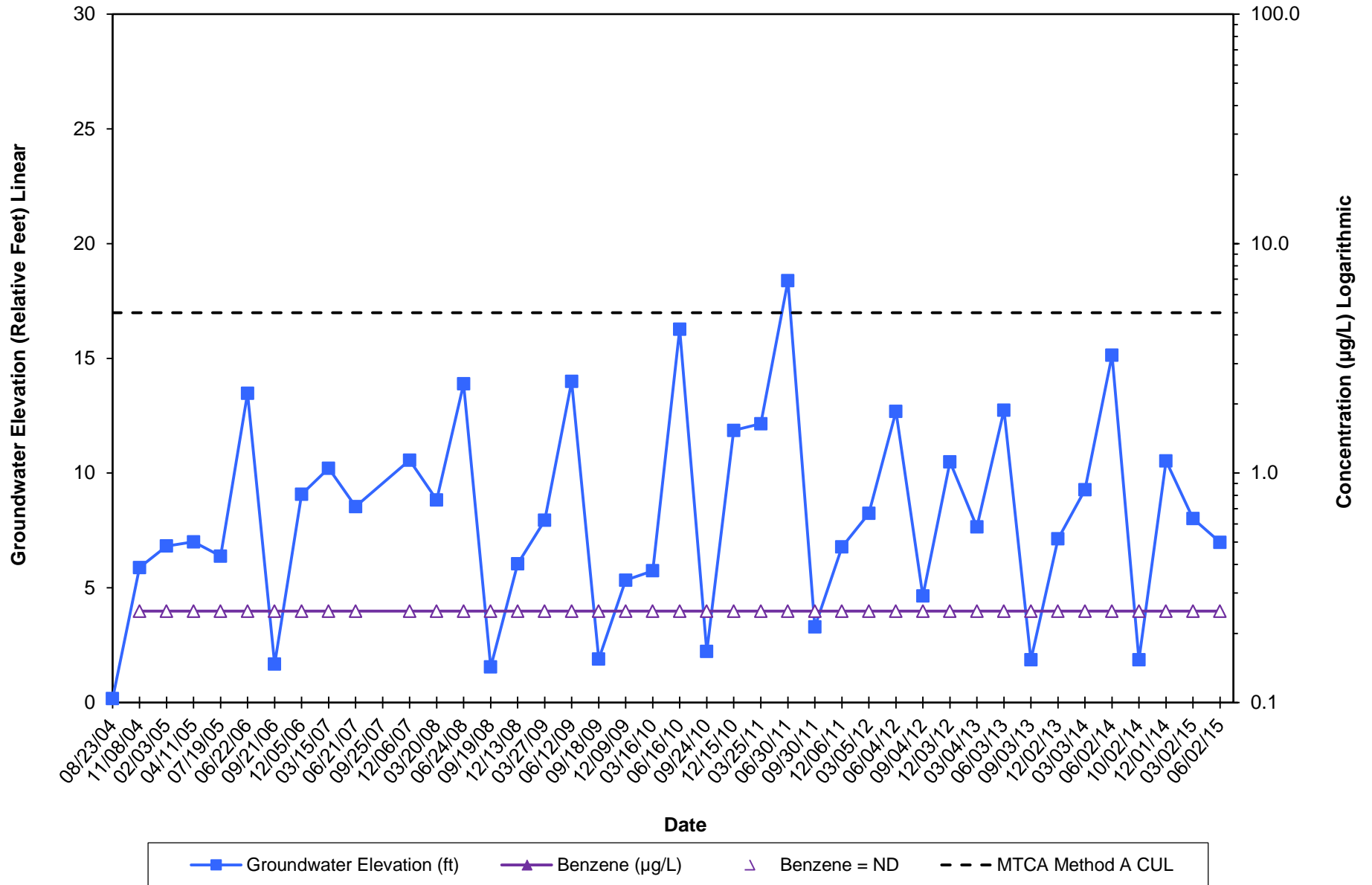




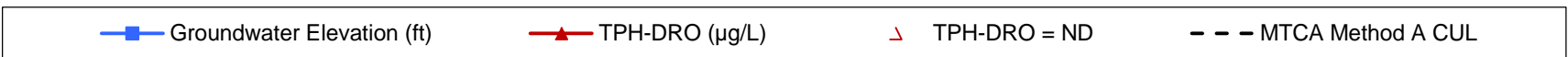
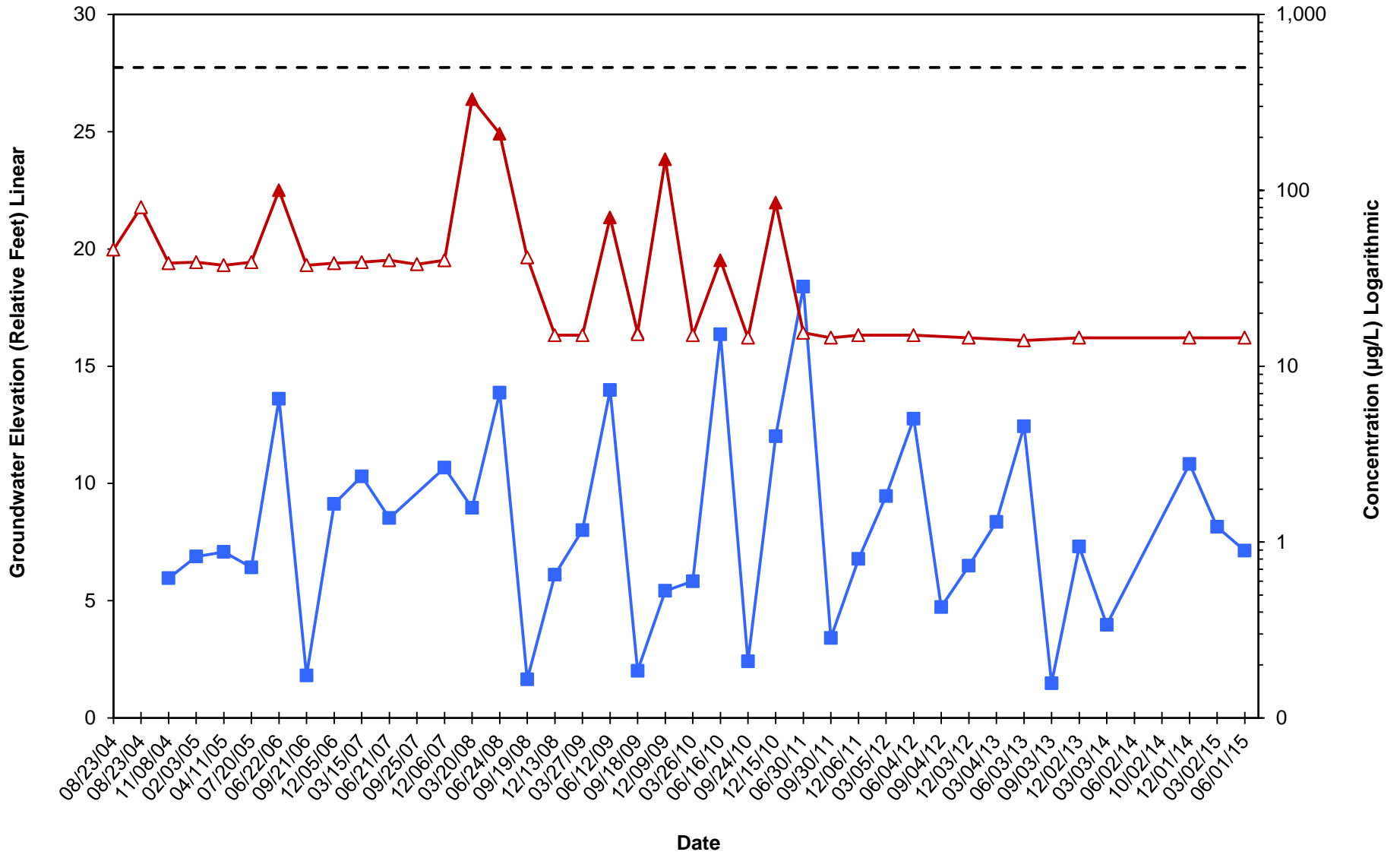
**Well MW-6**  
**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



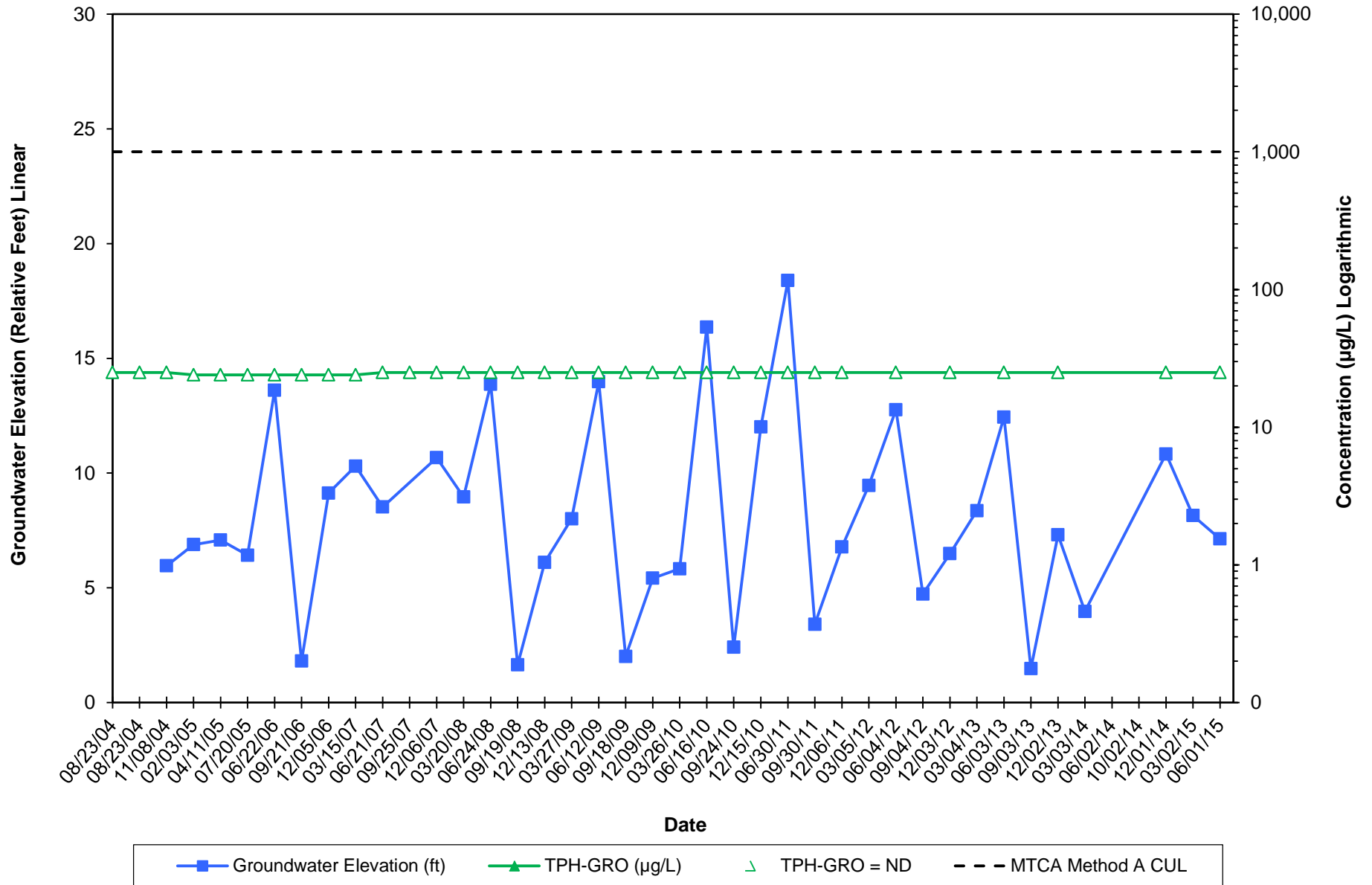
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Hydrograph - Benzene  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**



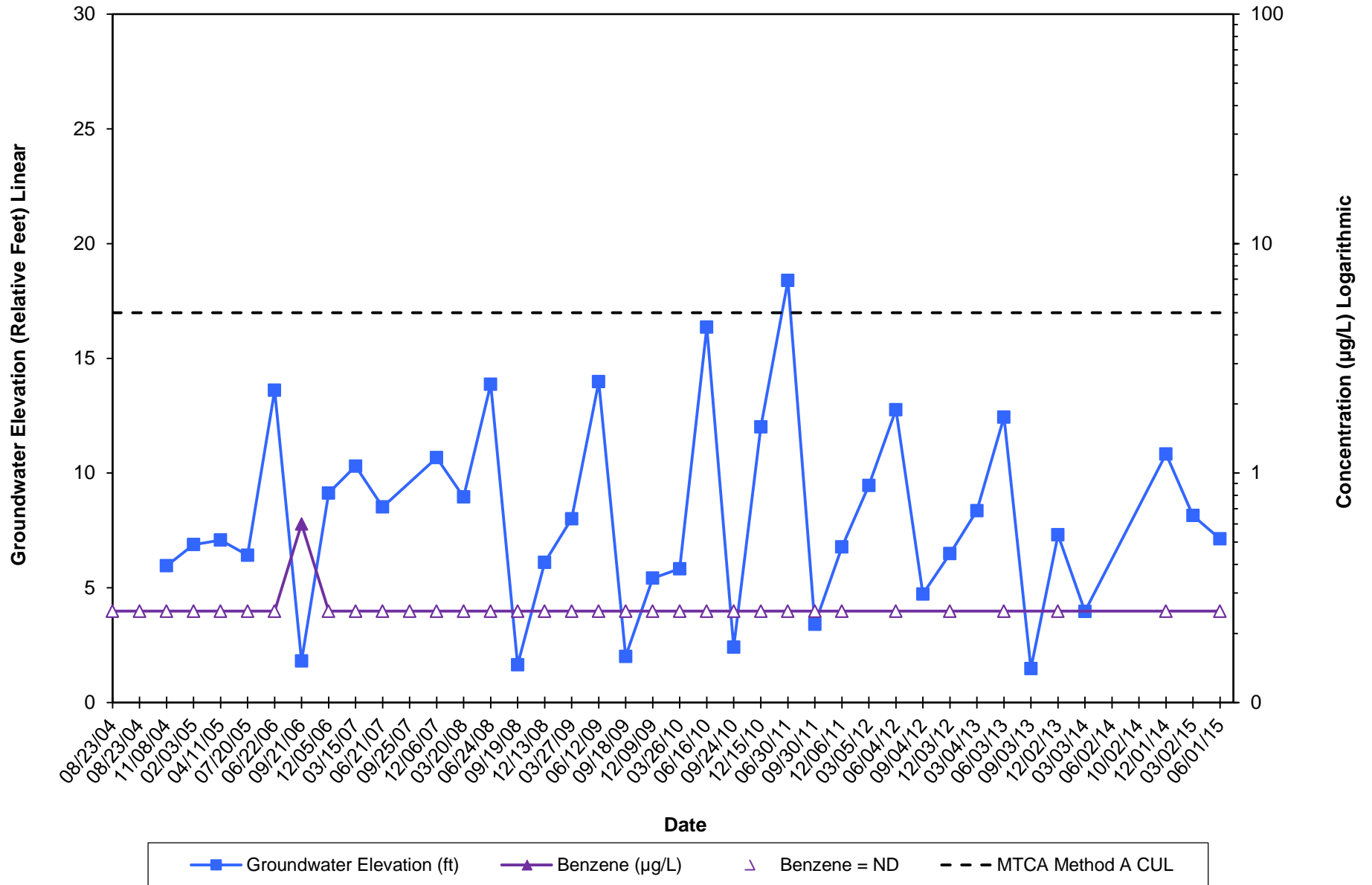
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**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



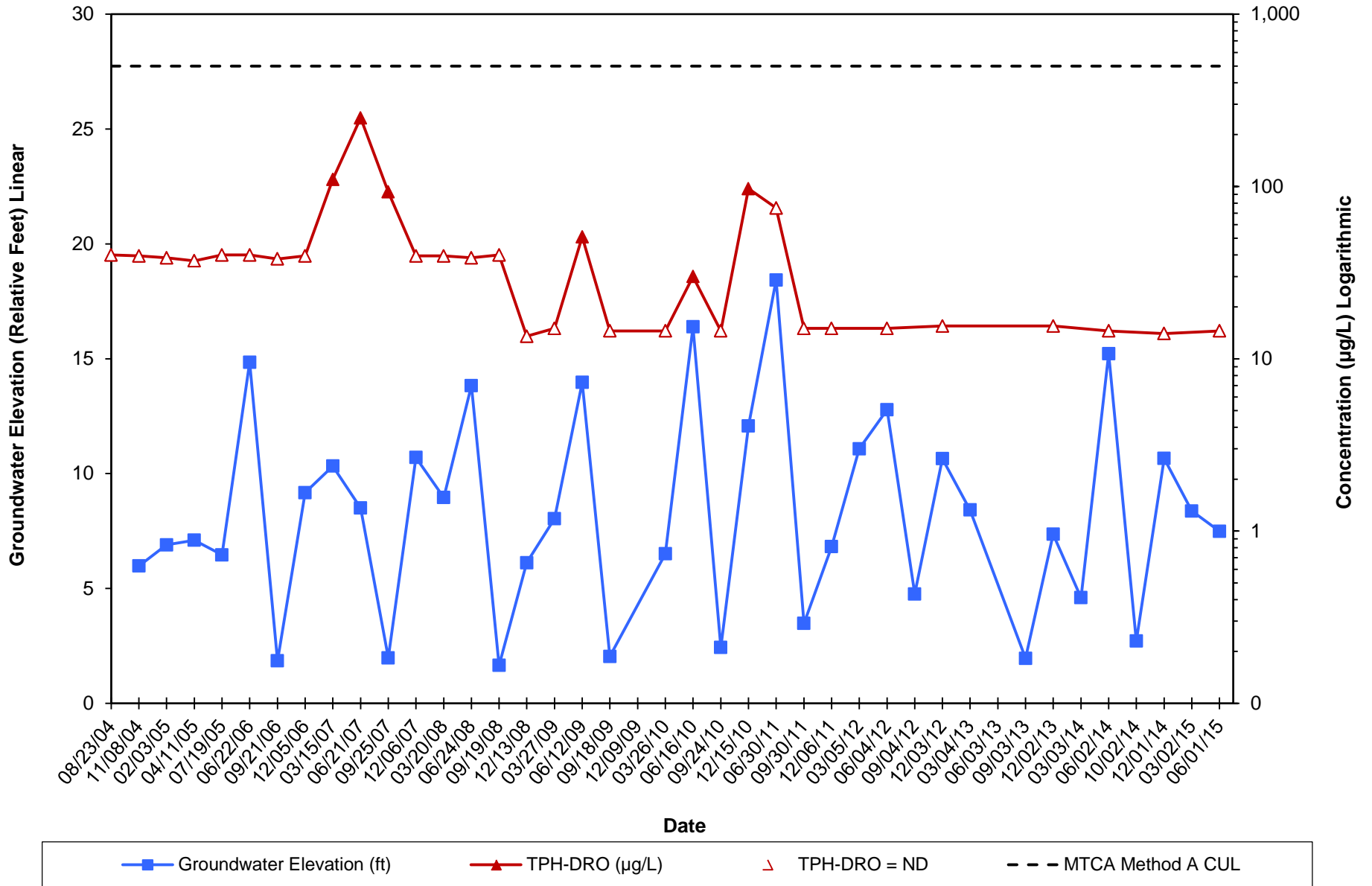
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**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



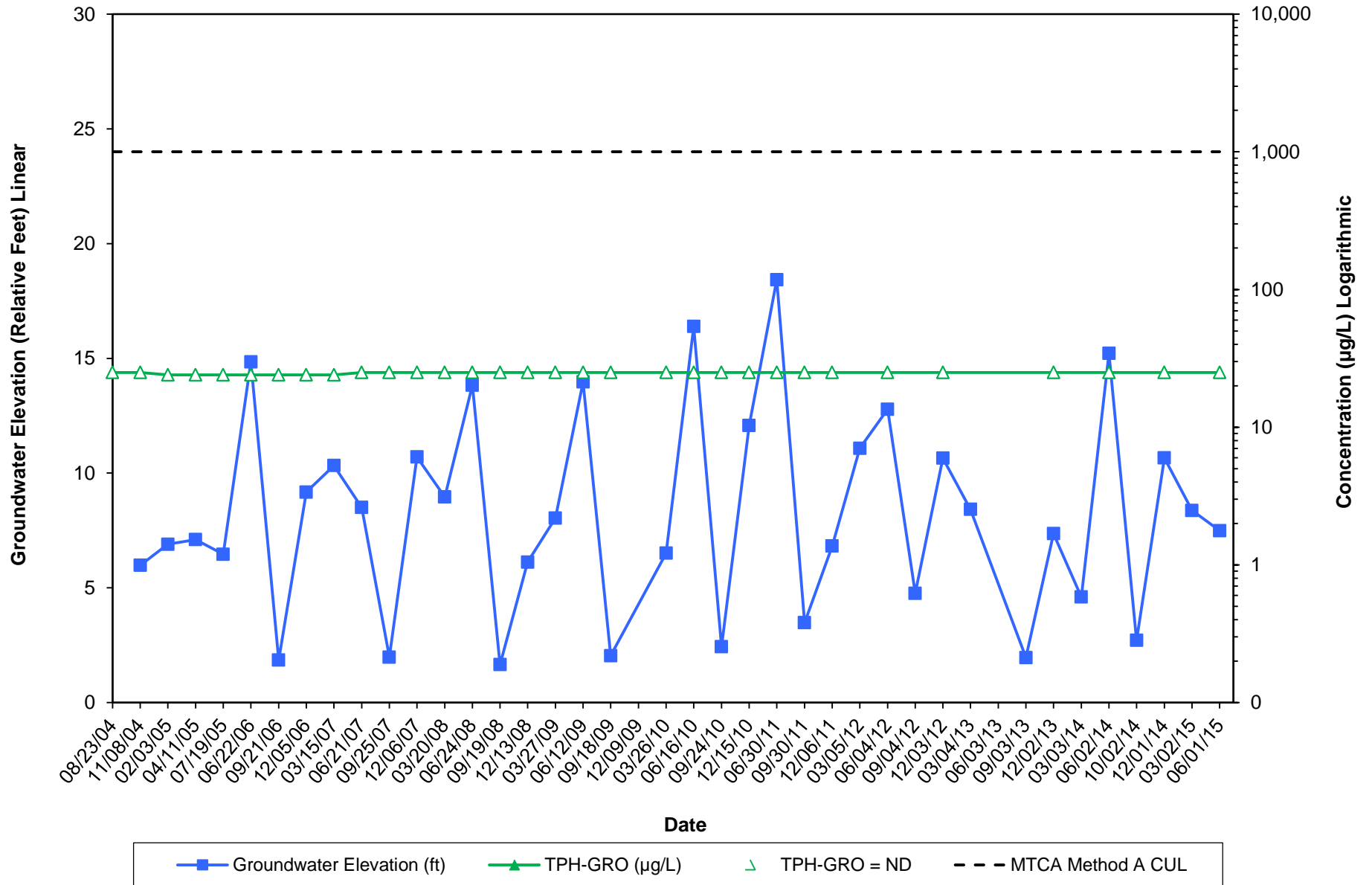
**Well MW-8  
Hydrograph - Benzene  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**



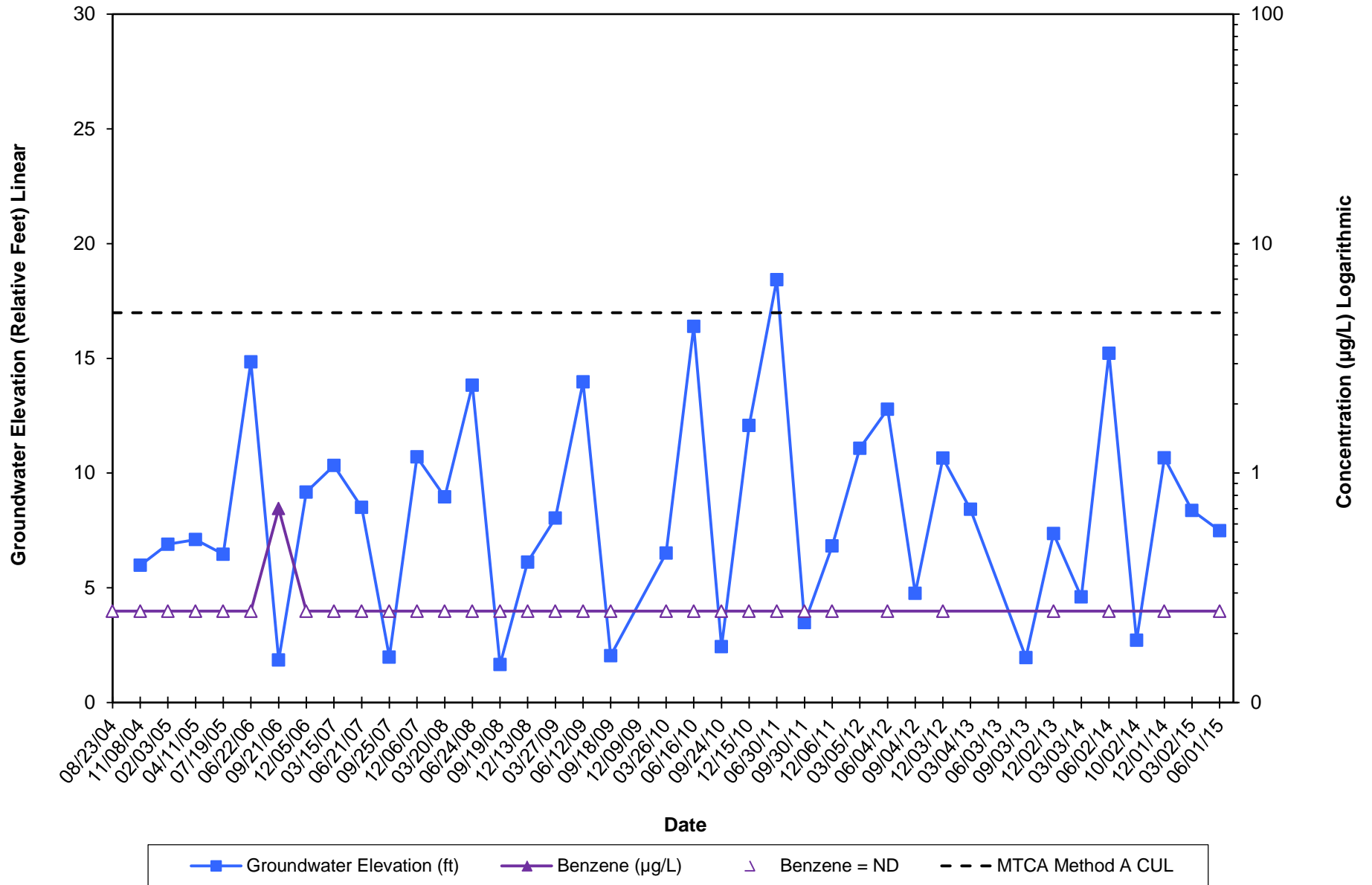
**Well MW-9**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



**Well MW-9  
Hydrograph - Gasoline-Range Hydrocarbons  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**

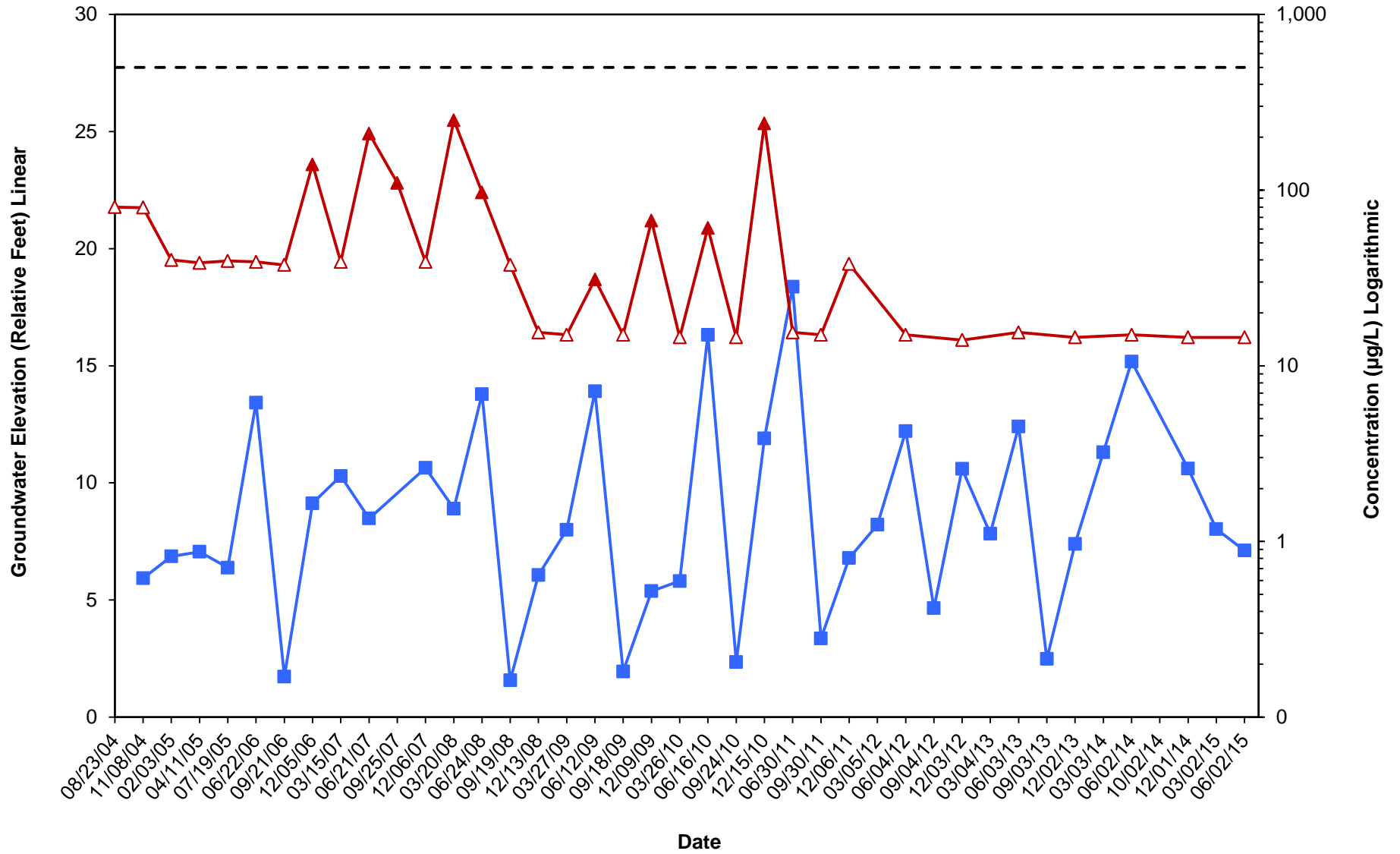


**Well MW-9  
Hydrograph - Benzene  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**

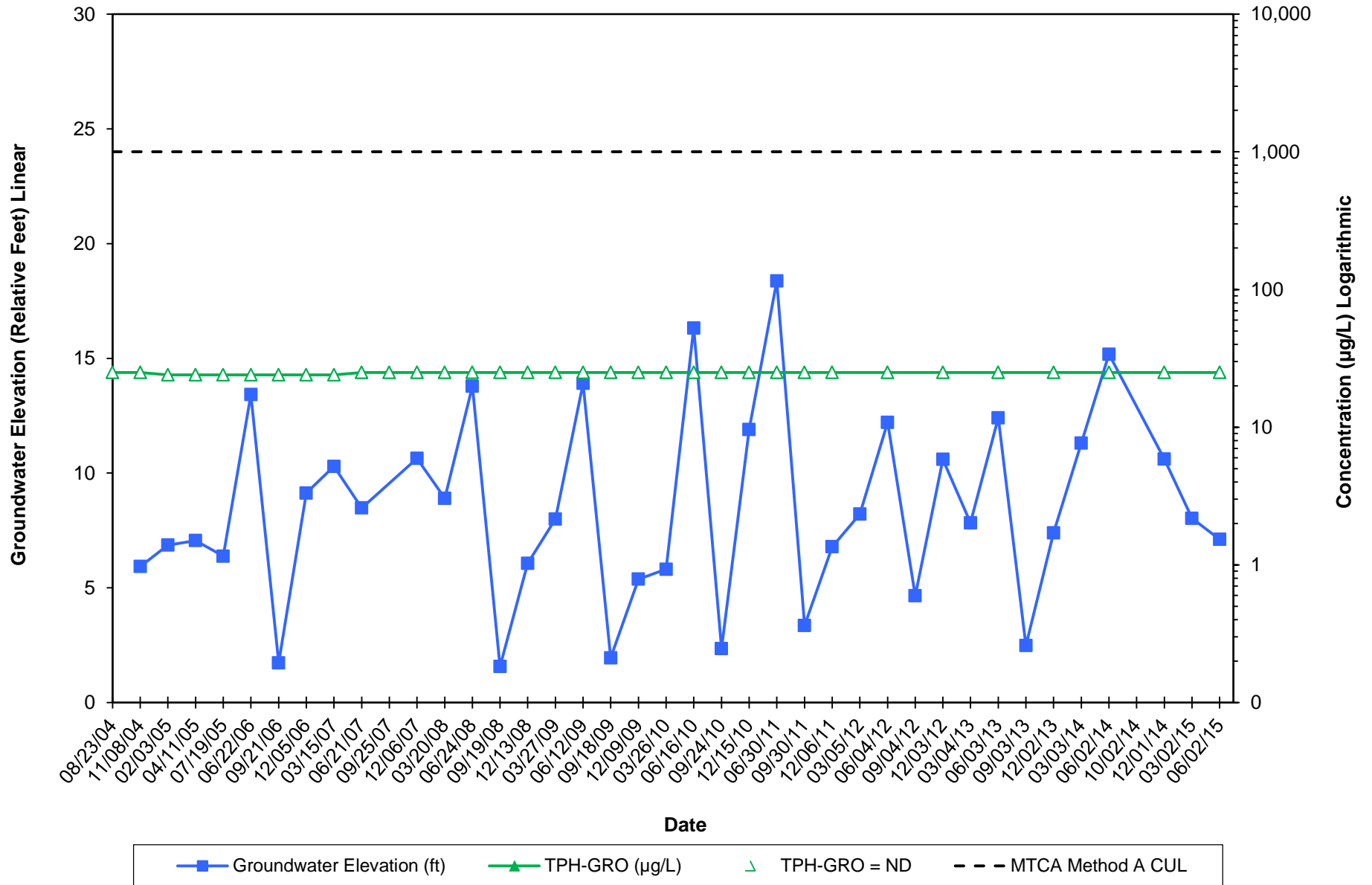




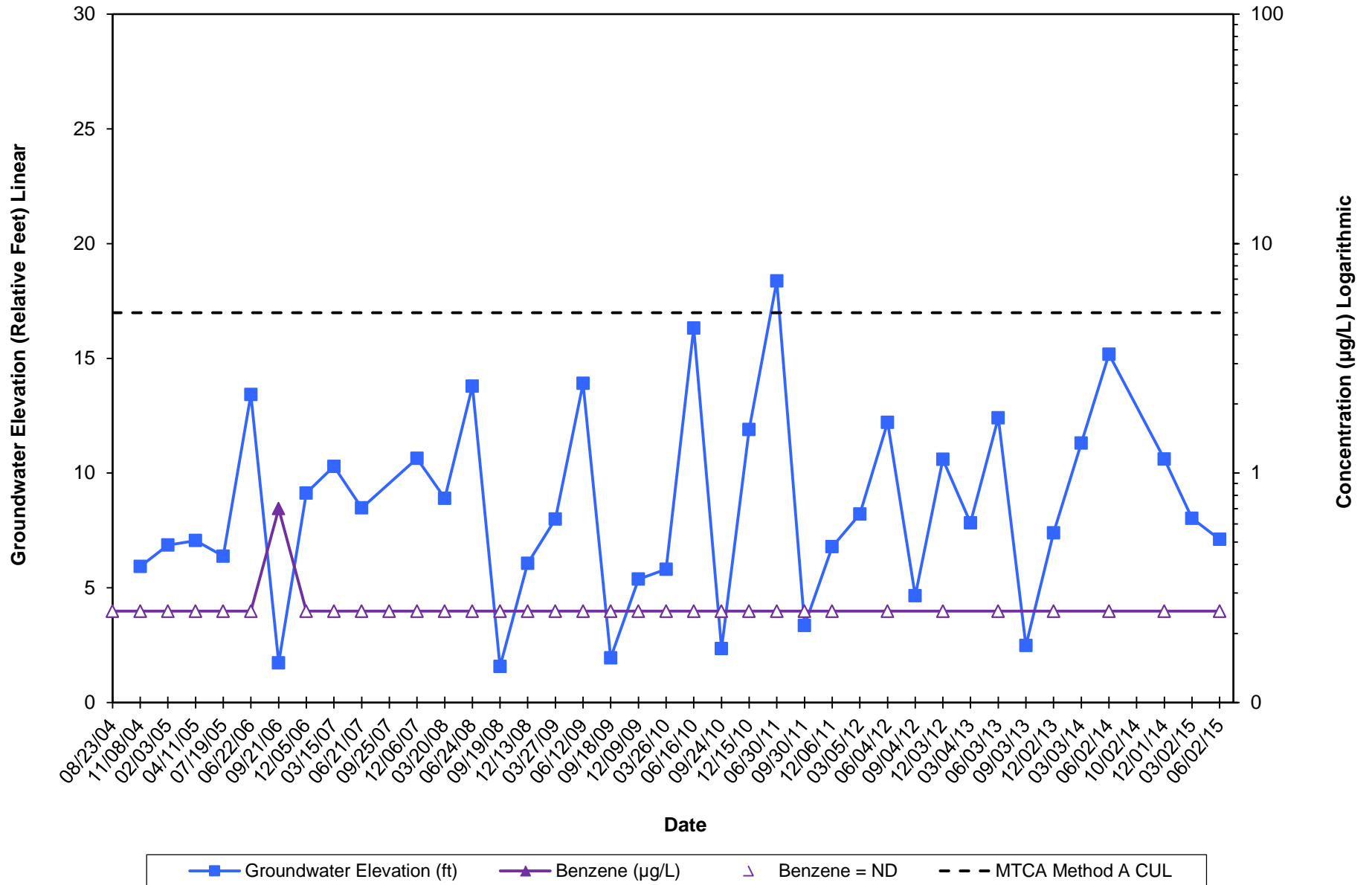
**Well MW-10**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



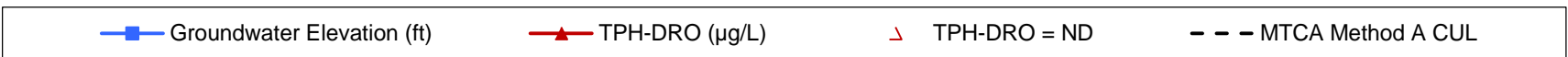
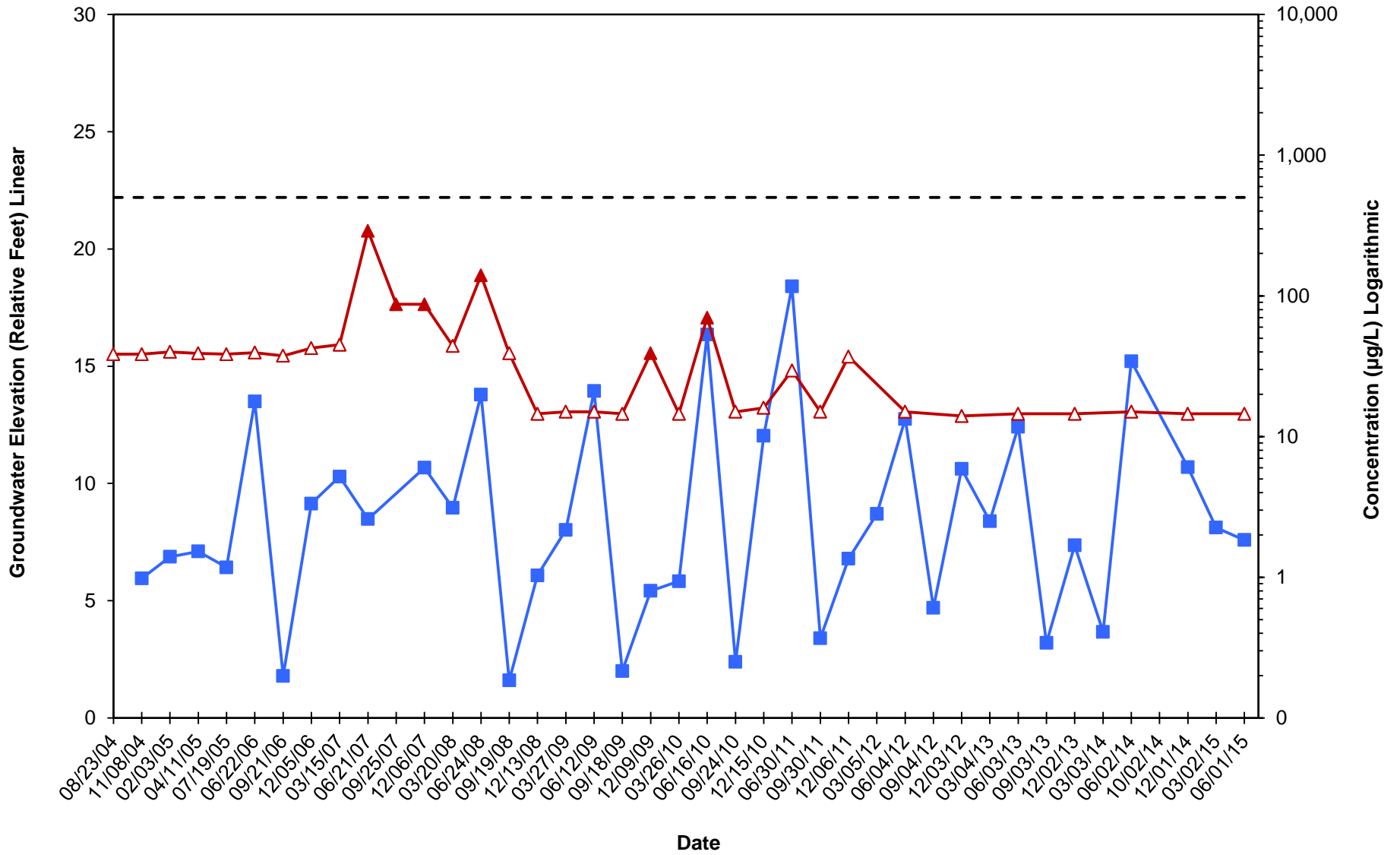
**Well MW-10**  
**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



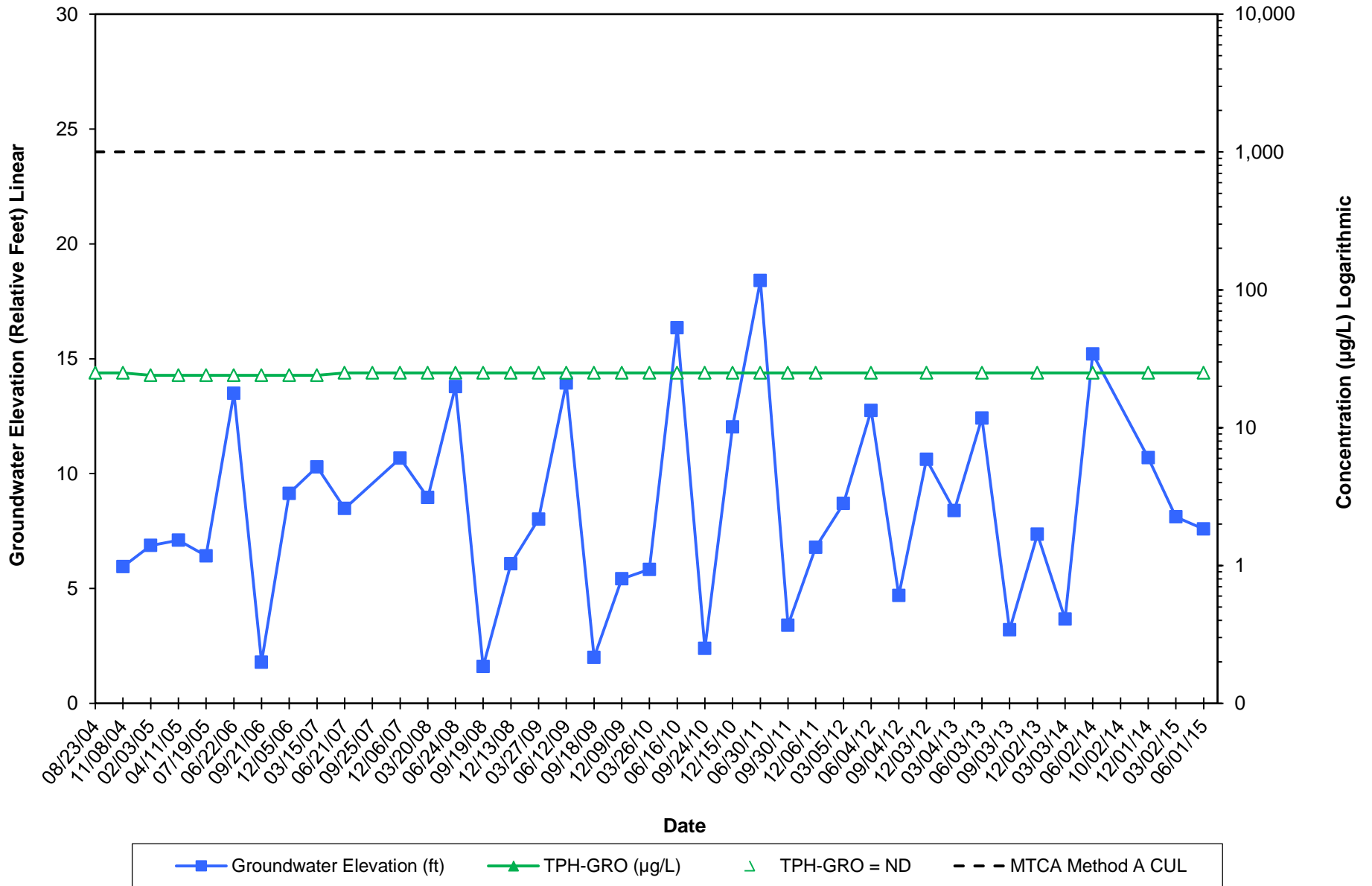
**Well MW-10**  
**Hydrograph - Benzene**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



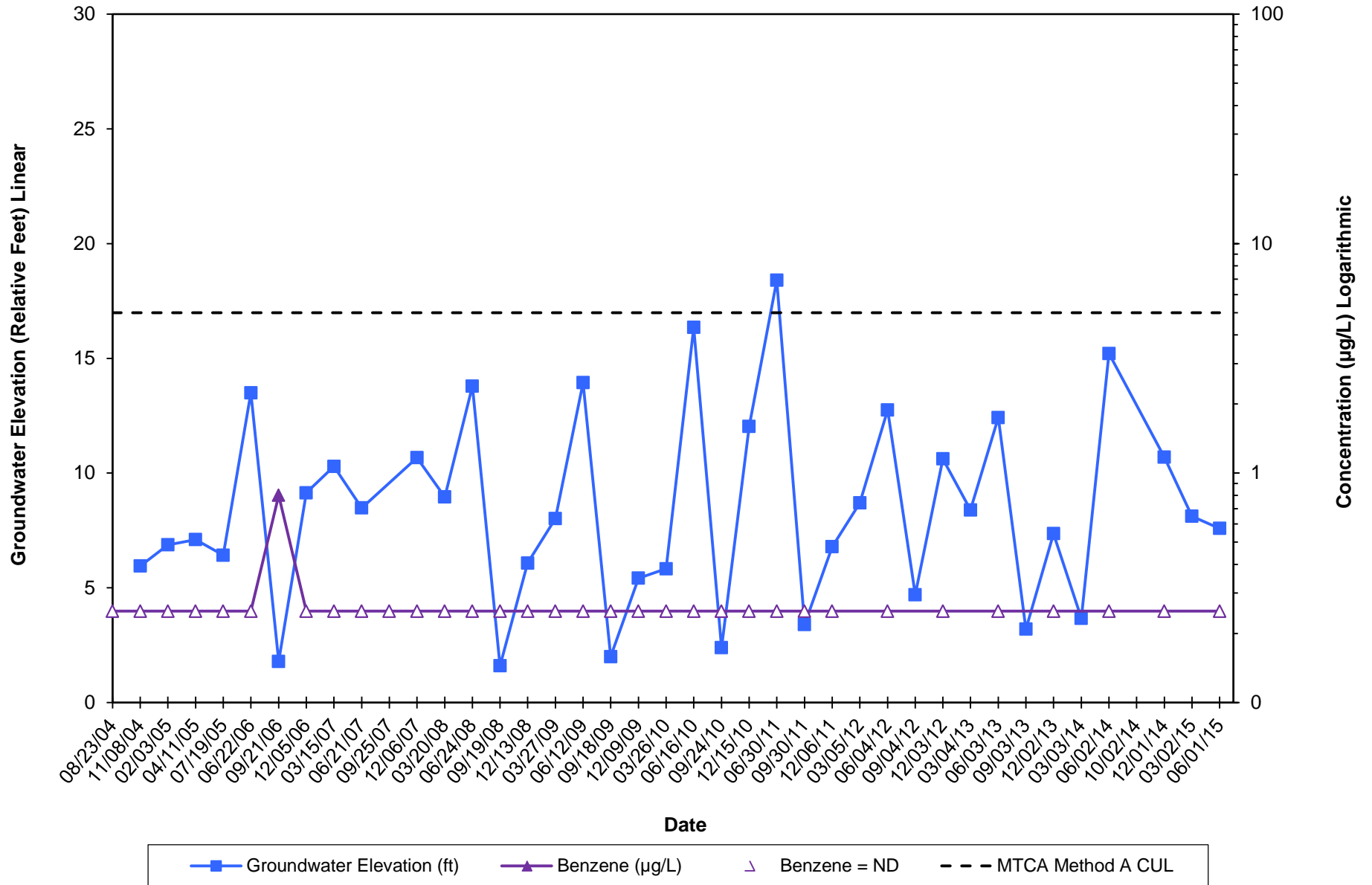
**Well MW-11**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



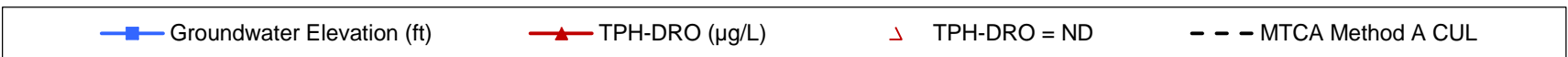
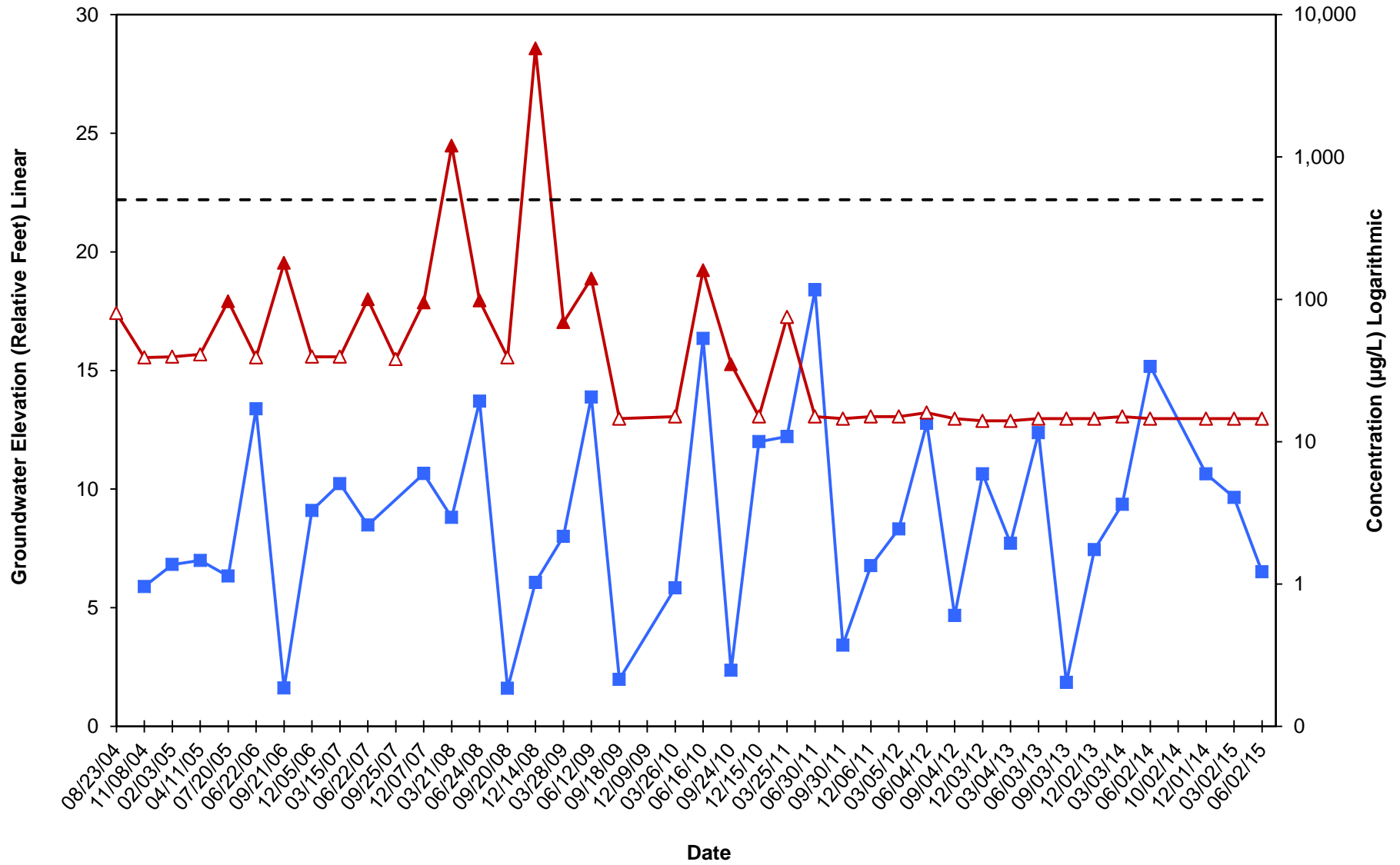
**Well MW-11**  
**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



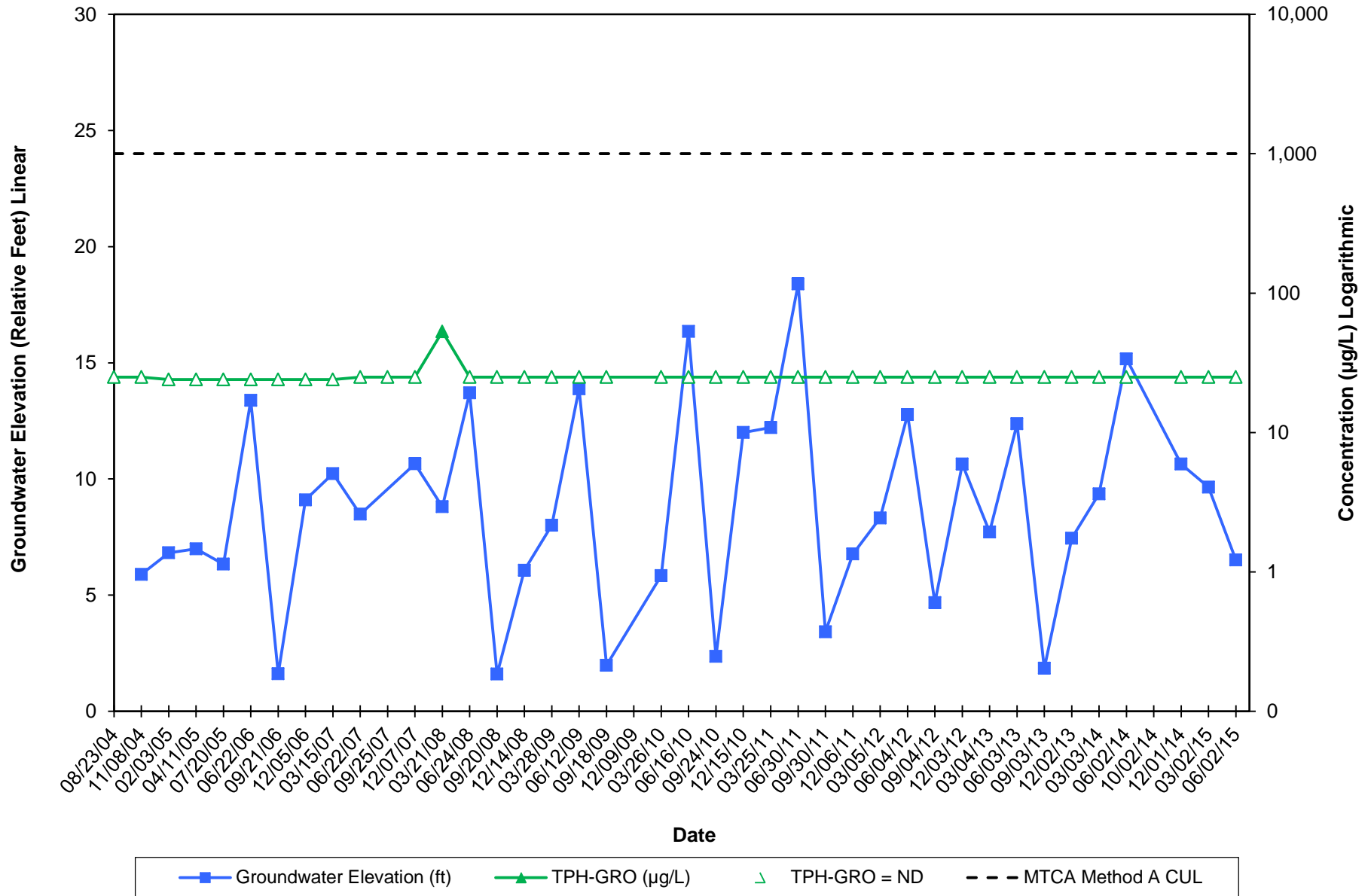
**Well MW-11**  
**Hydrograph - Benzene**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



**Well MW-12**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**

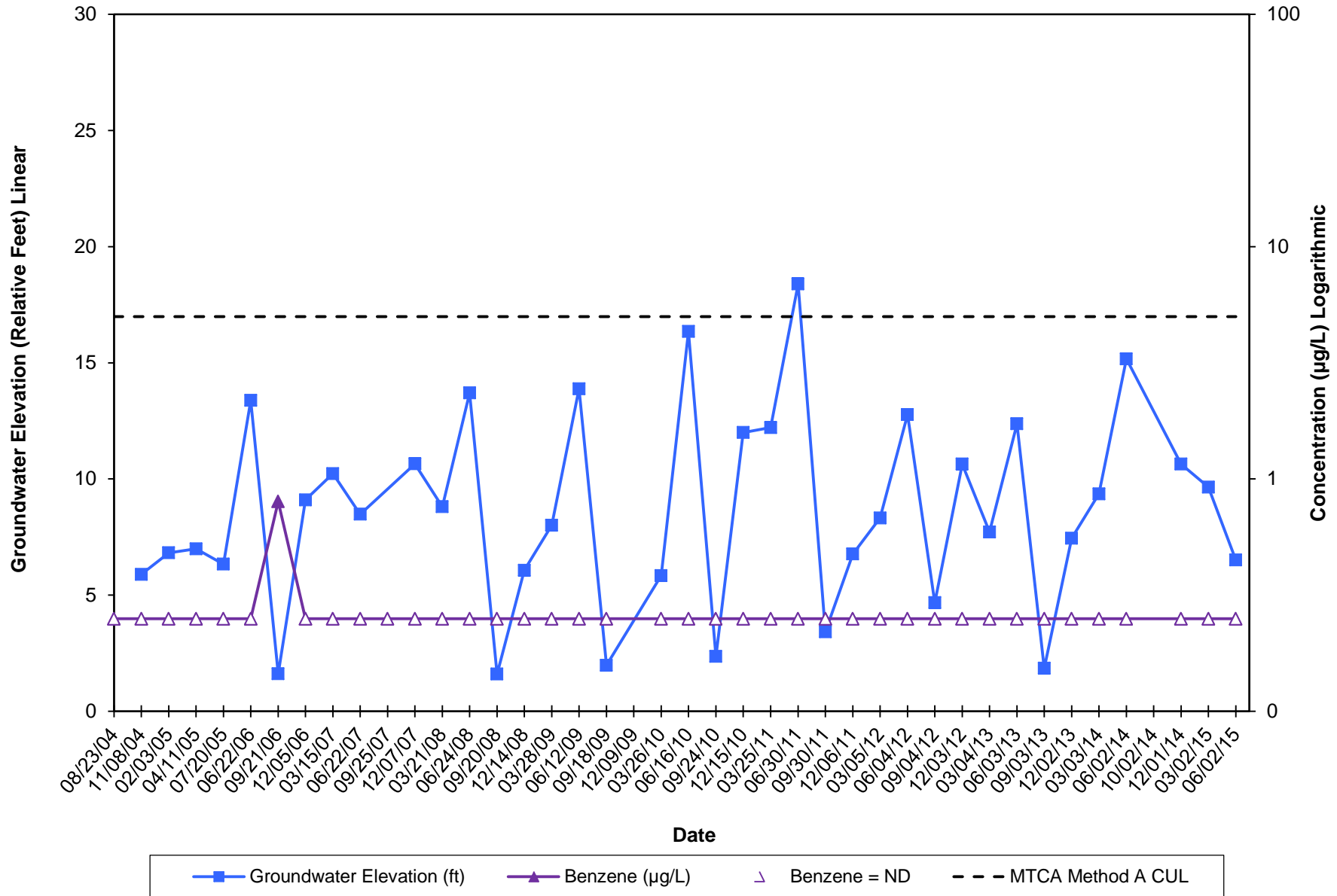


**Well MW-12**  
**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**

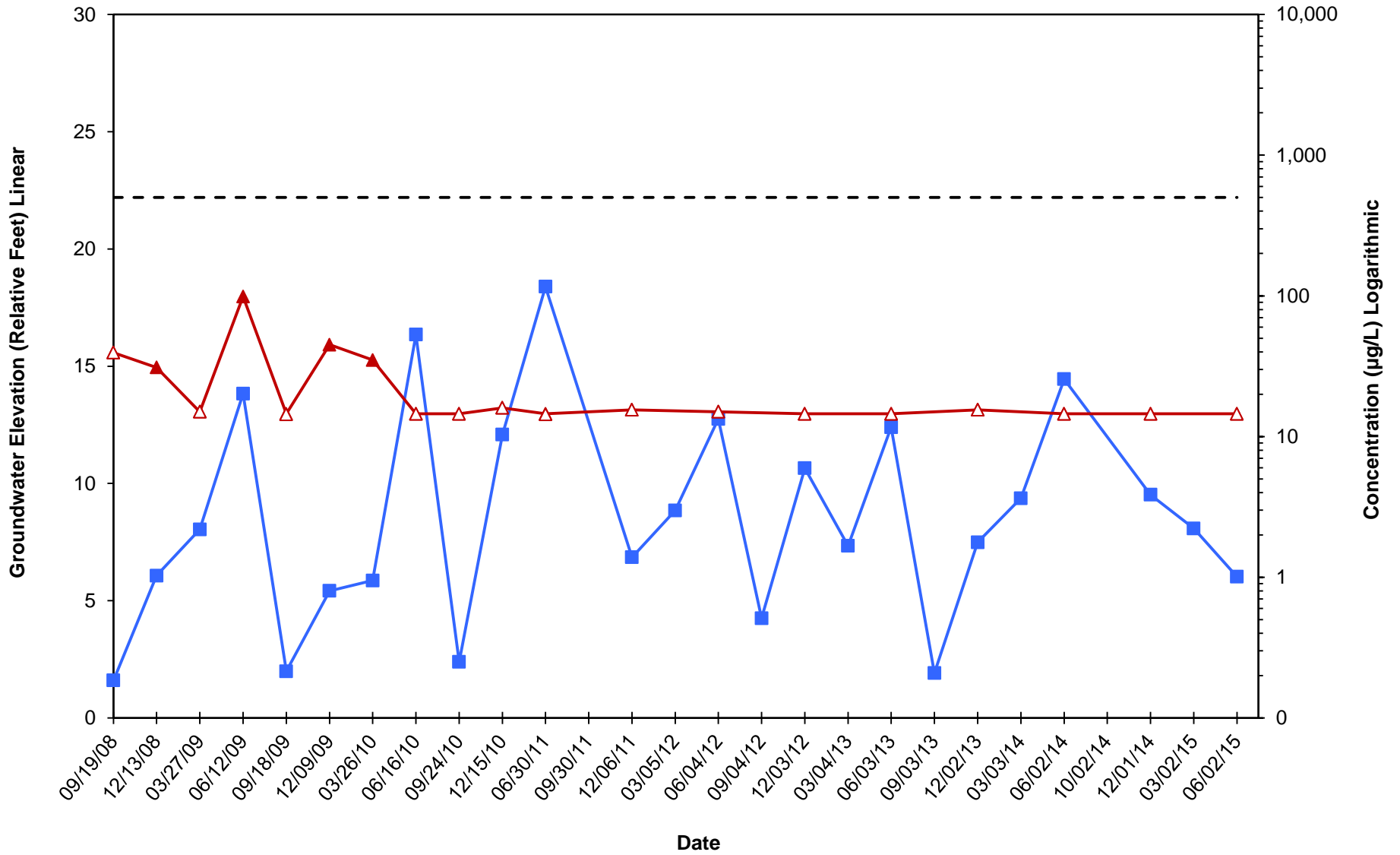




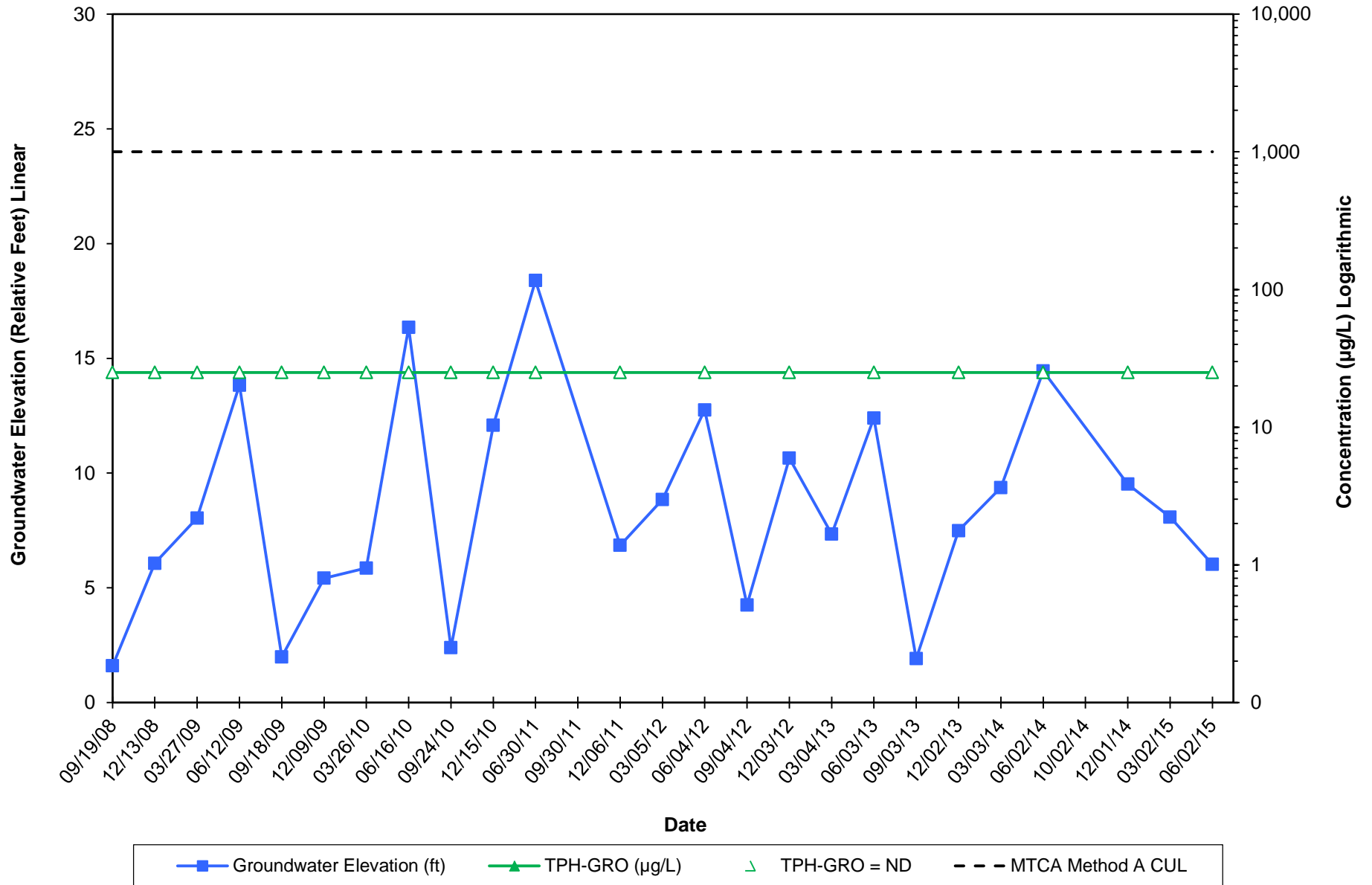
**Well MW-12**  
**Hydrograph - Benzene**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



**Well MW-16**  
**Hydrograph - Diesel-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



**Well MW-16**  
**Hydrograph - Gasoline-Range Hydrocarbons**  
**Former Chevron Bulk Terminal No. 207407**  
**612 SE Union Street, Camas, WA**



**Well MW-16  
Hydrograph - Benzene  
Former Chevron Bulk Terminal No. 207407  
612 SE Union Street, Camas, WA**

