GROUNDWATER MONITORING WELL SAMPLING REPORT

for

HORSE HEAVEN HILLS TRAVEL PLAZA

101 Merlot Drive
Prosser, Washington 99350

Date: August 31, 2015

Prepared for:

Horse Heaven Hills Travel Plaza
101 Merlot Drive
Prosser, WA 99350

Prepared by:

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PROJECT OVERVIEW

Client:	Colony Insurance PO Box 469011 San Antonio, TX 78246
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Property:	Horse Heaven Hills Travel Plaza 101 Merlot Drive Prosser, WA 99350
BMEC Site Manager:	Mr. Peter Trabusiner
DOE Coordinator:	Mr. Nnamdi Madakor, P.HG, P.G Statewide VCP Coordinator
Environmental Professionals:	Yancy Meyer, Environmental Professional Brent Bergeron, Licensed Geologist
Project Number:	E2015/0803
Report Date:	August 31, 2015

1.0 EXECUTIVE SUMMARY

In Spring of 2014, Blue Mountain Environmental and Consulting (BMEC) Company, Inc., from Waitsburg, Washington was contacted by Mr. Brian Rogers, the previous property owner, regarding performing a groundwater investigation to delineate petroleum hydrocarbon (PHC) contamination in the shallow soils and groundwater related to seven diesel fuel pumps at the Horse Heaven Hills Travel Plaza in Prosser, Washington. The 3.92-acre property is approximately 720 feet above sea level and located in Township 9 North, Range 24 East, Section 35 of Benton County, Washington (Willamette Meridian).

A limited site investigation was performed at the Site by BMEC personnel on September 18, 2013 and the results of that site investigation indicated that PHC contaminated soil existed beneath several of the truck stop (east side of commercial building) diesel fuel dispensers at concentrations exceeding Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Cleanup Levels. The depth of the PHC contamination beneath the diesel fuel dispensers was observed to be a minimum of one foot below surface grade (bsg) during the September 2013 site investigation.

A total of 10 soil stockpile samples, 33 soil samples, and three water samples were obtained for laboratory analysis from the Site during the March and April 2014 subsurface investigation activities. Approximately 30,000 ft^3 of soil was excavated from the vicinity of the former diesel fuel pump dispensers. Most of this soil was stockpiled onsite as petroleum-contaminated soil (PCS) awaiting future disposal at a licensed waste disposal facility.

During the March-April 2014 subsurface investigation, PHC concentrations exceeding MTCA Method A Cleanup Levels were detected in soil sidewall samples, diesel fuel pump dispenser excavation pit bottom soil samples, former underground storage tank (UST) excavation pit soil samples, and a single groundwater sample obtained from the base of the diesel fuel pump dispenser excavation pit. PHCs detected at concentrations exceeding MTCA Method A Cleanup Levels included total petroleum hydrocarbon (TPH) – diesel range (TPH-D), benzene, and polynuclear aromatic hydrocarbons (PAHs) in soil, as well as TPH-D and PAHs in groundwater.

Groundwater was observed to be at an approximate depth of 8 to 8.5 feet bsg on March 13 and 14, 2014, and as shallow as 3 feet bsg on April 23, 2014. Thus, the MTCA Method A Cleanup Level exceedances in soil should technically be considered a potential groundwater issue moving forward.

During the week of August 12 – 15, 2014, a shallow groundwater investigation was conducted at the Site. During the groundwater investigation, seven monitoring wells (MW-1 thru MW-7) were installed at the Site and screened from depths ranging from 4.5 feet to 21.5 feet bsg. A total of 14 soil samples (two per monitoring well boring) and 7 groundwater samples were obtained for laboratory analyses by ALS Laboratory Group (ALS) in Everett, Washington. All of the soil and groundwater samples were analyzed for a combination of TPH-D and TPH – heavy oil range (TPH-O) via Northwest Method TPH-Dx; benzene, toluene, ethylbenzene, and xylenes (BTEX)

analysis via Environmental Protection Agency (EPA) Method 8021; and PAHs via EPA Method 8270 SIM. TPH-D was detected in five soil samples collected in August 2014 and ethylbenzene was detected in one soil sample collected in August 2014, but at concentrations that did not exceed MTCA Method A Cleanup Levels.

The first quarterly groundwater sampling event was conducted at the Site on August 15, 2014. TPH-D was detected in four groundwater samples collected and TPH-O was detected in one groundwater sample collected in August 2014 at concentrations that did exceed MTCA Method A Cleanup Levels. PAHs were detected in the four groundwater samples analyzed during the August 2014 groundwater investigation, but none of the PAH detections exceeded MTCA Method A Cleanup Levels. Depth to water ranged from 2.68 feet to 4.73 feet below top of casing and groundwater flow direction was confirmed to be to the southeast based on data collected on August 15, 2014. The hydraulic gradient between monitoring wells MW-1 and MW-3 was calculated as 0.01 feet per foot, steepening to 0.05 feet per foot down-gradient between wells MW-3 and MW-6.

During the second quarterly groundwater sampling event conducted at the Site on November 24, 2014, depth to water ranged from 5.85 to 9.83 feet below top of casing and the groundwater flow direction was determined to be to the southeast. The hydraulic gradient between monitoring wells MW-1 and MW-3 was calculated as 0.01 feet per foot, steepening to 0.05 feet per foot down-gradient between wells MW-3 and MW-6. All seven monitoring wells (MW-1 thru MW-7) were sampled and the groundwater samples were submitted to ALS for a combination of the following analyses: TPH-D, TPH-O, BTEX, and PAHs. TPH-D concentrations were detected in groundwater samples obtained from four of the monitoring wells and two of the TPH-D detections exceeded Washington MTCA Method A Cleanup Levels. PAHs were detected in one of the two groundwater samples (in which TPH-D exceeded MTCA Method A Cleanup Levels) and one of the two PAH concentrations exceeded MTCA Method A Cleanup Levels.

During the third quarterly groundwater sampling event conducted at the Site on February 11, 2015, depth to water ranged from 6.25 to 10.25 feet below top of casing and the groundwater flow direction was determined to be to the southeast. The hydraulic gradient between monitoring wells MW-1 and MW-3 was calculated as 0.01 feet per foot, steepening to 0.13 feet per foot down-gradient between wells MW-3 and MW-6. All seven monitoring wells (MW-1 thru MW-7) were sampled and the groundwater samples were submitted to ALS for a combination of the following analyses: TPH-D, TPH-O, BTEX, and PAHs. TPH-D was detected in a groundwater sample obtained from monitoring well MW-5 at a concentration exceeding the MTCA Method A Cleanup Level.

During the fourth quarterly groundwater sampling event conducted at the Site on May 6, 2015, depth to water ranged from 3.21 to 5.24 feet below top of casing and the groundwater flow direction was determined to be to the southeast. The hydraulic gradient between monitoring wells MW-1 and MW-3 was calculated as 0.01 feet per foot, steepening to 0.05 feet per foot down-gradient between wells MW-3 and MW-6. All seven monitoring wells (MW-1 thru MW-7) were sampled and the groundwater samples were submitted to ALS for a combination of the following analyses: TPH-D, TPH-O, BTEX, and PAHs. TPH-D was detected in groundwater

samples obtained from monitoring wells MW-2 and MW-6 at concentrations exceeding the MTCA Method A Cleanup Level.

During the first quarterly groundwater sampling event of the second year of monitoring, conducted at the Site on August 11, 2015, depth to water ranged from 2.61 to 4.22 feet below top of casing and the groundwater flow direction was determined to be to the southeast. The hydraulic gradient between monitoring wells MW-1 and MW-5 was calculated as 0.015 feet per foot. All seven monitoring wells (MW-1 thru MW-7) were sampled and the groundwater samples were submitted to ALS for a combination of the following analyses: TPH-D, TPH-O, BTEX, and PAHs. The laboratory analytical data resulting from the August 2015 groundwater sampling event indicated that no TPH-D concentrations were detected above the MTCA Method A Cleanup Level of 500 µg/L in any of the groundwater samples obtained from the seven monitoring wells.

2.0 SCOPE OF WORK AND OBJECTIVE

2.1 Scope of Work

The Scope of Work for this quarterly groundwater sampling event was to evaluate the groundwater at the Site via sampling and analysis of seven existing monitoring wells located on Site. This quarterly sampling event is the fifth groundwater sampling event completed at the Site.

The groundwater sampling event was conducted on August 11, 2015, and was performed by a trained environmental professional employed by BMEC. Each of the seven groundwater samples was analyzed by ALS in Everett, Washington. The reporting aspect of this groundwater sampling event was completed by a professional geologist licensed in the State of Washington.

2.2 Protocol

The procedure(s) for this groundwater sampling event as defined by the Scope of Work were to perform in practical and reasonable steps, a quarterly groundwater sampling event to ascertain the possibility, presence, or absence of diesel fuel constituents in the shallow aquifer first detected at the Site in September 2013 as a result of leaking diesel fuel dispensers. This groundwater sampling event was performed while employing currently available technology, existing regulations, and generally acceptable engineering practices.

2.3 Objectives

The primary objective of this quarterly monitoring well groundwater sampling event was to assess the potential concentrations of diesel fuel constituents in the shallow aquifer beneath the Site. This groundwater sampling event is the fifth consecutive quarterly sampling event scheduled for the Site. Diesel fuel constituent detections in groundwater samples obtained from the Site shall be compared to Washington MTCA Method A Cleanup Levels for Unrestricted Land Use.

While the performance of this quarterly groundwater sampling event cannot absolutely quantify and qualify every possible past and present environmental risk in the shallow aquifer, the assessment does provide a partial information basis for reasonable decision making regarding the potential for environmental liabilities and risk concerning the groundwater beneath the site, based upon the current site-specific situation, assessment limitations, and methods of evaluation.

3.0 SITE LOCATION AND BACKGROUND

BMEC was retained by Mr. Brian Rogers to perform a shallow groundwater investigation of the diesel fuel pump islands located on the east side of the gas station/convenience store located at 101 Merlot Drive in Prosser, Washington. The initial monitoring well installation and groundwater sampling event occurred at the Site during August 12 – 15, 2014 at which time TPH-D and TPH-O were detected in groundwater samples obtained from at least one of the wells at concentrations exceeding MTCA Method A Cleanup Levels. This report documents the findings of the fifth quarterly groundwater sampling event conducted at the Site on August 11, 2015. The weather during the sampling event was calm and sunny with temperatures in the mid to upper 80s (degrees Fahrenheit).

3.1 Location

Legal Description: Parcel number 1-3594-301-1661-001, in the northwest quarter of the southeast quarter of Section 35, Township 9 North, Range 24 East, Willamette Meridian, Benton County, Washington. The 3.92-acre property is approximately 720 feet above sea level. The Site is locally known as Horse Heaven Hills Travel Plaza and the address is 101 Merlot Drive in Prosser, Washington 99350. A Site Location Map of the property and surrounding land is included as **Figure 1**.

The Site is located within the city limits of Prosser, Washington and is surrounded primarily by commercial properties. The property consists of one parcel of land with improvements and is accessible from Merlot Drive. The nearest roadway is Interstate I-82 which is approximately 500 feet north of the Site. The nearest surface water body is the Yakima River approximately one mile south-southeast and down-gradient of the Site.

3.2 Background

The Site is defined by a retail petroleum refueling station for standard passenger vehicles, as well as large truck-and-trailer rigs. The Site was developed as a retail fuel facility in 1995. A site investigation was performed at the Site by BMEC personnel on September 18, 2013 and the results of that site investigation indicated that PHCs existed in shallow soils beneath several of the diesel fuel dispensers at concentrations exceeding MTCA Method A Cleanup Levels for Unrestricted Land Use.

An additional subsurface investigation performed at the Site on March 13 and 14, 2014, confirmed that PHCs exceeding MTCA Method A Cleanup Levels for Unrestricted Land Use existed in subsurface soils beneath the diesel fuel dispensers at depths ranging up to approximately 8 feet bsg. Laboratory analytical results of one groundwater sample obtained from standing water pooled in the diesel fuel dispenser excavation pit indicated that shallow groundwater beneath the Site was also impacted by PHCs at concentrations exceeding MTCA Method A Cleanup Levels.

During the groundwater investigation conducted at the Site from August 12 – 15, 2014, TPH-D was detected in soil samples collected from four monitoring well borings and ethylbenzene was detected in soil obtained from one well boring; however, none of the PHC detections in soil exceeded the MTCA Method A Cleanup Levels for Unrestricted Land Use.

The first quarterly groundwater sampling event was conducted at the Site on August 15, 2014. TPH-D was detected in four groundwater samples collected and TPH-O was detected in one groundwater sample collected in August 2014 at concentrations that did exceed MTCA Method A Cleanup Levels. PAHs were detected in the four groundwater samples analyzed during the August 2014 groundwater investigation, but none of the PAH detections exceeded MTCA Method A Cleanup Levels.

During the second quarterly groundwater sampling event conducted at the Site on November 24, 2014, TPH-D concentrations were detected in groundwater samples obtained from four of the monitoring wells and two of the TPH-D detections exceeded Washington MTCA Method A Cleanup Levels. PAHs were detected in one of the two groundwater samples (in which TPH-D exceeded MTCA Method A Cleanup Levels) and one of the two PAH concentrations exceeded MTCA Method A Cleanup Levels.

During the third quarterly groundwater sampling event conducted at the Site on February 11, 2015, TPH-D was detected in a groundwater sample obtained from monitoring well MW-5 at a concentration exceeding the MTCA Method A Cleanup Level.

During the fourth quarterly groundwater sampling event conducted at the Site on May 6, 2015, TPH-D was detected in groundwater samples obtained from monitoring wells MW-2 and MW-6 at concentrations exceeding the MTCA Method A Cleanup Level.

The first quarterly groundwater sampling event of the second year was conducted at the site on August 11, 2015. The laboratory analytical data resulting from the August 2015 groundwater sampling event indicated that no TPH-D concentrations were detected above the MTCA Method A Cleanup Level of 500 µg/L in any of the groundwater samples obtained from the seven monitoring wells.

4.0 GEOLOGY AND HYDROGEOLOGY

According to the U.S. Department of Agriculture Soil Survey of Yakima County, Washington, the Site is underlain by the Ashue Silt Loam which is considered very deep and moderately well-drained with moderately coarse textures. A typical cross-section of the Ashue Silt Loam includes a 9-inch thick surface layer of light brown to brown loam, underlain by an approximate 15-inch thick layer of light gray, gravelly sandy loam, and further underlain by light yellowish brown and pale brown very gravelly sand up to 60 inches thick.

During the subsurface drilling activities conducted at the Site from August 12 – 14, 2014, the following lithology was encountered:

- Asphalt from 0 to 0.5 feet bsg;
- Brown to gray-brown SILT to silty SAND from 0.5 to 4 feet bsg in most borings (except MW-5);
- Brown to gray-brown silty to sandy, subrounded to rounded GRAVEL from 4 to 9 feet bsg in most borings (except MW-5);
- Mixtures of brown to gray-brown silty to sandy subrounded to rounded GRAVEL and BASALT COBBLES or BOULDERS from 9 to 19 feet bsg;
- Dark gray to brown CLAY and SILT with little gravel from 19 to 21.5 feet (MW-7); and
- Gray, silty GRAVEL from 21.5 to 22 feet bsg (MW-7).

Geologically, the Site is located in the Yakima Fold Belt east of the Cascade Range in a much dryer climate that receives between 6 to 18 inches of precipitation annually. The Yakima Fold Belt is dominated by east-west trending anticlinal ridges and synclinal valley(s). The Site is located southeast of the Rattlesnake Mountains and immediately north of the Horse Heaven Hills. The near surface soils are formed primarily from deposition of Quaternary sediments that overlie Miocene Columbia River Basalt Group flood basalts. Fine-grained slackwater sediments characterized by rhythmically graded bedding were deposited throughout the Pleistocene atop the Miocene basalts in the area of the Columbia River Gorge extending north to the Yakima Valley including the region surrounding the Site. Volcanic ash deposits and wind-blown loess deposits are also noted throughout the region.

During the subsurface drilling activities conducted at the Site from August 12 – 14, 2014, groundwater was first encountered at depths ranging from 5.5 feet bsg in monitoring well MW-5 to 9 feet bsg in well MW-7 (**Table 1 - below**).

Table 1: Monitoring Well Installation and Depth to Groundwater Details			
Monitoring Well ID	Total Depth (feet bsg)	Screened Interval (feet bsg)	First Encountered GW (feet bsg)
MW-1	17'	5 to 17'	6'
MW-2	17'	5 to 17'	7'
MW-3	20'	5 to 20'	6'
MW-4	17'	5 to 17'	7'
MW-5	18'	5 to 18'	5.5'
MW-6	20'	5 to 20'	6'
MW-7	22'	4.5 to 21.5'	9'

GW = groundwater
bsg = below surface grade

Prior to the August 2014 groundwater investigation, regional shallow groundwater flow was inferred to be to the south-southeast toward the Yakima River approximately one mile away from the Site. Subsequent to well development, groundwater was encountered at depths ranging from 2.68 feet below top of casing in monitoring well MW-7 to 4.73 feet below top of casing in well MW-6 (**Table 2 – attached**). Data obtained during the August 2014 groundwater investigation confirmed that the groundwater flow direction was to the southeast with a hydraulic gradient varying from approximately 0.01 between monitoring wells MW-1 and MW-3 and steepening down-gradient to 0.05 between wells MW-3 and MW-6.

During the second quarter groundwater sampling event conducted at the Site on November 24, 2014, groundwater was encountered at depths ranging from 5.85 feet below top of casing in monitoring well MW-7 to 9.83 feet below top of casing in well MW-6 (**Table 2 – attached**). The groundwater flow direction was to the southeast with a hydraulic gradient varying from approximately 0.01 between monitoring wells MW-1 and MW-3 and steepening down-gradient to 0.05 between wells MW-3 and MW-6.

During the third quarter groundwater sampling event conducted at the Site on February 11, 2015, groundwater was encountered at depths ranging from 6.25 feet below top of casing in monitoring well MW-5 to 10.20 feet below top casing in well MW-6 (**Table 2 – attached**). The groundwater flow direction was to the southeast with an approximate hydraulic gradient of 0.01 between monitoring wells MW-1 and MW-3, steepening down-gradient to 0.13 between monitoring wells MW-3 and MW-6.

During the fourth quarter groundwater sampling event conducted at the Site on May 6, 2015, groundwater was encountered at depths ranging from 3.21 feet below top of casing in monitoring well MW-7 to 5.24 feet below top of casing in well MW-6 (**Table 2 – attached**). The groundwater flow direction was determined to be to the southeast with an hydraulic gradient between monitoring wells MW-1 and MW-3 of 0.01 feet per foot, steepening to 0.05 feet per foot down-gradient between wells MW-3 and MW-6.

During the first quarterly groundwater sampling event of the second year of monitoring, conducted at the Site on August 11, 2015, depth to water ranged from 2.61 feet below top of

casing in monitoring well MW-7 to 4.22 feet below top of casing in well MW-6 (**Table 2 – attached**). The groundwater flow direction was determined to be to the southeast with an hydraulic gradient between monitoring wells MW-1 and MW-3 of 0.01 feet per foot, steepening to 0.05 feet per foot down-gradient between wells MW-3 and MW-6 (**Figure 2**).

5.0 GROUNDWATER SAMPLING

5.1 Groundwater Sampling Rationale

On August 11, 2015, groundwater samples were obtained from seven on-site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7). These seven groundwater samples were obtained as part of a quarterly groundwater sampling program to assess to what extent (if any) the shallow aquifer beneath the Site has been impacted by diesel fuel. This August 2015 groundwater sampling event was the fifth consecutive quarterly groundwater sampling event conducted at the Site.

5.2 Groundwater Purging and Sampling Methodology

Groundwater sampling in each monitoring well was conducted using low-flow purging techniques. During sampling, a 1.66" Geotech submersible bladder pump with dedicated air and discharge tubes was lowered to approximately the middle of the standing water column in each well. The monitoring well was purged at approximately 750 milliliters per minute (ml/min) until groundwater quality parameters (pH, temperature, and conductivity) stabilized. Stabilization was achieved when three consecutive readings were obtained within the following limits: pH (± 0.1 unit); temperature (± 1°Celsius); and conductivity (± 5 microSiemens). Turbidity was visually monitored and recorded, but was not used as an indication of when the groundwater had stabilized. Copies of the Groundwater Sample Field Logs are included in **Appendix A.**

The purge water from each of the seven groundwater monitoring wells was containerized in a single 55-gallon drum that was properly labeled and sealed awaiting future disposal at an approved liquid waste disposal facility. The temporary staging area for the 55-gallon drum(s) is illustrated on **Figure 2.**

The pump and connective tubing were decontaminated by placing the pump and tubing in a soapy water solution, followed by a potable water rinse. Several gallons of soapy water followed by potable water were cycled through the pump and tubing. All decontamination water was containerized in a 55-gallon drum along with the purge water.

Each groundwater sample was placed into the following containers for the associated analyses:

- Two laboratory prepped volatile organic analysis (VOA) 40-ml glass vials preserved with hydrochloric acid for BTEX analysis via EPA Method 8021B;
- One laboratory prepped 0.5-Liter amber glass container preserved with hydrochloric acid for TPH-D and TPH-O analysis via Northwest Method NWTPH-Dx; and
- One unpreserved laboratory prepped 1-Liter amber glass containers for PAH analysis via EPA Method 8270 SIM.

Disposable latex gloves were used at all times during sampling. A clean pair of latex gloves was donned prior to purging and sampling of each monitoring well. Each sample container was closed with a plastic screw cap onto a Teflon-faced septum. Each VOA vial was then inverted

and tapped to confirm that no air bubbles were present. Each sample container was labeled and placed in an ice chest with blue-ice for transport to the laboratory (ALS).

5.3 Groundwater Sampling Results

All seven groundwater samples collected on August 11, 2015 were analyzed for TPH-D, TPH-O, and BTEX. None of the samples were analyzed for PAHs. The laboratory analytical results for those samples are summarized in **Tables 3 and 4 -attached.**

Complete copies of the laboratory analytical reports and accompanying chain-of-custody documentation are included in **Appendix B.**

5.4 Dissolved-Phase TPH-D and Groundwater Surface Fluctuation Discussion

Groundwater sampling events have occurred at the Site on the following dates:

- August 15, 2014
- November 24, 2014
- February 11, 2015
- May 6, 2015
- August 8, 2015

Graphs 1A thru 4A in Appendix C illustrate the gradual lowering of dissolved-phase TPH-D detections in groundwater in monitoring wells MW-2, MW-3, MW-5, and MW-6. Although TPH-D concentrations in groundwater samples obtained from monitoring wells MW-2 and MW-6 rebounded above the MTCA Method A Cleanup Level of 500 µg/L in May 2015, all of the laboratory data for the seven groundwater samples obtained on August 11, 2015 were below 500 µg/L. The trend of lowering dissolved-phase TPH-D detections in groundwater will continue to be monitored.

Graphs 1B thru 4B in Appendix C illustrate the correlation of groundwater surface fluctuations in monitoring wells MW-2, MW-3, MW-5, and MW-6. Furthermore, the greatest depth to groundwater was observed in all four wells during the November 2014 and February 2015 groundwater sampling events. The lowered water table noted during August and May groundwater sampling events is likely attributed to the "flooding" of the shallow groundwater via the local irrigation system during spring and summer months.

6.0 CONCLUSIONS

A total of seven groundwater monitoring wells (MW-1 through MW-7) exist on the Site. During the groundwater sampling field event conducted at the Site on August 11, 2015, these seven monitoring wells were monitored and sampled. During the August 2015 groundwater sampling event, the depth to groundwater ranged from 2.61 feet below top of casing in monitoring well MW-7 to 4.22 feet below top of casing in well MW-6 and groundwater flow direction was to the south-southeast. The approximate hydraulic gradient was 0.015 feet per foot between monitoring wells MW-1 and MW-5.

The laboratory analytical data resulting from the August 2015 groundwater sampling event indicated that no TPH-D concentrations were detected above the MTCA Method A Cleanup Level of 500 µg/L in any of the groundwater samples obtained from the seven monitoring wells.

7.0 RECOMMENDATIONS

At a minimum, three additional quarterly groundwater sampling events should be conducted at the Site through May 2016. All seven monitoring wells (MW-1 through MW-7) should be monitored for depth-to-water measurements and sampled for the following analytes: BTEX via EPA Method 8021, as well as TPH-D and TPH-O via Northwest Method NWTPH. If any groundwater samples yield BTEX, TPH-D, or TPH-O concentrations exceeding MTCA Method A Cleanup Levels, those samples should also be analyzed for PAHs via EPA Method 8270 SIM.

8.0 STATEMENT OF THE ENVIRONMENTAL PROFESSIONALS

Statement of Quality Assurance

I performed the August 11, 2015 groundwater sampling field activities in accordance with generally accepted environmental practices and procedures, as of the date of this report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained within this quarterly groundwater sampling report are based upon laboratory analytical data resulting from the groundwater sampling event conducted in August 2015.

The conclusions stated in this report are based upon personal observations made by employees of BMEC and upon information provided by others. I have no reason to suspect or believe that the information provided by others is inaccurate.

Blue Mountain Environmental Consulting, Inc.

Yancy Meyer, E.P.

Statement of Quality Control

The objective of this groundwater sampling report was to assess the potential presence or absence of environmental issues involving the groundwater beneath the Site that could impact the Site, as delineated by the Scope of Work. The procedures involved performing reasonable groundwater sampling activities in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.

To the best of my knowledge, these field activities have been performed in compliance with BMEC's Standard Operating Procedures protocol for quarterly groundwater sampling events.

Blue Mountain Environmental Consulting, Inc.

Brent N. Bergeron, LG, RG

State of Washington BNB 2267 Licensed Geologist

Brent N. Bergeron

Expires: 1/3/16

9.0 REPORT LIMITATIONS

This quarterly groundwater sampling report has been performed for the exclusive use of Colony Insurance and the Site or agents specified by representatives of Coilony Insurance.

The purpose of a quarterly groundwater sampling event is to assess the current status of the groundwater beneath the Site, prior to obtaining ***No Further Action*** status. In performing a quarterly groundwater sampling event, a balance must be struck between reasonable inquiry into environmental issues and an exhaustive analysis of every conceivable issue of possible concern. This groundwater sampling report contains BMEC's opinion(s) regarding environmental issues of concern and/or additional issues that may need to be addressed. In rendering our professional opinion, BMEC warrants that the services provided within the Scope of Work for this groundwater sampling event were performed, within the limits described, in accordance with generally accepted environmental consulting principles and practices. No other warranty, expressed or implied, is made. The following paragraphs describe the assumptions and standard parameters under which such opinion is rendered.

Any opinions and/or recommendations presented in this report apply to site conditions existing at the time of performance of services. BMEC is unable to report on or accurately predict events that may affect the Site after performance of services, whether occurring naturally or caused by human forces. BMEC assumes no responsibility for conditions BMEC did not investigate, or conditions not generally recognized as environmentally unacceptable at the time services were performed.

Where subsurface work was performed, BMEC's professional opinions are based in part on the interpretation of data from discrete sample locations that may not represent actual conditions at the non-sampled locations.

Except where there is expressed concern of our client, or where specific environmental impact to the groundwater has previously been reported by others, naturally occurring toxic substances in the groundwater, or contaminant concentrations not of current environmental concern (subsurface and aboveground), may not be addressed in this document.

No assessment is thorough enough to exclude the presence of hazardous materials at a given site. Therefore, if specific hazardous materials have not been identified during this assessment, the lack of such identifications should not be construed as a guarantee of the absence of hazardous materials, but merely as the result of services performed within the scope, limitations, and cost of work done.

BMEC is not responsible for the effects of changes in applicable environmental standards, practices, or regulations after the performance of services.

Services provided for this quarterly groundwater assessment were performed in accordance with BMEC's agreement and understanding with our client, which may not be fully disclosed in this

report. Opinions and/or recommendations are intended for the client, Site, location, time frame, and project parameters indicated.

This report was prepared solely for the use of our client, and should be reviewed in its entirety; BMEC is not responsible for subsequent separation, detachment, or partial use of this document. Any reliance on this report by a third party shall be at such party's sole risk.

10.0 REFERENCES

Blue Mountain Environmental & Consulting Co, GROUNDWATER MONITORING WELL SAMPLING REPORT, Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, May 28, 2015

Blue Mountain Environmental & Consulting Co, GROUNDWATER MONITORING WELL SAMPLING REPORT, Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, March 6, 2015

Blue Mountain Environmental & Consulting Co, GROUNDWATER MONITORING WELL SAMPLING REPORT, Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, December 15, 2014

Blue Mountain Environmental & Consulting Co, WORK PLAN: Delineation of Subsurface Petroleum Hydrocarbon Contamination in the Vadose Zone Soils and Groundwater-Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, May 28, 2014

Blue Mountain Environmental & Consulting Co, Delineation of Subsurface Petroleum Hydrocarbon Contamination-Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, May 5, 2014

Blue Mountain Environmental & Consulting Co, WORK PLAN: Delineation of Subsurface Petroleum Hydrocarbon Contamination-Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, December 17, 2013

Blue Mountain Environmental & Consulting Co, Phase I Environmental Site Assessment Report-Horse Heaven Hills Travel Plaza, 101 Merlot Drive, Prosser, Washington 99350, August 20, 2013

Google Earth, Aerial Photo of Prosser, Washington, pre-March 2014

Washington Department of Ecology, Model Toxics Control Act Statute and Regulation, Revised November 2007

Image Provided by ESRI

All Features on this Property are Approximate

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FIGURE 1: SITE LOCATION MAP

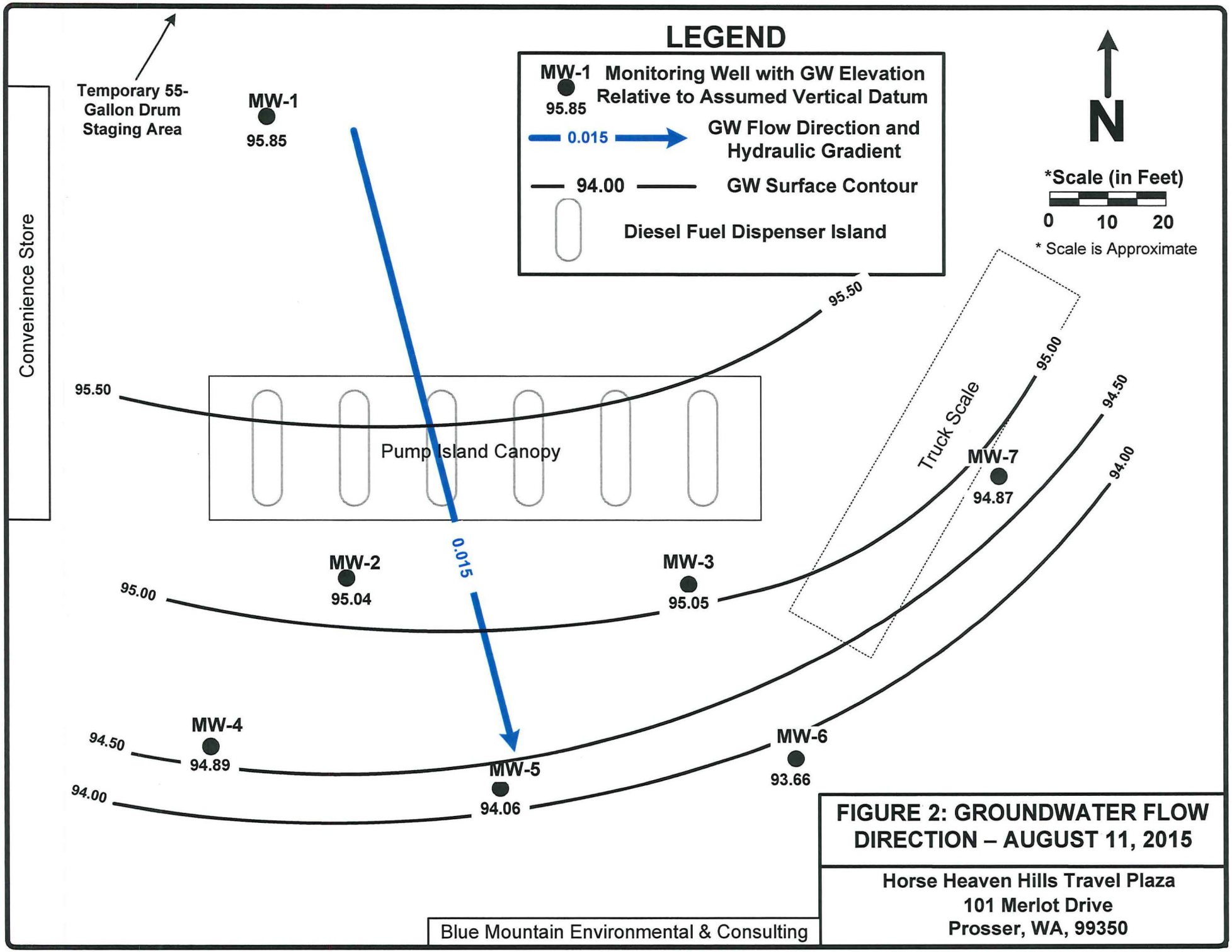
LEGEND
MW-1 Monitoring Well with GW Elevation Relative to Assumed Vertical Datum
95.85
0.015
GW Flow Direction and Hydraulic Gradient
94.00
GW Surface Contour
Diesel Fuel Dispenser Island
N
*Scale (in Feet)
0 10 20
* Scale is Approximate
Temporary 55-Gallon Drum Staging Area
MW-1
95.85
Convenience Store
95.50
95.50
Pump Island Canopy
Truck Scale
95.00
94.50
94.00
MW-7
94.87
MW-2
95.04
0.015
MW-3
95.05
95.00
MW-4
94.89
94.50
MW-5
94.06
94.00
MW-6
93.66
FIGURE 2: GROUNDWATER FLOW DIRECTION – AUGUST 11, 2015
Horse Heaven Hills Travel Plaza
101 Merlot Drive
Prosser, WA, 99350
Blue Mountain Environmental & Consulting

TABLE 2
Monitoring Well Groundwater Surface Data
Horse Heaven Hills Travel Plaza
Prosser, Washington 99350

Monitoring Well Number	Date Measured	Top of Casing Elevation (feet bavd)	Water Depth Below Top of Casing (feet btoc)	Groundwater Elevation (feet bavd)	LNAPL Thickness (feet)	Volume of Groundwater Purged (gallons)
Monitoring Wells						
MW-1	8/15/14	99.04	3.22	95.82	0.00	28
	11/24/14		6.10	92.94	0.00	6
	2/11/15		6.30	92.74	0.00	6
	5/6/15		3.79	95.25	0.00	6
	8/11/15		3.19	95.85	0.00	6
MW- 2	8/15/14	98.76	3.79	94.97	0.00	27
	11/24/14		6.52	92.24	0.00	6
	2/11/15		6.72	92.04	0.00	6
	5/6/15		4.34	94.42	0.00	6
	8/11/15		3.72	95.04	0.00	6
MW- 3	8/15/14	98.13	3.33	94.80	0.00	30
	11/24/14		6.01	92.12	0.00	6
	2/11/15		6.30	91.83	0.00	6
	5/6/15		3.75	94.38	0.00	6
	8/11/15		3.08	95.05	0.00	6
MW-4	8/15/14	98.29	3.53	94.76	0.00	25
	11/24/14		6.21	92.08	0.00	6
	2/11/15		6.39	91.90	0.00	6
	5/6/15		3.96	94.33	0.00	6
	8/11/15		3.40	94.89	0.00	6
MW- 5	8/15/14	97.66	3.98	93.68	0.00	36
	11/24/14		6.59	91.07	0.00	6
	2/11/15		6.25	91.41	0.00	6
	5/6/15		4.36	93.30	0.00	6
	8/11/15		3.60	94.06	0.00	6
MW-6	8/15/14	97.88	4.73	93.15	0.00	23
	11/24/14		9.83	88.05	0.00	6
	2/11/15		10.20	87.68	0.00	6
	5/6/15		5.24	92.64	0.00	6
	8/11/15		4.22	93.66	0.00	6
MW- 7	8/15/14	97.48	2.68	94.80	0.00	35
	11/24/14		5.85	91.63	0.00	6
	2/11/15		6.49	90.99	0.00	6
	5/6/15		3.21	94.27	0.00	6
	8/11/15		2.61	94.87	0.00	6

Notes:
avd = assumed vertical datum = 100.00 feet
btoc = below top of casing
bavd = below assumed vertical datum
LNAPL = light, non- aqueous phase liquid

TABLE 3

Groundwater Sample Results - Total Petroleum Hydrocarbons and Volatile Organic Compounds (µg/L)
Horse Heaven Hills - 101 Merlot Drive
Prosser, Washington 99350

Sample I.D.	Date Collected	Total Petroleum Hydrocarbons (TPH) (µg/L)		Volatile Organic Compounds (VOCs) by EPA Method 8021 (µg/L)			
		TPH-Diesel by Northwest Method NWTPH-Dx	TPH-Heavy Oil by Northwest Method NWTPH-Dx	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-1	8/15/14	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-2	8/15/14	**12,000**	< 250	< 1.0	**1.4**	< 1.0	< 3.0
	11/24/14	**570**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	**400**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	**780**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	**260**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-3	8/15/14	**10,000**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	**400**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	**340**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	**370**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-4	8/15/14	**150**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-5	8/15/14	**1100**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	**410**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	**730**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	**460**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	**160**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-6	8/15/14	**2600**	**1200**	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	**920**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	**370**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	**840**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
MW-7	8/15/14	**360**	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	11/24/14	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	2/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	5/6/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
	8/11/15	< 130	< 250	< 1.0	< 1.0	< 1.0	< 3.0
Ecology MTCA Method A Cleanup Levels (µg/L)							
		500	500	5	1000	700	1000

Notes:

MTCA = Model Toxics Control Act

ft bsg = feet below surface grade

µg/L = micrograms per Liter or parts per billion (ppb)

BOLD = sample yielded detectable concentration of analyzed compound

BOLD Yellow highlighting indicates concentration exceeds MTCA Method A Cleanup Level

TABLE 4

Groundwater Sample Results - Polynuclear Aromatic Hydrocarbons (µg/L)
Horse Heaven Hills - 101 Merlot Drive
Prosser, Washington 99350

Sample I.D.	Date Collected	Polynuclear Aromatic Hydrocarbons by EPA Method 8270 SIM (µg/L)																	
		Naphthalene [1]	2-Methylnaphthalene [1]	1-Methylnaphthalene [1]	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz[a]anthracene [2]	Chrysene [2]	Benzo[b]fluoranthene [2]	Benzo[k]fluoranthene [2]	Benzo[a]pyrene [2]	Indeno[1,2,3-c,d]pyrene [2]	Dibenz[a,h]anthracene [2]	Benzo[g,h,i]perylene
Monitoring Wells																			
MW-1	8/15/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	8/15/14	< 0.020	**0.22**	**3.8**	**0.059**	**0.84**	**2.0**	**0.54**	< 0.020	**0.023**	**0.27**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.029	< 0.020	< 0.020	< 0.020
	11/24/14	< 0.020	< 0.020	< 0.020	< 0.020	**0.21**	**0.72**	< 0.020	< 0.020	< 0.020	**0.12**	< 0.020	< 0.020	**0.022**	**0.027**	< 0.027	< 0.020	< 0.020	< 0.020
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.040	< 0.040	**0.10**	< 0.020	< 0.040	< 0.040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
MW-3	8/15/14	< 0.020	< 0.020	< 0.020	< 0.020	**0.10**	**0.19**	< 0.020	< 0.020	**0.022**	**0.13**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.029	< 0.020	< 0.020	< 0.020
	11/24/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	8/15/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	8/15/14	< 0.020	< 0.020	< 0.020	< 0.020	**0.45**	**1.3**	**0.41**	< 0.020	**0.030**	**0.20**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.029	< 0.020	< 0.020	< 0.020
	11/24/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/11/15	**0.58**	< 0.020	< 0.020	< 0.020	**0.19**	**0.25**	< 0.020	< 0.040	< 0.040	**0.16**	< 0.020	< 0.040	< 0.040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
	5/6/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	8/15/14	< 0.020	**0.18**	**0.17**	< 0.020	**0.25**	**0.40**	< 0.020	< 0.020	**0.047**	**0.13**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.029	< 0.020	< 0.020	< 0.020
	11/24/14	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.027	< 0.020	< 0.020	< 0.020
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.040	< 0.040	< 0.040	< 0.020	< 0.040	< 0.040	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
MW-7	8/15/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/11/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Ecology MTCA Method A Groundwater Cleanup Levels (µg/L)																	
		160	160	160	DNE	DNE	DNE	DNE	DNE	DNE	DNE	0.1	0.01	0.1	0.1	1	0.1	0.1	DNE

Notes:

1 = Cleanup Level is total value for naphthalene + 1-methyl naphthalene + 2-methly naphthalene

2 = Cleanup Level is cumulative value of a percentage of all seven carcinogenic PAHs per MTCA Table 708-2

µg/L = micrograms per Liter or parts per billion (ppb)

DNE = MTCA Cleanup Levels **Do Not Exist** for this constiuent

PAH = polynuclear aromatic hydrocarbon

BOLD = sample yielded detectable concentration of analyzed compound

BOLD cumulative concentration(s) exceed MTCA Method A Cleanup Levels

APPENDIX A

Groundwater Sample Field Logs

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 | SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS | PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Fair ☐Overcast ☐Fog ☐Rain ☐Snow | Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 | Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 | Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW-1	**SAMPLE NUMBER:** 8-11-MW1-01
Well depth: 17' / Screen length: 12'	Laboratory: ALS
Well install date: 8-13-14	COC and/or RFA Number:
Pre-purge SWL: 3.19	Casing diameter: 2"
Time Sample Collected: 0859	SWL at sample time: 3.19
Sample Turbidity: LOW	Sample Conductance: 429
Sample Color: CLEAR	Sample pH: 7.06
Sample Temperature: 19.3	Sample Odor: —

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail No.	Turbidity	Other
0830	19.4	431	6.62	1gal/5min		
0839	19.3	430	6.69			
0849	19.3	429	7.05			
0859	19.3	429	7.06	6 gal		

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the unit, the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR.

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. blue-ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx BTEX; ☐ VOC; ☐ HVOC;

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8; ☐ ; ☐ 3 Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: [signature]

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = .459 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 | SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS | PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Air ☐Overcast ☐Fog ☐Rain ☐Snow | Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 | Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 | Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW2 | SAMPLE NUMBER: 8-11-MW2-02

Well depth: 17' | Screen length: 12' | Laboratory: ALS

Well install date: 8.13.14 | COC and/or RFA Number:

Pre-purge SWL: 3.72 | Casing diameter: 2"

Time Sample Collected: 0952 | SWL at sample time: 3.70

Sample Turbidity: Light | Sample Conductance: 473

Sample Color: TAN | Sample pH: 7.11

Sample Temperature: 22.6 | Sample Odor: —

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail No.	Turbidity	Other
0925	22.7	469	7.17	1gal/5min		
0938	22.6	470	7.12			
0947	22.6	472	7.11			
0952	22.6	473	7.11	6gal		

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the until the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR.

☐ by hand bailing until temperature, conductivity and pH stabilized.

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized.

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized.

☐ with disposable bailers until the temperature, conductivity and pH stabilized.

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. blue-ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx/BTEX; ☐ VOC; ☐ HVOC;

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8; ☐ [illegible] ☐ 13 Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: [signature]

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.[illegible] gallons per foot; 4" Hole = .459 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Clear ☐Overcast ☐Fog ☐Rain ☐Snow Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW3	**SAMPLE NUMBER:** 8-11-MW3-03
Well depth: 20' Screen length: 15'	Laboratory: ALS
Well install date: 8-14-15	COC and/or RFA Number:
Pre-purge SWL: 3.08	Casing diameter: 2"
Time Sample Collected: 1047	SWL at sample time 3.08
Sample Turbidity: LIGHT	Sample Conductance 470
Sample Color: TAN	Sample pH 7.13
Sample Temperature: 21.4	Sample Odor —

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail No.	Turbidity	Other
1001	21.9	459	7.17	4gal/5min		
1021	21.5	468	7.12			
1038	21.4	472	7.11			
1047	21.4	473	7.11	6gal		

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the until the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR.

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and packed in an ice chest at approximately 4°C (e.g. blue ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx BTEX; ☐ VOC; ☐ HVOC;

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8; ☐ ; ☐ 3 Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: [signature]

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = .459 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 | SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS | PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Clear ☐Overcast ☐Fog ☐Rain ☐Snow | Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 | Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 | Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location):	MW4	**SAMPLE NUMBER:**	8-11-MW4-01
Well depth:	17'	Screen length:	12'
Well install date:	8-14-14	Laboratory:	ALS
Pre-purge SWL:	3.40	COC and/or RFA Number:	
		Casing diameter:	2"
Time Sample Collected:	1132	SWL at sample time	3.40
Sample Turbidity:	Low	Sample Conductance	455
Sample Color:	CLEAR	Sample pH	7.11
Sample Temperature:	21.1	Sample Odor	—

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail Vol	Turbidity	Other
1057	21.8	460	7.11			
1110	21.2	456	7.11			
1121	21.1	455	7.11			
1132	21.1	455	7.11			

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the unit. the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized. OR.

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. bag-ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx BTEX; ☐ VOC; ☐ HVOC;

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ [illegible]; ☐ [illegible]; ☐ Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: [signature]

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = 1.45 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 | SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS | PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Clear ☐Overcast ☐Fog ☐Rain ☐Snow | Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 | Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 | Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW5 | SAMPLE NUMBER: 8-11-MW5-05

Well depth: 18' | Screen length: 13' | Laboratory: ALS

Well install date: 8-14-14 | COC and/or RFA Number:

Pre-purge SWL: 3.60 | Casing diameter: 2"

Time Sample Collected: 1221 | SWL at sample time: 3.68

Sample Turbidity: LIGHT | Sample Conductance: 489

Sample Color: TAN | Sample pH: 7.16

Sample Temperature: 20.0 | Sample Odor: ~

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail No.	Turbidity	Other
1155	20.3	491	7.23	1gal/5min		
1211	20.0	489	7.19			
1218	20.0	489	7.17			
1221	20.0	489	7.16	6gal		

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the unit, the temperature, conductivity and pH stabilized OR

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval, until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. blue-ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocol)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx/BTEX; ☐ VOC; ☐ cVOC

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8___; ☐ ___; ☐ 13 Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: [signature]

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = 1.45 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 | SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS | PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Clear ☐Overcast ☐Fog ☐Rain ☐Snow | Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 | Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 | Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW6 | SAMPLE NUMBER: 8-11-MW6-06

Well depth: 20' | Screen length: 15' | Laboratory: ALS

Well install date: 8-12-14 | COC and/or RFA Number:

Pre-purge SWL: 4.22 | Casing diameter: 2"

Time Sample Collected: 1352 | SWL at sample time 4.34

Sample Turbidity: LIGHT | Sample Conductance 508

Sample Color: GREY | Sample pH 6.96

Sample Temperature: 23.3 | Sample Odor

Field Data

Time (24 HR)	Temp	Cond	pH	Pump Rate or Bail Vol	Turbidity	Other
1328	21.1	501	7.00			
1337	22.4	525	6.97			
1345	23.2	509	6.96			
1352	23.3	508	6.96			

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the until the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR.

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump at approximately _____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. blue-ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx; ☒ NWTPH-Dx; ☐ NWTPH-Gx BTEX; ☐ VOC; ☐ aVOC;

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8; ☐ ; ☐ ; Metals; ☐ TCLP; ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: _____

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = 1.469 gallons per foot

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: 8-11-15 SHEET 1 of

PROJECT NAME: HORSE HEAVEN HILLS PROJECT NO.: E2015/0803

PROJECT LOCATION: 101 MERLOT DR PROSSER WA

Weather: ☒Clear ☐Overcast ☐Fog ☐Rain ☐Snow Wind: ☐Calm ☒Light ☐Moderate ☐Strong

Temp.: ☐<0 ☐0-32 ☐33-54 ☐55-79 ☒>80 Wind from: ☐N ☐NE ☐E ☐SE ☐S ☒SW ☐W ☐NW

Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75 Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO. (or Boring, Location): MW7 SAMPLE NUMBER: 8-11-MW7-GF

Well depth: 21.5' Screen length: 17' Laboratory: ALS

Well install date: 8-12-14 COC and/or RFA Number:

Pre-purge SWL: 2.61 Casing diameter: 2"

Time Sample Collected: 1448 SWL at sample time: 2.66

Sample Turbidity: Low Sample Conductance: 467

Sample Color: CLEAR Sample pH: 7.13

Sample Temperature: 22.1 Sample Odor:

Field Data

Time (24 HR)	Temp	Cond.	pH	Pump Rate or Bail No.	Turbidity	Other
1415	21.8	477	7.02			
1427	22.3	470	7.09			
1436	22.1	468	7.13			
1448	22.1	467	7.13			

Sample Collection Method:

The monitor well was purged:

☒ of stagnant water in the casing and filter by slowly setting a pump or intake tubing within the approximate middle of the screened interval or slightly above the middle until the unit, the temperature, conductivity and pH stabilized OR.

☐ of stagnant water in the casing and filter by slowly setting a pump or intake tubing at approximately ____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized OR.

☐ by hand bailing until temperature, conductivity and pH stabilized

Samples were collected:

☒ by setting a pump, or tubing attached to a pump, within the approximate middle of the screened interval until the temperature, conductivity and pH stabilized

☐ by setting a pump, or tubing attached to a pump, at approximately ____ feet above the bottom of the casing until the temperature, conductivity and pH stabilized

☐ with disposable bailers until the temperature, conductivity and pH stabilized

Sample Shipment:

Water samples were placed in appropriate containers suitable for analyses requested. As necessary, the containers were prepared by the lab. The containers were filled to prevent air-entrapment, sealed, labeled, and placed in an ice chest at approximately 4°C (e.g. blue ice) for transport to the laboratory.

Analysis Requested: (per laboratory protocols)

☐ NWTPH-HCID; ☐ NWTPH-Gx, ☒ NWTPH-Dx, ☐ NWTPH-Gx/BTEX, ☐ VOC, ☐ cVOC

☐ SemiVOC; ☒ PAH; ☐ PCB; ☐ Pesticides; ☐ 8___; ☐ 13___; ☐ 13___ Metals; ☐ TCLP ☐ MTBE;

☒ OTHER: BTEX

SIGNATURE: _____

PRINT NAME: NANCY MEYER

Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = 1.469 gallons per foot

APPENDIX B

Laboratory Analytical Report
And
Chain-Of-Custody

August 18, 2015

Mr. Peter Trabusiner
Blue Mountain Environmental Consulting
PO Box 545,
Waitsburg, WA 99361

Dear Mr. Trabusiner,

On August 13th, 8 samples were received by our laboratory and assigned our laboratory project number EV15080068. The project was identified as your E2015/0803. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-01
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 8:59:00 AM
CLIENT SAMPLE ID	8-11-MW1-01	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**88.8**	08/14/2015	PAB
C25	NWTPH-DX	**84.2**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-02
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 9:52:00 AM
CLIENT SAMPLE ID	8-11-MW2-02	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	**260**	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**91.2**	08/14/2015	PAB
C25	NWTPH-DX	**85.4**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered diesel.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-03
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 10:47:00 AM
CLIENT SAMPLE ID	8-11-MW3-03	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**93.1**	08/14/2015	PAB
C25	NWTPH-DX	**84.5**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-04
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 11:32:00 AM
CLIENT SAMPLE ID	8-11-MW4-04	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**91.4**	08/14/2015	PAB
C25	NWTPH-DX	**83.0**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-05
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 12:21:00 PM
CLIENT SAMPLE ID	8-11-MW5-05	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	**160**	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**91.2**	08/14/2015	PAB
C25	NWTPH-DX	**85.4**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered diesel.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-06
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 1:52:00 PM
CLIENT SAMPLE ID	8-11-MW6-06	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**90.8**	08/14/2015	PAB
C25	NWTPH-DX	**79.9**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE: ALS JOB#: ALS SAMPLE#:	8/18/2015 EV15080068 EV15080068-07
CLIENT CONTACT:	Peter Trabusiner	DATE RECEIVED:	08/13/2015
CLIENT PROJECT:	E2015/0803	COLLECTION DATE:	8/11/2015 2:48:00 PM
CLIENT SAMPLE ID	8-11-MW7-07	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/14/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	08/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	08/17/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	08/17/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	**90.7**	08/14/2015	PAB
C25	NWTPH-DX	**79.6**	08/17/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE:	8/18/2015
		ALS SDG#:	EV15080068
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Peter Trabusiner		
CLIENT PROJECT:	E2015/0803		

LABORATORY BLANK RESULTS

MB-081315W - Batch 96166 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U		UG/L	1.0	08/13/2015	PAB
Toluene	EPA-8021	U		UG/L	1.0	08/13/2015	PAB
Ethylbenzene	EPA-8021	U		UG/L	1.0	08/13/2015	PAB
Xylenes	EPA-8021	U		UG/L	3.0	08/13/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MB-081315W - Batch 96211 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U		UG/L	130	08/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U		UG/L	250	08/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Blue Mountain Environmental Consulting PO Box 545, Waitsburg, WA 99361	DATE:	8/18/2015
		ALS SDG#:	EV15080068
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Peter Trabusiner		
CLIENT PROJECT:	E2015/0803		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 96166 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**95.2**			08/13/2015	PAB
Benzene - BSD	EPA-8021	**94.9**	**0**		08/13/2015	PAB
Toluene - BS	EPA-8021	**96.0**			08/13/2015	PAB
Toluene - BSD	EPA-8021	**95.7**	**0**		08/13/2015	PAB
Ethylbenzene - BS	EPA-8021	**97.1**			08/13/2015	PAB
Ethylbenzene - BSD	EPA-8021	**97.5**	**0**		08/13/2015	PAB
Xylenes - BS	EPA-8021	**98.9**			08/13/2015	PAB
Xylenes - BSD	EPA-8021	**99.8**	**1**		08/13/2015	PAB

ALS Test Batch ID: 96211 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**92.8**			08/13/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**95.9**	**3**		08/13/2015	EBS

APPROVED BY

Laboratory Director

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ALS Group USA, Corp

ALS Environmental
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Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1508 0068

Date 8-12-15 Page 1 Of 1

PROJECT ID: E2015/0803
REPORT TO COMPANY: BMEC
PROJECT MANAGER: P. TRABUSINER
ADDRESS: PO Box 545/125 Main St. Whitsburg, WA 99361
PHONE: 509-521-6531 FAX: 509-627-5263
P.O. #: E-MAIL: ptrabus1@frontier.com
INVOICE TO COMPANY: COLONY INSURANCE
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): BTEX by 8021	* Analyze for PAH 8270	If TPH-Dx > 500 ppb	If Benzene > 5 ppb	If Toluene > 1000 ppb	If Ethylbenzene > 700 ppb	If Xylenes > 1000 ppb	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 8-11-MW1-01	8.11.15	0859	H_2O	1		X									*					X						4	
2. 8-11-MW2-02		0952		2											*												
3. 8-11-MW3-03		1047		3											*												
4. 8-11-MW4-04		1132		4											*												
5. 8-11-MW5-05		1221		5											*												
6. 8-11-MW6-06		1352		6											*												
7. 8-11-MW7-07		1448		7											*												
8. Trip Blank	8/11/15	00:00		8																							
9.																											
10.																											

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: , BMEC, 8-12-15, 1200
   Received By:
2. Relinquished By:
   Received By: Shawn Robinson ALS 8/13/15 2:00pm

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

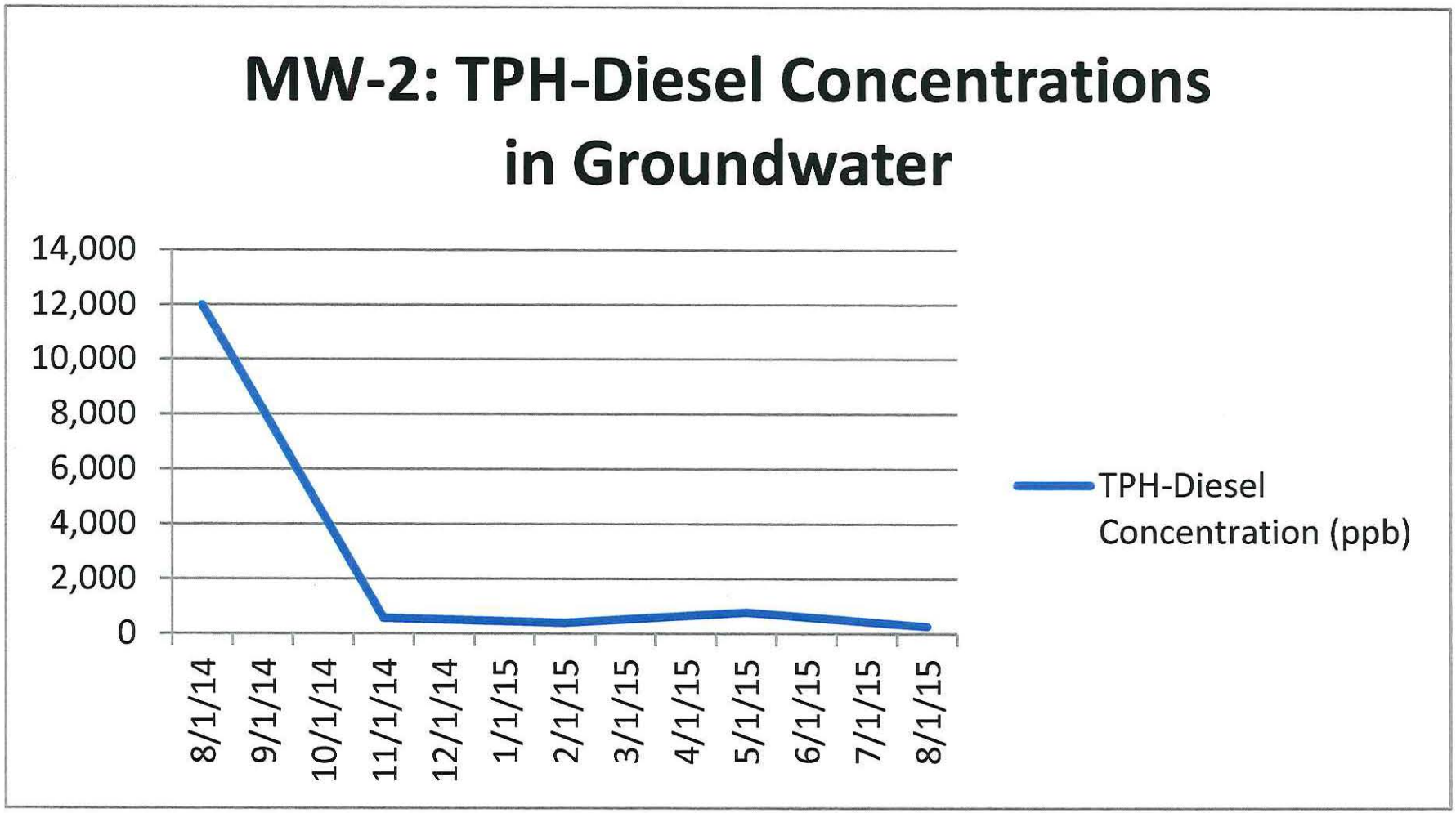
OTHER:
Specify:

*Turnaround request less than standard may incur Rush Charges

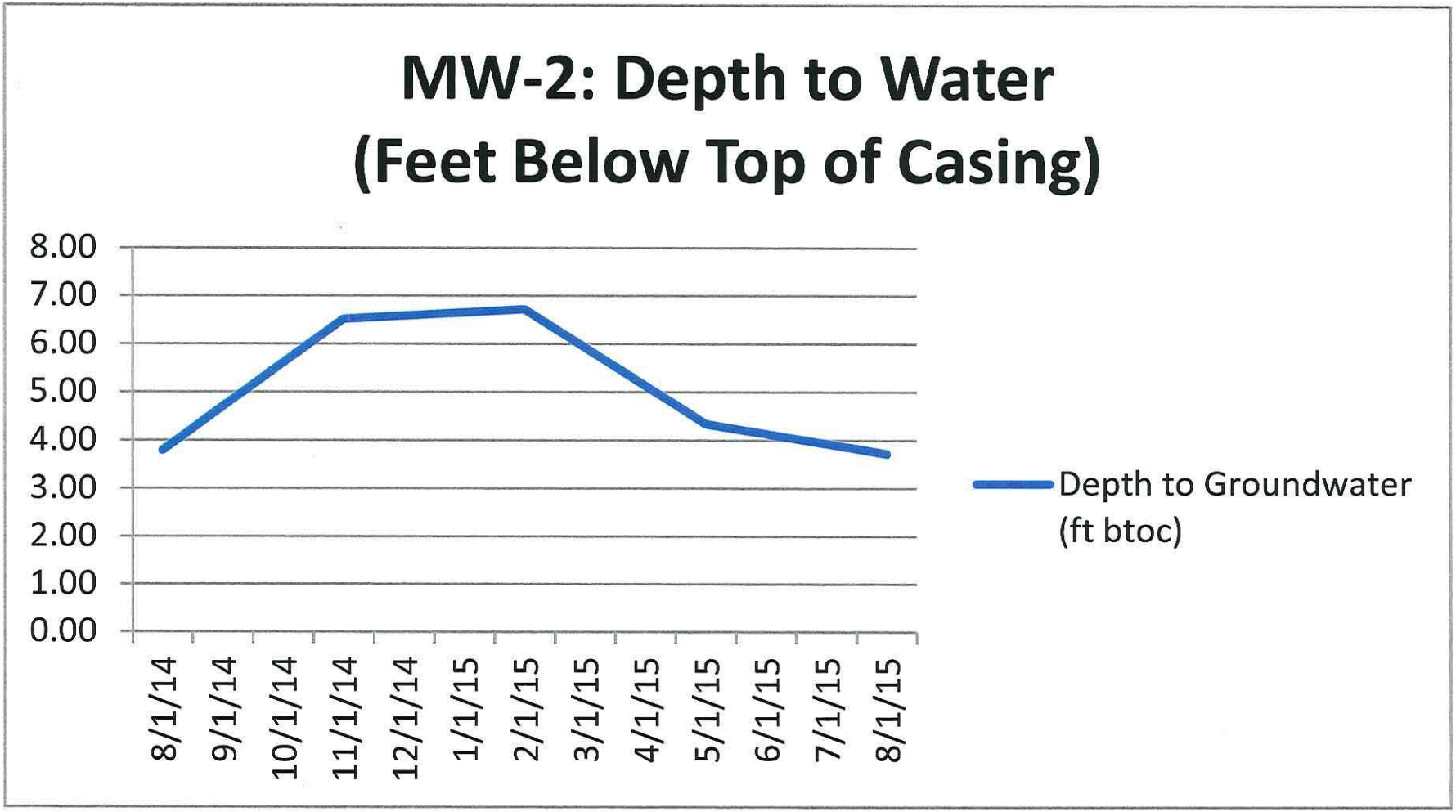
APPENDIX C

Graphs: TPH-Diesel Concentrations in Groundwater
and Depth to Water

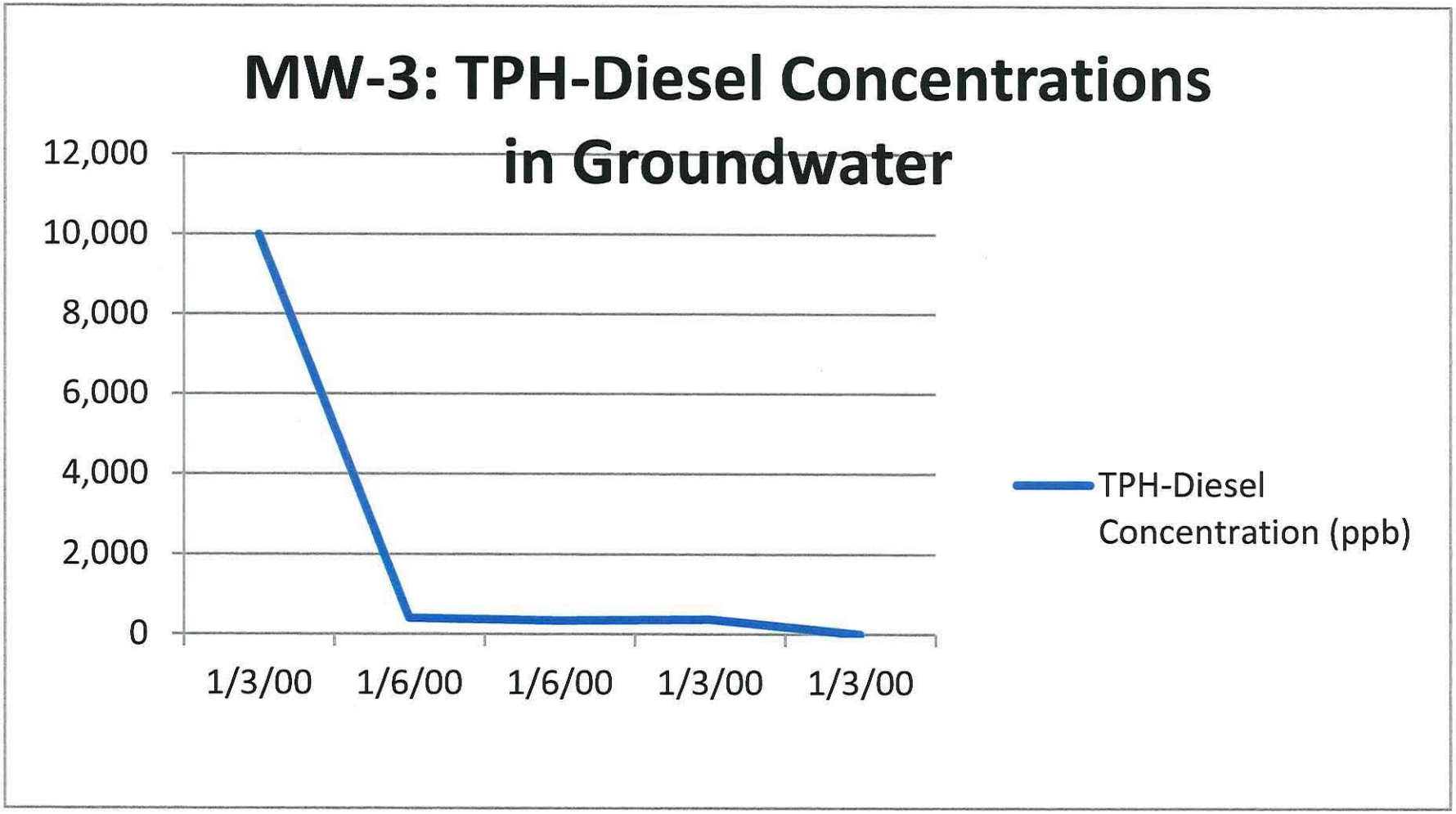
GRAPH 1A


MW-2: TPH-Diesel Concentrations in Groundwater
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
TPH-Diesel Concentration (ppb)

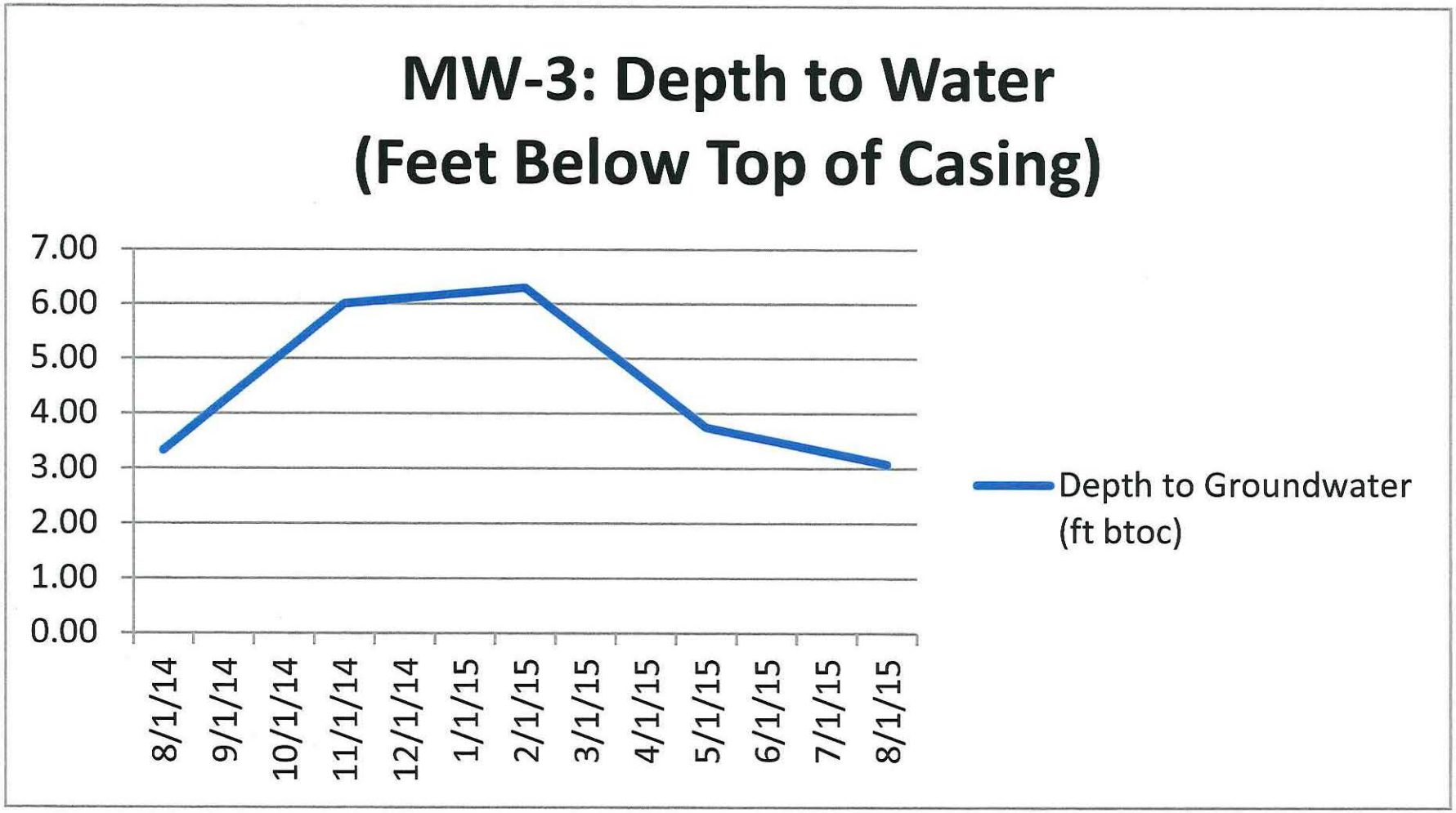
GRAPH 1B


MW-2: Depth to Water
(Feet Below Top of Casing)
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
Depth to Groundwater
(ft btoc)

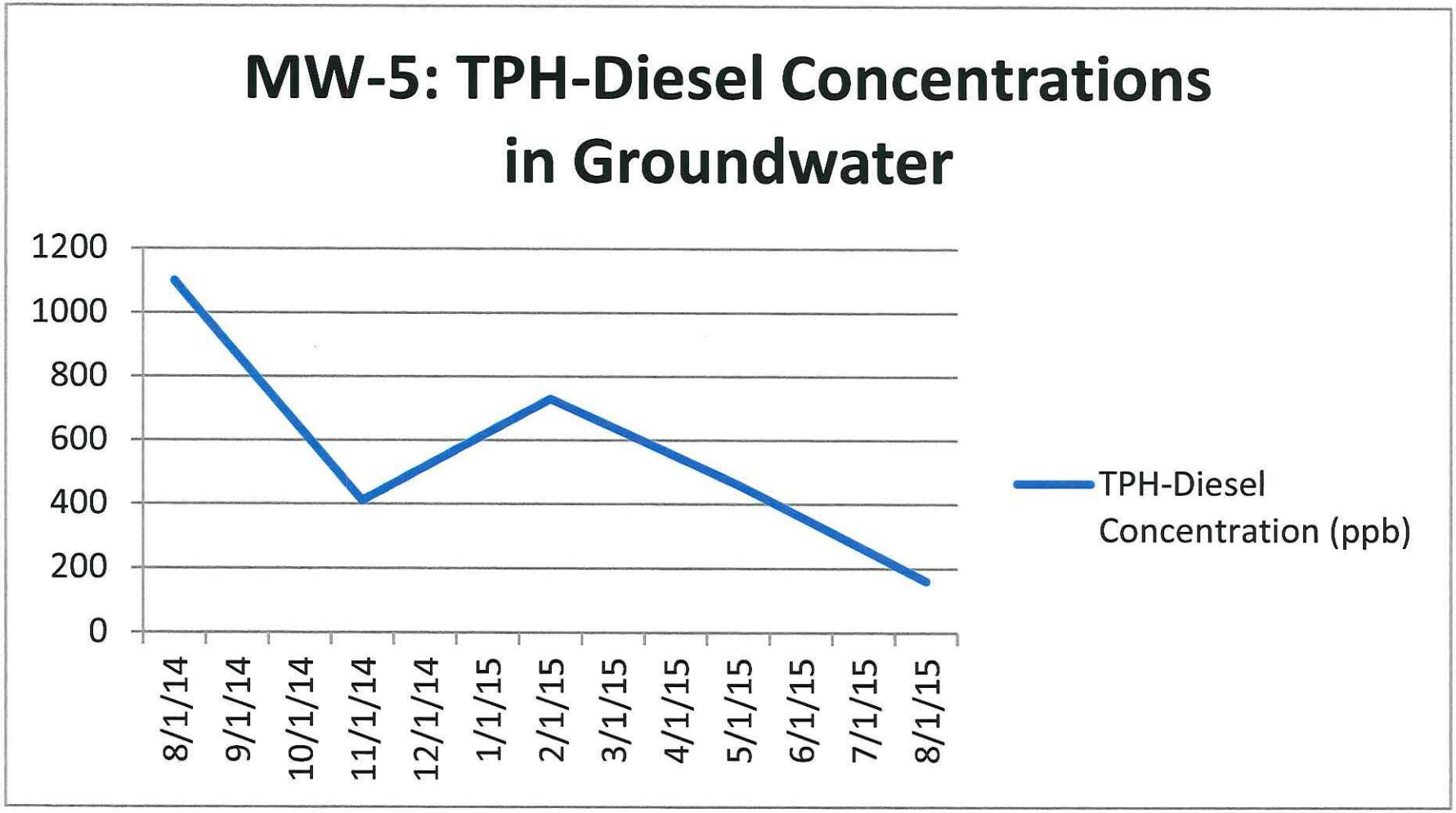
GRAPH 2A


MW-3: TPH-Diesel Concentrations in Groundwater
12,000
10,000
8,000
6,000
4,000
2,000
0
1/3/00
1/6/00
1/6/00
1/3/00
1/3/00
TPH-Diesel Concentration (ppb)

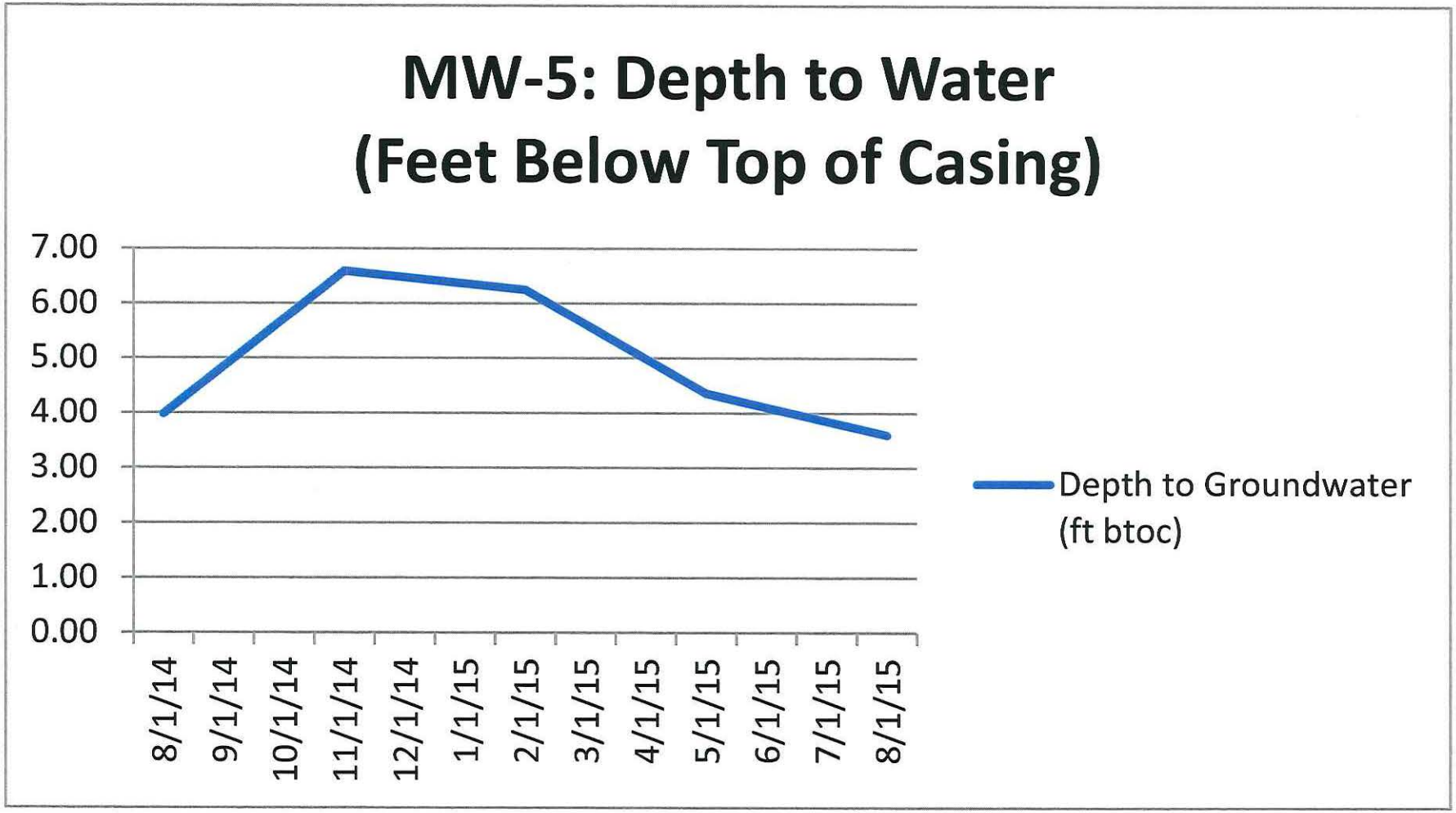
GRAPH 2B


MW-3: Depth to Water
(Feet Below Top of Casing)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
Depth to Groundwater
(ft btoc)

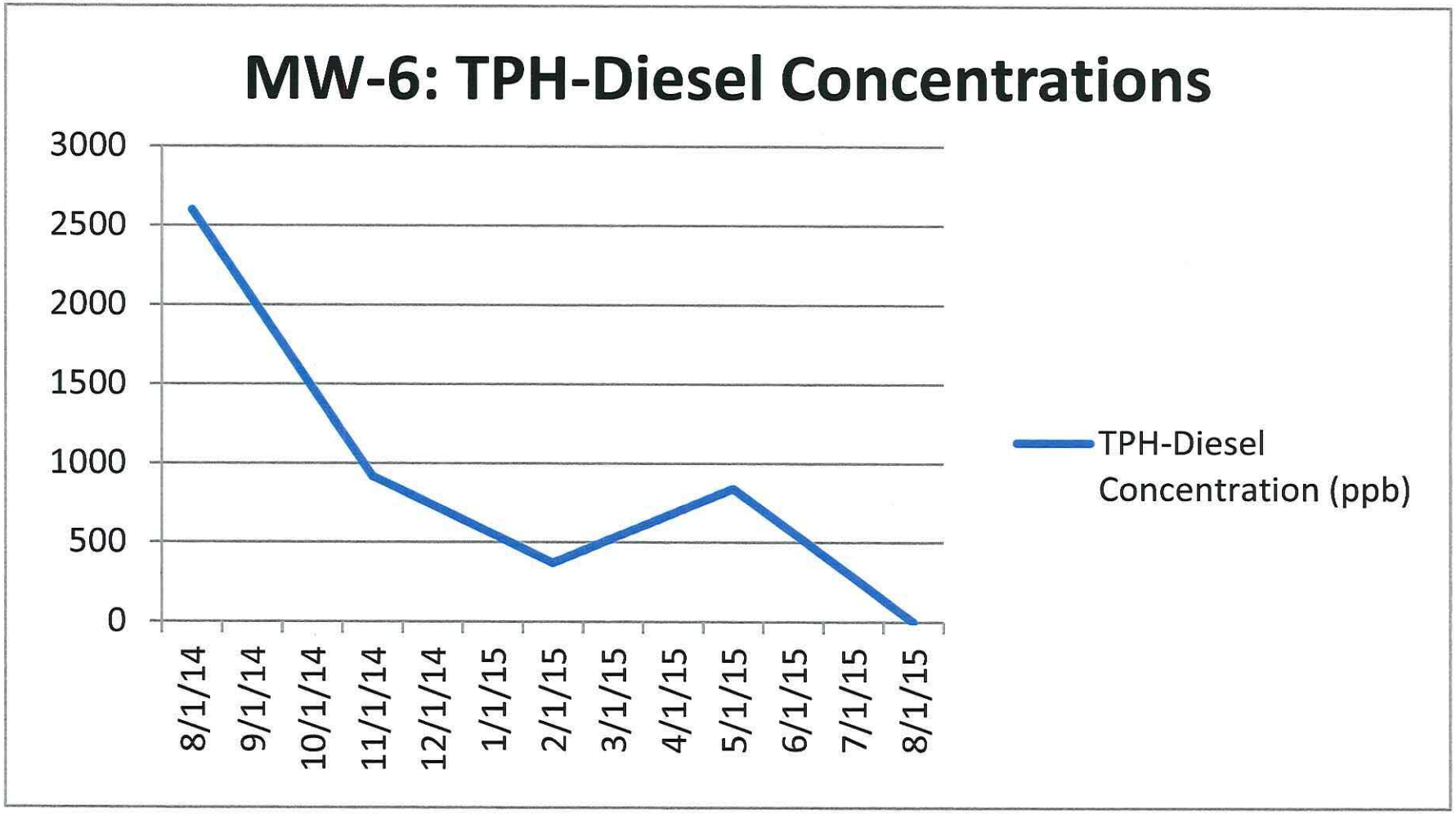
GRAPH 3A


MW-5: TPH-Diesel Concentrations in Groundwater
1200
1000
800
600
400
200
0
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
TPH-Diesel Concentration (ppb)

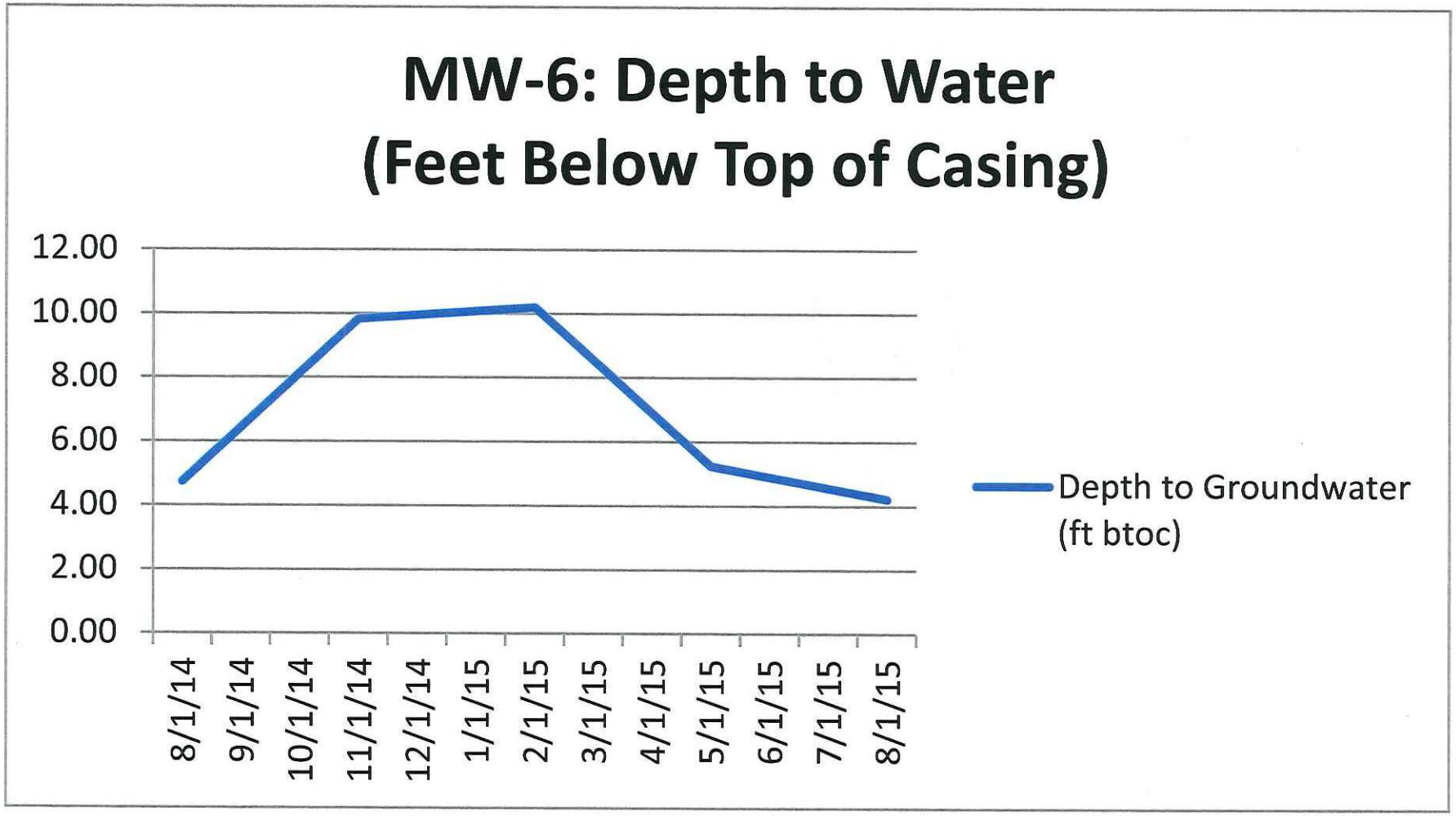
GRAPH 3B


MW-5: Depth to Water
(Feet Below Top of Casing)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
Depth to Groundwater (ft btoc)

GRAPH 4A


MW-6: TPH-Diesel Concentrations
3000
2500
2000
1500
1000
500
0
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
TPH-Diesel Concentration (ppb)

GRAPH 4B


MW-6: Depth to Water
(Feet Below Top of Casing)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
8/1/14
9/1/14
10/1/14
11/1/14
12/1/14
1/1/15
2/1/15
3/1/15
4/1/15
5/1/15
6/1/15
7/1/15
8/1/15
Depth to Groundwater
(ft btoc)