GROUNDWATER MONITORING REPORT

CIRCLE K STORE #2706042
10171 U.S. HIGHWAY 12
NACHES, WASHINGTON 98937

SAMPLING DATE: MARCH 6, 2018

PREPARED FOR:

CIRCLE K STORES INC.
255 EAST RINCON, STE. 100
CORONA, CALIFORNIA 92879

SUBMITTED TO:

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1250 ALDER STREET
UNION GAP, WASHINGTON 98903

PREPARED BY:

18011 SKY PARK CIRCLE, STE. H
IRVINE, CALIFORNIA 92614

BLAES PROJECT #202-06042-10

MARCH 16, 2018

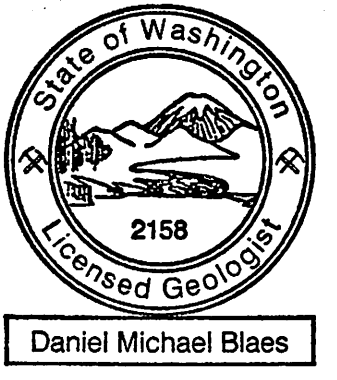
This *Groundwater Monitoring Report* has been prepared by Blaes Environmental Management, Inc. for the exclusive use of Circle K Stores Inc. as it pertains to Circle K Store #2706042 located at 10171 U.S. Highway 12 in Naches, Washington. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists, engineers, and environmental consultants practicing in this field. No other warranty, express or implied, is made as to the professional advice in this report. *Any use of or reliance on this report by a third party shall be at such a party's sole risk.*

Blaes Environmental Management, Inc. can offer no assurances and assumes no responsibility for site conditions or activities outside the scope of the inquiry requested by Circle K Stores Inc. as outlined in this document. It should be understood by all parties that Blaes Environmental Management, Inc. has relied on the accuracy of documents, oral information, and other materials, services, and information provided by Circle K Stores Inc., subcontractors, and other associated parties. Any subsequent modification, revision or verification of this report must be provided in writing by Blaes Environmental Management, Inc.

All work associated with this project will be performed under the supervision of a State of Washington Licensed Geologist/Hydrogeologist.

Prepared By:
Blaes Environmental Management, Inc.

Daniel M. Blaes, L.G.
President/Principal Geologist
Washington Geologist/Hydrogeologist #2158



Blaes Project #202-06042-10

March 16, 2018

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1.0 INTRODUCTION

This groundwater monitoring report was prepared by Blaes Environmental Management, Inc. (Blaes Environmental), on behalf of Circle K Stores Inc. (Circle K) for Circle K Store #2706042 located at 10171 U.S. Highway 12 in Naches, Washington (Figure 1). This periodic groundwater monitoring program was conducted following a detection of petroleum hydrocarbon constituents in 2013 near the intersection of Naches Avenue and Highway 12 and following soil and groundwater remediation efforts at the property.

In March 2018, Blaes Environmental conducted another full groundwater monitoring event at the site using all eight groundwater monitoring wells at the site. The sampling event involved: (1) measuring the depth to groundwater in all eight wells; (2) collecting a groundwater sample from each well; and (3) analyzing each groundwater sample at an analytical laboratory for petroleum constituents.

The data from this full sampling event was compared to the data from the past groundwater sampling events as a continued evaluation of the effectiveness of the air sparge injection events conducted during this summer 2017 and in preparation for additional remediation activities in the summer of 2018. During this sampling event, there was a decrease in petroleum hydrocarbons and individual constituents in the groundwater within well MW-3 compared to the sampling event conducted last December 2017. The following sections of this report include the description of the procedures and findings of the March 2018 groundwater monitoring event.

2.0 BACKGROUND INFORMATION

This section presents information regarding the site and provides a summary of the site background. The information was obtained from public records, the project files of Blaes Environmental, and the records of Circle K.

2.1 SITE LOCATION AND LAND USE

The property is located on the northwest corner of the intersection of Naches Avenue and Highway 12 in Naches, Washington. The property is within Section 4, Township 14 North, Range 17 East of the Naches Washington U.S. Geological Survey 7 ½ -minute Topographic Quadrangle. The property consists of a concrete and asphalt-paved lot with one existing single-story building (the Circle K Store) and three product dispensers. The site features are shown on the Site Plan in Figure 2. Global Positioning System (GPS) readings locate the site at approximately latitude 46 degrees, 43 minutes, 43.32 seconds North and longitude 210 degrees, 42 minutes, 01.73 seconds West as measured on Google Earth 2013.

The area surrounding the site consists of a mixture of commercial businesses and residential development. Commercial businesses are located southeast, west, and east-southeast of the site. Residential development is located south (across Highway 12), immediately north, and east (across the Naches Avenue), of the site.

2.2 SITE PHYSIOGRAPHY

The property lies at an elevation of approximately 1468 feet above Mean Sea Level (Google Earth 2013). Natural surface drainage in the area is towards the south-southwest towards the Naches River (U.S. Geological Survey 7 ½ -minute Topographic Quadrangle). On-site drainage is predominantly away from the building, towards the storm drains, to the north and east and east to Naches Avenue.

2.3 SITE LITHOLOGY AND DEPTH TO GROUNDWATER

The soil types in the immediate vicinity consists of Naches River Deposits. These deposits are composed of brown sandy loam with approximately 80 percent gravel, cobbles, and boulders up to approximately two feet (2) in diameter. The highly coarse soils extend to a depth of at least 25 feet below the ground surface. The soils in the lower part of the zone contain some clay.

Groundwater was encountered within the tank pit at approximately 11 feet below the ground surface in 1992 and logs of wells in the area also show the water level to be between 9 and 13 feet below the ground surface depending on the season of year. Groundwater was encountered at a depth of approximately 9 to 11 feet below the ground surface within the wells samples during this investigation. Groundwater flow is predominantly toward the south at the site.

2.4 SENSITIVE RECEPTORS

The Naches River is approximately 1,500 feet south of the site and the open irrigation ditch (trending approximately north-south) is approximately 75 feet east of the site. There are no additional surface water bodies or wetlands within one-mile of the site. Residences are located directly north of the site, across Naches Avenue to the east, and across U.S. Highway 12 to the south of the site.

The Naches Valley Middle School is located approximately 1,287 feet east-northeast of the site. The Naches Valley Intermediate School is located approximately 1,689 feet east-northeast of the site. The Naches Valley High School is located approximately 2,914 feet north-northwest of the site.

2.5 PREVIOUS INVESTIGATIONS

2.5.1 Limited Site Check: 1992

Previous investigations conducted at the site included a limited site check and sampling program in 1992 at the former Naches Chevron Facility. The investigation indicated gasoline range organics (GRO) in soil and GRO and lead in groundwater, adjacent to the former supreme unleaded gasoline UST, in excess of WDOE "Method A Clean-Up Levels". An Interim Status Report was prepared and submitted to the WDOE by Sage Earth Sciences, Inc. in October 1992. After the leak had been repaired the excavation was reportedly left open for approximately 15 months and then backfilled around the existing USTs.

2.5.2 UST Removal: 1998

In 1994 the three existing USTs were removed and replaced with fiberglass USTs. Subsequent soil and groundwater sampling during the tank removal revealed GRO in the groundwater beneath the site. Concentrations of soluble lead were not found in the soil sample collected at the site. The groundwater sample was not analyzed for soluble lead during this program. A UST Closure Site Assessment & Interim Remediation Report was prepared and submitted to the WDOE by White Shield, Inc. in March 1994.

2.5.3 WDOE Correspondence 1998-2001

In October 1998 the property owner, Mr. Mike Abhold, contacted WDOE indicating that he "believes that natural attenuation mechanisms have cleaned the residual groundwater at this site" and he wanted input from WDOE. WDOE responded to Mr. Abhold indicating that "groundwater samples to confirm natural attenuation and a site cleanup report" would be required. In 2001 the UST file was reviewed by Mr. Brian T. Deeken with WDOE and it was determined that there had been no change of status at the site since 1998. Based on this file review, Mr. John Mefford, L.G. the current WDOE manager for this site contacted Circle K (following the purchase of the site from Sun Pacific Energy) asking for the current site status.

2.5.4 Site Characterization Activities

Circle K contracted Blaes Environmental to conduct a program to determine if groundwater beneath the site had been impacted by petroleum hydrocarbons. The program included drilling and installation of four groundwater monitoring wells and collection and analyses of groundwater samples and the preparation of the October 2013 Site Characterization Report documenting the activities. Cascade Drilling of Woodinville, Washington was contracted to drill the soil borings for the four wells using a hollow-stem auger drilling rig. The boreholes were drilled on July 22 and 23, 2013 to depths ranging from approximately 14 feet below the ground surface (MW-3) to approximately 15' below the ground surface (MW-1) before large cobbles triggered auger refusal.

A total of five soil samples (one from wells MW-2, MW-3, and MW-1 and two from MW-1) were collected during the site characterization program and delivered by Blaes Environmental, under proper chain-of-custody record, to Test America in Seattle, Washington. Soil samples from the soil borings were analyzed for NWTPH-GX (GRO), NWTPH-DX (DRO), and for VOCs including Benzene, Toluene, Ethylbenzene, & Total Xylenes (BTEX), fuel oxygenates including methyl-tert butyl ether (MTBE), and ethylene dibromide (EDB) according to EPA Method 8260. Laboratory analytical results indicated concentrations of m-Xylenes & p-Xylenes (3.4 ug/Kg) and 1,2,4-Trimethylbenzene above laboratory reporting limits in the soil sample collected from the boring at MW-3 near the intersection. No other detectable concentrations of GRO, DRO, BTEX, VOC, or EDB were found in any other soil sample.

2.5.5 Groundwater Monitoring and Sampling

On August 18, 2013 Blaes Environmental conducted a groundwater monitoring and sampling event within the newly installed wells. The groundwater monitoring and sampling event consisted of three

tasks: 1) measuring the depth to groundwater in the wells; 2) purging water from each well using a low-flow device and collecting a groundwater sample; and 3) analyzing the groundwater samples at a State of Washington certified analytical laboratory. A copy of the report entitled *Site Characterization Report*, prepared by Blaes Environmental, dated October 31, 2013, is on file with WDOE.

On August 8, 2014, Blaes Environmental conducted a groundwater monitoring and sampling event within the four groundwater monitoring wells at the site (MW-1, MW-2, MW-3, and MW-4). The groundwater monitoring and sampling event consisted of three tasks: 1) measuring the depth to groundwater in the wells; 2) purging water from each well using low-flow pump and collecting a groundwater sample from each well; and 3) analyzing the groundwater samples at a State of Washington certified analytical laboratory. A copy of the report entitled *Groundwater Monitoring Report*, prepared by Blaes Environmental, dated August 25, 2014, is on file with WDOE.

On December 10, 2014, Blaes Environmental conducted a groundwater monitoring and sampling event within the four groundwater monitoring wells at the site (MW-1, MW-2, MW-3, and MW-4). The groundwater monitoring and sampling event consisted of three tasks: 1) measuring the depth to groundwater in the wells; 2) purging water from each well using low-flow pump and collecting a groundwater sample from each well; and 3) analyzing the groundwater samples at a State of Washington certified analytical laboratory. A copy of the report entitled *Groundwater Monitoring Report*, prepared by Blaes Environmental, dated December 31, 2014, is on file with WDOE.

On May 28, 2015, Blaes Environmental conducted another groundwater monitoring and sampling event within the four groundwater monitoring wells at the site (MW-1, MW-2, MW-3, and MW-4). The groundwater monitoring and sampling event consisted of three tasks: 1) measuring the depth to groundwater in the wells; 2) grabbing a groundwater sample from each well without purging; and 3) analyzing the groundwater samples at a State of Washington certified analytical laboratory. A copy of the report entitled *Groundwater Monitoring Report*, prepared by Blaes Environmental, dated June 8, 2015, is on file with WDOE.

On November 12, 2015, Blaes Environmental conducted a groundwater monitoring and sampling event within the four groundwater monitoring wells at the site (MW-1, MW-2, MW-3, and MW-4). The groundwater monitoring and sampling event consisted of three tasks: (1) measuring the depth to groundwater in the wells, and (2) analyzing the groundwater samples at a State of Washington certified

analytical laboratory. A copy of the report entitled *Groundwater Monitoring Report*, prepared by Blaes Environmental, dated December 21, 2015, is on file with WDOE.

2.5.6 Additional Groundwater Monitoring and Remediation Well Installation

In June 2016, Blaes Environmental, in conjunction with Cascade Drilling of Federal Way, Washington installed four additional groundwater monitoring wells and 11 air sparge remediation wells at the site. The objective of the additional monitoring wells was to further understand the lateral distribution of petroleum hydrocarbon concentrations under the property. The objective of the air sparge wells was to provide a remediation mechanism to start reducing the volatile hydrocarbon constituents at the site.

The four new groundwater monitoring wells (MW-5, MW-6, MW-7, and MW-8) were each drilled to a depth of approximately 25 feet below the ground surface using a sonic drilling rig. Each 2-inch diameter PVC monitoring well was screened from approximately 5 feet to 25 feet below the ground surface. The 11 new air sparge remediation wells were each drilled to a depth of approximately 25 feet below the ground surface using a sonic drilling rig. Each 2-inch diameter PVC monitoring well was screened from approximately 20 feet to 25 feet below the ground surface. The location of each new well is shown on the Site Plan in Figure 2. Additional data from this well installation program will be submitted in a separate report.

2.5.7 Subsequent Groundwater Monitoring and Sampling

In March 2017, an additional groundwater sampling event was conducted to evaluate the site conditions prior to the 2017 remediation events. The results of the sampling event were submitted to WDOE in a report dated May 1, 2017. The results of the March 2017 sampling event showed an additional rebound in the petroleum hydrocarbons but a reduction in benzene and other hydrocarbon constituents. The only monitoring well with hydrocarbon detections was MW-3 near the southeast corner of the property.

In June 2017, an additional groundwater sampling event was conducted to evaluate the site conditions prior to the summer 2017 remediation events. The results of the sampling event were submitted to WDOE in a report dated July 9, 2017. The results of the June 2017 sampling event showed a decrease in the petroleum hydrocarbons. Again, the only monitoring well with hydrocarbon detections was MW-3 near the southeast corner of the property.

In September 2017, an additional groundwater sampling event was conducted to evaluate the site conditions prior to the summer 2017 remediation events. The results of the sampling event were

submitted to WDOE in a report dated October 13, 2017. The results of the September 2017 sampling event showed a decrease in the petroleum hydrocarbons. Again, the only monitoring well with hydrocarbon detections was MW-3 near the southeast corner of the property.

In December 2017, an additional groundwater sampling event was conducted to evaluate the site conditions prior to the summer 2018 remediation events. The results of the sampling event were submitted to WDOE in a report dated December 15, 2017. The results of the December 2017 sampling event showed a slight decrease in the petroleum hydrocarbons. Again, the only monitoring well with hydrocarbon detections was MW-3 near the southeast corner of the property.

2.5.8 Soil Vapor Extraction and Groundwater Air Sparge Events

In August 2016, during a scheduled addition of diesel fuel and fuel system repipe project the site by Circle K, Blaes Environmental conducted a soil vapor extraction and groundwater air sparging remediation pilot test event at the site. The objective of the pilot test program was to evaluate whether petroleum hydrocarbon concentrations in the vadose zone soil and in the groundwater saturated zone could be significantly reduced in the southeast part of the site without installing a full fixed-based remediation system. The program utilized a mobile trailer-mounted all-electric catalytic oxidizer (powered by its own diesel generator) to extract and treat soil vapor and a mobile air sparge compressor (powered by a separate diesel generator) to inject air. All of the equipment was located near the corner of the intersection. Select monitoring wells were used as the vapor extraction points and many of the new air sparge wells were used to inject air into the groundwater during the test.

The air sparge test was conducted from August 15, 2016 to August 26, 2016. The vapor extraction test was completed near the end of the air sparge test from August 24, 2016 to August 26, 2016 in part to recover vapors from the previous days of sparge testing. During both feasibility tests, Blaes Environmental recorded system parameters and monitored the uptime of each system. Additional details from this pilot test program will be presented in a separate pilot test report.

On June 23, 2017, Blaes Environmental conducted a one-day additional air sparge injection event at the site. A small air compressor was used to inject air into sparge well AS-5 near monitoring well MW-3. The event last approximately three hours with a flowrate of approximately 5 cubic feet per minute at a pressure of approximately 3 pounds per square inch into AS-5.

During the summer of 2017, Blaes Environmental conducted four additional one-day additional air sparge injection events at the site. During each event (July 7, 2017, July 17, 2017, July 27, 2017, and August 2, 2017), a small air compressor was used to inject air into sparge well AS-5 near monitoring well MW-3. Each event last between four and eight hours of runtime with a flowrate of approximately 5 cubic feet per minute at a pressure of approximately 3 pounds per square inch into AS-5.

3.0 GROUNDWATER MONITORING PROGRAM

A groundwater monitoring and sampling event was conducted at the site in March 2018 by personnel from Blaes Environmental. The objective of the program was to evaluate the groundwater conditions at the site following the air sparge remediation activities during the summer of 2017. The data from this event was compared to the data from the July 2016 sampling event (before the pilot test) and to the data from the August and December 2016 sampling events (after the pilot test) as well as the March 2017, June 2017, September 2017, and December 2017 sampling events as a method to determine the effectiveness of the remediation technologies and the approach. Details of the March 2018 sampling event are provided in the following sections.

3.1 GROUNDWATER MONITORING AND SAMPLING

On March 6, 2018, Blaes Environmental conducted the full groundwater monitoring and sampling event within the eight existing groundwater monitoring wells at the site (MW-1, MW-2, MW-3, and MW-4, MW-5, MW-6, MW-7 and MW-8). The event consisted of three tasks: (1) measuring the depth to groundwater in the eight wells, and (2) collecting a groundwater sample from each well, and (3) analyzing the groundwater samples from each well at a State of Washington certified analytical laboratory. A description of each task is presented in the following sections.

3.1.1 Groundwater Depth Measurements and Gradient

The depth to groundwater in monitoring wells MW-1, 2, 3, 4, 5, 6, 7, and 8 was measured to the nearest 0.01 foot using a groundwater level indicator. Depths to water ranged from 10.62 feet (MW-8) to 12.04 feet (MW-4) and averaged 11.185 feet across the site. The water level measurement probe was washed with a Liquinox™ solution and rinsed with tap water before and after each groundwater depth measurement to prevent cross contamination. A summary of the depth to water/elevation data from the March 6, 2018 sampling event is included in Table 1. The field data sheets showing the depth to groundwater measurements are included in Appendix A.

The depth to groundwater was measured from a permanent mark on the top of the uncapped PVC well casing. Using the elevation of the well casing at that same mark, Blaes Environmental calculated the elevation of groundwater in the well during the monitoring event by subtracting the measured depth to groundwater within the well from the surveyed wellhead elevation. On March 6, 2018, the average groundwater elevation at the site was 1454.97 feet.

The groundwater flow direction was to the south at a gradient of approximately 0.0098 feet/foot. A diagram of the groundwater flow direction and gradient is presented in Figure 3. A hydrograph of groundwater elevations is presented in Figure 4.

3.1.2 Groundwater Sample Collection

The wells were not purged during this sampling event because Circle K wanted to compare directly to the groundwater data from the recent sampling events (that also did not have purged sample events). A groundwater grab sample was collected from each groundwater monitoring well to evaluate the current dissolved petroleum hydrocarbon concentrations in the groundwater. The groundwater samples were placed into laboratory supplied sample containers. The sample containers were sealed with Teflon lined caps, labeled, and placed on ice in a cooler. A written record of the sample was entered onto a chain-of-custody document for transport to the analytical laboratory.

3.1.3 Groundwater Laboratory Analyses

The groundwater samples were delivered to Test America in Fife, Washington for laboratory analyses. The groundwater samples were analyzed for Total Petroleum Hydrocarbons gasoline range organics using method NWTPH-GX, NWTPH-Dx, NWTPH-O, Arsenic, Lead, and for full list VOCs according to EPA Method 8260B including EDB and EDC. A copy of the groundwater laboratory analytical report is included in Appendix B.

3.1.4 Groundwater Analytical Results

Laboratory analysis of the groundwater samples collected on March 6, 2018 indicated concentrations in well MW-3 were NWTPH-gas (8,400 ug/L), NWTPH-Dx (2,300 ug/L), NWTPH-O (490 ug/L), Benzene (11 ug/L), Ethylbenzene (210 ug/L), Xylenes (88 ug/L), Naphthalene (56 ug/L), 1,2,4-Trimethylbenzene (1,300 ug/L), and other various volatile organic compounds. None of the other seven groundwater monitoring wells had laboratory reportable detections of the hydrocarbon constituents. The laboratory analytical results of the groundwater samples are summarized in Table 2.

4.0 RESULTS AND CONCLUSIONS

Based on the analytical results from the groundwater samples collected on March 6, 2018, Blaes Environmental confirms a continued impact to groundwater with petroleum hydrocarbon constituents on the southeastern most portion of the site. The groundwater concentrations of petroleum hydrocarbon constituents found in the well MW-3 during this event were lower with some constituents and higher with other constituents compared with the December 2017 sampling event. The estimated continued lateral extent of Benzene above MTCA Method A Cleanup Standards in groundwater is shown in Figure 5.

These latest groundwater laboratory results continue to indicate that limited groundwater air sparging continues to have a long-lasting effect and will be effective remediation technology for lowering hydrocarbon concentrations in groundwater at this site. Further, the use of short-term targeted treatment events at the site (using select wells during each event) will likely meet the long-term remediation goals while avoiding the costly and time consuming need to install a fixed-based remediation system.

The next groundwater monitoring event is scheduled for June 2018. The next short-term air sparge injection events are planned for the June, July and August 2018.

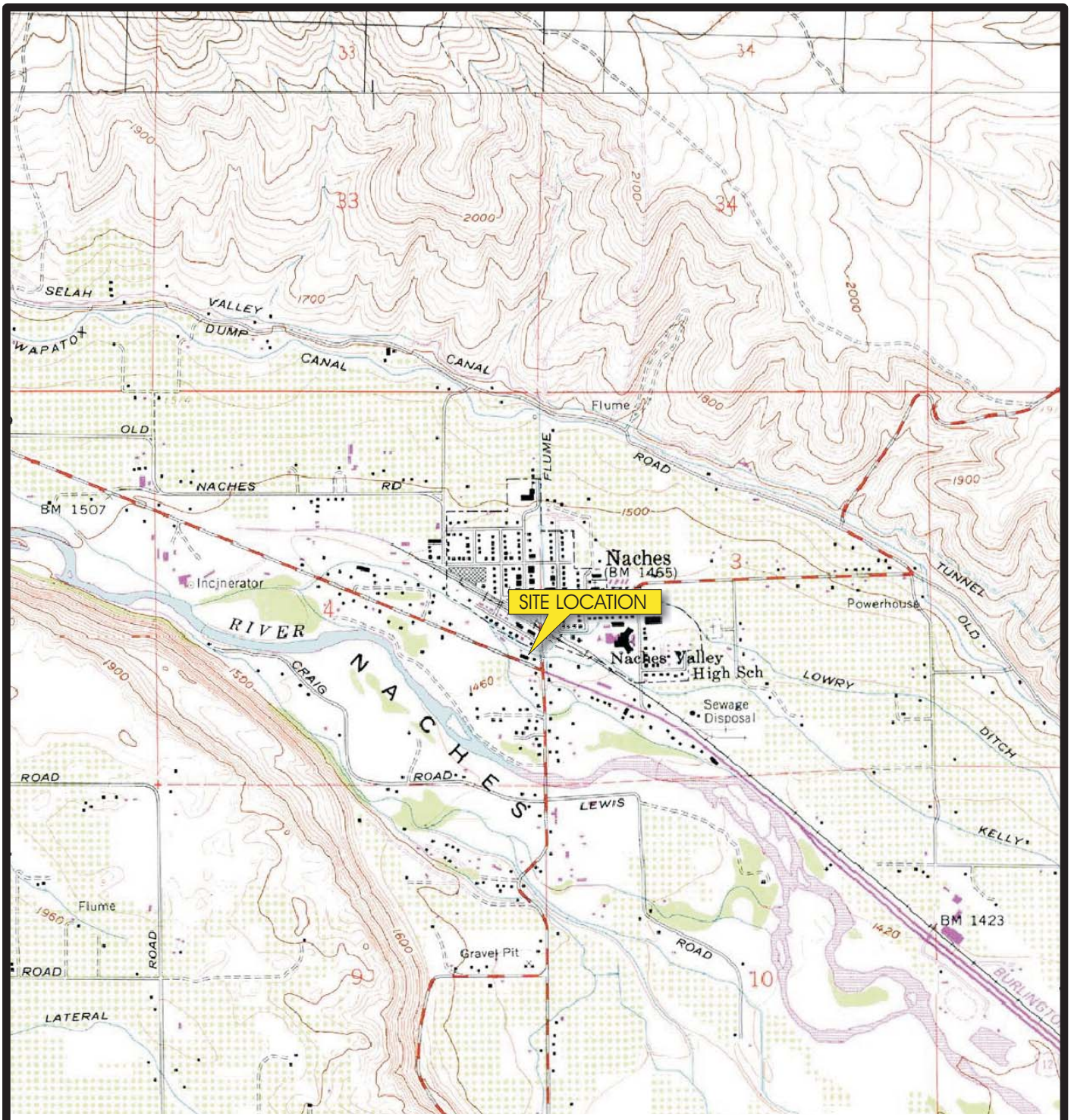
5.0 REFERENCES

White Shield Inc., 1994, UST Closure Site Assessment & Interim Remediation, 47 pg.

Sage Earth Sciences, Inc., 1992, Interim Status Report for a Limited Site Check and Petroleum Contaminated Soil Removal Activities, 36 pg.

Lasmanis, Raymond, 1991, The geology of Washington: Rocks and Minerals, v. 66, no. 4, p. 262-277. © Copyright Heldref Publications (Helen Dwight Reid Educational Foundation).

FIGURES



Source: MapTech Terrain Navigator Naches Quadrangle, 7.5 Minute Topographic Series, 1978

QUADRANGLE LOCATION

Approximate Scale
1:24,000
1 inch = 2000 feet

0 1000 2000 3000 4000

Contour Interval = 20 feet

SITE LOCATION: T14N, R17E, Section 4
46° 43′ 43.23″ North Latitude; 120° 42′ 03.07″ West Longitude

Blaes ENVIRONMENTAL

Couche-Tard
Circle K Stores, Inc.

Circle K Store 2706042
(Former Sunmart #21)
10171-10173 Highway 12
Naches, WA

SITE LOCATION MAP

April 2013	Project #202-06042-02	Figure 1

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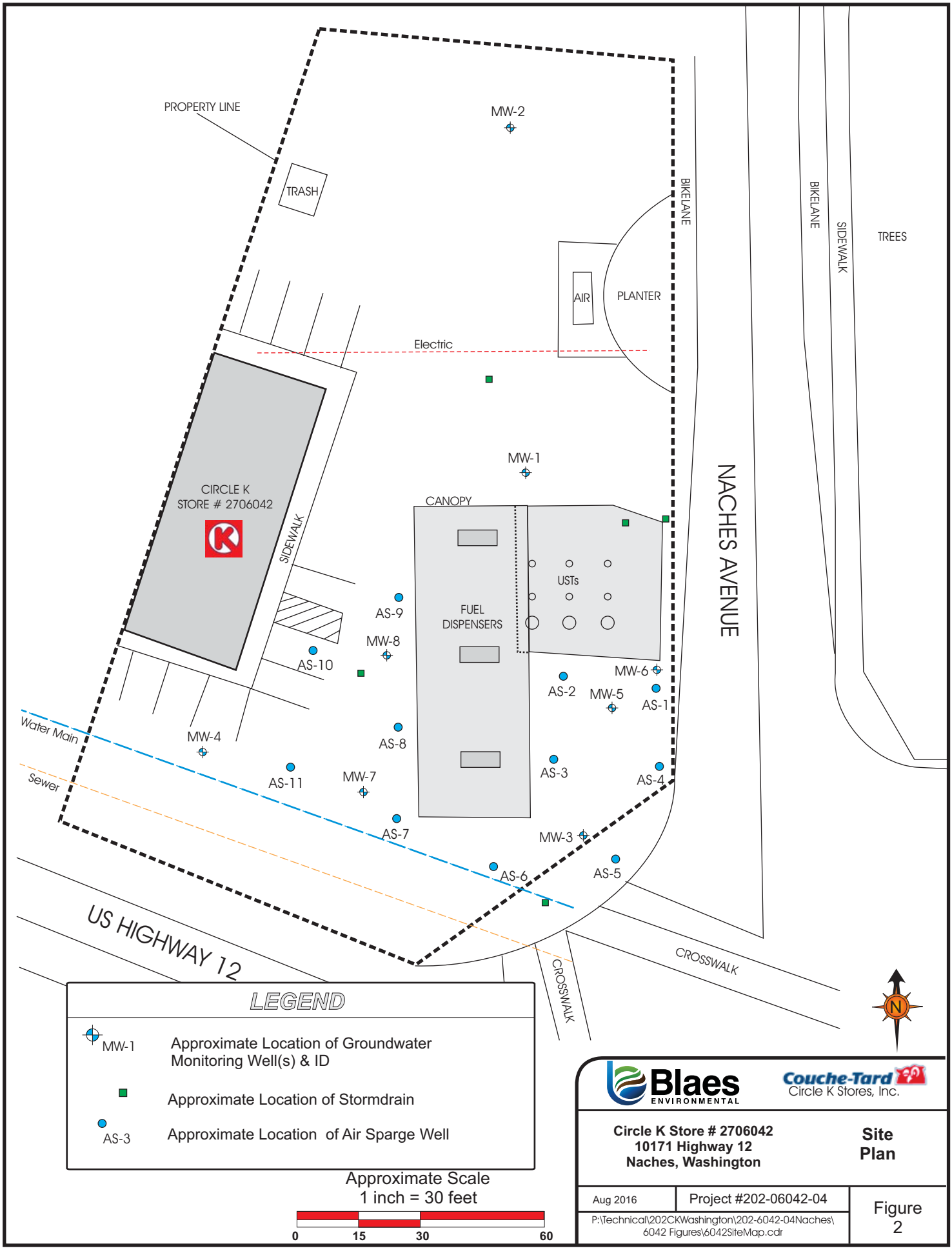

Blaes ENVIRONMENTAL

Couche-Tard
Circle K Stores, Inc.

Circle K Store # 2706042
10171 Highway 12
Naches, Washington

Site Plan

Aug 2016

Project #202-06042-04

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Figure 2

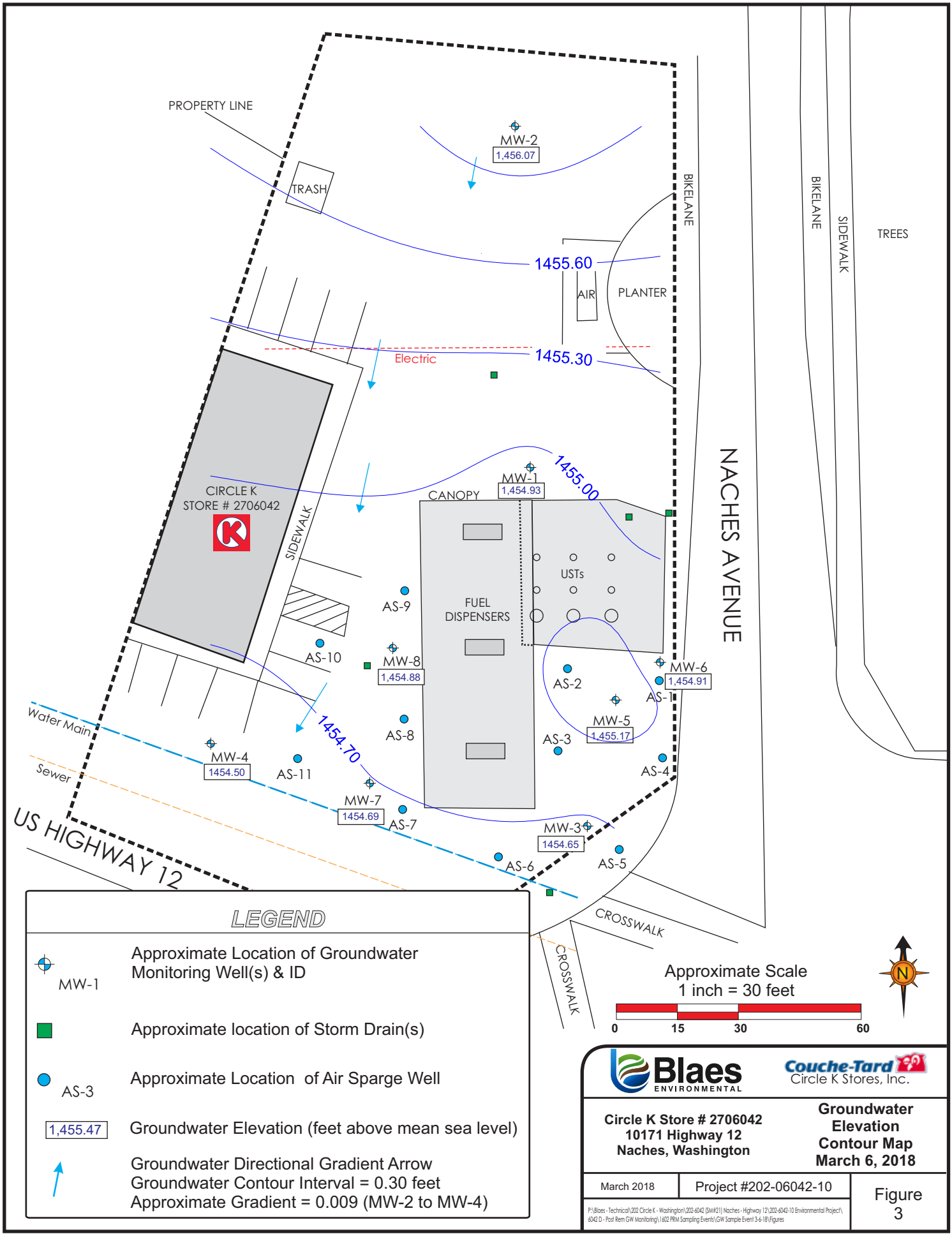
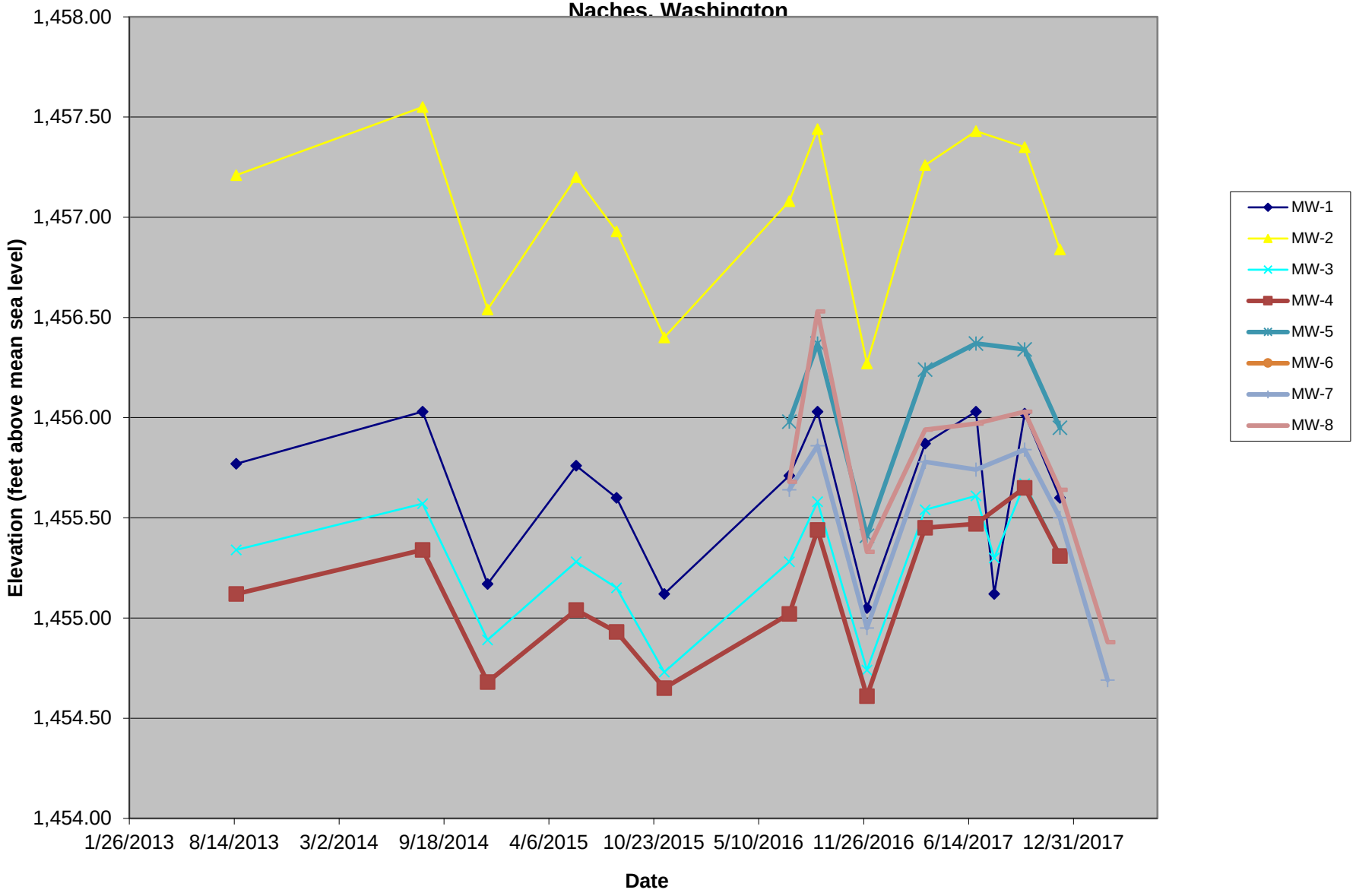
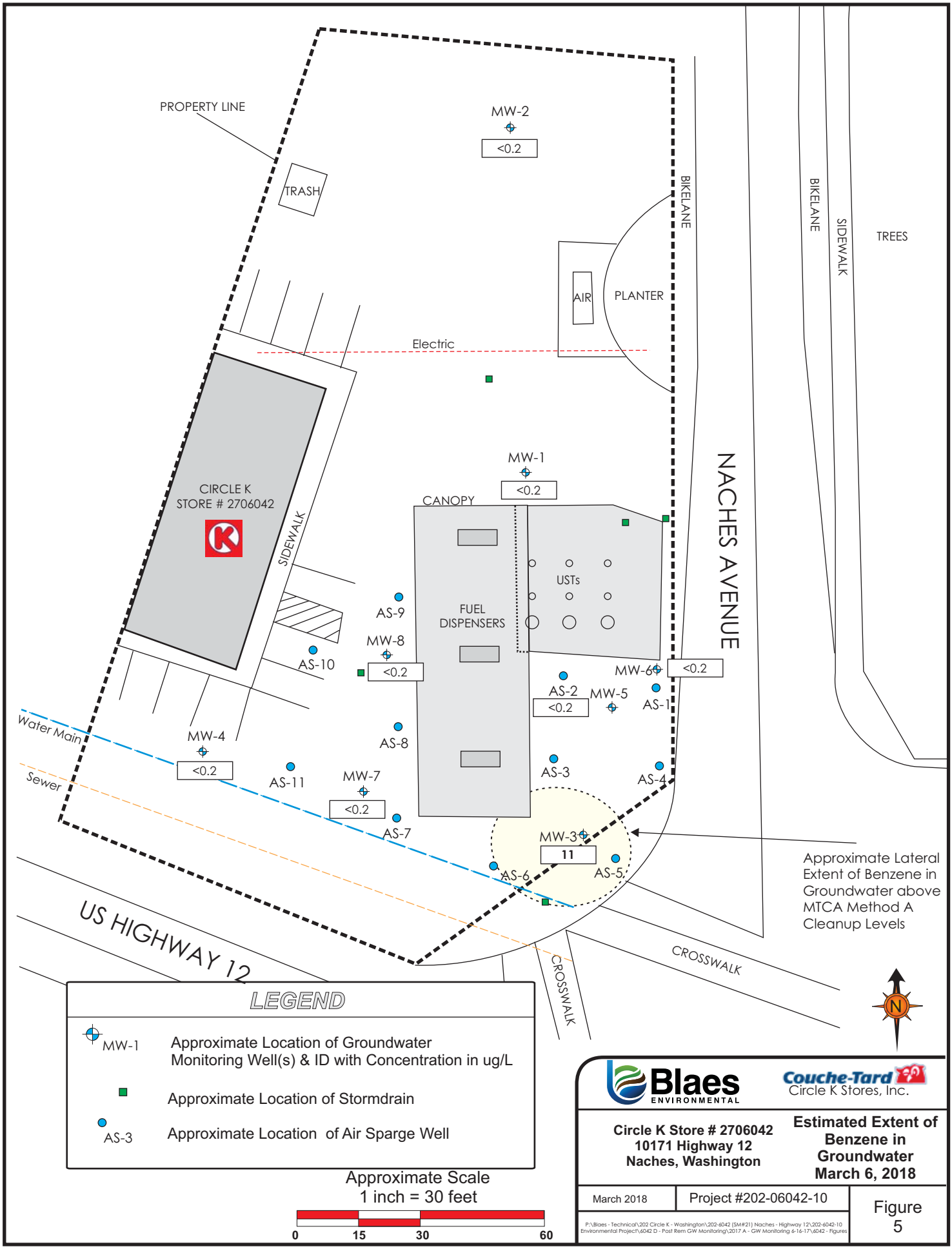

PROPERTY LINE
MW-2
1,456.07
TRASH
BIKELANE
BIKELANE
SIDEWALK
TREES
1455.60
AIR
PLANTER
Electric
1455.30
NACHES AVENUE
CIRCLE K
STORE # 2706042
SIDEWALK
MW-1
1,454.93
1455.00
CANOPY
USTs
FUEL
DISPENSERS
AS-9
AS-10
MW-8
1,454.88
AS-2
MW-6
1,454.91
AS-1
MW-5
1,455.17
AS-3
AS-8
AS-4
Water Main
Sewer
MW-4
1454.50
AS-11
1454.70
MW-7
1454.69
AS-7
MW-3
1454.65
AS-6
AS-5
US HIGHWAY 12
CROSSWALK
CROSSWALK
Approximate Scale
1 inch = 30 feet
0
15
30
60
N
LEGEND
MW-1
Approximate Location of Groundwater Monitoring Well(s) & ID
Approximate location of Storm Drain(s)
AS-3
Approximate Location of Air Sparge Well
1,455.47
Groundwater Elevation (feet above mean sea level)
Groundwater Directional Gradient Arrow
Groundwater Contour Interval = 0.30 feet
Approximate Gradient = 0.009 (MW-2 to MW-4)
Blaes ENVIRONMENTAL
Couche-Tard
Circle K Stores, Inc.
Circle K Store # 2706042
10171 Highway 12
Naches, Washington
Groundwater Elevation Contour Map
March 6, 2018
March 2018
Project #202-06042-10
Figure 3
P:\Blaes - Technical\202 Circle K - Washington\202-6042 (SM#21) Naches - Highway 12\202-6042-10 Environmental Project\6042 D - Post Rem GW Monitoring\1602 PRM Sampling Events\GW Sample Event 3-6-18\Figures

FIGURE 4: HYDROGRAPH
Circle K #2706042
10171 Highway 12
Naches, Washington




PROPERTY LINE
MW-2
<0.2
TRASH
BIKELANE
BIKELANE
SIDEWALK
TREES
AIR
PLANTER
Electric
MW-1
<0.2
CIRCLE K
STORE # 2706042
SIDEWALK
CANOPY
NACHES AVENUE
USTs
FUEL
DISPENSERS
AS-9
MW-8
<0.2
AS-10
MW-6
<0.2
AS-2
<0.2
MW-5
AS-1
Water Main
Sewer
MW-4
<0.2
AS-11
MW-7
<0.2
AS-8
AS-7
AS-3
AS-4
MW-3
11
AS-6
AS-5
Approximate Lateral Extent of Benzene in Groundwater above MTCA Method A Cleanup Levels
US HIGHWAY 12
CROSSWALK
CROSSWALK
N
LEGEND
MW-1
Approximate Location of Groundwater Monitoring Well(s) & ID with Concentration in ug/L
Approximate Location of Stormdrain
AS-3
Approximate Location of Air Sparge Well
Approximate Scale
1 inch = 30 feet
0
15
30
60
Blaes ENVIRONMENTAL
Couche-Tard
Circle K Stores, Inc.
Circle K Store # 2706042
10171 Highway 12
Naches, Washington
Estimated Extent of Benzene in Groundwater
March 6, 2018
March 2018
Project #202-06042-10
Figure 5
P:\Blaes - Technical\202 Circle K - Washington\202-6042 (SM#21) Naches - Highway 12\202-6042-10 Environmental Project\6042 D - Post Rem GW Monitoring\2017 A - GW Monitoring 6-16-17\6042 - Figures

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA

Circle K Store #2706042
10171 Highway 12
Naches, Washington

Well ID	Date	TOC Elevation (ft amsl)	Depth to Free Product (ft btoc)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
MW-1	8/18/2013	1466.08	---	10.31	1,455.77
	8/8/2014		---	10.05	1,456.03
	12/10/2014		---	10.91	1,455.17
	5/28/2015		---	10.32	1,455.76
	8/13/2015		---	10.48	1,455.60
	11/12/2015		---	10.96	1,455.12
	7/7/2016		---	10.37	1,455.71
	8/30/2016		---	10.05	1,456.03
	12/2/2016		---	11.03	1,455.05
	3/23/2017		---	10.21	1,455.87
	6/28/2017		---	10.05	1,456.03
	8/2/2017		---	10.96	1,455.12
	9/29/2017		---	10.06	1,456.02
	12/5/2017		---	10.48	1,455.60
	3/6/2018		---	11.15	1,454.93
MW-2	8/18/2013	1466.84	---	9.63	1,457.21
	8/8/2014		---	9.29	1,457.55
	12/10/2014		---	10.30	1,456.54
	5/28/2015		---	9.64	1,457.20
	8/13/2015		---	9.91	1,456.93
	11/12/2015		---	10.44	1,456.40
	7/7/2016		---	9.76	1,457.08
	8/30/2016		---	9.40	1,457.44
	12/2/2016		---	10.57	1,456.27
	3/23/2017		---	9.58	1,457.26
	6/28/2017		---	9.41	1,457.43
	9/29/2017		---	9.49	1,457.35
	12/5/2017		---	10.00	1,456.84
	3/6/2018		---	10.77	1,456.07
MW-3	8/18/2013	1466.26	---	10.92	1,455.34
	8/8/2014		---	10.69	1,455.57
	12/10/2014		---	11.37	1,454.89
	5/28/2015		---	10.98	1,455.28
	8/13/2015		---	11.11	1,455.15
	11/12/2015		---	11.53	1,454.73
	7/7/2016		---	10.98	1,455.28
	8/30/2016		---	10.68	1,455.58
	12/2/2016		---	11.52	1,454.74
	3/23/2017		---	10.72	1,455.54
	6/28/2017		---	10.65	1,455.61
	8/2/2017		---	10.96	1,455.30
	9/29/2017		---	10.59	1,455.67
	12/5/2017		---	10.94	1,455.32
	3/6/2018		---	11.61	1,454.65
MW-4	8/18/2013		---	11.42	1,455.12
	8/8/2014		---	11.20	1,455.34
	12/10/2014		---	11.86	1,454.68
	5/28/2015		---	11.50	1,455.04
	8/13/2015		---	11.61	1,454.93
	11/12/2015		---	11.89	1,454.65

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA

Circle K Store #2706042
10171 Highway 12
Naches, Washington

Well ID	Date	TOC Elevation (ft amsl)	Depth to Free Product (ft btoc)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
	7/7/2016	1466.54	---	11.52	1,455.02
	8/30/2016		---	11.10	1,455.44
	12/2/2016		---	11.93	1,454.61
	3/23/2017		---	11.09	1,455.45
	6/28/2017		---	11.07	1,455.47
	9/29/2017		---	10.89	1,455.65
	12/5/2017		---	11.23	1,455.31
	3/6/2018		---	12.04	1,454.50
MW-5	7/7/2016	1466.25	---	10.27	1,455.98
	8/30/2016		---	9.88	1,456.37
	12/2/2016		---	10.84	1,455.41
	3/23/2017		---	10.01	1,456.24
	6/28/2017		---	9.88	1,456.37
	9/29/2017		---	9.91	1,456.34
	12/5/2017		---	10.30	1,455.95
	3/6/2018		---	11.08	1,455.17
MW-6	7/7/2016	1465.82	---	10.05	1,455.77
	8/30/2016		---	9.64	1,456.18
	12/2/2016		---	NA	NA
	3/23/2017		---	9.87	1,455.95
	6/28/2017		---	9.80	1,456.02
	9/28/2017		---	9.83	1,455.99
	12/5/2017		---	10.23	1,455.59
	3/6/2018		---	10.91	1,454.91
MW-7	7/7/2016	1465.99	---	10.35	1,455.64
	8/30/2016		---	10.13	1,455.86
	12/2/2016		---	11.04	1,454.95
	3/23/2017		---	10.21	1,455.78
	6/28/2017		---	10.25	1,455.74
	9/29/2017		---	10.15	1,455.84
	12/5/2017		---	10.49	1,455.50
	3/6/2018		---	11.30	1,454.69
MW-8	7/7/2016	1465.50	---	9.82	1,455.68
	8/30/2016		---	8.97	1,456.53
	12/2/2016		---	10.17	1,455.33
	3/23/2017		---	9.56	1,455.94
	6/28/2017		---	9.53	1,455.97
	9/29/2017		---	9.47	1,456.03
	12/5/2017		---	9.86	1,455.64
	3/6/2018		---	10.62	1,454.88

NOTES:

ft btoc = Feet Below Top Of Casing
ft amsl = Feet Above Mean Sea Level
TOC = Top of Casing
--- = Not Present/Not Applicable

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

Circle K Store #2706042
10171 Highway 12
Naches, Washington 98937

Sample ID	Date Collected	NWTPH-Gx (ug/L)	NWTPH-Dx (ug/L)	NWTPH-O (ug/L)	EPA Method 8260													
					Benzene (ug/L)	Toluene (ug/L)	EB (ug/L)	m&p -Xylenes (ug/L)	o-Xylene (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Naph (ug/L)	Isoprop (ug/L)	1,2,4-TMB (ug/L)	1,3,5-TMB (ug/L)	Total Lead (ug/L)	Other VOCs (ug/L)
MW-1	8/12/2013	<50	---	---	**1.1**	<1.0	<1.0	<2.0	<1.0	<1.0	<0.01	NA	<1.0	<1.0	<1.0	<1.0	---	ND
	8/8/2014	**340**	---	---	<0.10	**0.27**	<0.10	**0.26**	**0.11**	<0.10	<0.01	<0.10	<0.40	<0.10	<0.10	<0.10	---	**1,2-Dichloropropane 0.16**
	12/10/2014	**170**	---	---	<0.10	**1.9**	**0.13**	**29**	**5.1**	<0.10	<0.01	<0.10	<0.40	**1.5**	<0.10	<0.10	---	ND
	5/28/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	ND
	8/13/2015	<50	---	---	**3.1**	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	**2.6**	<0.5	<0.2	<0.5	---	ND
	11/12/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	7/7/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	3/23/2017	<50	---	---	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<110	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	---	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	8.4	ND
	3/6/2018	<250	<110	<360	<0.2	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0099	<0.2	<1.0	<1.0	<0.3	<0.5	**53**	ND
MW-2	8/12/2013	<50	---	---	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<0.01	NA	<1.0	<1.0	<1.0	<1.0	---	ND
	8/8/2014	**130**	---	---	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.01	<0.10	<0.40	<0.10	<0.10	<0.10	---	ND
	12/10/2014	<50	---	---	**0.32**	<0.10	<0.10	<0.20	<0.10	<0.10	<0.01	<0.10	<0.40	<0.10	<0.10	<0.10	---	ND
	5/28/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	ND
	8/13/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	ND
	11/12/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	7/7/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	3/23/2017	<50	---	---	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	1.7	ND
	3/6/2018	<250	<110	<350	<0.2	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0098	<0.2	<1.0	<1.0	<0.3	<0.5	**19**	ND

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

Circle K Store #2706042
10171 Highway 12
Naches, Washington 98937

Sample ID	Date Collected	NWTPH-Gx (ug/L)	NWTPH-Dx (ug/L)	NWTPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	EB (ug/L)	m&p -Xylenes (ug/L)	o-Xylene (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Naph (ug/L)	Isoprop (ug/L)	1,2,4-TMB (ug/L)	1,3,5-TMB (ug/L)	Total Lead (ug/L)	Other VOCs (ug/L)
MW-3	8/12/2013	50000	---	---	<1.0	27	830	1,500	930	<1.0	<0.01	NA	380	160	1,200	780	---	4-Isopropyltoluene 22; n-Butylbenzene 550; N-propylbenzene 490; sec-Butylbenzene 34; Styrene 32;
	8/8/2014	59000	---	---	2.6	15	1100	5,300	920	<0.10	<0.01	<0.10	320	110	3,600	1,300	---	4-isopropylbenzene 57; n-Butylbenzene 510; N-Propylbenzene 430; sec-butylbenzene 31; Styrene 27;
	12/10/2014	49000	---	---	200	25	860	4,100	1000	<0.10	<0.01	<0.10	560	160	770	1,200	---	4-isopropylbenzene 19; n-Butylbenzene 670; N-Propylbenzene 460; sec-butylbenzene 38; Styrene 1.2;
	5/28/2015	56000	---	---	2800	3100	1300	5,100	1200	<0.2	<0.01	<0.2	520	180	4,800	1,300	---	4-isopropylbenzene 16; n-Butylbenzene 680; sec-butylbenzene 43; Styrene 1.4;
	8/13/2015	74000	110	---	2400	2300	1200	2,600	1200	<2	<0.01	<0.2	600	180	1,900	1,300	---	#2 Diesel 0.11; sec-Butylbenzene 43; n-Butylbenzene 710; N-Propylbenzene 590; 4-Isopropyltoluene 19
	11/12/2015	54000	12000	---	1900	1800	970	3,000	780	<0.2	<0.01	<0.2	33	140	3,100	830	---	4-Isopropyltoluene 16; Styrene 0.82; n-Butylbenzene 530; N-Propylbenzene 520; #2 Diesel 12000 Motor Oil 860
	7/7/2016	36000	---	---	540	260	1000	3,000	790	<0.2	<0.40	<0.2	9	130	3,700	790	---	Styrene 0.74; 4-isopropyltoluene 19; N-propylbenzene 520; n-Butylbenzene 590;
	8/30/2016	1900	---	---	14	33	36	100	32	<0.2	<0.001	<0.2	26	3.5	110	42	---	1,3 Dichloropropene 0.5; N-Propylbenzene 13 ; sec-Butylbenzene 1.1; 4-Isopropyltoluene 0.84; n-Butylbenzene 44 ;

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

Circle K Store #2706042
10171 Highway 12
Naches, Washington 98937

Sample ID	Date Collected	NWTPH-Gx (ug/L)	NWTPH-Dx (ug/L)	NWTPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	EB (ug/L)	m&p -Xylenes (ug/L)	o-Xylene (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Naph (ug/L)	Isoprop (ug/L)	1,2,4-TMB (ug/L)	1,3,5-TMB (ug/L)	Total Lead (ug/L)	Other VOCs (ug/L)
	12/2/2016	10000	---	---	150	25	510	1,200	280	<10	<0.0099	<10	350	84	2,400	540	---	N-Propylbenzene 290; 4-Isopropyltoluene 15; n-Butylbenzene 430
	3/23/2017	18000	---	---	52.9	5.52	264	358	121	<0.5	<0.01	<0.2	<0.5	47.5	247	132	---	2-Chlorotoluene 27.6; N-Propylbenzene 98.9 ; sec-Butylbenzene 15.1; 4-Isopropyltoluene 9.73; n-Butylbenzene 19.0 ;
	6/28/2017	8700	---	---	18	7.3	190	280	59	<2.0	<0.01	<2.0	91	38	940	81	---	N-Propylbenzene 120 ; sec-Butylbenzene 14; 4-Isopropyltoluene 6.7; n-Butylbenzene 120 ;
	8/2/2017	4400	---	---	5.67	1.15	63.2	76	4.43	<0.15	<0.15	<0.15	25.1	13.9	402	7.5	---	4-Chlorotoluene 10.0; N-Propylbenzene 58.3 ; sec-Butylbenzene 5.61; p-Isopropyltoluene 2.32; n-Butylbenzene 10.2;
	9/29/2017	10000	1400	300	32	<10	370	470	29	<10	<0.0099	<10	130	<250	1,500	76	43	N-Propylbenzene 270 ; n-Butylbenzene 160 ;
	12/5/2017	7800	1900	400	22	3.5	210	110	19	<10	<0.01	<0.2	110	43	1,200	6.9	12	N-Propylbenzene 160 ; n-Butylbenzene 50 ; 4-Isopropyltoluene 4.6; sec-butylbenzene 15
	3/6/2018	8400	2300	490	11	<10	210	88	<25	<15	<0.0099	<10	56	<50	1,300	<25	57	N-Propylbenzene 160 ; n-Butylbenzene 79 ;
	8/12/2013	590	---	---	<1.0	<1.0	1.3	7.0	1.7	<1.0	<0.01	NA	72	<1.0	12	4.1	---	N-propylbenzene 1.9
	8/8/2014	<50	---	---	<1.0	0.22	<1.0	<0.20	<0.10	<1.0	<0.01	<0.10	<0.40	<1.0	<0.10	<0.10	---	1,2-Dichloropropane 0.17; sec-Butylbenzene 0.20
	12/10/2014	<50	---	---	12	0.12	0.71	3.6	0.64	<0.10	<0.01	<0.10	4.1	0.17	1.3	1.6	---	sec-Butylbenzene 1.3
	5/28/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	N-propylbenzene 1.2
	8/13/2015	51.0	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.2	---	trans-1,2 Dichloroethene 0.29;
	11/12/2015	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

Circle K Store #2706042
10171 Highway 12
Naches, Washington 98937

Sample ID	Date Collected	NWTPH-Gx (ug/L)	NWTPH-Dx (ug/L)	NWTPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	EB (ug/L)	m&p -Xylenes (ug/L)	o-Xylene (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Naph (ug/L)	Isoprop (ug/L)	1,2,4-TMB (ug/L)	1,3,5-TMB (ug/L)	Total Lead (ug/L)	Other VOCs (ug/L)
MW-4	7/7/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	2	<0.5	<0.2	<0.5	---	ND
	8/30/2016	<50	----	----	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	----	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.50	<0.5	<0.2	<0.5	---	ND
	3/23/2017	<50	---	---	<0.2	<0.2	**0.32**	**0.7**	<0.2	<0.5	<0.01	<0.2	**11.4**	<0.2	**3.44**	**0.49**	---	**N-propylbenzene 0.34**
	6/28/2017	<50	---	---	<2.0	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<100	<240	<2.0	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<100	<240	<2.0	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	3.1	ND
	3/6/2018	<250	<110	<360	<2.0	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0097	<0.2	<1.0	<1.0	<0.3	<0.5	23	ND
MW-5	7/7/2016	850	---	---	**1.9**	**33.0**	**14.0**	**96 E**	**67**	**0.70**	<0.01	<0.2	**4.3**	**0.7**	**40**	<0.5	---	**N-Propylbenzene 2.2; 4- Isopropyltoluene 0.34 n-Butylbenzene 17;**
	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	**0.32**	**0.51**	---	**n-Butylbenzene 0.95**
	3/23/2017	<50	---	---	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.2	**1.64**	<0.2	**0.87**	<0.2	---	ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<110	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	3.2	ND
	3/6/2018	<250	<110	<350	<2.0	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0099	<0.2	<!.0	<1.0	<0.3	<0.5	5.4	ND
MW-6	7/7/2016	**79**	---	---	**0.31**	**0.26**	**0.68**	**2.10**	**1.30**	<0.20	<0.01	<0.20	**0.51**	<0.50	**2.30**	**0.91**	---	**n-butylbenzene 0.94**
	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	0.50	<0.5	<0.2	<0.5	---	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	3/23/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	**0.62**	<0.2	**0.43**	<0.2	---	ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<110	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	5.4	ND
	3/6/2018	<250	<110	<350	<0.2	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0099	<0.2	<1.0	<1.0	<0.3	<0.5	7.3	ND
MW-7	7/7/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	2	<0.5	<0.2	<0.5	---	ND
	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	3/27/2017	<50	---	---	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.01	<0.2	<0.5	<0.2	**0.28**	<0.2	---	ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5	---	ND
	9/29/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<110	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<0.8	ND
	3/6/2018	<250	<110	<350	<0.2	<0.2	<0.2	<0.5	<0.5	<0.3	<0.0099	<0.2	<1.0	<1.0	<0.3	<0.5	<4.0	ND
	7/7/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	2	<0.5	<0.2	<0.5		ND

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

Circle K Store #2706042
10171 Highway 12
Naches, Washington 98937

Sample ID	Date Collected	NWTPH-Gx (ug/L)	NWTPH-Dx (ug/L)	NWTPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	EB (ug/L)	m&p -Xylenes (ug/L)	o-Xylene (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Naph (ug/L)	Isoprop (ug/L)	1,2,4-TMB (ug/L)	1,3,5-TMB (ug/L)	Total Lead (ug/L)	Other VOCs (ug/L)
MW-8	8/30/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5		ND
	12/2/2016	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5		ND
	3/27/2017	<50	---	---	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.01	<0.2	<0.5	<0.2	**0.21**	<0.2		ND
	6/28/2017	<50	---	---	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.01	<0.2	<0.5	<0.5	<0.2	<0.5		ND
	9/29/2017	<250	<110	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	<30	ND
	12/5/2017	<250	<100	<240	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.0099	<0.2	<0.5	<0.5	<0.2	<0.5	7.7	ND
	3/6/2018	<250	<110	<350	<0.2	<0.2	<0.2	<0.5	<0.5	<0.3	<0.01	<0.2	<1.0	<1.0	<0.3	<0.5	**21**	ND
MTCA Cleanup Standards		**800**	**500**	**500**	**5**	**1,000**	**700**	**1,000**		**20**	**0.01**	**NA**	**160**	**NA**	**NA**	**NA**	**15**	**NA**

Notes:

EB	Ethylbenzene
EPA	U.S. Environmental Protection Agency
mg/L	milligrams per liter (parts per million)
ug/L	micrograms per liter (parts per billion)
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons - Gasoline Range
MTBE	Methyl-tert-butyl Ether
EDB	Ethylene Dibromide
Naph	Naphthanlene
Isoprop	Isopropylbenzene
TMB	Trimethylbenzene
BOLD	Concentration exceeds laboratory reporting limit or method detection limit
RED	Concentration exceeds applicable MTCA Cleanup Standard
NA	MTCA cleanup standard not available
ND	Not Detected above reporting limit
MTCA	Model Toxics Control Act

APPENDICES

APPENDIX A

GROUNDWATER SAMPLE DATA SHEETS

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042
Project No.: 202-6042-10
Recorded By: D. BLAES

Well No.: MW-1
Well Type: ☒ Monitor ☐ Remedial - VE AS
☐ Other:
Well Material: ☒ PVC ☐ St. Steel
☐ Other:

WELL PURGING

Purge Volume **Purge Date:**

Casing Diameter (D) in inches:
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:
Total Depth of Casing (TD in feet BTOC):
Water Level Depth (WL in feet BTOC): 11.15'
Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Method
☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting
☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Purge Volume Calulation:

(____ (TD feet) − ____ (WL feet)) X ____ (D (inches))^2 X ____ (# Vols) X 0.0409 = ____ gallons
Calculated Purge Volume

Pump Time **Purge Rate** **Actual Purge Volume**

Start: Stop: Time Elapsed:
Initial gpm
Final gpm
gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	Temp. °C	ORP	TDS
8:42 AM	—	45.9	5.17	406	291	0.20	10.15	282	0.264

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 8:42 AM

Sampling Method
Water Level Before Sampling (in feet BTOC):

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:

☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

GROUNDWATER SAMPLING FORM

Blaes ENVIRONMENTAL

Site ID: CIRCLE K #6042
Project No.: 202-6042-10
Recorded By: D BLAES

Well No.: MW-2
Well Type: ☒ Monitor ☐ Remedial - VE AS ☐ Other:
Well Material: ☒ PVC ☐ St. Steel ☐ Other:

WELL PURGING

Purge Volume **Purge Date:**

Casing Diameter (D) in inches:
☐ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:

Total Depth of Casing (TD in feet BTOC):
Water Level Depth (WL in feet BTOC): 10.77'

Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Volume Calulation:

(TD (feet) − WL (feet)) X D (inches)^2 X # Vols X 0.0409 = Calculated Purge Volume gallons

Purge Method
☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting
☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Pump Time **Purge Rate** **Actual Purge Volume**

Start: Stop: Time Elapsed: Initial gpm Final gpm gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	°C Temp.	ORP	TDS
8:20 AM	—	63.1	7.22	222	157	0.11	9.8	212	0.144

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 8:20 A

Sampling Method
☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:

Water Level Before Sampling (in feet BTOC):
☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042

Project No.: 202-6042-10

Recorded By: D. BLAES

Well No.: MW-3

Well Type: ☑ Monitor ☐ Remedial - VE AS ☐ Other:

Well Material: ☑ PVC ☐ St. Steel ☐ Other:

WELL PURGING

Purge Volume

Purge Date:

Casing Diameter (D) in inches:
☑ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:

Total Depth of Casing (TD in feet BTOC):

Water Level Depth (WL in feet BTOC): 11.61'

Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Volume Calulation:

(TD (feet) − WL (feet)) X D (inches)^2 X # Vols X 0.0409 = Calculated Purge Volume gallons

Purge Method

☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting

☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Pump Time

Start: Stop: Time Elapsed:

Purge Rate

Initial gpm
Final gpm

Actual Purge Volume

gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	Temp. °C	ORP	TDS
11:20 AM	—	10.9	1.16	1088	822	0.54	12.15	-114	0.708

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): SLIGHTLY MUCKY - SLIGHT HYDROCARBON ODOR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 11:20 AM

Sampling Method

Water Level Before Sampling (in feet BTOC):

☑ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:

☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution

Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K # 6042
Project No.: 202-6042-10
Recorded By: D. BLAES

Well No.: MW-4
Well Type: ☒ Monitor ☐ Remedial - VE AS
☐ Other:
Well Material: ☒ PVC ☐ St. Steel
☐ Other:

WELL PURGING

Purge Volume **Purge Date:**

Casing Diameter (D) in inches:
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:

Total Depth of Casing (TD in feet BTOC):
Water Level Depth (WL in feet BTOC): 12.04'

Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Volume Calulation:

(TD (feet) − WL (feet)) X D (inches)^2 X # Vols X 0.0409 = Calculated Purge Volume gallons

Purge Method
☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting
☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Pump Time **Purge Rate** **Actual Purge Volume**

Start: Stop: Time Elapsed:
Initial gpm
Final gpm
gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	Temp. °C	ORP	TDS
10:00 A	53.3	5.93	305	222		0.15	10.80	313	0.198

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/16/18 **Sampling Time:** 10:00 A

Sampling Method
Water Level Before Sampling (in feet BTOC):

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:
☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042
Project No.: 202-6042-10
Recorded By: D. BLAES

Well No.: MW-5
Well Type: ☒ Monitor ☐ Remedial - VE AS ☐ Other:
Well Material: ☒ PVC ☐ St. Steel ☐ Other:

WELL PURGING

Purge Volume **Purge Date:**

Casing Diameter (D) in inches:
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:

Total Depth of Casing (TD in feet BTOC):
Water Level Depth (WL in feet BTOC): 11.08'
Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Method
☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting
☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Purge Volume Calulation:

(____ (TD feet) − ____ (WL feet)) X ____ (D (inches))^2 X ____ (# Vols) X 0.0409 = ____ gallons
Calculated Purge Volume

Pump Time **Purge Rate** **Actual Purge Volume**

Start: Stop: Time Elapsed: Initial gpm Final gpm ____ gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	°C Temp.	ORP	TDS
10:48 AM	—	25.8	2.74	266	204	0.13	12.68	297	0.171

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 10:48 AM

Sampling Method
☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:

Water Level Before Sampling (in feet BTOC):
☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042
Project No.: 202-6042-60
Recorded By: D. BLAES

Well No.: MW-6
Well Type: ☒ Monitor ☐ Remedial - VE AS
☐ Other:
Well Material: ☒ PVC ☐ St. Steel
☐ Other:

WELL PURGING

Purge Volume

Purge Date: _____

Casing Diameter (D) in inches:
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other: _____

Total Depth of Casing (TD in feet BTOC): _____
Water Level Depth (WL in feet BTOC): 10.91'
Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other: _____

Purge Volume Calulation:

(_____ TD (feet) − _____ WL (feet)) X _____ D (inches)^2 X _____ # Vols X 0.0409 = _____ gallons
Calculated Purge Volume

Purge Method

☐ Bailer - Type: ~~D~~. NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other: _____

Pump Intake Setting

☐ Near Bottom ☐ Near Top ☐ Other: _____
Depth in feet (BTOC): _____
Screen Interval in Feet (BTOC): from _____ to _____

Pump Time

Start: _____ Stop: _____ Time Elapsed: _____

Purge Rate

Initial _____ gpm
Final _____ gpm

Actual Purge Volume

_____ gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	Temp. °C	ORP	TDS
10:28A	-	26.9	2.85	262	200	0.13	12.63	305	0.171

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: _____ ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments: _____

WELL SAMPLING

Sampled By: D. BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 10:28A

Sampling Method

Water Level Before Sampling (in feet BTOC): _____

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other: _____

☐ Same as Above
☐ Grab - Type: _____
☐ Other - Type: _____

Sampling Distribution

Sample Series: _____

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes: _____

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042

Project No.: 202-6042-10

Recorded By: D-BLAES

Well No.: MW-7

Well Type: ☒ Monitor ☐ Remedial - VE AS

☐ Other: _____

Well Material: ☒ PVC ☐ St. Steel

☐ Other: _____

WELL PURGING

Purge Volume

Purge Date: _____

Casing Diameter (D) in inches:

☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other: _____

Total Depth of Casing (TD in feet BTOC): _____

Water Level Depth (WL in feet BTOC): 11.30'

Number of Well Volumes (# Vols) to be Purged:

☐ 3 ☐ 4 ☐ 5 ☐ Other: _____

Purge Volume Calulation:

(_____ TD (feet) − _____ WL (feet)) X _____ D (inches)^2 X _____ # Vols X 0.0409 = _____ gallons

Calculated Purge Volume

Purge Method

☐ Bailer - Type: NO PURGE

☐ Submersible ☐ Submersible Whale

☐ Other: _____

Pump Intake Setting

☐ Near Bottom ☐ Near Top ☐ Other: _____

Depth in feet (BTOC): _____

Screen Interval in Feet (BTOC): from _____ to _____

Pump Time

Start: _____ Stop: _____ Time Elapsed: _____

Purge Rate

Initial _____ gpm

Final _____ gpm

Actual Purge Volume

_____ gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	°C Temp.	ORP	TDS
9:33 AM	—	29.6	3.11	269	206	0.13	12.77	295	0.175

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: _____ ☐ Storm Sewer ☐ Sanitary Sewer

Other / Comments: _____

WELL SAMPLING

Sampled By: D-BLAES

Sampling Date: 3/6/18

Sampling Time: 9:33A

Sampling Method

Water Level Before Sampling (in feet BTOC): _____

☒ Bailer - Type: DISPOSABLE

☐ Submersible ☐ Whale

☐ Other: _____

☐ Same as Above

☐ Grab - Type: _____

☐ Other - Type: _____

Sampling Distribution

Sample Series: _____

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes: _____

Blaes ENVIRONMENTAL

GROUNDWATER SAMPLING FORM

Site ID: CIRCLE K #6042
Project No.: 202-6042-10
Recorded By: D-BLAES

Well No.: MW-8
Well Type: ☒ Monitor ☐ Remedial - VE AS
☐ Other:
Well Material: ☒ PVC ☐ St. Steel
☐ Other:

WELL PURGING

Purge Volume **Purge Date:**

Casing Diameter (D) in inches:
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other:
Total Depth of Casing (TD in feet BTOC):
Water Level Depth (WL in feet BTOC): 10.62'
Number of Well Volumes (# Vols) to be Purged:
☐ 3 ☐ 4 ☐ 5 ☐ Other:

Purge Method
☐ Bailer - Type: NO PURGE
☐ Submersible ☐ Submersible Whale
☐ Other:

Pump Intake Setting
☐ Near Bottom ☐ Near Top ☐ Other:
Depth in feet (BTOC):
Screen Interval in Feet (BTOC): from to

Purge Volume Calulation:

(____ (TD feet) − ____ (WL feet)) X ____ (D (inches))^2 X ____ (# Vols) X 0.0409 = ____ gallons
Calculated Purge Volume

Pump Time **Purge Rate** **Actual Purge Volume**

Start: Stop: Time Elapsed:
Initial gpm
Final gpm
gallons

Field Parameter Measurements

Time	Gallons Purged	DO%	DO (mg/L)	Cond. 1 (umhos/cm)	Cond. 2 (umhos/cm)	Salinity	°C Temp.	ORP	TDS
9:10 AM	—	28.7	3.04	265	203	0.13	12.66	294	0.173

Observations During Purging (well Condition, Turbidity, Color, Odor, etc.): CLEAR

Purge Water Storage/Disposal: ☐ Drum(s), Number: ☐ Storm Sewer ☐ Sanitary Sewer
Other / Comments:

WELL SAMPLING

Sampled By: D-BLAES **Sampling Date:** 3/6/18 **Sampling Time:** 9:10 AM

Sampling Method
Water Level Before Sampling (in feet BTOC):

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Whale
☐ Other:
☐ Same as Above
☐ Grab - Type:
☐ Other - Type:

Sampling Distribution Sample Series:

Sample No.	# Containers, Vol.	Preservative	Analysis	Lab	Comments

Other Notes:

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. BLAES	Lab PM: Walker, Elaine M	Carrier Tracking No(s):	COC No: 580-27860-9195.2
Client Contact: Dan Blaes	Phone: 602-728-0707	E-Mail: elaine.walker@testamericainc.com		Page: Page 2 of 3
Company: Blaes Environmental Inc.				Job #:
Address: 45 E Monterey Way Suite 200	Due Date Requested: 5 DAY TAT			
City: Phoenix	TAT Requested (days):			
State, Zip: AZ, 85012				
Phone: 602-549-0925(Tel)	PO #: Purchase Order not required			
Email: dblaes@blaesenvironmental.com	WO #:			
Project Name: Circle K 6042	Project #: 58005982			
Site: Arizona	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	8011 - EDB in Water	NWTPH_Dx - Dx LVI	6020A - MEMS	8260B full list VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	R	A	D			
MW-1	3/6/18	8:42	G	Water			X	X	X	X	X		5 DAY TAT RUSH
MW-2		8:20		Water			X	X	X	X	X		
MW-3		11:20		Water			X	X	X	X	X		
MW-4		10:00		Water			X	X	X	X	X		
MW-5		10:48		Water			X	X	X	X	X		
MW-6		10:28		Water			X	X	X	X	X		
MW-7		9:33		Water			X	X	X	X	X		
MW-8		9:10		Water			X	X	X	X	X		
				Water									
				Water									
				Water									

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D Blaes	3/6/18 2:05 pm	BLAES		3.6.18 1405	SEA TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

APPENDIX B

GROUNDWATER LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-75539-1
Client Project/Site: Circle K 6042
Sampling Event: Circle K #6042 Naches

For:
Blaes Environmental Inc.
45 E Monterey Way
Suite 200
Phoenix, Arizona 85012

Attn: Dan Blaes

M. Elaine Walker

Authorized for release by:
3/12/2018 2:49:39 PM

Elaine Walker, Project Manager II
(253)248-4972
elaine.walker@testamericainc.com

Table of Contents

Job ID: 580-75539-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-75539-1

Receipt
Eight samples were received on 3/6/2018 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-3 (580-75539-3). Elevated reporting limits (RLs) are provided.

Method(s) NWTPH-Gx: Surrogate recovery for the following sample was outside control limits: MW-3 (580-75539-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) NWTPH-Dx: Surrogate recovery for the following sample was outside control limits: MW-3 (580-75539-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-3 (580-75539-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-1
Date Collected: 03/06/18 08:42
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 19:00	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 19:00	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 19:00	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 19:00	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 19:00	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 19:00	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 19:00	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 19:00	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 19:00	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 19:00	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 19:00	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 19:00	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:00	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 19:00	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 19:00	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:00	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 19:00	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:00	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 19:00	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 19:00	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 19:00	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 19:00	1
Benzene	ND		0.20		ug/L			03/09/18 19:00	1
Bromobenzene	ND		0.20		ug/L			03/09/18 19:00	1
Bromoform	ND		0.50		ug/L			03/09/18 19:00	1
Bromomethane	ND		0.50		ug/L			03/09/18 19:00	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 19:00	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 19:00	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 19:00	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 19:00	1
Chloroethane	ND		0.50		ug/L			03/09/18 19:00	1
Chloroform	ND		0.20		ug/L			03/09/18 19:00	1
Chloromethane	ND		0.50		ug/L			03/09/18 19:00	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:00	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:00	1
Dibromomethane	ND		0.20		ug/L			03/09/18 19:00	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 19:00	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 19:00	1
EDC	ND		0.20		ug/L			03/09/18 19:00	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 19:00	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 19:00	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 19:00	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 19:00	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 19:00	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 19:00	1
Naphthalene	ND		1.0		ug/L			03/09/18 19:00	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 19:00	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 19:00	1
o-Xylene	ND		0.50		ug/L			03/09/18 19:00	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-1
Date Collected: 03/06/18 08:42
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 19:00	1
Styrene	ND		0.50		ug/L			03/09/18 19:00	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 19:00	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 19:00	1
Toluene	ND		0.20		ug/L			03/09/18 19:00	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:00	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:00	1
Trichloroethene	ND		0.20		ug/L			03/09/18 19:00	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 19:00	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*46 - 150*		*03/09/18 19:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 19:00*	*1*
Dibromofluoromethane (Surr)	*103*		*42 - 132*		*03/09/18 19:00*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*03/09/18 19:00*	*1*
Trifluorotoluene (Surr)	*98*		*74 - 118*		*03/09/18 19:00*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*58 - 133*		*03/08/18 23:34*	*1*
Trifluorotoluene (Surr)	*110*		*77 - 128*		*03/08/18 23:34*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099		ug/L		03/07/18 14:30	03/07/18 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*91*		*60 - 140*	*03/07/18 14:30*	*03/07/18 18:10*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/08/18 23:45	1
Motor Oil (>C24-C36)	ND		0.36		mg/L		03/07/18 09:23	03/08/18 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*72*		*50 - 150*	*03/07/18 09:23*	*03/08/18 23:45*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**28**		5.0		ug/L		03/07/18 14:25	03/08/18 14:46	5
Lead	**53**		4.0		ug/L		03/07/18 14:25	03/08/18 14:46	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-2
Date Collected: 03/06/18 08:20
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 19:26	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 19:26	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 19:26	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 19:26	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 19:26	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 19:26	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 19:26	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 19:26	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 19:26	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 19:26	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 19:26	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 19:26	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:26	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 19:26	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 19:26	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:26	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 19:26	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:26	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 19:26	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 19:26	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 19:26	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 19:26	1
Benzene	ND		0.20		ug/L			03/09/18 19:26	1
Bromobenzene	ND		0.20		ug/L			03/09/18 19:26	1
Bromoform	ND		0.50		ug/L			03/09/18 19:26	1
Bromomethane	ND		0.50		ug/L			03/09/18 19:26	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 19:26	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 19:26	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 19:26	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 19:26	1
Chloroethane	ND		0.50		ug/L			03/09/18 19:26	1
Chloroform	ND		0.20		ug/L			03/09/18 19:26	1
Chloromethane	ND		0.50		ug/L			03/09/18 19:26	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:26	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:26	1
Dibromomethane	ND		0.20		ug/L			03/09/18 19:26	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 19:26	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 19:26	1
EDC	ND		0.20		ug/L			03/09/18 19:26	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 19:26	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 19:26	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 19:26	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 19:26	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 19:26	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 19:26	1
Naphthalene	ND		1.0		ug/L			03/09/18 19:26	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 19:26	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 19:26	1
o-Xylene	ND		0.50		ug/L			03/09/18 19:26	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-2
Date Collected: 03/06/18 08:20
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 19:26	1
Styrene	ND		0.50		ug/L			03/09/18 19:26	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 19:26	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 19:26	1
Toluene	ND		0.20		ug/L			03/09/18 19:26	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:26	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:26	1
Trichloroethene	ND		0.20		ug/L			03/09/18 19:26	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 19:26	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*46 - 150*		*03/09/18 19:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 19:26*	*1*
Dibromofluoromethane (Surr)	*104*		*42 - 132*		*03/09/18 19:26*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 19:26*	*1*
Trifluorotoluene (Surr)	*98*		*74 - 118*		*03/09/18 19:26*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/07/18 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*58 - 133*		*03/07/18 22:12*	*1*
Trifluorotoluene (Surr)	*110*		*77 - 128*		*03/07/18 22:12*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0098		ug/L		03/07/18 14:30	03/07/18 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*89*		*60 - 140*	*03/07/18 14:30*	*03/07/18 18:27*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 00:05	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/09/18 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*64*		*50 - 150*	*03/07/18 09:23*	*03/09/18 00:05*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		5.0		ug/L		03/07/18 14:25	03/08/18 14:49	5
Lead	**19**		4.0		ug/L		03/07/18 14:25	03/08/18 14:49	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-3
Date Collected: 03/06/18 11:20
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		15		ug/L			03/09/18 22:05	50
1,1,1-Trichloroethane	ND		10		ug/L			03/09/18 22:05	50
1,1,2,2-Tetrachloroethane	ND		10		ug/L			03/09/18 22:05	50
1,1,2-Trichloroethane	ND		10		ug/L			03/09/18 22:05	50
1,1-Dichloroethane	ND		10		ug/L			03/09/18 22:05	50
1,1-Dichloroethene	ND		10		ug/L			03/09/18 22:05	50
1,1-Dichloropropene	ND		10		ug/L			03/09/18 22:05	50
1,2,3-Trichlorobenzene	ND		25		ug/L			03/09/18 22:05	50
1,2,3-Trichloropropane	ND		10		ug/L			03/09/18 22:05	50
1,2,4-Trichlorobenzene	ND		15		ug/L			03/09/18 22:05	50
1,2,4-Trimethylbenzene	**1300**		15		ug/L			03/09/18 22:05	50
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			03/09/18 22:05	50
1,2-Dichlorobenzene	ND		15		ug/L			03/09/18 22:05	50
1,2-Dichloropropane	ND		10		ug/L			03/09/18 22:05	50
1,3,5-Trimethylbenzene	ND		25		ug/L			03/09/18 22:05	50
1,3-Dichlorobenzene	ND		15		ug/L			03/09/18 22:05	50
1,3-Dichloropropane	ND		10		ug/L			03/09/18 22:05	50
1,4-Dichlorobenzene	ND		15		ug/L			03/09/18 22:05	50
2,2-Dichloropropane	ND		25		ug/L			03/09/18 22:05	50
2-Chlorotoluene	ND		25		ug/L			03/09/18 22:05	50
4-Chlorotoluene	ND		15		ug/L			03/09/18 22:05	50
4-Isopropyltoluene	ND		15		ug/L			03/09/18 22:05	50
Benzene	**11**		10		ug/L			03/09/18 22:05	50
Bromobenzene	ND		10		ug/L			03/09/18 22:05	50
Bromoform	ND		25		ug/L			03/09/18 22:05	50
Bromomethane	ND		25		ug/L			03/09/18 22:05	50
Carbon tetrachloride	ND		10		ug/L			03/09/18 22:05	50
Chlorobenzene	ND		10		ug/L			03/09/18 22:05	50
Chlorobromomethane	ND		10		ug/L			03/09/18 22:05	50
Chlorodibromomethane	ND		10		ug/L			03/09/18 22:05	50
Chloroethane	ND		25		ug/L			03/09/18 22:05	50
Chloroform	ND		10		ug/L			03/09/18 22:05	50
Chloromethane	ND		25		ug/L			03/09/18 22:05	50
cis-1,2-Dichloroethene	ND		10		ug/L			03/09/18 22:05	50
cis-1,3-Dichloropropene	ND		10		ug/L			03/09/18 22:05	50
Dibromomethane	ND		10		ug/L			03/09/18 22:05	50
Dichlorobromomethane	ND		10		ug/L			03/09/18 22:05	50
Dichlorodifluoromethane	ND		20		ug/L			03/09/18 22:05	50
EDC	ND		10		ug/L			03/09/18 22:05	50
Ethylbenzene	**210**		10		ug/L			03/09/18 22:05	50
Hexachlorobutadiene	ND		25		ug/L			03/09/18 22:05	50
Isopropylbenzene	ND		50		ug/L			03/09/18 22:05	50
Methyl tert-butyl ether	ND		15		ug/L			03/09/18 22:05	50
Methylene Chloride	ND		250		ug/L			03/09/18 22:05	50
m-Xylene & p-Xylene	**88**		25		ug/L			03/09/18 22:05	50
Naphthalene	**56**		50		ug/L			03/09/18 22:05	50
n-Butylbenzene	**79**		25		ug/L			03/09/18 22:05	50
N-Propylbenzene	**160**		15		ug/L			03/09/18 22:05	50
o-Xylene	ND		25		ug/L			03/09/18 22:05	50

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-3
Date Collected: 03/06/18 11:20
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		50		ug/L			03/09/18 22:05	50
Styrene	ND		25		ug/L			03/09/18 22:05	50
tert-Butylbenzene	ND		25		ug/L			03/09/18 22:05	50
Tetrachloroethene	ND		25		ug/L			03/09/18 22:05	50
Toluene	ND		10		ug/L			03/09/18 22:05	50
trans-1,2-Dichloroethene	ND		10		ug/L			03/09/18 22:05	50
trans-1,3-Dichloropropene	ND		10		ug/L			03/09/18 22:05	50
Trichloroethene	ND		10		ug/L			03/09/18 22:05	50
Trichlorofluoromethane	ND		25		ug/L			03/09/18 22:05	50
Vinyl chloride	ND		1.0		ug/L			03/09/18 22:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*46 - 150*		*03/09/18 22:05*	*50*
4-Bromofluorobenzene (Surr)	*103*		*81 - 120*		*03/09/18 22:05*	*50*
Dibromofluoromethane (Surr)	*98*		*42 - 132*		*03/09/18 22:05*	*50*
Toluene-d8 (Surr)	*108*		*75 - 125*		*03/09/18 22:05*	*50*
Trifluorotoluene (Surr)	*98*		*74 - 118*		*03/09/18 22:05*	*50*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**8.4**		0.25		mg/L			03/07/18 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*246*	*X*	*58 - 133*		*03/07/18 22:44*	*1*
Trifluorotoluene (Surr)	*114*		*77 - 128*		*03/07/18 22:44*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099		ug/L		03/07/18 14:30	03/07/18 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*90*		*60 - 140*	*03/07/18 14:30*	*03/07/18 18:43*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	**2.3**		0.11		mg/L		03/07/18 09:23	03/09/18 00:26	1
Motor Oil (>C24-C36)	**0.49**		0.36		mg/L		03/07/18 09:23	03/09/18 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*49*	*X*	*50 - 150*	*03/07/18 09:23*	*03/09/18 00:26*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**28**		5.0		ug/L		03/07/18 14:25	03/08/18 14:53	5
Lead	**57**		4.0		ug/L		03/07/18 14:25	03/08/18 14:53	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-4
Date Collected: 03/06/18 10:00
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 19:53	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 19:53	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 19:53	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 19:53	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 19:53	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 19:53	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 19:53	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 19:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 19:53	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 19:53	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 19:53	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 19:53	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:53	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 19:53	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 19:53	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:53	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 19:53	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 19:53	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 19:53	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 19:53	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 19:53	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 19:53	1
Benzene	ND		0.20		ug/L			03/09/18 19:53	1
Bromobenzene	ND		0.20		ug/L			03/09/18 19:53	1
Bromoform	ND		0.50		ug/L			03/09/18 19:53	1
Bromomethane	ND		0.50		ug/L			03/09/18 19:53	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 19:53	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 19:53	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 19:53	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 19:53	1
Chloroethane	ND		0.50		ug/L			03/09/18 19:53	1
Chloroform	ND		0.20		ug/L			03/09/18 19:53	1
Chloromethane	ND		0.50		ug/L			03/09/18 19:53	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:53	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:53	1
Dibromomethane	ND		0.20		ug/L			03/09/18 19:53	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 19:53	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 19:53	1
EDC	ND		0.20		ug/L			03/09/18 19:53	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 19:53	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 19:53	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 19:53	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 19:53	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 19:53	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 19:53	1
Naphthalene	ND		1.0		ug/L			03/09/18 19:53	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 19:53	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 19:53	1
o-Xylene	ND		0.50		ug/L			03/09/18 19:53	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-4
Date Collected: 03/06/18 10:00
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 19:53	1
Styrene	ND		0.50		ug/L			03/09/18 19:53	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 19:53	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 19:53	1
Toluene	ND		0.20		ug/L			03/09/18 19:53	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 19:53	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 19:53	1
Trichloroethene	ND		0.20		ug/L			03/09/18 19:53	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 19:53	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*46 - 150*		*03/09/18 19:53*	*1*
4-Bromofluorobenzene (Surr)	*97*		*81 - 120*		*03/09/18 19:53*	*1*
Dibromofluoromethane (Surr)	*104*		*42 - 132*		*03/09/18 19:53*	*1*
Toluene-d8 (Surr)	*103*		*75 - 125*		*03/09/18 19:53*	*1*
Trifluorotoluene (Surr)	*102*		*74 - 118*		*03/09/18 19:53*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/07/18 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*58 - 133*		*03/07/18 23:48*	*1*
Trifluorotoluene (Surr)	*111*		*77 - 128*		*03/07/18 23:48*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0097		ug/L		03/07/18 14:30	03/07/18 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*81*		*60 - 140*	*03/07/18 14:30*	*03/07/18 18:59*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 00:46	1
Motor Oil (>C24-C36)	ND		0.36		mg/L		03/07/18 09:23	03/09/18 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*50 - 150*	*03/07/18 09:23*	*03/09/18 00:46*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		5.0		ug/L		03/07/18 14:25	03/08/18 14:57	5
Lead	**23**		4.0		ug/L		03/07/18 14:25	03/08/18 14:57	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-5
Date Collected: 03/06/18 10:48
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 20:19	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 20:19	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 20:19	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 20:19	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 20:19	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 20:19	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 20:19	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 20:19	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 20:19	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 20:19	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 20:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 20:19	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:19	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 20:19	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 20:19	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:19	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 20:19	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:19	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 20:19	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 20:19	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 20:19	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 20:19	1
Benzene	ND		0.20		ug/L			03/09/18 20:19	1
Bromobenzene	ND		0.20		ug/L			03/09/18 20:19	1
Bromoform	ND		0.50		ug/L			03/09/18 20:19	1
Bromomethane	ND		0.50		ug/L			03/09/18 20:19	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 20:19	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 20:19	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 20:19	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 20:19	1
Chloroethane	ND		0.50		ug/L			03/09/18 20:19	1
Chloroform	ND		0.20		ug/L			03/09/18 20:19	1
Chloromethane	ND		0.50		ug/L			03/09/18 20:19	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 20:19	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 20:19	1
Dibromomethane	ND		0.20		ug/L			03/09/18 20:19	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 20:19	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 20:19	1
EDC	ND		0.20		ug/L			03/09/18 20:19	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 20:19	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 20:19	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 20:19	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 20:19	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 20:19	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 20:19	1
Naphthalene	ND		1.0		ug/L			03/09/18 20:19	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 20:19	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 20:19	1
o-Xylene	ND		0.50		ug/L			03/09/18 20:19	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-5
Date Collected: 03/06/18 10:48
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 20:19	1
Styrene	ND		0.50		ug/L			03/09/18 20:19	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 20:19	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 20:19	1
Toluene	ND		0.20		ug/L			03/09/18 20:19	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 20:19	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 20:19	1
Trichloroethene	ND		0.20		ug/L			03/09/18 20:19	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 20:19	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*46 - 150*		*03/09/18 20:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 20:19*	*1*
Dibromofluoromethane (Surr)	*103*		*42 - 132*		*03/09/18 20:19*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 20:19*	*1*
Trifluorotoluene (Surr)	*99*		*74 - 118*		*03/09/18 20:19*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*58 - 133*		*03/08/18 00:19*	*1*
Trifluorotoluene (Surr)	*109*		*77 - 128*		*03/08/18 00:19*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099		ug/L		03/07/18 14:30	03/07/18 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*85*		*60 - 140*	*03/07/18 14:30*	*03/07/18 19:16*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 01:06	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/09/18 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*64*		*50 - 150*	*03/07/18 09:23*	*03/09/18 01:06*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		03/07/18 14:25	03/08/18 15:01	5
Lead	**5.4**		4.0		ug/L		03/07/18 14:25	03/08/18 15:01	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-6
Date Collected: 03/06/18 10:28
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 20:46	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 20:46	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 20:46	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 20:46	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 20:46	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 20:46	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 20:46	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 20:46	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 20:46	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 20:46	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 20:46	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 20:46	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:46	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 20:46	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 20:46	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:46	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 20:46	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 20:46	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 20:46	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 20:46	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 20:46	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 20:46	1
Benzene	ND		0.20		ug/L			03/09/18 20:46	1
Bromobenzene	ND		0.20		ug/L			03/09/18 20:46	1
Bromoform	ND		0.50		ug/L			03/09/18 20:46	1
Bromomethane	ND		0.50		ug/L			03/09/18 20:46	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 20:46	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 20:46	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 20:46	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 20:46	1
Chloroethane	ND		0.50		ug/L			03/09/18 20:46	1
Chloroform	ND		0.20		ug/L			03/09/18 20:46	1
Chloromethane	ND		0.50		ug/L			03/09/18 20:46	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 20:46	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 20:46	1
Dibromomethane	ND		0.20		ug/L			03/09/18 20:46	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 20:46	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 20:46	1
EDC	ND		0.20		ug/L			03/09/18 20:46	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 20:46	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 20:46	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 20:46	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 20:46	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 20:46	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 20:46	1
Naphthalene	ND		1.0		ug/L			03/09/18 20:46	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 20:46	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 20:46	1
o-Xylene	ND		0.50		ug/L			03/09/18 20:46	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-6
Date Collected: 03/06/18 10:28
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 20:46	1
Styrene	ND		0.50		ug/L			03/09/18 20:46	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 20:46	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 20:46	1
Toluene	ND		0.20		ug/L			03/09/18 20:46	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 20:46	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 20:46	1
Trichloroethene	ND		0.20		ug/L			03/09/18 20:46	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 20:46	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*46 - 150*		*03/09/18 20:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 20:46*	*1*
Dibromofluoromethane (Surr)	*103*		*42 - 132*		*03/09/18 20:46*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 20:46*	*1*
Trifluorotoluene (Surr)	*100*		*74 - 118*		*03/09/18 20:46*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*58 - 133*		*03/08/18 00:51*	*1*
Trifluorotoluene (Surr)	*109*		*77 - 128*		*03/08/18 00:51*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099		ug/L		03/07/18 14:30	03/07/18 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*89*		*60 - 140*	*03/07/18 14:30*	*03/07/18 19:32*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 01:27	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/09/18 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*50 - 150*	*03/07/18 09:23*	*03/09/18 01:27*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		03/07/18 14:25	03/08/18 15:05	5
Lead	**7.3**		4.0		ug/L		03/07/18 14:25	03/08/18 15:05	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-7
Date Collected: 03/06/18 09:33
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 21:12	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 21:12	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 21:12	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 21:12	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 21:12	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 21:12	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 21:12	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 21:12	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 21:12	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 21:12	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 21:12	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 21:12	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:12	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 21:12	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 21:12	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:12	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 21:12	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:12	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 21:12	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 21:12	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 21:12	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 21:12	1
Benzene	ND		0.20		ug/L			03/09/18 21:12	1
Bromobenzene	ND		0.20		ug/L			03/09/18 21:12	1
Bromoform	ND		0.50		ug/L			03/09/18 21:12	1
Bromomethane	ND		0.50		ug/L			03/09/18 21:12	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 21:12	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 21:12	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 21:12	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 21:12	1
Chloroethane	ND		0.50		ug/L			03/09/18 21:12	1
Chloroform	ND		0.20		ug/L			03/09/18 21:12	1
Chloromethane	ND		0.50		ug/L			03/09/18 21:12	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 21:12	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 21:12	1
Dibromomethane	ND		0.20		ug/L			03/09/18 21:12	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 21:12	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 21:12	1
EDC	ND		0.20		ug/L			03/09/18 21:12	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 21:12	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 21:12	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 21:12	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 21:12	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 21:12	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 21:12	1
Naphthalene	ND		1.0		ug/L			03/09/18 21:12	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 21:12	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 21:12	1
o-Xylene	ND		0.50		ug/L			03/09/18 21:12	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-7
Date Collected: 03/06/18 09:33
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 21:12	1
Styrene	ND		0.50		ug/L			03/09/18 21:12	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 21:12	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 21:12	1
Toluene	ND		0.20		ug/L			03/09/18 21:12	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 21:12	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 21:12	1
Trichloroethene	ND		0.20		ug/L			03/09/18 21:12	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 21:12	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*46 - 150*		*03/09/18 21:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 21:12*	*1*
Dibromofluoromethane (Surr)	*104*		*42 - 132*		*03/09/18 21:12*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 21:12*	*1*
Trifluorotoluene (Surr)	*99*		*74 - 118*		*03/09/18 21:12*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*58 - 133*		*03/08/18 01:23*	*1*
Trifluorotoluene (Surr)	*108*		*77 - 128*		*03/08/18 01:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099		ug/L		03/07/18 14:30	03/07/18 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*94*		*60 - 140*	*03/07/18 14:30*	*03/07/18 20:04*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 02:07	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/09/18 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*50 - 150*	*03/07/18 09:23*	*03/09/18 02:07*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		03/07/18 14:25	03/08/18 15:09	5
Lead	ND		4.0		ug/L		03/07/18 14:25	03/08/18 15:09	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-8
Date Collected: 03/06/18 09:10
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 21:39	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 21:39	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 21:39	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 21:39	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 21:39	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 21:39	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 21:39	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 21:39	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 21:39	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 21:39	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 21:39	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 21:39	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:39	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 21:39	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 21:39	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:39	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 21:39	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 21:39	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 21:39	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 21:39	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 21:39	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 21:39	1
Benzene	ND		0.20		ug/L			03/09/18 21:39	1
Bromobenzene	ND		0.20		ug/L			03/09/18 21:39	1
Bromoform	ND		0.50		ug/L			03/09/18 21:39	1
Bromomethane	ND		0.50		ug/L			03/09/18 21:39	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 21:39	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 21:39	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 21:39	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 21:39	1
Chloroethane	ND		0.50		ug/L			03/09/18 21:39	1
Chloroform	ND		0.20		ug/L			03/09/18 21:39	1
Chloromethane	ND		0.50		ug/L			03/09/18 21:39	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 21:39	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 21:39	1
Dibromomethane	ND		0.20		ug/L			03/09/18 21:39	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 21:39	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 21:39	1
EDC	ND		0.20		ug/L			03/09/18 21:39	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 21:39	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 21:39	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 21:39	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 21:39	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 21:39	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 21:39	1
Naphthalene	ND		1.0		ug/L			03/09/18 21:39	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 21:39	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 21:39	1
o-Xylene	ND		0.50		ug/L			03/09/18 21:39	1

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-8
Date Collected: 03/06/18 09:10
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 21:39	1
Styrene	ND		0.50		ug/L			03/09/18 21:39	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 21:39	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 21:39	1
Toluene	ND		0.20		ug/L			03/09/18 21:39	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 21:39	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 21:39	1
Trichloroethene	ND		0.20		ug/L			03/09/18 21:39	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 21:39	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*46 - 150*		*03/09/18 21:39*	*1*
4-Bromofluorobenzene (Surr)	*99*		*81 - 120*		*03/09/18 21:39*	*1*
Dibromofluoromethane (Surr)	*105*		*42 - 132*		*03/09/18 21:39*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 21:39*	*1*
Trifluorotoluene (Surr)	*99*		*74 - 118*		*03/09/18 21:39*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*58 - 133*		*03/08/18 01:55*	*1*
Trifluorotoluene (Surr)	*109*		*77 - 128*		*03/08/18 01:55*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.010		ug/L		03/07/18 14:30	03/07/18 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*87*		*60 - 140*	*03/07/18 14:30*	*03/07/18 20:20*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/09/18 02:27	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/09/18 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*50 - 150*	*03/07/18 09:23*	*03/09/18 02:27*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		5.0		ug/L		03/07/18 14:25	03/08/18 15:13	5
Lead	**21**		4.0		ug/L		03/07/18 14:25	03/08/18 15:13	5

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-268714/7
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			03/09/18 13:36	1
1,1,1-Trichloroethane	ND		0.20		ug/L			03/09/18 13:36	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			03/09/18 13:36	1
1,1,2-Trichloroethane	ND		0.20		ug/L			03/09/18 13:36	1
1,1-Dichloroethane	ND		0.20		ug/L			03/09/18 13:36	1
1,1-Dichloroethene	ND		0.20		ug/L			03/09/18 13:36	1
1,1-Dichloropropene	ND		0.20		ug/L			03/09/18 13:36	1
1,2,3-Trichlorobenzene	ND		0.50		ug/L			03/09/18 13:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			03/09/18 13:36	1
1,2,4-Trichlorobenzene	ND		0.30		ug/L			03/09/18 13:36	1
1,2,4-Trimethylbenzene	ND		0.30		ug/L			03/09/18 13:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/09/18 13:36	1
1,2-Dichlorobenzene	ND		0.30		ug/L			03/09/18 13:36	1
1,2-Dichloropropane	ND		0.20		ug/L			03/09/18 13:36	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/09/18 13:36	1
1,3-Dichlorobenzene	ND		0.30		ug/L			03/09/18 13:36	1
1,3-Dichloropropane	ND		0.20		ug/L			03/09/18 13:36	1
1,4-Dichlorobenzene	ND		0.30		ug/L			03/09/18 13:36	1
2,2-Dichloropropane	ND		0.50		ug/L			03/09/18 13:36	1
2-Chlorotoluene	ND		0.50		ug/L			03/09/18 13:36	1
4-Chlorotoluene	ND		0.30		ug/L			03/09/18 13:36	1
4-Isopropyltoluene	ND		0.30		ug/L			03/09/18 13:36	1
Benzene	ND		0.20		ug/L			03/09/18 13:36	1
Bromobenzene	ND		0.20		ug/L			03/09/18 13:36	1
Bromoform	ND		0.50		ug/L			03/09/18 13:36	1
Bromomethane	ND		0.50		ug/L			03/09/18 13:36	1
Carbon tetrachloride	ND		0.20		ug/L			03/09/18 13:36	1
Chlorobenzene	ND		0.20		ug/L			03/09/18 13:36	1
Chlorobromomethane	ND		0.20		ug/L			03/09/18 13:36	1
Chlorodibromomethane	ND		0.20		ug/L			03/09/18 13:36	1
Chloroethane	ND		0.50		ug/L			03/09/18 13:36	1
Chloroform	ND		0.20		ug/L			03/09/18 13:36	1
Chloromethane	ND		0.50		ug/L			03/09/18 13:36	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 13:36	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 13:36	1
Dibromomethane	ND		0.20		ug/L			03/09/18 13:36	1
Dichlorobromomethane	ND		0.20		ug/L			03/09/18 13:36	1
Dichlorodifluoromethane	ND		0.40		ug/L			03/09/18 13:36	1
EDC	ND		0.20		ug/L			03/09/18 13:36	1
Ethylbenzene	ND		0.20		ug/L			03/09/18 13:36	1
Hexachlorobutadiene	ND		0.50		ug/L			03/09/18 13:36	1
Isopropylbenzene	ND		1.0		ug/L			03/09/18 13:36	1
Methyl tert-butyl ether	ND		0.30		ug/L			03/09/18 13:36	1
Methylene Chloride	ND		5.0		ug/L			03/09/18 13:36	1
m-Xylene & p-Xylene	ND		0.50		ug/L			03/09/18 13:36	1
Naphthalene	ND		1.0		ug/L			03/09/18 13:36	1
n-Butylbenzene	ND		0.50		ug/L			03/09/18 13:36	1
N-Propylbenzene	ND		0.30		ug/L			03/09/18 13:36	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-268714/7
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.50		ug/L			03/09/18 13:36	1
sec-Butylbenzene	ND		1.0		ug/L			03/09/18 13:36	1
Styrene	ND		0.50		ug/L			03/09/18 13:36	1
tert-Butylbenzene	ND		0.50		ug/L			03/09/18 13:36	1
Tetrachloroethene	ND		0.50		ug/L			03/09/18 13:36	1
Toluene	ND		0.20		ug/L			03/09/18 13:36	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			03/09/18 13:36	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			03/09/18 13:36	1
Trichloroethene	ND		0.20		ug/L			03/09/18 13:36	1
Trichlorofluoromethane	ND		0.50		ug/L			03/09/18 13:36	1
Vinyl chloride	ND		0.020		ug/L			03/09/18 13:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*46 - 150*		*03/09/18 13:36*	*1*
4-Bromofluorobenzene (Surr)	*98*		*81 - 120*		*03/09/18 13:36*	*1*
Dibromofluoromethane (Surr)	*103*		*42 - 132*		*03/09/18 13:36*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*03/09/18 13:36*	*1*
Trifluorotoluene (Surr)	*101*		*74 - 118*		*03/09/18 13:36*	*1*

Lab Sample ID: LCS 580-268714/4
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.42		ug/L		108	68 - 139
1,1,1-Trichloroethane	5.00	5.47		ug/L		109	56 - 150
1,1,2,2-Tetrachloroethane	5.00	5.88		ug/L		118	60 - 134
1,1,2-Trichloroethane	5.00	5.45		ug/L		109	62 - 137
1,1-Dichloroethane	5.00	5.48		ug/L		110	68 - 135
1,1-Dichloroethene	5.00	5.10		ug/L		102	64 - 125
1,1-Dichloropropene	5.00	5.44		ug/L		109	64 - 146
1,2,3-Trichlorobenzene	5.00	5.20		ug/L		104	60 - 137
1,2,3-Trichloropropane	5.00	5.37		ug/L		107	45 - 150
1,2,4-Trichlorobenzene	5.00	5.20		ug/L		104	60 - 138
1,2,4-Trimethylbenzene	5.00	5.48		ug/L		110	70 - 142
1,2-Dibromo-3-Chloropropane	5.00	4.95		ug/L		99	34 - 150
1,2-Dichlorobenzene	5.00	5.45		ug/L		109	73 - 120
1,2-Dichloropropane	5.00	5.82		ug/L		116	72 - 120
1,3,5-Trimethylbenzene	5.00	5.51		ug/L		110	70 - 145
1,3-Dichlorobenzene	5.00	5.48		ug/L		110	76 - 120
1,3-Dichloropropane	5.00	5.55		ug/L		111	61 - 130
1,4-Dichlorobenzene	5.00	5.57		ug/L		111	77 - 120
2,2-Dichloropropane	5.00	5.73		ug/L		115	60 - 150
2-Chlorotoluene	5.00	5.19		ug/L		104	68 - 130
4-Chlorotoluene	5.00	5.32		ug/L		106	75 - 130
4-Isopropyltoluene	5.00	5.72		ug/L		114	72 - 127
Benzene	5.00	5.77		ug/L		115	73 - 120
Bromobenzene	5.00	5.16		ug/L		103	68 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-268714/4
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	5.00	4.78		ug/L		96	51 - 137
Bromomethane	5.00	5.62		ug/L		112	61 - 135
Carbon tetrachloride	5.00	5.40		ug/L		108	54 - 150
Chlorobenzene	5.00	5.51		ug/L		110	74 - 114
Chlorobromomethane	5.00	5.31		ug/L		106	71 - 131
Chlorodibromomethane	5.00	5.39		ug/L		108	46 - 150
Chloroethane	5.00	5.93		ug/L		119	58 - 130
Chloroform	5.00	5.56		ug/L		111	71 - 130
Chloromethane	5.00	5.32		ug/L		106	40 - 150
cis-1,2-Dichloroethene	5.00	5.52		ug/L		110	73 - 130
cis-1,3-Dichloropropene	5.00	5.38		ug/L		108	54 - 150
Dibromomethane	5.00	5.32		ug/L		106	65 - 137
Dichlorobromomethane	5.00	5.77		ug/L		115	62 - 150
Dichlorodifluoromethane	5.00	4.25		ug/L		85	45 - 150
EDC	5.00	5.62		ug/L		112	63 - 150
Ethylbenzene	5.00	5.65		ug/L		113	74 - 125
Hexachlorobutadiene	5.00	5.18		ug/L		104	38 - 150
Isopropylbenzene	5.00	5.66		ug/L		113	75 - 137
Methyl tert-butyl ether	5.00	4.93		ug/L		99	56 - 150
Methylene Chloride	5.00	5.58		ug/L		112	58 - 134
m-Xylene & p-Xylene	5.00	5.52		ug/L		110	73 - 130
Naphthalene	5.00	5.36		ug/L		107	26 - 150
n-Butylbenzene	5.00	5.36		ug/L		107	66 - 125
N-Propylbenzene	5.00	4.94		ug/L		99	61 - 142
o-Xylene	5.00	5.55		ug/L		111	80 - 139
sec-Butylbenzene	5.00	5.64		ug/L		113	62 - 140
Styrene	5.00	5.27		ug/L		105	68 - 136
tert-Butylbenzene	5.00	5.59		ug/L		112	55 - 150
Tetrachloroethene	5.00	5.02		ug/L		100	67 - 123
Toluene	5.00	5.46		ug/L		109	70 - 126
trans-1,2-Dichloroethene	5.00	5.21		ug/L		104	69 - 124
trans-1,3-Dichloropropene	5.00	5.14		ug/L		103	40 - 150
Trichloroethene	5.00	5.45		ug/L		109	72 - 123
Trichlorofluoromethane	5.00	5.18		ug/L		104	60 - 150
Vinyl chloride	5.00	5.46		ug/L		109	59 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*46 - 150*
4-Bromofluorobenzene (Surr)	*100*		*81 - 120*
Dibromofluoromethane (Surr)	*99*		*42 - 132*
Toluene-d8 (Surr)	*96*		*75 - 125*
Trifluorotoluene (Surr)	*93*		*74 - 118*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-268714/5
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.39		ug/L		108	68 - 139	1	20
1,1,1-Trichloroethane	5.00	5.51		ug/L		110	56 - 150	1	29
1,1,2,2-Tetrachloroethane	5.00	5.83		ug/L		117	60 - 134	1	25
1,1,2-Trichloroethane	5.00	5.38		ug/L		108	62 - 137	1	30
1,1-Dichloroethane	5.00	5.44		ug/L		109	68 - 135	1	27
1,1-Dichloroethene	5.00	5.06		ug/L		101	64 - 125	1	28
1,1-Dichloropropene	5.00	5.43		ug/L		109	64 - 146	0	20
1,2,3-Trichlorobenzene	5.00	5.38		ug/L		108	60 - 137	3	20
1,2,3-Trichloropropane	5.00	5.40		ug/L		108	45 - 150	1	20
1,2,4-Trichlorobenzene	5.00	5.30		ug/L		106	60 - 138	2	20
1,2,4-Trimethylbenzene	5.00	5.47		ug/L		109	70 - 142	0	20
1,2-Dibromo-3-Chloropropane	5.00	5.06		ug/L		101	34 - 150	2	20
1,2-Dichlorobenzene	5.00	5.43		ug/L		109	73 - 120	0	14
1,2-Dichloropropane	5.00	5.68		ug/L		114	72 - 120	2	20
1,3,5-Trimethylbenzene	5.00	5.49		ug/L		110	70 - 145	0	20
1,3-Dichlorobenzene	5.00	5.40		ug/L		108	76 - 120	1	12
1,3-Dichloropropane	5.00	5.49		ug/L		110	61 - 130	1	29
1,4-Dichlorobenzene	5.00	5.48		ug/L		110	77 - 120	2	11
2,2-Dichloropropane	5.00	5.89		ug/L		118	60 - 150	3	29
2-Chlorotoluene	5.00	5.20		ug/L		104	68 - 130	0	20
4-Chlorotoluene	5.00	5.25		ug/L		105	75 - 130	1	20
4-Isopropyltoluene	5.00	5.74		ug/L		115	72 - 127	0	14
Benzene	5.00	5.72		ug/L		114	73 - 120	1	20
Bromobenzene	5.00	5.15		ug/L		103	68 - 130	0	20
Bromoform	5.00	4.72		ug/L		94	51 - 137	1	20
Bromomethane	5.00	5.56		ug/L		111	61 - 135	1	31
Carbon tetrachloride	5.00	5.40		ug/L		108	54 - 150	0	30
Chlorobenzene	5.00	5.46		ug/L		109	74 - 114	1	12
Chlorobromomethane	5.00	5.34		ug/L		107	71 - 131	0	20
Chlorodibromomethane	5.00	5.33		ug/L		107	46 - 150	1	20
Chloroethane	5.00	6.02		ug/L		120	58 - 130	1	35
Chloroform	5.00	5.49		ug/L		110	71 - 130	1	20
Chloromethane	5.00	5.50		ug/L		110	40 - 150	3	31
cis-1,2-Dichloroethene	5.00	5.44		ug/L		109	73 - 130	1	20
cis-1,3-Dichloropropene	5.00	5.32		ug/L		106	54 - 150	1	28
Dibromomethane	5.00	5.31		ug/L		106	65 - 137	0	20
Dichlorobromomethane	5.00	5.69		ug/L		114	62 - 150	1	20
Dichlorodifluoromethane	5.00	4.06		ug/L		81	45 - 150	5	29
EDC	5.00	5.57		ug/L		111	63 - 150	1	29
Ethylbenzene	5.00	5.59		ug/L		112	74 - 125	1	20
Hexachlorobutadiene	5.00	5.20		ug/L		104	38 - 150	0	20
Isopropylbenzene	5.00	5.65		ug/L		113	75 - 137	0	20
Methyl tert-butyl ether	5.00	5.07		ug/L		101	56 - 150	3	26
Methylene Chloride	5.00	5.44		ug/L		109	58 - 134	3	29
m-Xylene & p-Xylene	5.00	5.46		ug/L		109	73 - 130	1	20
Naphthalene	5.00	5.57		ug/L		111	26 - 150	4	20
n-Butylbenzene	5.00	5.35		ug/L		107	66 - 125	0	20
N-Propylbenzene	5.00	4.93		ug/L		99	61 - 142	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-268714/5
Matrix: Water
Analysis Batch: 268714

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene			5.00	5.50		ug/L		110	80 - 139	1	20
sec-Butylbenzene			5.00	5.70		ug/L		114	62 - 140	1	20
Styrene			5.00	5.12		ug/L		102	68 - 136	3	20
tert-Butylbenzene			5.00	5.67		ug/L		113	55 - 150	1	20
Tetrachloroethene			5.00	5.03		ug/L		101	67 - 123	0	20
Toluene			5.00	5.38		ug/L		108	70 - 126	1	20
trans-1,2-Dichloroethene			5.00	5.23		ug/L		105	69 - 124	0	27
trans-1,3-Dichloropropene			5.00	5.07		ug/L		101	40 - 150	1	30
Trichloroethene			5.00	5.47		ug/L		109	72 - 123	0	20
Trichlorofluoromethane			5.00	5.15		ug/L		103	60 - 150	1	31
Vinyl chloride			5.00	5.49		ug/L		110	59 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*46 - 150*
4-Bromofluorobenzene (Surr)	*100*		*81 - 120*
Dibromofluoromethane (Surr)	*100*		*42 - 132*
Toluene-d8 (Surr)	*97*		*75 - 125*
Trifluorotoluene (Surr)	*95*		*74 - 118*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-268542/5
Matrix: Water
Analysis Batch: 268542

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/07/18 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*58 - 133*		*03/07/18 14:16*	*1*
Trifluorotoluene (Surr)	*102*		*77 - 128*		*03/07/18 14:16*	*1*

Lab Sample ID: LCS 580-268542/6
Matrix: Water
Analysis Batch: 268542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline			1.00	1.05		mg/L		105	79 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*58 - 133*
Trifluorotoluene (Surr)	*106*		*77 - 128*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-268542/7
Matrix: Water
Analysis Batch: 268542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			1.00	1.05		mg/L		105	79 - 110	0	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*58 - 133*
Trifluorotoluene (Surr)	*104*		*77 - 128*

Lab Sample ID: MB 580-268653/5
Matrix: Water
Analysis Batch: 268653

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25		mg/L			03/08/18 12:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*58 - 133*		*03/08/18 12:58*	*1*
Trifluorotoluene (Surr)	*80*		*77 - 128*		*03/08/18 12:58*	*1*

Lab Sample ID: LCS 580-268653/6
Matrix: Water
Analysis Batch: 268653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline			1.00	0.989		mg/L		99	79 - 110		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*58 - 133*
Trifluorotoluene (Surr)	*97*		*77 - 128*

Lab Sample ID: LCSD 580-268653/7
Matrix: Water
Analysis Batch: 268653

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			1.00	1.07		mg/L		107	79 - 110	7	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*58 - 133*
Trifluorotoluene (Surr)	*108*		*77 - 128*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 580-268550/2-A
Matrix: Water
Analysis Batch: 268576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268550

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.010		ug/L		03/07/18 14:30	03/07/18 17:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	92		60 - 140	03/07/18 14:30	03/07/18 17:06	1

Lab Sample ID: LCS 580-268550/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268576 — **Prep Batch: 268550**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylene Dibromide	0.0571	0.0624		ug/L		109	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dibromopropane	92		60 - 140

Lab Sample ID: LCSD 580-268550/4-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268576 — **Prep Batch: 268550**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	0.0571	0.0600		ug/L		105	60 - 140	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dibromopropane	86		60 - 140

Lab Sample ID: LLCS 580-268550/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268576 — **Prep Batch: 268550**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylene Dibromide	0.0114	0.0139		ug/L		122	60 - 140

Surrogate	LLCS %Recovery	LLCS Qualifier	Limits
1,2-Dibromopropane	86		60 - 140

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-268492/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268614 — **Prep Batch: 268492**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.11		mg/L		03/07/18 09:23	03/08/18 22:24	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		03/07/18 09:23	03/08/18 22:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150	03/07/18 09:23	03/08/18 22:24	1

Lab Sample ID: LCS 580-268492/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268614 — **Prep Batch: 268492**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	2.00	1.66		mg/L		83	59 - 112
Motor Oil (>C24-C36)	2.00	1.83		mg/L		92	64 - 120

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-268492/2-A
Matrix: Water
Analysis Batch: 268614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268492

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*80*		*50 - 150*

Lab Sample ID: LCSD 580-268492/3-A
Matrix: Water
Analysis Batch: 268614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 268492

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)			2.00	1.74		mg/L		87	59 - 112	5	16
Motor Oil (>C24-C36)			2.00	1.95		mg/L		97	64 - 120	6	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*82*		*50 - 150*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-268549/17-A
Matrix: Water
Analysis Batch: 268691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0		ug/L		03/07/18 14:25	03/08/18 13:51	5
Lead	ND		4.0		ug/L		03/07/18 14:25	03/08/18 13:51	5

Lab Sample ID: LCS 580-268549/18-A
Matrix: Water
Analysis Batch: 268691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268549

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			4000	3940		ug/L		99	80 - 120
Lead			1000	973		ug/L		97	80 - 120

Lab Sample ID: LCSD 580-268549/19-A
Matrix: Water
Analysis Batch: 268691

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 268549

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic			4000	3980		ug/L		99	80 - 120	1	20
Lead			1000	985		ug/L		98	80 - 120	1	20

Lab Chronicle

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-1

Lab Sample ID: 580-75539-1

Date Collected: 03/06/18 08:42

Matrix: Water

Date Received: 03/06/18 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 19:00	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268653	03/08/18 23:34	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 18:10	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/08/18 23:45	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 14:46	FCW	TAL SEA

Client Sample ID: MW-2

Lab Sample ID: 580-75539-2

Date Collected: 03/06/18 08:20

Matrix: Water

Date Received: 03/06/18 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 19:26	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/07/18 22:12	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 18:27	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 00:05	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 14:49	FCW	TAL SEA

Client Sample ID: MW-3

Lab Sample ID: 580-75539-3

Date Collected: 03/06/18 11:20

Matrix: Water

Date Received: 03/06/18 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	268714	03/09/18 22:05	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/07/18 22:44	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 18:43	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 00:26	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 14:53	FCW	TAL SEA

Lab Chronicle

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-4

Date Collected: 03/06/18 10:00
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 19:53	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/07/18 23:48	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 18:59	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 00:46	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 14:57	FCW	TAL SEA

Client Sample ID: MW-5

Date Collected: 03/06/18 10:48
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 20:19	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/08/18 00:19	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 19:16	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 01:06	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 15:01	FCW	TAL SEA

Client Sample ID: MW-6

Date Collected: 03/06/18 10:28
Date Received: 03/06/18 14:05

Lab Sample ID: 580-75539-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 20:46	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/08/18 00:51	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 19:32	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 01:27	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 15:05	FCW	TAL SEA

Lab Chronicle

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Client Sample ID: MW-7

Lab Sample ID: 580-75539-7

Date Collected: 03/06/18 09:33

Matrix: Water

Date Received: 03/06/18 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 21:12	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/08/18 01:23	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 20:04	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 02:07	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 15:09	FCW	TAL SEA

Client Sample ID: MW-8

Lab Sample ID: 580-75539-8

Date Collected: 03/06/18 09:10

Matrix: Water

Date Received: 03/06/18 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	268714	03/09/18 21:39	W1T	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	268542	03/08/18 01:55	JCV	TAL SEA
Total/NA	Prep	8011			268550	03/07/18 14:30	Y1W	TAL SEA
Total/NA	Analysis	8011		1	268576	03/07/18 20:20	TL1	TAL SEA
Total/NA	Prep	3510C			268492	03/07/18 09:23	NDB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	268614	03/09/18 02:27	ADB	TAL SEA
Total/NA	Prep	3010A			268549	03/07/18 14:25	PAB	TAL SEA
Total/NA	Analysis	6020A		5	268691	03/08/18 15:13	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C553	02-17-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Water	Arsenic
6020A	3010A	Water	Lead

Sample Summary

Client: Blaes Environmental Inc.
Project/Site: Circle K 6042

TestAmerica Job ID: 580-75539-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-75539-1	MW-1	Water	03/06/18 08:42	03/06/18 14:05
580-75539-2	MW-2	Water	03/06/18 08:20	03/06/18 14:05
580-75539-3	MW-3	Water	03/06/18 11:20	03/06/18 14:05
580-75539-4	MW-4	Water	03/06/18 10:00	03/06/18 14:05
580-75539-5	MW-5	Water	03/06/18 10:48	03/06/18 14:05
580-75539-6	MW-6	Water	03/06/18 10:28	03/06/18 14:05
580-75539-7	MW-7	Water	03/06/18 09:33	03/06/18 14:05
580-75539-8	MW-8	Water	03/06/18 09:10	03/06/18 14:05

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

Loc: 580
75539

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Blaes	Lab PM: Walker, Elaine M	Carrier Tracking No(s):	COC No: 580-27860-9195.2
Client Contact: Dan Blaes	Phone: 602-728-0707	E-Mail: elaine.walker@testamericainc.com		Page: Page 2 of 3
Company: Blaes Environmental Inc.				Job #:
Address: 45 E Monterey Way Suite 200	Due Date Requested: 5 DAY TAT			
City: Phoenix	TAT Requested (days):			
State, Zip: AZ, 85012				
Phone: 602-549-0925(Tel)	PO #: Purchase Order not required			
Email: dblaes@blaesenvironmental.com	WO #:			
Project Name: Circle K 6042	Project #: 58005982			
Site: Arizona	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	8011 - EDB in Water	NWTPH_Dx - Dx LVI	6020A - MEGMS 8260 Full List VOCs	Total Number of containers	Special Instructions/Note:
		Preservation Code:					A	R	A	D		
MW-1	3/6/18	8:42	G	Water			X	X	X	X	X	5 DAY TAT RUSH
MW-2		8:20		Water			X	X	X	X	X	
MW-3		11:20		Water			X	X	X	X	X	
MW-4		10:00		Water			X	X	X	X	X	
MW-5		10:48		Water			X	X	X	X	X	
MW-6		10:28		Water			X	X	X	X	X	
MW-7		9:33		Water			X	X	X	X	X	
MW-8		9:10		Water			X	X	X	X	X	
				Water								
				Water								
				Water								

Therm. ID M2 Cor 2.9° Unc 3.8°
Cooler Dsc: Lrg Blue
Wet/Packs Packing: Bubble
Cl. do Custody Seal: Yes__ No X

Possible Hazard Identification
X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client X Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D Blaes	3/6/18 2:05 pm	BLAES		3.6.18 1405	SEA TA
Relinquished by:	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by		Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Tem

580-75539 Chain of Custody

Login Sample Receipt Checklist

Client: Blaes Environmental Inc.

Job Number: 580-75539-1

Login Number: 75539
List Number: 1
Creator: Gall, Brandon A

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	