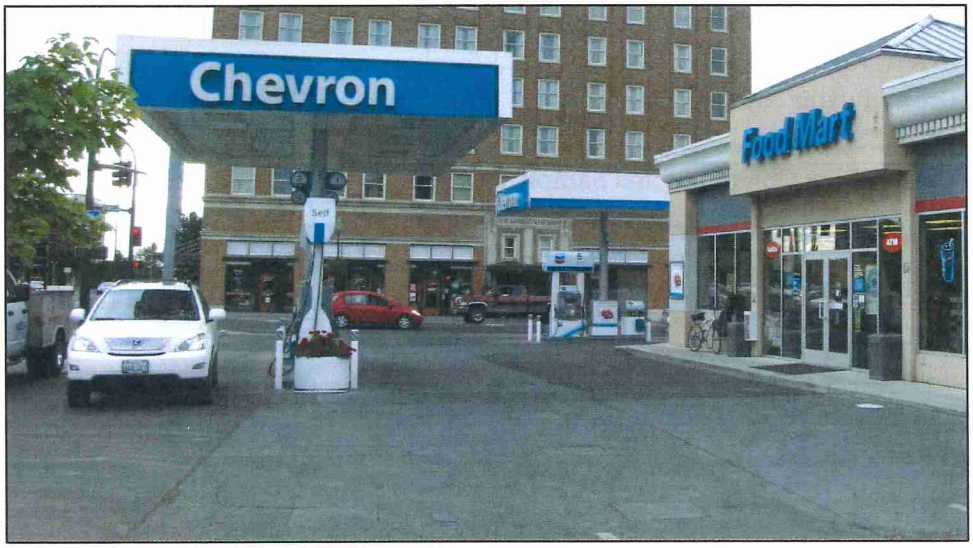
MONITOR WELLS INSTALLATION and FIRST QUARTER GROUNDWATER MONITORING REPORT

SINGER'S CHEVRON FOOD MART LLC

("Bill Singers Chevron")
7 E. Rose Street, Walla Walla, Washington 99362
WA DOE Facility ID: 70525886
VCP Project No. EA0219



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Contents

1 INTRODUCTION

1.1 Landowner Contact

Bill D. and Loretta R. Singer
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1.2 Purpose and Objectives

Plateau Geoscience Group LLC (Plateau) has prepared this report on behalf of the landowner's business, Singer's Chevron Food Mart LLC, 7 East Rose Street, Walla Walla, WA (Site). The purpose is to determine whether petroleum constituents identified in soil may have impacted underlying groundwater.

This report is in response to a Further Remedial Action letter from Patti Carter, Washington Department of Ecology (DOE), ERO Toxics Cleanup Program, dated July 8, 2011 which requests additional site characterization by installing three groundwater monitor wells and sampling soil and groundwater from each well.

In response to the July 8, 2011 DOE letter, a brief work plan was submitted and approved by DOE on September 21, 2011 which included proposed monitor well locations and well installation specifications.

Specific objectives of this investigation include:

- Install three groundwater monitor wells;
- Collect soil samples during the drilling of each monitor well and test the soil for chemicals of concern: gasoline-range hydrocarbons (TPH-Gx), benzene-toluene-ethybenzene-xylenes (BTEX), and methyl tertiary butyl ether (MTBE);
- Collect a groundwater sample from each monitor well and test for chemicals of concern: TPH-Gx, BTEX, MTBE, and total lead;
- Prepare a summary report on the monitor well installations, results of testing the soil and groundwater, estimate groundwater flow direction and gradient, estimate extent of soil contamination, and conclusions.
- A second quarterly round of testing groundwater samples is planned.

1.3 Location

The Site is located at 7 East Rose St. in downtown Walla Walla, Washington, at the northeast intersection of East Rose Street and North 2nd Avenue. The property is bounded to the northeast by a paved parking lot, to the southeast by Rose Street, and to the southwest by North 2nd Avenue. An office building abuts the northwest property boundary. The Site is an active petroleum fuel station offering gasoline and diesel at dispensers located under two canopies. The Food Mart building is a convenience store offering food and general merchandise. The Site is paved with asphalt and concrete. The Site is approximately 10,146 square feet in area. The Walla Walla County tax parcel number is 360720574707 (Cains Tax 7 Blk C).

The Site has been operated by the current landowners since December 29, 1987 when purchased from Chevron U.S.A., Inc. The Site is surrounded by commercial businesses. The Site is shown in Figure 1 – Site Location Topographic and Image Maps.

2 BACKGROUND

2.1 Phase I and Phase II Environmental Site Assessments

Previous investigations conducted at the Site are described below.

A Phase I Environmental Site Assessment (ESA) for the Site was completed for Baker Boyer Bank on October 27, 2010. The following is a summary of the Phase I report.

- The Site was developed as a service station in 1930.
- A 10,000 gallon underground storage tank (UST) was installed in 1967.
- All existing USTs were decommissioned and replaced in 1981 without recording if soil sampling was performed during excavation. All new USTs are fiberglass.
- A waste oil UST was decommissioned in 2005. The bottom of the 1,000 gallon fiberglass UST was approximately 6.5 feet below ground surface (bgs) and reported to be in good condition with no visible holes. Two soil samples were collected at the bottom of the UST excavation at 7.5 feet bgs and analyzed for hydrocarbon identification and total lead. Hydrocarbons were not detected and total lead was detected at 35.1 and 54.7 mg/kg (milligrams per kilogram)(ppm).

A Phase II ESA for the Site was completed for Baker Boyer Bank on December 1, 2010. The following is a summary of the Phase II report.

- Soil samples were collected from what is described as "excavations" (page 7) in the following locations shown on Figure 2 – Historic UST and Sampling Locations:
    1. Heating oil UST location: 1 soil sample from each of 3 borings were collected at 8 feet bgs and analyzed for diesel and heavy oil. Diesel was not detected and heavy oil was detected at 290 mg/kg in one sample.
    2. Hydraulic lift location: 1 soil sample from 1 boring was collected at 8 feet bgs and analyzed for diesel, heavy oil and polychlorinated biphenyls (PCBs). Diesel and PCBs were not detected; heavy oil was detected in the sample at 580 mg/kg.
    3. 1,000 gallon waste oil UST location: 1 soil sample from 1 of 2 borings was collected at 12 feet bgs and analyzed for diesel and heavy oil. Heavy oil was detected at 98 mg/kg.

4. 10,000 gallon gasoline UST location: 1 soil sample was collected from each of 3 borings and analyzed for gasoline and BTEX. 1 sample was also analyzed for total lead. Two samples collected at 8 feet were near the presumed endwalls and a 12 foot sample was collected at the presumed center of the gasoline UST excavation (see Figure 2). The following analysis table is summarized from the Phase II report.

	MTCA Criteria	11-18-UST-1-8.0 ft	11-18-UST-2-12.0 ft	11-18-UST-3-8.0 ft
Benzene *mg/kg*	0.03	**1.5**	**3.5**	**0.79**
Toluene *mg/kg*	7	<0.12	0.60	<0.065
Ethylbenzene *mg/kg*	6	2.2	**12**	1.9
Xylenes *mg/kg*	9	3.3	**40.9**	2.6
TPH Gasoline *mg/kg*	30/100[1]	**520**	**880**	**460**
Total Lead *mg/kg*	250	NA	51	NA

[1] 30 mg/kg for gasoline if benzene is present and 100 mg/kg if benzene is not present.
Bold values exceed MTCA soil cleanup criteria unrestricted land use.

- The Phase II ESA states that the "groundwater gradient...is to the southeast towards Mill Creek" (page 7).

2.2 Hydrogeologic Setting[1]

The Site is underlain by alluvium consisting of discontinuous, unconsolidated deposits of clay, silt, fine sand, and gravel found in and adjacent to stream channels and on the flood plain adjacent to streams on the valley floor. The alluvium is primarily reworked, locally derived loess and flood deposits. Strike-slip faulting controls the geometry of the Walla Walla Basin and all faults are concealed and do not displace the alluvium. The geologic structures are primarily based upon interpretations of basalt correlations from well logs. Most of the alluvium has been interpreted as a series of coalescing fans with discontinuous and lenticular bedding (see Figure 3 – Geologic Map-Walla Walla).

Groundwater movement in the gravel aquifers follows the pattern of the surface water drainage. The gravel aquifer tends to be encountered within 50-feet of the surface. The flow direction is estimated to be westerly to slightly southwesterly near the Site, generally following the westerly surface flow of Mill Creek, located within the city block immediately south of the Site. Mill Creek originates in the central part of the Blue Mountains, flows westerly and turns southwest through northeastern Oregon before turning northwest toward Walla Walla. East of the City of Walla Walla, a flood control structure was built on Mill Creek to divert portions of its flow into Yellowhawk Creek and Bennington Lake from May through October. Mill Creek converges with the Walla Walla River downstream of Walla Walla, near the historic Whitman Museum. Past the diversion,

[1] Washington State Department of Ecology Eastern Regional Offices Open-File Technical Report 95-11 (Draft), May 5, 1995, "Initial Watershed Assessment Water Resources Inventory Area 22 Walla Walla River Watershed".

Mill Creek has very little water as it flows in a concrete channel through the City of Walla Walla.

The hydrogeology of the Walla Walla region is controlled by the occurrence of three main geologic units: the Pleistocene gravel, the Pleistocene clay, and the underlying Miocene Columbia River Basalt (CRB). The Pleistocene gravel was deposited as coalescent alluvial fans filling in the structural basin of the underlying bedrock and were transported from upland sources by Mill Creek. The gravel is commonly interbedded with clay, which represents a fine-grained facies of the same alluvial fan deposits.

The Miocene Columbia River Basalt (CRB) is an extensive deposit of 10 to 17 million year old lava which covers all of southeastern Washington. The CRB is subdivided into three formations: the Saddle Mountains; the Wanapum; and the Grande Ronde. The Saddle Mountains Basalt is the uppermost unit and is relatively thin to non-existent in the Walla Walla area. The Wanapum Basalt occurs stratigraphically below the Saddle Mountains Basalt and is the most important unit from a water supply standpoint. Most of the public supply wells apparently tap the Wanapum Basalt. The Grande Ronde Basalt occurs below the Wanapum Basalt. Very few wells are drilled deep enough to encounter the Grande Ronde Basalt, especially west of Walla Walla.

Based on the available geologic and hydrogeologic information described above for the Site area, groundwater at the Site was anticipated to be unconfined and estimated to be near depths of 10 to 12 feet bgs.

3 MONITOR WELL INSTALLATIONS

The following section describes the methods and procedures used during the drilling and installation of three groundwater monitor wells at the Site.

3.1 Soil Boring Method and Procedure

Three soil borings, MW-1, MW-2 and MW-3 were drilled on September 26-27, 2011 prior to the installation of groundwater monitor wells in each boring. The borings were drilled by Major Drilling Environmental LLC, Sherwood, Oregon whose drilling operators hold a State of Washington Well Construction Operator's License. Drilling was completed with a GeoProbe 8140 LS sonic head machine. A State of Washington Licensed Geologist observed the drilling and completed a Geologic Log for each boring.

Boring MW-1 was drilled with a 6-inch diameter bit and Borings MW-2 and MW-3 were drilled with an 8-inch diameter bit which allowed the larger cobbles encountered to be sampled. The drill pipe, serving also as casing, was advanced an average of 4-feet during each run. The drill bit is physically vibrating up and down in addition to being pushed down and rotated. The open-ended piece of drill pipe vibrates into the ground to form the hole, and protects it from collapse. Compressed air was used to remove the cuttings directly into plastic tubing which were in stratigraphic order, similar to a core. The material in the tubing was then visually inspected and described. All drill pipe, fittings and equipment was steam cleaned between borings. Photographs of typical plastic tubing with cuttings are included in Appendix E.

3.2 Soil Sampling

Based on observations made during each soil boring, soil beneath the Site generally consists of, from ground surface downwards: fill, silt, and gravel. Fill occurs beneath the asphalt and concrete surface and consists of silt, sand, gravel and pea gravel at 2.5 to 4 feet thickness. A 2 to 3 foot thick layer of brown silt was encountered in each boring underlying the fill. Gravel with varying amounts of sand and silt was encountered in each boring from beneath the silt to the total depth of the boring.

A gray-black discolored zone of silty-sandy gravel was encountered in boring MW-2 from approximately 10 feet to 11.5 feet bgs. The zone had a strong petroleum odor and elevated PID reading.

Groundwater was first encountered in the borings within the gravel at about 11 to 11.5 feet bgs.

Soil samples were collected for analyses in each boring (see Table 1). In addition to collecting samples, a Hnu model DL-101 photoionization detector (PID) was used to detect the relative parts per million (ppm) of volatile organic compounds in selected soil samples which were enclosed in an air-tight zip-lock bag. PID readings were recorded on the Geologic Logs. The following soil samples were collected and analyzed.

Table 1 – Soil Samples

Boring	Sample Number	Depth (bgs)	Geologic Material	Rationale
MW-1	MW-1-5	5 ft	silt	geologic unit overlying water table
MW-1	MW-1-11.5	11.5 ft	sandy gravel	immediately above water table
MW-2	MW-2-5	5 ft	silt	geologic unit overlying water table
MW-2	MW-2-10.5	10.5 ft	sandy gravel	immediately above water table within zone of apparent contamination
MW-3	MW-3-5	5 ft	silt	geologic unit overlying water table
MW-3	MW-3-10.5	10.5 ft	sandy gravel	immediately above water table

Soil samples were collected pursuant to EPA Method 5035A using a sampling kit provided by the laboratory with 2 pre-weighed vials containing a small magnetic stir bar for low level analysis, 1 pre-weighed vial for medium-high level analysis, 1 four ounce jar for percent total solids determination and 1 syringe. The collection and preservation procedures are intended to prevent loss of VOCs during sample transport, handling and analysis. New disposable latex gloves were used during each sample collection.

3.3 Monitor Well Installation Method and Procedure

Groundwater monitor well MW-1 was installed on September 26, 2011 and monitor wells MW-2 and MW-3 were installed on September 27, 2011 in borings described above. Geologic Logs are included in Appendix A – Geologic Logs and well installation details are included in Appendix B – As-Built Well Installation Sketches.

Each monitor well was designed to allow the collection of water samples from the water table below the first encounter of water beneath the Site, at depths of about 12-feet

bgs. Possible fluctuations in the groundwater table are assumed, and may cause the groundwater table to rise and fall. 10-foot well screens were installed from 10-feet to 20-feet depth bgs in monitor wells MW-1 and MW-3, and from 9 to 19 feet bgs in monitor well MW-2. Upon completion of each well, an installation static water level was measured and recorded.

The screen and blank well casing are constructed of two (2)-inch diameter schedule 20, polyvinyl chloride ("PVC") flush coupled, threaded pipe. The screen was slotted at a nominal machine cut of 0.010-inch width. The filter pack consists of clean graded Colorado silica #10-20 sand. Upon drilling to total depth, the well casing, consisting of a threaded end cap on a 10-foot section of screen, in turn threaded fit to a 10-foot blank casing, was assembled and lowered to total depth. The filter pack was placed (by measuring with a weighted tape measure) into the annular space to approximately two-feet above the well screen. A surface seal using bentonite pellets was placed above the filter pack to approximately one-foot bgs. A water tight well cover was installed on the well casing and a vault traffic box was cemented around the well at the surface. An installation static water level was then measured.

The following Table 2 summarizes the DOE monitor well tag numbers and surveyed elevations of the monitor wells. The vertical and horizontal monitor well locations were surveyed accurate relative to each other on October 28, 2011 by USKH surveyors, Walla Walla. The well locations are shown in Figure 2.

Table 2 – Monitor Well Identification

Monitor Well No.	WA-DOE Well Tag No.	PVC Notch Elevation
MW-1	RHC 738	955.152
MW-2	RHC 740	953.721
MW-3	RHC 739	953.926

4 GROUNDWATER SAMPLING

4.1 Groundwater Sampling Method and Procedure

A Groundwater Sample Field Log was prepared during the sampling of each monitor well (see Appendix C). Prior to sampling, each well had been developed by lowering a submersible pump to near bottom of each well, then gently pulling the pump up and down the well within the screened zone until clear water was discharged. The development of monitor well MW-3, located in a zone of higher clay content than MW-1 or MW-2, resulted in over 55 gallons of development water. All development and purged groundwater was discharged into 55-gallon drums that were labeled and stored on-Site pending laboratory results.

Groundwater static water levels were measured prior to, and following, sampling of each monitor well. Groundwater was collected from each monitor well using a small-diameter submersible pump. Dedicated polyethylene tubing was attached to the pump which was lowered to the approximate center of the screened interval during sampling.

Groundwater samples, collected on September 26, 2011 from MW-1 and on September 27, 2011 from MW-2 and MW-3, were placed in sample containers furnished by the laboratory. New disposable latex gloves were used during collection of each sample. A chain of custody accompanied the sample shipping container with an approximate temperature of 4°C using packaged ice-gel. The following Table 3 is a summary of groundwater quality parameters measured during sampling.

Table 3 – Groundwater Sample Parameters

Monitor Well No.	Turbidity ppm	Conductance µS	pH	Temperature °F	Color	Odor
MW-1	196	393	6.37	63.8	clear	none
MW-2	256	533	6.78	64.5	clear	none
MW-3	247	498	6.78	66.3	clear	none

5 SAMPLING RESULTS

5.1 Data Quality Objectives and Sample Analysis

Data quality objectives for this groundwater investigation are to generate data of known and documented quality that can be used to determine whether chemicals of potential concern are present in groundwater above detection levels and at levels that pose an unacceptable risk to receptors. Data has been compared to MTCA Method A unrestricted land use to determine whether these levels are exceeded and to support decision-making regarding the need for further remediation or investigation.

5.2 Soil Analyses

All soil samples were submitted to TestAmerica, Beaverton, Oregon for analysis of gasoline, BTEX, and methyl tert-butyl ether (MTBE) using EPA Method 8260B – Selected Volatile Organic Compounds (including BTEX). The specific analyses were requested by DOE as chemicals of concern.

The following Table 4 is a summary of the analyses on soil samples. Gasoline range hydrocarbons were detected in sample MW-2-10.5 at 261 mg/kg. This concentration exceeds the DOE MTCA Method A cleanup criteria for unrestricted land use of 100 mg/kg, without benzene. Benzene was not detected in any of the monitor well boring soil samples at detection limits below the Method A soil cleanup level except sample MW-2-10.5 which is reported by the laboratory as a raised reporting limit "due to high concentrations of non-target analytes". The detection limit for the MW-2 sample was 0.055 mg/kg, slightly above the benzene criteria of 0.030 mg/kg. No other chemicals of concern were detected in soil samples above reporting limits that are below MTCA Method A cleanup levels for unrestricted land use. Low concentrations of toluene and total xylenes were detected in sample MW-3-5, but well below the Method A cleanup levels. The laboratory report is included in Appendix D.

Table 4 – Soil Analyses Results

	Benzene *mg/kg*	Toluene *mg/kg*	Ethyl Benzene *mg/kg*	Total Xylenes *mg/kg*	Gasoline w/o Benzene *mg/kg*	Gasoline w/Benzene *mg/kg*	MTBE *mg/kg*
MTCA Cleanup Level[3]	0.03	7	6	9	100	30	0.1
Sample Number[1]							
MW-1-5	ND<0.0138[2]	ND<0.0346	ND<0.0346	ND<0.0692	ND<2.77	-	ND<0.0277
MW-1-11.5	ND<0.0103	ND<0.0259	ND<0.0259	ND<0.0517	ND<2.07	-	ND<0.0207
MW-2-5	ND<0.0164	ND<0.0411	ND<0.0411	ND<0.0822	ND<3.29	-	ND<0.0329
MW-2-10.5	ND<0.0555	ND<0.139	ND<0.139	ND<0.278	**261**[4]	-	ND<0.111
MW-3-5	ND<0.0149	**0.0951**	ND<0.0371	**0.0980**	ND<2.97	-	ND<0.0297
MW-3-10.5	ND<0.0138	ND<0.0346	ND<0.0346	ND<0.0692	ND<2.71	-	ND<0.0271

Notes:
1. Sample Number explanation: "MW-2" is monitor well number; "-10.5" is depth of sample in feet bgs.
2. ND – not detected at Reporting Limit shown.
3. Cleanup criteria pursuant to Washington State Department of Ecology Model Toxics Control Act (MTCA) Cleanup Regulation Chapter 173-340 WAC (Method A), Part IX-Tables, Chapter 70.105D RCW (RCW Amended 2007), and Chapter 64.70 RCW (Adopted 2007).
4. Hydrocarbon pattern most closely resembles a blend of heavy gasoline/light diesel range.
5. Detected chemicals are **bold** and chemicals that exceed MTCA cleanup levels are highlighted yellow.

5.3 Groundwater Analyses

All groundwater samples were submitted to TestAmerica, Beaverton, Oregon for analysis of gasoline, BTEX, and MTBE using EPA Method 8260B – Selected Volatile Organic Compounds (including BTEX), and lead using EPA Method 6020-Total Metals per EPA 6000/7000 Series Methods. The specific analyses were requested by DOE as chemicals of concern.

The following Table 5 is a summary of the analyses on groundwater samples. Gasoline range hydrocarbons were detected only in sample MW-2-9/19 at 187 µg/l and does not exceed the DOE MTCA Method A cleanup criteria for unrestricted land use of 1,000 µg/l without benzene. No other chemicals of concern, particularly benzene, were detected in groundwater samples above their reporting limits which are well below the MTCA Method A cleanup levels for unrestricted land use. The laboratory report is included in Appendix D.

Table 5 – Groundwater Analyses Results

	Benzene *µg/l*	Toluene *µg/l*	Ethyl Benzene *µg/l*	Total Xylenes *µg/l*	Gasoline w/o Benzene *µg/l*	Gasoline w/Benzene *µg/l*	MTBE *µg/l*	Lead *µg/l*
MTCA Method A Groundwater Cleanup Level[3]	5	1,000	700	1,000	1,000	800	20	15
Sample Number[1]								
MW-1-10/20	ND<0.200[2]	ND<0.500	ND<0.500	ND<1.00	ND<80.0		ND<2.00	ND<1.00
MW-2-9/19	ND<0.200	ND<0.500	ND<0.500	ND<1.00	**187**		ND<2.00	ND<1.00
MW-3-10/20	ND<0.200	ND<0.500	ND<0.500	ND<1.00	ND<80.0		ND<2.00	ND<1.00

Notes:
1. Sample Number explanation: "MW-2" is monitor well number; "-10/20" is screen depths in feet bgs.
2. ND – not detected at Reporting Limit shown.
3. Cleanup criteria pursuant to Washington State Department of Ecology Model Toxics Control Act (MTCA) Cleanup Regulation Chapter 173-340 WAC (Method A), Part IX-Tables, Chapter 70.105D RCW (RCW Amended 2007), and Chapter 64.70 RCW (Adopted 2007).
4. Detected chemicals are **bold**.

6 GROUNDWATER FLOW DIRECTION

The following Table 6 summarizes the static water levels measured in MW-1, MW-2 and MW-3 on September 28, 2011. The groundwater flow direction is west-northwest at N70°W at a gradient of 0.02 ft/ft, and appears to be consistent with the overall flow direction of Mill Creek (see Figure 1). The monitor well locations generally represent the upgradient (MW-1), downgradient (MW-2), and cross-gradient (MW-3) and directions from the general area of soil contamination previously identified during the Phase II investigation in the proximity of the 1981 excavation of the gasoline UST.

Table 6 – Static Water Levels 9-28-2011

Monitor Well No.	PVC Notch Elevation-ft	Static Water Level	Static Water Elevation-ft
MW-1	955.152	12.95	942.20
MW-2	953.721	12.44	941.28
MW-3	953.926	11.67	942.26

Notes:
Well elevations in feet surveyed accurate by USKH surveyors, Walla Walla, Washington. Static water level elevations in feet measured from notch in the top of the PVC well casing.

An additional water level measurement will be obtained in October 2011 to confirm water levels and groundwater flow direction beneath the Site.

7 CONCLUSIONS

The following conclusions are based on the data collected during this 1st Quarter groundwater site characterization investigation as requested in the Further Remedial Action letter from Patti Carter, Washington Department of Ecology (DOE), ERO Toxics Cleanup Program, dated July 8, 2011 to install three groundwater monitor wells and sample soil and groundwater from each well.

- A potential source of soil contamination was identified at 12 feet bgs during a Phase II Environmental Site Investigation completed in December 2010 at a previous location of an UST which held gasoline. The UST was excavated in 1981.
- Three groundwater monitor wells, MW-1, MW-2 and MW-3, were installed at the Site on September 26 and 27, 2011. Monitor well MW-1 is located in an upgradient direction from the potential soil contamination source; MW-2 is downgradient, and MW-3 is cross-gradient.
- One soil sample was collected and analyzed for petroleum hydrocarbons from each monitor well boring at 5 feet bgs. Toluene and xylenes were detected only in MW-3 at 0.951 and 0.098 mg/kg, respectively. No other contaminants were detected at 5 feet bgs in MW-1 or MW-2.
- One soil sample was collected and analyzed for petroleum hydrocarbons in each well boring immediately above the first encounter of groundwater, at approximately 10.5 to 11.5 feet bgs. Gasoline was detected only in MW-2 at 261 mg/kg, above the 100 mg/kg MTCA Method A cleanup level for unrestricted land use. The detected gasoline was flagged by the testing laboratory as: "resembles a blend of heavy gasoline/light diesel range". The comment by the laboratory indicates the gasoline detected in well MW-2 is highly weathered and is in a state of degradation based upon no detection of benzene and the assumption that the source of the gasoline is the gasoline UST excavated in 1981. No other contaminants were detected in MW-1 or MW-3 soil samples above the water table.
- The analysis of groundwater samples from monitor wells MW-1 and MW-3 resulted in non-detection of petroleum hydrocarbons and lead. The analysis of the groundwater sample from MW-2 resulted in only the detection of gasoline at 187 µg/l, well below the 1,000 µg/l MTCA Method A cleanup level for unrestricted land use without benzene.
- The groundwater flow direction on September 28, 2011 was west-northwest at a gradient of 0.02 ft/ft.

8 RECOMMENDATIONS

As requested by DOE, a second round of groundwater sampling is planned for January 2012. An additional measurement of static water levels will be made in October 2011 to confirm the groundwater flow direction and gradient reported herein.

9 REFERENCES

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10 LIMITATIONS

This report has been prepared for use by the Washington Department of Ecology and is not intended for use by others except the landowner(s) or landowner's agents. Each project and project site is unique and the information contained in this report is not applicable to other sites. Only the Washington Department of Ecology should rely upon this report and all others should contact Plateau Geoscience Group LLC before applying or interpreting any information in this report.

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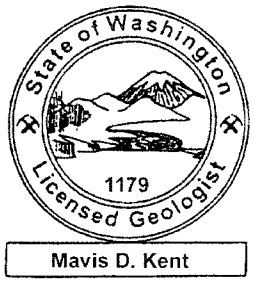
Conclusions and findings apply only to present conditions, and opinions expressed are subject to revision when additional or new information is presented and reviewed. This warranty is in lieu of all other warranties, either expressed or implied. It is possible that explorations failed to reveal the presence of hazardous materials at areas where hazardous materials were assumed, suspected or expected to exist (hazardous as used herein shall also mean contaminated and polluted). Through use of this report it is understand that failure to sample soil or water, or install groundwater monitor wells at locations through appropriate and mutually agreed-upon techniques does not guarantee that hazardous materials have, or will be, detected at such locations. Similarly, areas which in fact are unaffected by hazardous materials at the time of this report, may later, due to natural causes or human intervention, become contaminated. Plateau Geoscience Group LLC is not responsible for failing to locate hazardous materials which have not discovered at the time of this report or in the future. This report should not be construed as presenting a value to neither the Site nor the condition as to construction capabilities. In the event of changes in future development plans as understood at the time of this report, the conclusions and recommendations made herein shall be invalid until given the opportunity to review and modify this report in writing. Portions of an Agreement to perform professional services may or may not be disclosed in this report.

Respectfully submitted,

Mavis D. Kent

Mavis D. Kent, R.G.
Plateau Geoscience Group LLC



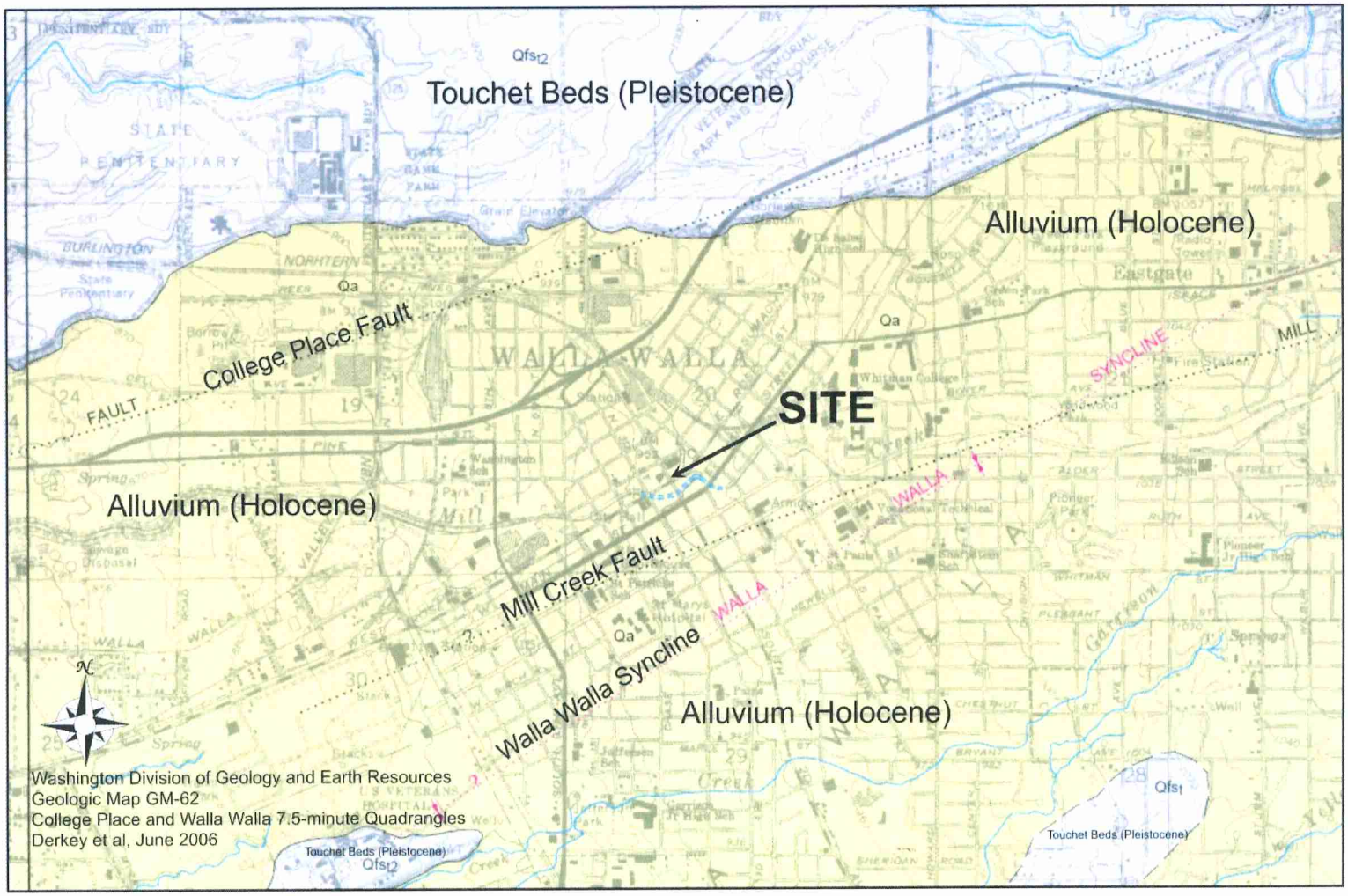
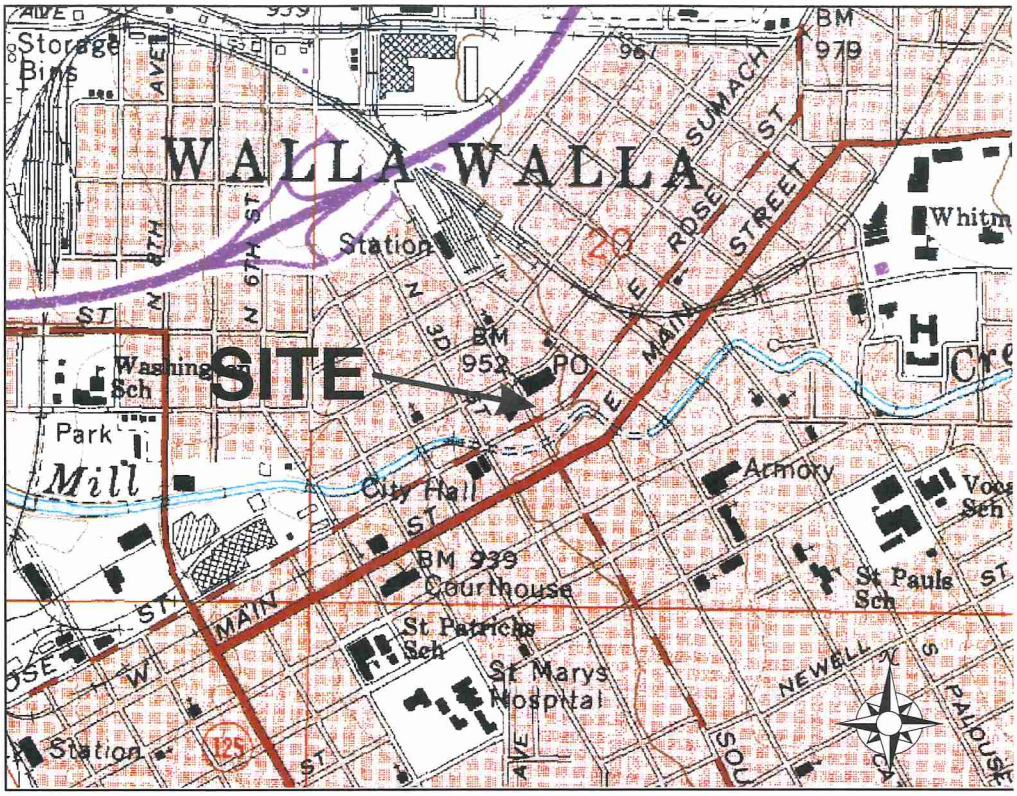


Figure 3 – Geologic Map - Walla Walla

APPENDICES



USGS Walla Walla 7.5' Topographic Map

Figure 1 – Site Location Topographic and Image Maps

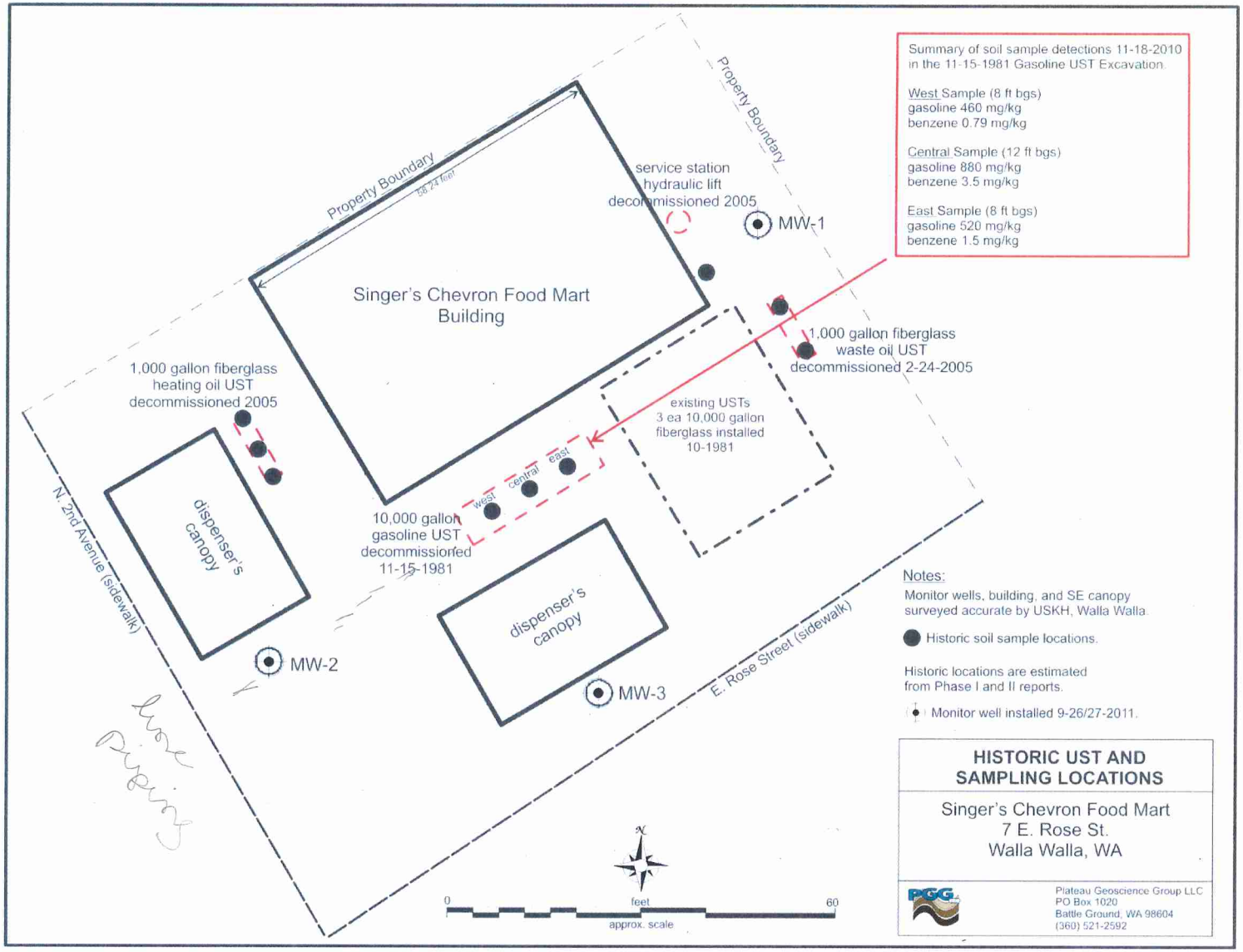


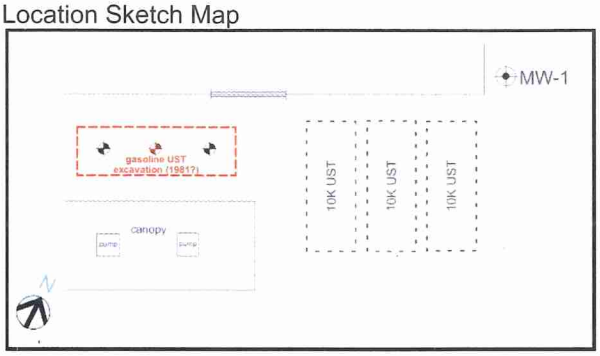
Figure 2 – Historic UST and Sampling Locations

APPENDIX A
GEOLOGIC LOGS

Plateau Geoscience Group LLC
Post Office Box 1020
Battle Ground, WA 98604
(360) 521-2592

GEOLOGIC LOG

Location Sketch Map



Project No./Name: 110816/Singer's Chevron	CLIENT: Singer
Project Location: 7 E. Rose St., Walla Walla, WA	**Drill Hole No.: MW-1**
Drilling Co./Foreman: Major Drilling/Caleb	Geologist: M. Kent
Drilling Method/C57/Rig: Sonic Geoprobe 8140LS #9	Sampling Method(s): sonic plastic tubing grab

Drilling Start Date/Time: 9/26/11 16:15	Drilling End Date/Time: 9/26/11 17:10	Elevation: 953 ft approx.	Total Depth: 21 ft	Surface Conditions: asphalt	Samples: Water: 1 (well)
Depth 1st Water Date/Time: 12 ft bgs, 9/26/11 16:50	Tax parcel: Walla Walla County: 360720574707	Sec-Tws-Rng SW/20-T6N-R36E	Laboratory: TestAmerica	C-O-C Number: PU10965	Soil: 2

DEPTH (feet)	SAMPLE NO.	PID ppm	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1									Dry	Fill 0-4'
2				none		Silt w/sand and 10% rounded to ang pebbles >2"		mod brn 5 YR 3/4	Moist to wet	
3		0.2								
4										
5			1620	none	ML	SILT w/Sand	Med Stiff	Dk Yel Br 10 YR 4/2	Moist	
6	MW-1-5									
7					GP	GRAVEL w/sand and little fines gravel to 5+"sub-angular to round	Med Dense to Dense		Damp to moist	
8								Mod brn 5 YR 3/4		
9		2	1635							
10			1642							
11									11	
12	MW-1-11.5	1.7	1650						Wet to sat	1st encounter ▽ ~12 ft
13									13	
14									Wet	slight rise in water level to ~11+ ft
15									15	
16									Wet to saturated	
17										
18			1700							
19										
20										TD 21 ft, backfilled with sand to 20 ft

This geologic log and related information depict subsurface conditions only at a specific location and time. Geologic conditions at other locations may differ from conditions encountered and described in this log. The passage of time may result in a change in geologic and hydrogeologic conditions and engineering properties at this location.

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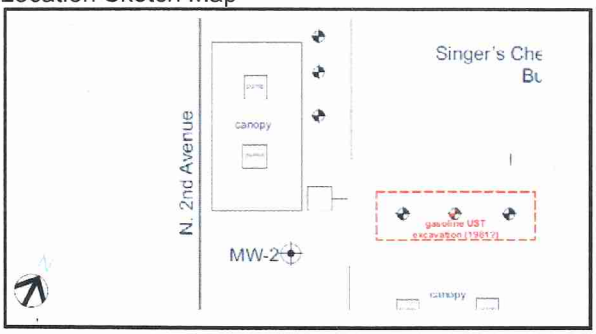
GEOLOGIC LOG

Location Sketch Map



Project No./Name: 110816/Singer's Chevron	CLIENT: Singer
Project Location: 7 E. Rose St., Walla Walla, WA	**Drill Hole No.: MW-2**
Drilling Co./Foreman: Major Drilling/Caleb	Geologist: M. Kent
Drilling Method/C57/Rig: Sonic Geoprobe 8140LS #9	Sampling Method(s): sonic plastic tubing grab

Drilling Start Date/Time: 9/27/11 11:32	Drilling End Date/Time: 9/27/11 12:45	Elevation: 953 ft approx.	Total Depth: 20 ft	Surface Conditions: asphalt	Samples: Water: 1 (well) Soil: 2
Depth 1st Water Date/Time: 9.5 ft bgs, 9/27/11 12:15	Tax parcel: Walla Walla County: 360720574707	Sec-Tws-Rng SW/20-T6N-R36E	Laboratory: TestAmerica	C-O-C Number: PU10965	

DEPTH (feet)	SAMPLE NO.	PID ppm	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1						GRAVEL sandy w/some silt	Med dense to dense	Dys br 5 YR 2/2	Damp	asphalt 6" gvl subgrade fill to 2.5'
2				none	GP					
3					ML	SILT w/little clay	Med stiff	Med brn 5 YR 3/4		Silt is mottled And w/dysk brn chunks in upper foot
4										
5										
6	MW-2-5	0.5	1155		GP	Sandy GRAVEL w/little silt	Dense to v. dense	Gry brn 5 YR 3/2	Moist to wet	
7			1205			Gravel up to 6-8"				8ft: large cobble, slow drilling
8										
9			1210							
10									~9.5ft	▽ at 1215
11	MW-2-10.5	240		strong				Gry blck N2 becoming	Wet to saturated	10 - ~11.5ft: gray black (N2)
12		68	1220	slight				Brn blck 5 YR 2/1		
13		2		none						
14										
15										
16		0.5	1240	none				Gry brn 5 YR 3/2		
17										
18						increasing clay				
19										
20			1245							TD 20 ft

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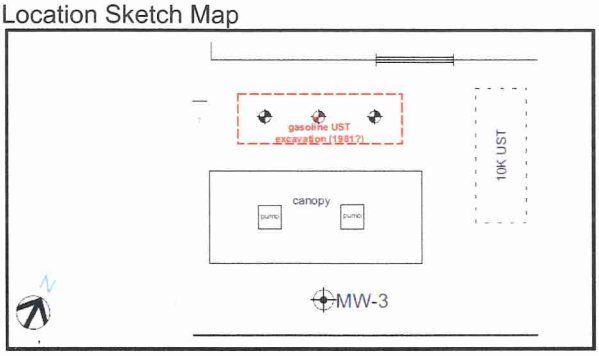
GEOLOGIC LOG

Location Sketch Map



Project No./Name: 110816/Singer's Chevron	CLIENT: Singer
Project Location: 7 E. Rose St., Walla Walla, WA	**Drill Hole No.: MW-3**
Drilling Co./Foreman: Major Drilling/Caleb	Geologist: M. Kent
Drilling Method/C57/Rig: Sonic Geoprobe 8140LS #9	Sampling Method(s): sonic plastic tubing grab

Drilling Start Date/Time: 9/27/11 07:45	Drilling End Date/Time: 9/27/11 09:15	Elevation: 953 ft approx.	Total Depth: 20 ft	Surface Conditions: concrete (4")	Samples: Water: 1 (well)
Depth 1st Water Date/Time: 11.5 ft bgs, 9/27/11 08:40	Tax parcel: Walla Walla County: 360720574707	Sec-Tws-Rng SW/20-T6N-R36E	Laboratory: TestAmerica	C-O-C Number: PU10965	Soil: 2

DEPTH (feet)	SAMPLE NO.	PID ppm	Time	HC Odor	USCS CLASS	NAME	DENSITY	COLOR	MOISTURE	REMARKS
1										rock wire mesh below concrete
2						pea gravel fill	loose			
3							Med dense To dense	Gry brn 5 YR 3/2		FILL 1-3.5ft w/brick
4				none						
5		1	0820		ML	SILT w/little subang-ang gravel	Med stiff	Mod brn 5 YR 3/4	Moist	
6	MW-3-5		0825							
7					GP	GRAVEL w/some sand and clay, trace silt	Dense	Gry brn 5 YR 3/2		Gravel to 3-4" Subang - rounded "packed" matrix
8										
9										
10			0838						Damp to moist	
11	MW-3-10.5	1							moist	
12			0840	none						▽ ~11.5' 1st encounter
13									Moist to wet	
14										
15			0900							
16									Wet to saturated	
17										
18										
19										
20			0915							TD 20 ft

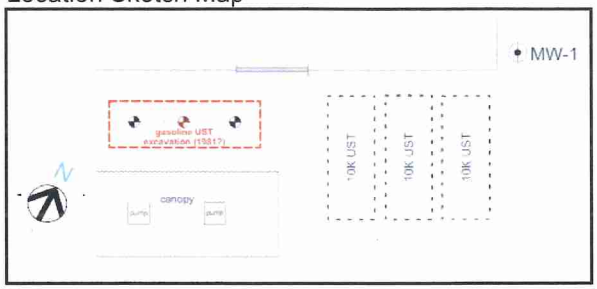
This geologic log and related information depict subsurface conditions only at a specific location and time. Geologic conditions at other locations may differ from conditions encountered and described in this log. The passage of time may result in a change in geologic and hydrogeologic conditions and engineering properties at this location.

APPENDIX B
AS-BUILT WELL INSTALLATION SKETCHES

Plateau Geoscience Group LLC
Post Office Box 1020
Battle Ground, WA 98604
(360) 521-2592

AS-BUILT WELL INSTALLATION SKETCH

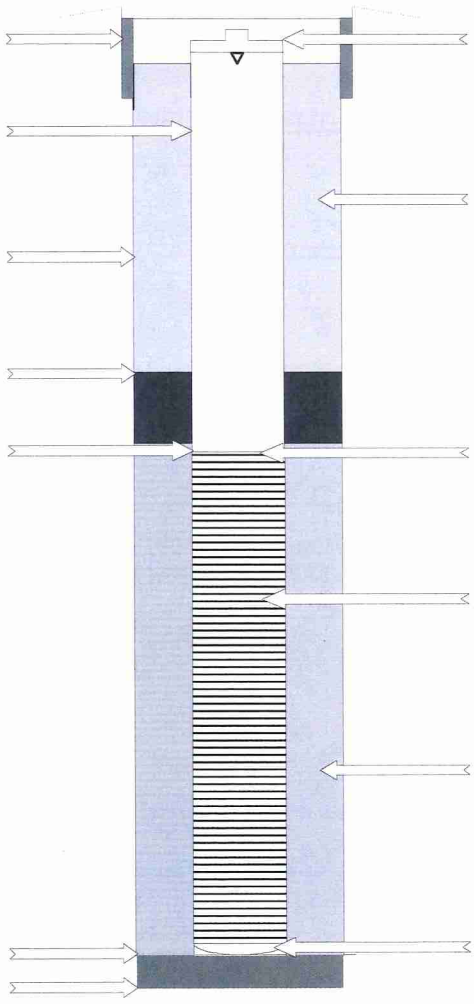
Location Sketch Map



Project No./Name:	CLIENT:
110816/Singer's Chevron	Singer
Install Date: 9/26/11	**Well No.: MW-1**
Time:	WA Well Tag: RHC 738
Start: 17:30 End: 18:30	Project Location: 7 E. Rose St., Walla Walla, WA

First Groundwater Encounter During Drilling Was:	Elevation:	Total Drilled Depth:	Drilling Co./Foreman:	Type of Well:
Date: 9/26/11 Time: 16:50 Depth: 12 ft bgs	955.152 ft. at notch	21 ft (backfill 1 ft)	Major Drilling/Caleb	monitor

Development Method:	Geologist:	Sec-Tws-Rng	Padlock No.:	Drill Rig Type:	Install SWL:
pump <3 gpm until clear drums labeled on-site	M. Kent	SW/20 T6N-R36E	1160 key-alike	Sonic Geoprobe 8140LS #9	12.95 ft at notch



Traffic security box cemented in-place

Blank casing ID: 2- inches

Boring OD: 6- inches

Filter pack depth to top: 8 feet

Screen depth to top: 10 feet

Depth bottom of casing: 20 feet

Overdrill sand backfill bottom: 21 feet

Water-tight well plug with padlock
Top of blank casing notched for SWL readings

Surface annular seal: 3/8" "Hole Plug" bentonite chips

Flush threaded O-ring coupling

Schedule 20 PVC screen slot size 0.010 inches

Granular filter pack kiln dried Colorado sand, #10/20

Bottom flush threaded cap flat cap

Notes:
feet below ground surface
no scale

This as-built well installation sketch and related information depict subsurface conditions only at a specific location and time. Geologic conditions at other locations may differ from conditions encountered and described in this sketch. The passage of time may result in a change in original well construction, geologic and hydrogeologic conditions and engineering properties at this location.

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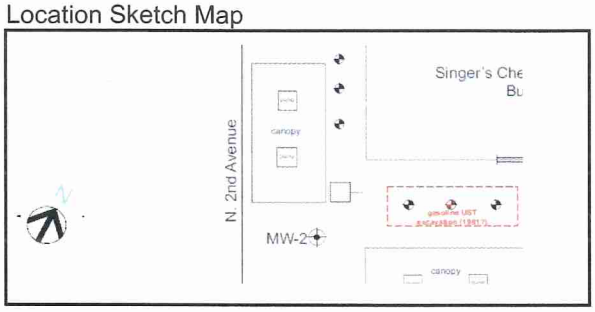
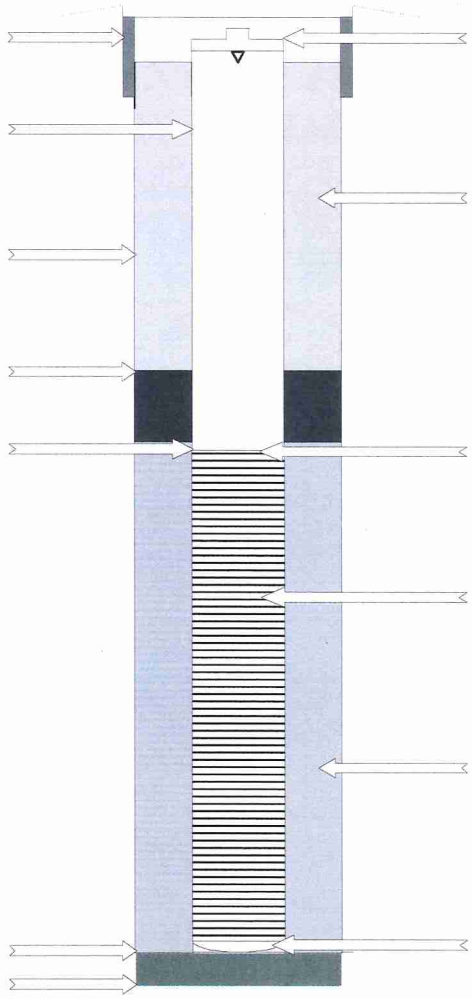
AS-BUILT WELL INSTALLATION SKETCH

Location Sketch Map



Project No./Name: 110816/Singer's Chevron	CLIENT: Singer
Install Date: 9/27/11 Time: Start: 13:15 End: 14:00	**Well No.: MW-2** WA Well Tag: RHC 740 Project Location: 7 E. Rose St., Walla Walla, WA

First Groundwater Encounter During Drilling Was: Date: 9/27/11 Time: 12:15 Depth: 9.5 ft bgs		Elevation: 953.721 ft. at notch	Total Drilled Depth: 20 ft (backfill 1 ft)	Drilling Co./Foreman: Major Drilling/Caleb	Type of Well: monitor
Development Method: pump <3 gpm until clear drums labeled on-site	Geologist: M. Kent	Sec-Tws-Rng SW/20 T6N-R36E	Padlock No.: 1160 key-alike	Drill Rig Type: Sonic Geoprobe 8140LS #9	Install SWL: 11.8 ft at notch



Traffic security box cemented in-place

Blank casing ID: 2- inches

Boring OD: 8- inches

Filter pack depth to top: 7 feet

Screen depth to top: 9 feet

Depth bottom of casing: 19 feet

Overdrill sand backfill bottom: 20 feet

Water-tight well plug with padlock
Top of blank casing notched for SWL readings

Surface annular seal: 3/8" "Hole Plug" bentonite chips

Flush threaded O-ring coupling

Schedule 20 PVC screen slot size 0.010 inches

Granular filter pack kiln dried Colorado sand, #10/20

Bottom flush threaded cap flat cap

Notes:
feet below ground surface
no scale

This as-built well installation sketch and related information depict subsurface conditions only at a specific location and time. Geologic conditions at other locations may differ from conditions encountered and described in this sketch. The passage of time may result in a change in original well construction, geologic and hydrogeologic conditions and engineering properties at this location.

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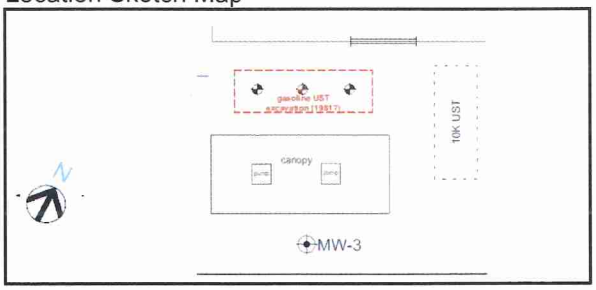
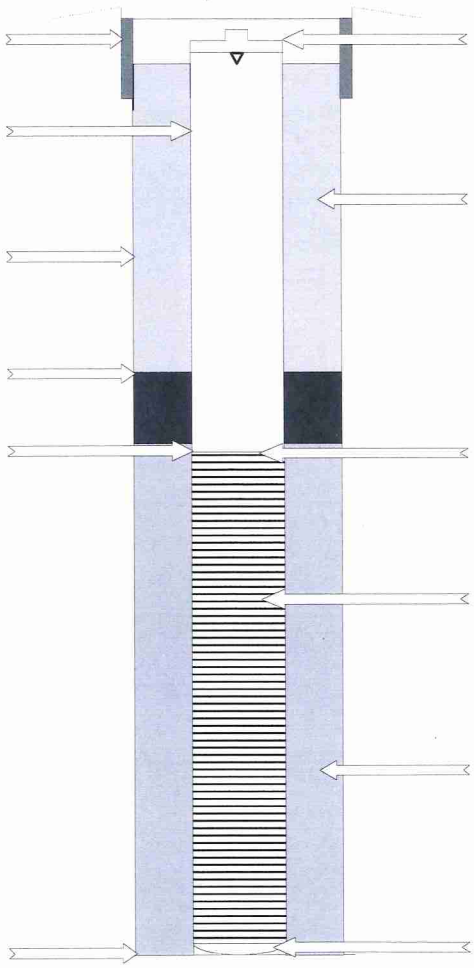
AS-BUILT WELL INSTALLATION SKETCH

Location Sketch Map



Project No./Name: 110816/Singer's Chevron	CLIENT: Singer
Install Date: 9/27/11 Time: Start: 09:50 End: 10:40	**Well No.: MW-3** WA Well Tag: RHC 739 Project Location: 7 E. Rose St., Walla Walla, WA

First Groundwater Encounter During Drilling Was:	Date: 9/27/11 Time: 08:40 Depth: 11.5 ft bgs	Elevation: 953.926 ft. at notch	Total Drilled Depth: 20 ft	Drilling Co./Foreman: Major Drilling/Caleb	Type of Well: monitor
Development Method: pump <3 gpm until clear drums labeled on-site	Geologist: M. Kent	Sec-Tws-Rng SW/20 T6N-R36E	Padlock No.: 1160 key-alike	Drill Rig Type: Sonic Geoprobe 8140LS #9	Install SWL: 12.44 ft at notch



Traffic security box cemented in-place

Blank casing ID: 2- inches

Boring OD: 8- inches

Filter pack depth to top: 8 feet

Screen depth to top: 10 feet

Depth bottom of casing: 20 feet

Water-tight well plug with padlock
Top of blank casing notched for SWL readings

Surface annular seal: 3/8" "Hole Plug" bentonite chips

Flush threaded O-ring coupling

Schedule 20 PVC screen slot size 0.010 inches

Granular filter pack kiln dried Colorado sand, #10/20

Bottom flush threaded cap flat cap

Notes:
feet below ground surface
no scale

This as-built well installation sketch and related information depict subsurface conditions only at a specific location and time. Geologic conditions at other locations may differ from conditions encountered and described in this sketch. The passage of time may result in a change in original well construction, geologic and hydrogeologic conditions and engineering properties at this location.

APPENDIX C
GROUNDWATER SAMPLE FIELD LOGS

Plateau Geoscience Group LLC
Post Office Box 1020
Battle Ground, WA 98604
(360) 521-2592

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: Tuesday, September 27, 2011	SHEET 1 of 1
PROJECT NAME: Singers Chevron Food Mart	PROJECT NO.: 110816
PROJECT LOCATION: 7 E. Rose St., Walla Walla, WA	
Weather: ☒Fair ☐Overcast ☐Fog ☐Rain ☐Snow Temp.: ☐<0 ☐0-32 ☐33-54 ☒55-79 ☐>80 Humidity %: ☒<25 ☐26-49 ☐50-74 ☐>75	Wind: ☒Calm ☐Light ☐Moderate ☐Strong Wind from: ☐N ☐NE ☐E ☐SE ☐S ☐SW ☐W ☐NW Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO.: MW-1 (WA Tag RHC 738)	**SAMPLE NUMBER: MW-1 10/20**
Well depth: 20 ft | Screen length: 10 ft	Laboratory: TestAmerica, Beaverton, OR
Well install date: 9/26/11	COC Number: PU10965
Pre-purge SWL: 12.9 ft below notch	Casing diameter: 2 inch
Time Sample Collected: 09:00	SWL at sample time: 12.92 ft below notch
Sample Turbidity: 196 ppm	Sample Conductance: 393 µS
Sample Color: clear	Sample pH: 6.37
Sample Temperature: 63.8°F	Sample Odor: none

Field Data

Time (24 HR)	Temp (°F)	Cond (µS)	pH	Pump Rate	Turbidity (ppm)	Other
08:48	61.1	434	6.5	<2 gpm	210	no odor
08:53	62.8	388	6.45	<2 gpm	195	no odor
08:57	63.8	393	6.37	<2 gpm	196	no odor

Sample Collection Method:

The monitor well was purged:

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

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

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

Samples were collected:

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

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

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

Sample Shipment:

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

Analysis Requested: (per laboratory protocols)

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

☐ SemiVOC; ☐ PAH; ☐ PCB; ☐ Pesticides; (☐8, ☐10, ☐13) Metals; ☐ TCLP; ☒MTBE;

☒ OTHER: total lead

SIGNATURE: Mark D. Kent

PRINT NAME: M. Kent

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

Plateau Geoscience Group LLC
Post Office Box 1020
Battle Ground, WA 98604
(360) 521-2592

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: Tuesday, September 27, 2011	SHEET 1 of 1
PROJECT NAME: Singers Chevron Food Mart	PROJECT NO.: 110816
PROJECT LOCATION: 7 E. Rose St., Walla Walla, WA	
Weather: ☐Fair ☒Overcast ☐Fog ☐Rain ☐Snow Temp.: ☐<0 ☐0-32 ☐33-54 ☒55-79 ☐>80 Humidity %: ☐ <25 ☒26-49 ☐50-74 ☐>75	Wind: ☐Calm ☒Light ☐Moderate ☐Strong Wind from☒N ☐NE ☐E ☐SE ☐S ☐SW ☐W ☐NW Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO.: MW-2 (WA Tag RHC 740)	**SAMPLE NUMBER: MW-2 9/19**
Well depth: 19 ft | Screen length: 10 ft	Laboratory: TestAmerica, Beaverton, OR
Well install date: 9/27/11	COC Number: PU10965
Pre-purge SWL: 11.67 ft below notch	Casing diameter: 2 inch
Time Sample Collected: 16:00	SWL at sample time: 11.67 ft below notch
Sample Turbidity: 256 ppm	Sample Conductance: 533 µS
Sample Color: clear	Sample pH: 6.78
Sample Temperature: 64.5°F	Sample Odor: none

Field Data

Time (24 HR)	Temp (°F)	Cond (µS)	pH	Pump Rate	Turbidity (ppm)	Other
15:50	68.2	550	7.05	<2 gpm	277	no odor
15:55	65.8	535	6.87	<2 gpm	266	no odor
16:00	64.5	533	6.78	<2 gpm	256	no odor

Sample Collection Method:

The monitor well was purged:

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

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

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

Samples were collected:

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

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

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

Sample Shipment:

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

Analysis Requested: (per laboratory protocols)

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

☐ SemiVOC; ☐ PAH; ☐ PCB; ☐ Pesticides; (☐8, ☐10, ☐13) Metals; ☐ TCLP; ☒MTBE;

☒ OTHER: total lead

SIGNATURE: Mark D. Kent

PRINT NAME: M. Kent

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

Plateau Geoscience Group LLC
Post Office Box 1020
Battle Ground, WA 98604
(360) 521-2592

GROUNDWATER SAMPLE FIELD LOG

DAY/DATE: Tuesday, September 27, 2011	SHEET 1 of 1
PROJECT NAME: Singers Chevron Food Mart	PROJECT NO.: 110816
PROJECT LOCATION: 7 E. Rose St., Walla Walla, WA	
Weather: ☒Fair ☐Overcast ☐Fog ☐Rain ☐Snow	Wind: ☒Calm ☐Light ☐Moderate ☐Strong
Temp.: ☐<0 ☐0-32 ☐33-54 ☒55-79 ☐>80	Wind from☐N ☐NE ☐E ☐SE ☐S ☐SW ☐W ☐NW
Humidity %: ☒ <25 ☐26-49 ☐50-74 ☐>75	Precip.: ☒None ☐Mist ☐Light ☐Moderate ☐Heavy

WELL NO.: MW-3 (WA Tag RHC 739)	**SAMPLE NUMBER: MW-3 10/20**
Well depth: 20 ft | Screen length: 10 ft	Laboratory: TestAmerica, Beaverton, OR
Well install date: 9/27/11	COC Number: PU10965
Pre-purge SWL: 11.2 ft below notch	Casing diameter: 2 inch
Time Sample Collected: 14:14	SWL at sample time: 11.92 ft below notch
Sample Turbidity: 247 ppm	Sample Conductance: 498 µS
Sample Color: clear	Sample pH: 6.78
Sample Temperature: 66.3°F	Sample Odor: none

Field Data

Time (24 HR)	Temp (°F)	Cond (µS)	pH	Pump Rate	Turbidity (ppm)	Other
14:02	69.6	490	7.17	<2 gpm	246	no odor
14:09	66.0	506	7.15	<2 gpm	249	no odor
14:14	66.3	498	6.78	<2 gpm	247	no odor

Sample Collection Method:

The monitor well was purged:

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

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

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

Samples were collected:

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

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

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

Sample Shipment:

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

Analysis Requested: (per laboratory protocols)

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

☐ SemiVOC; ☐ PAH; ☐ PCB; ☐ Pesticides; (☐8, ☐10, ☐13) Metals; ☐ TCLP; ☒MTBE;

☒ OTHER: total lead

SIGNATURE: Mark D. Kent

PRINT NAME: M. Kent

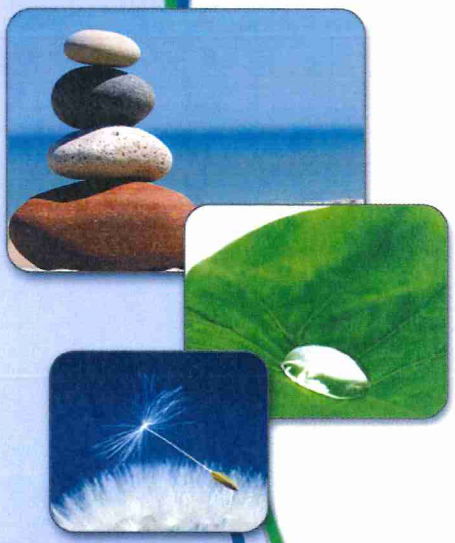
Notes: 2-inch, Schedule 40 PVC casing = 0.163 gallons per foot; 6" Hole = 1.469 gallons per foot

This groundwater sample field log and related information depict subsurface conditions only at a specific location and time. Hydrogeologic conditions at other locations may differ from conditions encountered and described in this log. The passage of time may result in a change in original well construction, geologic and hydrogeologic conditions and engineering properties at this location.

APPENDIX D
LABORATORY REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503) 906-9200

TestAmerica Job ID: PUI0965
Client Project/Site: 110816
Client Project Description: Singer Chevron

For:
Plateau Geoscience Group LLC
PO Box 1020
Battle Ground, WA 98604-1020

Attn: Mavis Kent

Christina M. Woodcock

Authorized for release by:
10/05/2011 05:41:19 PM

Christina Woodcock
Project Manager
christina.woodcock@testamericainc.com

Table of Contents

Sample Summary

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
PUI0965-01	MW-1-5	Soil	09/26/11 16:20	09/28/11 17:15
PUI0965-02	MW-1-11.5	Soil	09/26/11 16:50	09/28/11 17:15
PUI0965-03	MW-2-5	Soil	09/27/11 11:55	09/28/11 17:15
PUI0965-04	MW-2-10.5	Soil	09/27/11 12:30	09/28/11 17:15
PUI0965-05	MW-3-5	Soil	09/27/11 08:25	09/28/11 17:15
PUI0965-06	MW-3-10.5	Soil	09/27/11 09:06	09/28/11 17:15
PUI0965-07	MW-1-10/20	Water	09/27/11 09:00	09/28/11 17:15
PUI0965-08	MW-2-9/19	Water	09/27/11 16:00	09/28/11 17:15
PUI0965-09	MW-3-10/20	Water	09/27/11 14:14	09/28/11 17:15

Definitions/Glossary

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
RL3	Reporting limit raised due to high concentrations of non-target analytes.

GC Volatiles

Qualifier	Qualifier Description
Q8	Detected hydrocarbons in the gasoline range appear to be due to overlap of diesel range hydrocarbons.
S14	The weight of the sample relative to the volume of methanol exceeds the method maximum 1:1 ratio.
Q10a	Hydrocarbon pattern most closely resembles a blend of weathered diesel..
Q10	Hydrocarbon pattern most closely resembles a blend of Heavy gasoline/light diesel range. .

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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

Client Sample ID: MW-1-5 — Lab Sample ID: PUI0965-01

No Detections

Client Sample ID: MW-1-11.5 — Lab Sample ID: PUI0965-02

No Detections

Client Sample ID: MW-2-5 — Lab Sample ID: PUI0965-03

No Detections

Client Sample ID: MW-2-10.5 — Lab Sample ID: PUI0965-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Hydrocarbons	261	S14 Q10	22.2		mg/kg dry	500	☼	NW TPH-Gx	Total

Client Sample ID: MW-3-5 — Lab Sample ID: PUI0965-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	95.1		37.1		ug/kg dry	100	☼	EPA 8260B	Total
Xylenes (total)	98.0		74.3		ug/kg dry	100	☼	EPA 8260B	Total

Client Sample ID: MW-3-10.5 — Lab Sample ID: PUI0965-06

No Detections

Client Sample ID: MW-1-10/20 — Lab Sample ID: PUI0965-07

No Detections

Client Sample ID: MW-2-9/19 — Lab Sample ID: PUI0965-08

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Hydrocarbons	187		80.0		ug/l	1.00		NW TPH-Gx	Total

Client Sample ID: MW-3-10/20 — Lab Sample ID: PUI0965-09

No Detections

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

Client Sample ID: MW-1-5
Date Collected: 09/26/11 16:20
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-01
Matrix: Soil
Percent Solids: 75.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		13.8		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:29	100
Toluene	ND		34.6		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:29	100
Ethylbenzene	ND		34.6		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:29	100
Xylenes (total)	ND		69.2		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:29	100
Methyl tert-butyl ether	ND		27.7		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:29	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*92.2*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:29*	*100*
1,2-DCA-d4	*101*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:29*	*100*
Toluene-d8	*98.1*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:29*	*100*
4-BFB	*103*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:29*	*100*

Client Sample ID: MW-1-11.5
Date Collected: 09/26/11 16:50
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-02
Matrix: Soil
Percent Solids: 87

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		10.3		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:52	100
Toluene	ND		25.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:52	100
Ethylbenzene	ND		25.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:52	100
Xylenes (total)	ND		51.7		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:52	100
Methyl tert-butyl ether	ND		20.7		ug/kg dry	☼	10/03/11 13:00	10/04/11 16:52	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*88.6*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:52*	*100*
1,2-DCA-d4	*100*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:52*	*100*
Toluene-d8	*99.5*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:52*	*100*
4-BFB	*105*		*75 - 125*	*10/03/11 13:00*	*10/04/11 16:52*	*100*

Client Sample ID: MW-2-5
Date Collected: 09/27/11 11:55
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-03
Matrix: Soil
Percent Solids: 75.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		16.4		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:14	100
Toluene	ND		41.1		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:14	100
Ethylbenzene	ND		41.1		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:14	100
Xylenes (total)	ND		82.2		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:14	100
Methyl tert-butyl ether	ND		32.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:14	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*88.6*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:14*	*100*
1,2-DCA-d4	*100*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:14*	*100*
Toluene-d8	*99.6*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:14*	*100*
4-BFB	*103*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:14*	*100*

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

Client Sample ID: MW-2-10.5
Date Collected: 09/27/11 12:30
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-04
Matrix: Soil
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	RL3	55.5		ug/kg dry	☼	10/03/11 13:00	10/04/11 18:20	500
Toluene	ND	RL3	139		ug/kg dry	☼	10/03/11 13:00	10/04/11 18:20	500
Ethylbenzene	ND	RL3	139		ug/kg dry	☼	10/03/11 13:00	10/04/11 18:20	500
Xylenes (total)	ND	RL3	278		ug/kg dry	☼	10/03/11 13:00	10/04/11 18:20	500
Methyl tert-butyl ether	ND	RL3	111		ug/kg dry	☼	10/03/11 13:00	10/04/11 18:20	500

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*92.2*	*RL3*	*75 - 125*	*10/03/11 13:00*	*10/04/11 18:20*	*500*
1,2-DCA-d4	*103*	*RL3*	*75 - 125*	*10/03/11 13:00*	*10/04/11 18:20*	*500*
Toluene-d8	*96.8*	*RL3*	*75 - 125*	*10/03/11 13:00*	*10/04/11 18:20*	*500*
4-BFB	*100*	*RL3*	*75 - 125*	*10/03/11 13:00*	*10/04/11 18:20*	*500*

Client Sample ID: MW-3-5
Date Collected: 09/27/11 08:25
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-05
Matrix: Soil
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		14.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:36	100
Toluene	**95.1**		37.1		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:36	100
Ethylbenzene	ND		37.1		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:36	100
Xylenes (total)	**98.0**		74.3		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:36	100
Methyl tert-butyl ether	ND		29.7		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:36	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*90.5*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:36*	*100*
1,2-DCA-d4	*101*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:36*	*100*
Toluene-d8	*97.8*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:36*	*100*
4-BFB	*105*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:36*	*100*

Client Sample ID: MW-3-10.5
Date Collected: 09/27/11 09:06
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-06
Matrix: Soil
Percent Solids: 91.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		13.6		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:58	100
Toluene	ND		33.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:58	100
Ethylbenzene	ND		33.9		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:58	100
Xylenes (total)	ND		67.8		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:58	100
Methyl tert-butyl ether	ND		27.1		ug/kg dry	☼	10/03/11 13:00	10/04/11 17:58	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*86.3*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:58*	*100*
1,2-DCA-d4	*99.0*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:58*	*100*
Toluene-d8	*97.6*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:58*	*100*
4-BFB	*100*		*75 - 125*	*10/03/11 13:00*	*10/04/11 17:58*	*100*

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

Client Sample ID: MW-1-10/20
Date Collected: 09/27/11 09:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-07
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/l		10/03/11 11:35	10/03/11 17:37	1.00
Toluene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 17:37	1.00
Ethylbenzene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 17:37	1.00
Xylenes (total)	ND		1.00		ug/l		10/03/11 11:35	10/03/11 17:37	1.00
Methyl tert-butyl ether	ND		2.00		ug/l		10/03/11 11:35	10/03/11 17:37	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.0*		*80 - 120*	*10/03/11 11:35*	*10/03/11 17:37*	*1.00*
1,2-DCA-d4	*99.5*		*80 - 120*	*10/03/11 11:35*	*10/03/11 17:37*	*1.00*
Toluene-d8	*100*		*80 - 120*	*10/03/11 11:35*	*10/03/11 17:37*	*1.00*
4-BFB	*105*		*80 - 120*	*10/03/11 11:35*	*10/03/11 17:37*	*1.00*

Client Sample ID: MW-2-9/19
Date Collected: 09/27/11 16:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-08
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/l		10/03/11 11:35	10/03/11 18:02	1.00
Toluene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 18:02	1.00
Ethylbenzene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 18:02	1.00
Xylenes (total)	ND		1.00		ug/l		10/03/11 11:35	10/03/11 18:02	1.00
Methyl tert-butyl ether	ND		2.00		ug/l		10/03/11 11:35	10/03/11 18:02	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.8*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:02*	*1.00*
1,2-DCA-d4	*98.4*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:02*	*1.00*
Toluene-d8	*101*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:02*	*1.00*
4-BFB	*106*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:02*	*1.00*

Client Sample ID: MW-3-10/20
Date Collected: 09/27/11 14:14
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-09
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/l		10/03/11 11:35	10/03/11 18:27	1.00
Toluene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 18:27	1.00
Ethylbenzene	ND		0.500		ug/l		10/03/11 11:35	10/03/11 18:27	1.00
Xylenes (total)	ND		1.00		ug/l		10/03/11 11:35	10/03/11 18:27	1.00
Methyl tert-butyl ether	ND		2.00		ug/l		10/03/11 11:35	10/03/11 18:27	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:27*	*1.00*
1,2-DCA-d4	*97.4*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:27*	*1.00*
Toluene-d8	*102*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:27*	*1.00*
4-BFB	*107*		*80 - 120*	*10/03/11 11:35*	*10/03/11 18:27*	*1.00*

Method: NW TPH-Gx - Gasoline Hydrocarbons per NW TPH-Gx Method

Client Sample ID: MW-2-10.5
Date Collected: 09/27/11 12:30
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-04
Matrix: Soil
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	261	S14 Q10	22.2		mg/kg dry	☼	10/03/11 10:00	10/03/11 13:25	500

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*104*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 13:25*	*500*

Client Sample ID: MW-1-10/20
Date Collected: 09/27/11 09:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-07
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		80.0		ug/l		10/03/11 11:45	10/03/11 14:19	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*104*		*50 - 150*	*10/03/11 11:45*	*10/03/11 14:19*	*1.00*

Client Sample ID: MW-2-9/19
Date Collected: 09/27/11 16:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-08
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	187		80.0		ug/l		10/03/11 11:45	10/03/11 14:50	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*118*		*50 - 150*	*10/03/11 11:45*	*10/03/11 14:50*	*1.00*

Client Sample ID: MW-3-10/20
Date Collected: 09/27/11 14:14
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-09
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		80.0		ug/l		10/03/11 11:45	10/03/11 15:20	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*108*		*50 - 150*	*10/03/11 11:45*	*10/03/11 15:20*	*1.00*

Method: NW TPH-Gx - Gasoline Hydrocarbons per NW TPH-Gx Method - RE1

Client Sample ID: MW-1-5
Date Collected: 09/26/11 16:20
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-01
Matrix: Soil
Percent Solids: 75.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	S14	2.77		mg/kg dry	☼	10/03/11 10:00	10/03/11 18:51	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*100*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 18:51*	*50.0*

Client Sample ID: MW-1-11.5
Date Collected: 09/26/11 16:50
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-02
Matrix: Soil
Percent Solids: 87

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	S14	2.07		mg/kg dry	☼	10/03/11 10:00	10/03/11 17:00	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*103*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 17:00*	*50.0*

Client Sample ID: MW-2-5
Date Collected: 09/27/11 11:55
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-03
Matrix: Soil
Percent Solids: 75.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	S14	3.29		mg/kg dry	☼	10/03/11 10:00	10/03/11 17:28	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*102*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 17:28*	*50.0*

Client Sample ID: MW-3-5
Date Collected: 09/27/11 08:25
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-05
Matrix: Soil
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	S14	2.97		mg/kg dry	☼	10/03/11 10:00	10/03/11 17:55	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*104*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 17:55*	*50.0*

Client Sample ID: MW-3-10.5
Date Collected: 09/27/11 09:06
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-06
Matrix: Soil
Percent Solids: 91.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND	S14	2.71		mg/kg dry	☼	10/03/11 10:00	10/03/11 18:23	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*102*	*S14*	*50 - 150*	*10/03/11 10:00*	*10/03/11 18:23*	*50.0*

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

Method: EPA 6020 - Total Metals per EPA 6000/7000 Series Methods

Client Sample ID: MW-1-10/20
Date Collected: 09/27/11 09:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-07
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/l		09/29/11 13:07	09/30/11 02:14	1.00

Client Sample ID: MW-2-9/19
Date Collected: 09/27/11 16:00
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-08
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/l		09/29/11 13:07	09/30/11 02:18	1.00

Client Sample ID: MW-3-10/20
Date Collected: 09/27/11 14:14
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-09
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/l		09/29/11 13:07	09/30/11 02:23	1.00

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Client Sample ID: MW-1-5
Date Collected: 09/26/11 16:20
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-01
Matrix: Soil
Percent Solids: 75.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	75.5		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Client Sample ID: MW-1-11.5
Date Collected: 09/26/11 16:50
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-02
Matrix: Soil
Percent Solids: 87

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	87.0		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Client Sample ID: MW-2-5
Date Collected: 09/27/11 11:55
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-03
Matrix: Soil
Percent Solids: 75.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	75.8		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Client Sample ID: MW-2-10.5
Date Collected: 09/27/11 12:30
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-04
Matrix: Soil
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	84.7		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Client Sample ID: MW-3-5
Date Collected: 09/27/11 08:25
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-05
Matrix: Soil
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	89.2		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Client Sample ID: MW-3-10.5
Date Collected: 09/27/11 09:06
Date Received: 09/28/11 17:15

Lab Sample ID: PUI0965-06
Matrix: Soil
Percent Solids: 91.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	91.3		0.0100		% by Weight		09/30/11 08:08	10/03/11 08:05	1.00

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

Lab Sample ID: 11J0014-MS1
Matrix: Soil
Analysis Batch: 11J0014

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11J0014_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	ND		2370	1950		ug/kg dry	☼	82.1	68.5 - 125
Toluene	ND		2370	1930		ug/kg dry	☼	81.4	70.3 - 125
Ethylbenzene	ND		2370	2050		ug/kg dry	☼	86.5	80 - 124
Xylenes (total)	ND		7120	6060		ug/kg dry	☼	85.1	70 - 130
Methyl tert-butyl ether	ND		2370	2290		ug/kg dry	☼	96.5	80 - 130
Naphthalene	ND		2370	2220		ug/kg dry	☼	93.5	69 - 163

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Dibromofluoromethane	*96.2*		*75 - 125*
1,2-DCA-d4	*99.0*		*75 - 125*
Toluene-d8	*100*		*75 - 125*
4-BFB	*101*		*75 - 125*

Lab Sample ID: 11J0014-MSD1
Matrix: Soil
Analysis Batch: 11J0014

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11J0014_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND		2360	1980		ug/kg dry	☼	83.8	68.5 - 125	1.41	25
Toluene	ND		2360	2000		ug/kg dry	☼	84.9	70.3 - 125	3.57	25
Ethylbenzene	ND		2360	2080		ug/kg dry	☼	88.1	80 - 124	1.20	25
Xylenes (total)	ND		7080	6200		ug/kg dry	☼	87.5	70 - 130	2.22	25
Methyl tert-butyl ether	ND		2360	2330		ug/kg dry	☼	98.9	80 - 130	1.83	25
Naphthalene	ND		2360	2380		ug/kg dry	☼	101	69 - 163	7.04	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Dibromofluoromethane	*95.2*		*75 - 125*
1,2-DCA-d4	*97.8*		*75 - 125*
Toluene-d8	*98.8*		*75 - 125*
4-BFB	*101*		*75 - 125*

Lab Sample ID: 11J0021-BLK1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11J0021_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
1,2-Dichloroethane	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Benzene	ND		0.200		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Toluene	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Ethylbenzene	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Xylenes (total)	ND		1.00		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Methyl tert-butyl ether	ND		2.00		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Naphthalene	ND		2.00		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
1,2,4-Trimethylbenzene	ND		1.00		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
1,3,5-Trimethylbenzene	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
Isopropylbenzene	ND		2.00		ug/l		10/03/11 09:30	10/03/11 11:43	1.00
n-Propylbenzene	ND		0.500		ug/l		10/03/11 09:30	10/03/11 11:43	1.00

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B (Continued)

Lab Sample ID: 11J0021-BLK1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11J0021_P

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	*97.6*		*80 - 120*	*10/03/11 09:30*	*10/03/11 11:43*	*1.00*
1,2-DCA-d4	*96.4*		*80 - 120*	*10/03/11 09:30*	*10/03/11 11:43*	*1.00*
Toluene-d8	*98.3*		*80 - 120*	*10/03/11 09:30*	*10/03/11 11:43*	*1.00*
4-BFB	*103*		*80 - 120*	*10/03/11 09:30*	*10/03/11 11:43*	*1.00*

Lab Sample ID: 11J0021-BS1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11J0021_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,2-Dibromoethane	20.0	18.2		ug/l		91.1	80 - 140
1,2-Dichloroethane	20.0	17.2		ug/l		85.8	75 - 135
Benzene	20.0	17.8		ug/l		89.1	80 - 120
Toluene	20.0	17.3		ug/l		86.6	80 - 125
Ethylbenzene	20.0	17.9		ug/l		89.4	80 - 130
Xylenes (total)	60.0	54.4		ug/l		90.8	80 - 130
Methyl tert-butyl ether	20.0	17.3		ug/l		86.4	80 - 135
Naphthalene	20.0	18.3		ug/l		91.4	60 - 150
1,2,4-Trimethylbenzene	20.0	18.3		ug/l		91.4	75 - 125
1,3,5-Trimethylbenzene	20.0	18.6		ug/l		93.2	75 - 135
Isopropylbenzene	20.0	18.3		ug/l		91.3	80 - 140
n-Propylbenzene	20.0	19.1		ug/l		95.3	80 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
Dibromofluoromethane	*96.2*		*80 - 120*
1,2-DCA-d4	*98.0*		*80 - 120*
Toluene-d8	*100*		*80 - 120*
4-BFB	*106*		*80 - 120*

Lab Sample ID: 11J0021-MS1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11J0021_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
1,2-Dibromoethane	ND		20.0	19.6		ug/l		98.0	75 - 140
1,2-Dichloroethane	0.350		20.0	19.1		ug/l		93.9	79 - 130
Benzene	ND		20.0	19.6		ug/l		97.8	80 - 125
Toluene	ND		20.0	18.7		ug/l		93.4	65 - 135
Ethylbenzene	ND		20.0	19.4		ug/l		97.2	80 - 125
Xylenes (total)	ND		60.0	59.4		ug/l		98.9	70 - 130
Methyl tert-butyl ether	ND		20.0	18.3		ug/l		91.5	70 - 150
Naphthalene	ND		20.0	20.4		ug/l		102	55 - 145
1,2,4-Trimethylbenzene	ND		20.0	19.8		ug/l		98.8	80 - 136
1,3,5-Trimethylbenzene	ND		20.0	19.9		ug/l		99.5	70 - 140
Isopropylbenzene	ND		20.0	19.4		ug/l		97.0	60 - 135
n-Propylbenzene	ND		20.0	20.2		ug/l		101	70 - 135

Method: EPA 8260B - Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B (Continued)

Lab Sample ID: 11J0021-MS1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11J0021_P

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Dibromofluoromethane	*98.2*		*80 - 120*
1,2-DCA-d4	*95.6*		*80 - 120*
Toluene-d8	*100*		*80 - 120*
4-BFB	*106*		*80 - 120*

Lab Sample ID: 11J0021-MSD1
Matrix: Water
Analysis Batch: 11J0021

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11J0021_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	ND		20.0	22.0		ug/l		110	75 - 140	11.7	25
1,2-Dichloroethane	0.350		20.0	19.9		ug/l		98.0	79 - 130	4.15	25
Benzene	ND		20.0	20.1		ug/l		100	80 - 125	2.57	25
Toluene	ND		20.0	20.0		ug/l		100	65 - 135	6.93	25
Ethylbenzene	ND		20.0	20.7		ug/l		103	80 - 125	6.13	25
Xylenes (total)	ND		60.0	63.2		ug/l		105	70 - 130	6.33	25
Methyl tert-butyl ether	ND		20.0	19.2		ug/l		96.2	70 - 150	5.01	25
Naphthalene	ND		20.0	21.8		ug/l		109	55 - 145	6.21	25
1,2,4-Trimethylbenzene	ND		20.0	21.0		ug/l		105	80 - 136	6.09	25
1,3,5-Trimethylbenzene	ND		20.0	21.2		ug/l		106	70 - 140	6.09	25
Isopropylbenzene	ND		20.0	20.5		ug/l		102	60 - 135	5.42	25
n-Propylbenzene	ND		20.0	21.4		ug/l		107	70 - 135	5.73	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Dibromofluoromethane	*97.2*		*80 - 120*
1,2-DCA-d4	*95.6*		*80 - 120*
Toluene-d8	*100*		*80 - 120*
4-BFB	*104*		*80 - 120*

Method: NW TPH-Gx - Gasoline Hydrocarbons per NW TPH-Gx Method

Lab Sample ID: 11J0019-BLK1
Matrix: Soil
Analysis Batch: 11J0019

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11J0019_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		3.74		mg/kg wet		10/03/11 10:00	10/03/11 10:42	50.0

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*102*		*50 - 150*	*10/03/11 10:00*	*10/03/11 10:42*	*50.0*

Lab Sample ID: 11J0019-BS1
Matrix: Soil
Analysis Batch: 11J0019

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11J0019_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Hydrocarbons	24.2	25.2		mg/kg wet		104	70 - 130

Method: NW TPH-Gx - Gasoline Hydrocarbons per NW TPH-Gx Method (Continued)

Lab Sample ID: 11J0019-BS1
Matrix: Soil
Analysis Batch: 11J0019

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11J0019_P

Surrogate	LCS % Recovery	LCS Qualifier	Limits
a,a,a-TFT (FID)	108		50 - 150

Lab Sample ID: 11J0019-MS1
Matrix: Soil
Analysis Batch: 11J0019

Client Sample ID: MW-1-5
Prep Type: Total
Prep Batch: 11J0019_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Hydrocarbons	ND	S14	17.3	17.8	S14	mg/kg dry	☼	103	65 - 130

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
a,a,a-TFT (FID)	105	S14	50 - 150

Lab Sample ID: 11J0019-DUP1
Matrix: Soil
Analysis Batch: 11J0019

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11J0019_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Hydrocarbons	104		148	Q8	mg/kg dry	☼	35.4	40

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
a,a,a-TFT (FID)	97.2		50 - 150

Lab Sample ID: 11J0034-BLK1
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11J0034_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		80.0		ug/l		10/03/11 11:45	10/03/11 12:50	1.00

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	106		50 - 150	10/03/11 11:45	10/03/11 12:50	1.00

Lab Sample ID: 11J0034-BS1
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11J0034_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Hydrocarbons	500	522		ug/l		104	70 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-BFB (FID)	115		50 - 150

Lab Sample ID: 11J0034-BSD1
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11J0034_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Hydrocarbons	500	515		ug/l		103	70 - 130	1.35	35

Method: NW TPH-Gx - Gasoline Hydrocarbons per NW TPH-Gx Method (Continued)

Lab Sample ID: 11J0034-BSD1
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11J0034_P

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
4-BFB (FID)	115		50 - 150

Lab Sample ID: 11J0034-DUP1
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11J0034_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Hydrocarbons	398			372	Q10a	ug/l				6.64	35

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
4-BFB (FID)	107		50 - 150

Lab Sample ID: 11J0034-DUP2
Matrix: Water
Analysis Batch: 11J0034

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11J0034_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Hydrocarbons	ND			ND		ug/l					35

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
4-BFB (FID)	106		50 - 150

Method: EPA 6020 - Total Metals per EPA 6000/7000 Series Methods

Lab Sample ID: 11I0896-BLK1
Matrix: Water
Analysis Batch: 11I0896

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11I0896_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/l		09/29/11 13:07	10/03/11 18:04	1.00

Lab Sample ID: 11I0896-BS1
Matrix: Water
Analysis Batch: 11I0896

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11I0896_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Lead			0.100	0.0951		mg/l		95.1	80 - 120		

Lab Sample ID: 11I0896-MS1
Matrix: Water
Analysis Batch: 11I0896

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11I0896_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Lead	ND		0.100	0.0939		mg/l		93.9	75 - 125		

Method: EPA 6020 - Total Metals per EPA 6000/7000 Series Methods (Continued)

Lab Sample ID: 11I0896-MSD1
Matrix: Water
Analysis Batch: 11I0896

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11I0896_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Lead	ND		0.100	0.0968		mg/l		96.8	75 - 125	3.02	20

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Lab Sample ID: 11I0876-DUP1
Matrix: Soil
Analysis Batch: 11I0876

Client Sample ID: MW-1-5
Prep Type: Total
Prep Batch: 11I0876_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
% Solids	75.5		75.9		% by Weight		0.625	20

Certification Summary

Client: Plateau Geoscience Group LLC
Project/Site: 110816

TestAmerica Job ID: PUI0965

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Portland	Alaska	Alaska UST	10	UST-012
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	USDA		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PU10965

CLIENT: GeoPro LLC

REPORT TO: Plateau Geoscience Group LLC
ADDRESS: PO Box 1020, Battle Ground WA 98604
PHONE: 360 521 2592 FAX:

INVOICE TO: 360 907 5648
GeoPro LLC
PO Box 26
Battle Ground WA 98604

P.O. NUMBER:

PROJECT NAME: SINGER CHEVRON
PROJECT NUMBER: 110816
SAMPLED BY: M. D. KENT

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: TPH Gx	BTEX	MTBE	TOTAL LEAD	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	MW-1-5	9/26/11 1620		X	X	X		S	4		
2	MW-1-11.5	9/26/11 1650						S			
3	MW-2-5	9/27/11 1155						S			
4	MW-2-10.5	9/27/11 1230						S			
5	MW-3-5	9/27/11 0825						S			
6	MW-3-10.5	9/27/11 0906						S			
7	MW-1-10/20	9/27/11 0900					X	W			
8	MW-2-9/19	9/27/11 1600						W			
9	MW-3-10/20	9/27/11 1414						W			
10											

RELEASED BY: Pat Kent
PRINT NAME: Pat Kent FIRM: Plateau DATE: 9/28/11 TIME: 1715

RECEIVED BY:
PRINT NAME: Elissa Wilson FIRM: AP DATE: 9-28-11 TIME: 1715

RELEASED BY: DATE: TIME:
PRINT NAME: FIRM:

RECEIVED BY: DATE: TIME:
PRINT NAME: FIRM:

ADDITIONAL REMARKS:

TEMP: 12.8°C 5.9°C K

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TAL-1000(0408)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Portland Sample Control Checklist

Work Order #: PU10965 **Date/Time Received:** 9/28/11 @ 1715
Client Name: GEO PRO
Project Name: SINGER CHEVRON
Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐HI ☐OTHER

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Unpacking Checks:
Cooler (s): 1
Temperature (s): 5.9
Digi #1 ☐ Digi #2 ☐ IR Gun ☑ (☑Plastic ☐Glass)
Raytek ☐ (☐Plastic ☐Glass)
Ice used: (circle one) GEL LOOSE BLUE NONE OTHER: _____ Initials: PS

Temperature out of Range:
__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Ice Not Needed
__ Other: _____

N/A	Yes	No	
☑	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no and ESI client, document on NOD.
	☑	☐	3. Chain of Custody present? If no, document on NOD. Along with "received by" & "relinquished by" signatures with date & time?
	☑	☐	4. Bottles received intact? If no, document on NOD.
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.
	☐	☐	6. Sampler name/signature documented on COC?
	☑	☐	7. Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	8. pH for HN03/ESI samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	9. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	10. HF Dilution required?
	☑	☐	11. Sufficient volume provided for all analysis and requested MS/MSD? If no, document on NOD and consult PM before proceeding.
	☑	☐	12. Did chain of custody agree with samples received? If no, document on NOD.
☑	☐	☐	13. Were VOA samples received without headspace?
	☐	☑	14. Did samples require preservation with sodium thiosulfate?
☑	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☑	☐	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	17. Are analyses with short holding times received in hold?
	☑	☐	18. Were special log- in instructions read and followed?

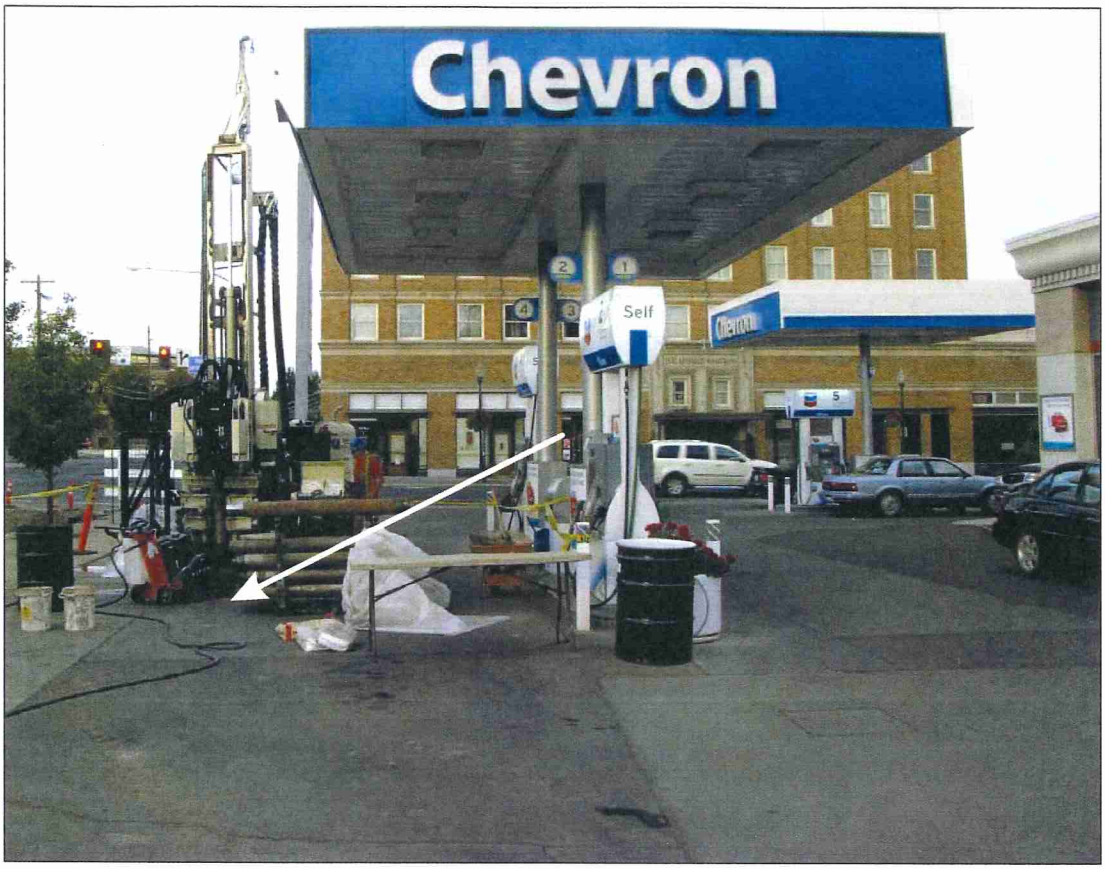
Metals bottle for MW1-10/20 labeled with HCl sticker.

Checklist Reviewed: **Log-in initials:** PS **Labeler initials:** PS

APPENDIX E
PHOTOGRAPHS

Monitor Well MW-1 Location

Monitor Well MW-2 Location



Monitor Well MW-3 Location

Monitor Well MW-3: 7.5 ft. bgs, Typical Clayey Sandy GRAVEL

Monitor Well MW-2: 10 ft. bgs, Contact Gray-Black Zone

Monitor Well MW-2: 15 ft. bgs, Typical Wet GRAVEL