Walla Walla Co
Mountain Oil Co - Isaacs
TCP VCP

Environmental
Resources
Management

1218 3rd Ave
Suite 1412
Seattle, WA 98101
(425) 462-8591
(425) 455-3573 (fax)

RECEIVED
DEC 29 2014
Department of Ecology
Eastern Washington Office

17 December 2014

Mr. Bob Jackson
265 Snider Drive
Walla Walla, Washington 99362

Subject: 2013-2014 Groundwater Monitoring and Groundwater Compliance Confirmation Report
Mountain Oil Facility
2285 East Isaacs Avenue
Walla Walla, Washington

Dear Mr. Jackson:

This report summarizes groundwater monitoring activities completed by ERM-West, Inc. (ERM) in September 2013 through June 2014 at the Mountain Oil, Inc. (Mountain Oil) facility at 2285 East Isaacs Avenue in Walla Walla, Washington (the "site"). These activities were completed under the terms of ERM's proposal to Mountain Oil dated 5 September 2013. The site history, characterization, and remedial progress information are contained in the reports listed in the *Previous Site Report Summary* (Attachment A). A site plan showing the location of the monitoring wells is included as Figure 1.

The groundwater monitoring was completed to evaluate the progress of the remediation of gasoline-related contamination by natural attenuation and to assess whether groundwater conditions at the site are compliant with regulatory requirements through a period of one year. Natural attenuation modeling of the site was completed by ERM in 1998 and was described in ERM's 26 June 1998 report titled *April 1998 Groundwater Remediation Activities*. The modeling results indicated that site contamination was naturally degrading at a rate that suggests natural attenuation as a viable remedial alternative. This conclusion was affirmed by the Washington State Department of Ecology (Ecology) in a Letter of Opinion dated 17 June 1999.

SCOPE OF SERVICES

Groundwater monitoring was completed on a quarterly basis in September and December 2013 and March and June 2014. Each groundwater monitoring event included the following activities:

- Measurement of groundwater levels in each of the 17 site monitoring wells;
- Collection of groundwater samples from 15 monitoring wells (MW-1, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, and MW-17);
- For each sample, completion of laboratory analysis for gasoline-range total petroleum hydrocarbons (TPH-G) by Ecology Method NWTPH-Gx and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8021B; and
- For select samples, completion of laboratory analysis for methyl tert-butyl ether (MTBE) by USEPA Method 8021B and naphthalenes by USEPA Method 8270SIM.

GROUNDWATER CLEANUP STANDARDS

The groundwater monitoring results were compared to Model Toxics Control Act (MTCA, Chapter 173-340 Washington Administrative Code [WAC]) Method A Cleanup Levels for Groundwater. The MTCA regulation is applicable to the discovery, investigation, and remediation of contaminated sites in Washington State. MTCA Method A cleanup levels are conservative compliance standards for common contaminants at sites with relatively few hazardous substances present; these cleanup standards are typically applied to petroleum releases in Washington state.

The applicable MTCA Method A groundwater cleanup standards were used as project cleanup goals to evaluate regulatory compliance at the site. The MTCA Method A cleanup levels applied to groundwater quality at the site are summarized in the table below.

Contaminant	Groundwater Concentration[1]
TPH-G	800 or 1,000 micrograms per liter (µg/l)[2]
Benzene	5 µg/l
Toluene	1,000 µg/l
Ethylbenzene	700 µg/l
Total Xylenes	1,000 µg/l
MTBE	20 µg/l
Naphthalenes	160 µg/L

[1]MTCA Method A Cleanup Levels for Ground Water (Chapter 173-340-900 WAC, Table 720-1).
[2]Standard is 1,000 µg/l if benzene is not present in the sample and 800 µg/l if benzene is present.

GROUNDWATER MONITORING SUMMARY AND RESULTS

Groundwater Levels

On 17 September 2013, 11 December 2013, 23 March 2014, and 16 June 2014, groundwater levels were measured at each monitoring well using an electronic water level indicator. A summary of groundwater level measurements is included in Table 1.

Potentiometric surface maps of groundwater elevations for each of the quarterly measurement events are included as Figures 2 through 5. Groundwater level at the site varied by approximately 3.7 to 6.0 feet in the monitoring wells during the monitoring period, generally consistent with seasonal precipitation patterns. Inferred groundwater flow direction at the site is generally toward the west at an average gradient of approximately 0.024 feet per foot. Groundwater levels at well MW-2 are typically not used for groundwater flow evaluation because of anomalous water level readings at the well that are attributed to the top of the well screen being installed several feet lower than the groundwater elevation.

Groundwater Sampling

Monitoring well purging and sampling at each well was completed on 17 and 18 September 2013, 11 and 12 December 2013, 24 and 25 March 2014, and 16 and 17 June 2014 using a submersible sampling pump. The pump was decontaminated by pumping a mixture of deionized water and laboratory-grade detergent for several minutes, followed by pumping deionized water for several minutes. A new length of disposable polyvinyl chloride (PVC) tubing was attached to the pump outlet prior to purging and sampling each well. The groundwater samples were collected directly from the PVC tubing used to purge each well.

Each sample container was labeled with the sample location, number, date, time, and sampler's initials. The samples were chilled with ice in a cooler during transport to ALS Laboratory Group's facility in Everett, Washington, for analysis. Chain-of-custody procedures were followed during sample preparation, shipment, and handling. Chain-of-custody and laboratory quality assurance/quality control documentation is included with the laboratory data reports in Attachment B.

Analytical results for the groundwater samples are summarized in Table 2. TPH-G, BTEX, and MTBE were not detected at concentrations greater than the MTCA Method A Cleanup Levels for Groundwater (Chapter 173-340-

900 WAC, Table 720-1) in the groundwater samples collected in September 2013 through June 2014.

DISCUSSION OF REGULATORY COMPLIANCE CONDITIONS

Groundwater

As indicated in the results section above, petroleum-related contaminant concentrations in groundwater at the site have been consistently less than MTCA Method A cleanup levels for greater than one year. The systematic decrease of groundwater contaminant concentrations observed since the decommissioning of the dual phase extraction system at the site in 1998 is attributed to aquifer geochemical conditions that provided robust natural attenuation of petroleum hydrocarbons. These conditions were confirmed by an investigation in 1998 and development of a BIOSCREEN model (ERM 1998). The BIOSCREEN Model predicted natural attenuation of gasoline-related contaminants in site groundwater within a timeframe that was matched by the actual observed degradation rate between 1999 and 2014.

During the site characterization effort, the full area of groundwater contamination in the site vicinity could not be investigated because landowners to the west of the site refused access for well installation. Therefore, the downgradient extent of the area of TPH-G in groundwater could not be confirmed until 2012 when the furthest downgradient well began to consistently show concentrations of gasoline-related contaminants that were compliant with the MTCA Method A cleanup levels. Additionally, the presence of utilities in the Isaacs Avenue right-of-way limited the area in which it was safe to complete drilling and well installation along that corridor. This further limited the potential space available to investigate the extent of petroleum impacts.

However, given the groundwater monitoring results from the existing monitoring well network, and the confirmation of robust natural attenuation of petroleum hydrocarbons in the aquifer in the site vicinity, there is no indication that petroleum hydrocarbons remain in groundwater at the site at concentrations greater than the applicable MTCA Method A cleanup levels.

Soil

The MTCA-compliant groundwater conditions at the site empirically demonstrate that contribution of petroleum-related contaminants from soil is no longer an issue at the site. Petroleum vapor recovery during operation of the soil vapor extraction system at the site through 1998 indicated that negligible concentrations of gasoline-related contaminants were being recovered when system operation was terminated (ERM 1998). These data indicate that the residual concentration of TPH-G in soil at the site is less than the applicable MTCA Method A soil cleanup level of 30 milligrams per kilogram (mg/kg).

TERRESTRIAL ECOLOGICAL EVALUATION

Because the site did not qualify for a Terrestrial Ecological Evaluation (TEE) exemption under the criteria listed in Chapter 173-340-7491(1) WAC, ERM completed a Simplified TEE for the site. The TEE Form completed for the site is included in Attachment C. Based on the results of the Simplified TEE, the site does not require a site-specific TEE under the criteria in Chapter 173-340-7491(2) WAC.

Available evidence indicates that TPH-G concentrations in soils at the site are less than the MTCA Method A value of 30 mg/kg, which is less than the TPH-G concentration of 200 mg/kg required to proceed with a Simplified TEE under Chapter 173-340-7492(2)(c)(i). Based on this data, the Simplified TEE is considered complete for the site.

CONCLUSIONS

Groundwater elevation data from 2013 through 2014 indicates groundwater flow at the site is toward the west-northwest, which is generally consistent with previous observations.

Concentrations of gasoline-related contaminants in groundwater at the site have been less than the applicable cleanup levels during sampling events completed since 2012, including quarterly groundwater monitoring events completed between September 2013 and June 2014.

It is ERM's opinion that although the 1993 release migrated in groundwater downgradient to the vicinity of wells MW-5, MW-7, and MW-9, early and aggressive remedial action halted the downgradient migration of gasoline-related contaminants from the release, and either

recovered the released material or created conditions that encouraged degradation of the contaminants by natural processes. Based on measured physical recovery rates of gasoline-related contaminants from the site and modeled natural degradation rates, it is ERM's opinion that the 1993 release of gasoline to soil and groundwater at the site has been fully remediated to MTCA requirements. ERM believes no further remedial action is required at this site and recommends requesting a no further action opinion letter from Ecology.

We appreciate the opportunity to provide environmental services to Mountain Oil. If you have questions regarding this report, please call Mr. Mike Arnold at (425) 761-2603 or Mr. Dave Edwards at (425) 214-0452.

Sincerely,

A. Michael Arnold, R.Hg.
Project Manager

David P. Edwards
Partner-in-Charge

AMA/DPE/mk/0217514

Attachments

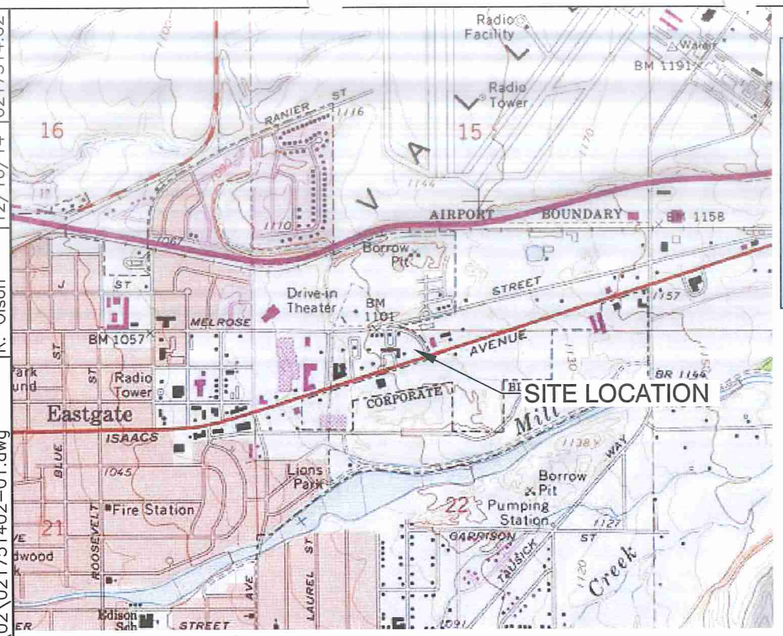
cc: Ms. Patti Carter, Washington State Department of Ecology
Mr. Richard Harvey, Mountain HI Trucking
Ms. Elisa Rombach, AIG
Mr. Sergio Honl, AIG

REFERENCE

Environmental Resources Management (ERM). 1998. April 1998 Groundwater Remediation Activities, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington. 26 June 1998.

Figures

Project No. 0217514.02
Date: 12/16/14
Drawn By: R. Olson
CAD File: G:\0217514\02\021751402-01.dwg



References:
TOPO!® Software
U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
Walla Walla, WA OR
Version: 1990; Current: 1991

0 2000
FEET



WALLA WALLA

LEGEND
MW–4 MONITORING WELL
ASW–1 AIR SPARGING WELL
STORM WATER DRYWELL
GASOLINE SPILL SOURCE LOCATION
UST UNDERGROUND STORAGE TANK

FENCE LINE
MINI–STORAGE BUILDING
MINI–STORAGE BUILDING
MINI–STORAGE BUILDING
MW–9
MINI–STORAGE BUILDING
15,000–GALLON DIESEL UST
PROPERTY LINE
LINK STREET
MW–4
MW–1
3,000–GALLON DIESEL UST
SERVICE ISLANDS
MW–7
CONCRETE PAD
CONCRETE PAD
SERVICE STATION BUILDING
ASW–1
3,000–GALLON GASOLINE USTs
MW–6
MW–11
4,000–GALLON GASOLINE UST
MW–5
MW–2
MW–10
12,000–GALLON GASOLINE UST
MW–12
MW–3
SERVICE ISLANDS
MW–16
MW–8
MINI–STORAGE BUILDING
COLONIAL MOTEL
MW–13
MW–14
GRASS
MW–15
MW–17
EAST ISAACS AVENUE

N
0 25 50
FEET

Figure 1
Site Plan
Mountain Oil Facility
Walla Walla, Washington
ERM 12/14

CAD File: G:\0217514\02\021751402-02.dwg
Drawn By: R. Olson
Date: 12/10/14
Project No. 0217514.02

LEGEND

MW-4	Monitoring Well
77.01	Groundwater Level in Feet, Based on Assumed Elevation
NM	Datum Not Measured
*	Not Used for Contouring
ASW-1	Air Sparging Well
	Storm Water Drywell
	Gasoline Spill Source Location
UST	Underground Storage Tank
77	Potentiometric Surface Contour with Water Elevation
	Inferred Groundwater Flow Direction

SOURCE: GeoEngineers, Inc. 1997

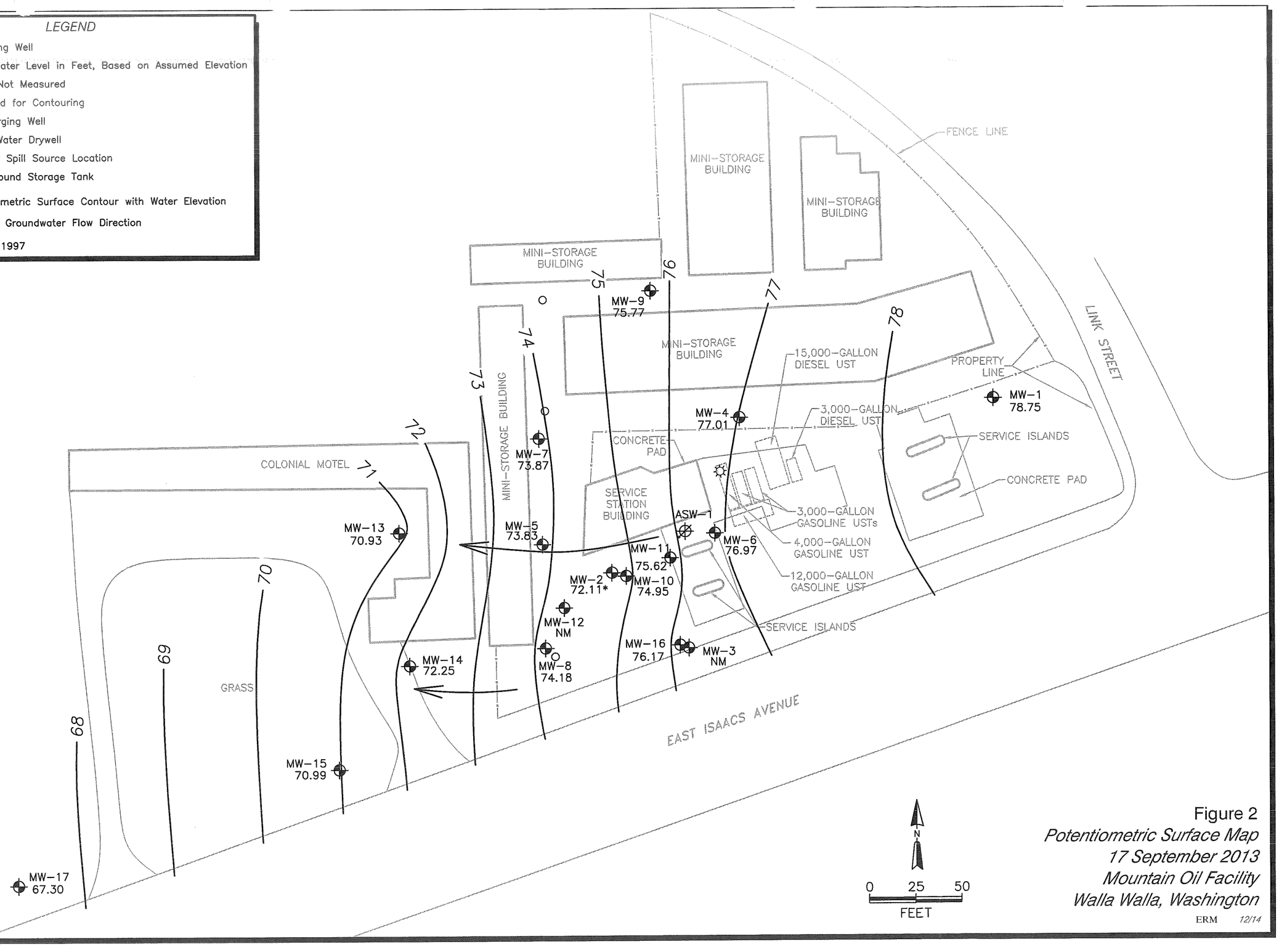


Figure 2
Potentiometric Surface Map
17 September 2013
Mountain Oil Facility
Walla Walla, Washington

ERM 12/14

Project No. 0217514.02
Date: 12/10/14
Drawn By: R. Olson
CAD File: G:\0217514\02\021751402-03.dwg

LEGEND

MW-4	Monitoring Well
74.85	Groundwater Level in Feet, Based on Assumed Elevation
NM	Datum Not Measured
*	Not Used for Contouring
ASW-1	Air Sparging Well
	Storm Water Drywell
	Gasoline Spill Source Location
UST	Underground Storage Tank
74	Potentiometric Surface Contour with Water Elevation
	Inferred Groundwater Flow Direction

SOURCE: GeoEngineers, Inc. 1997

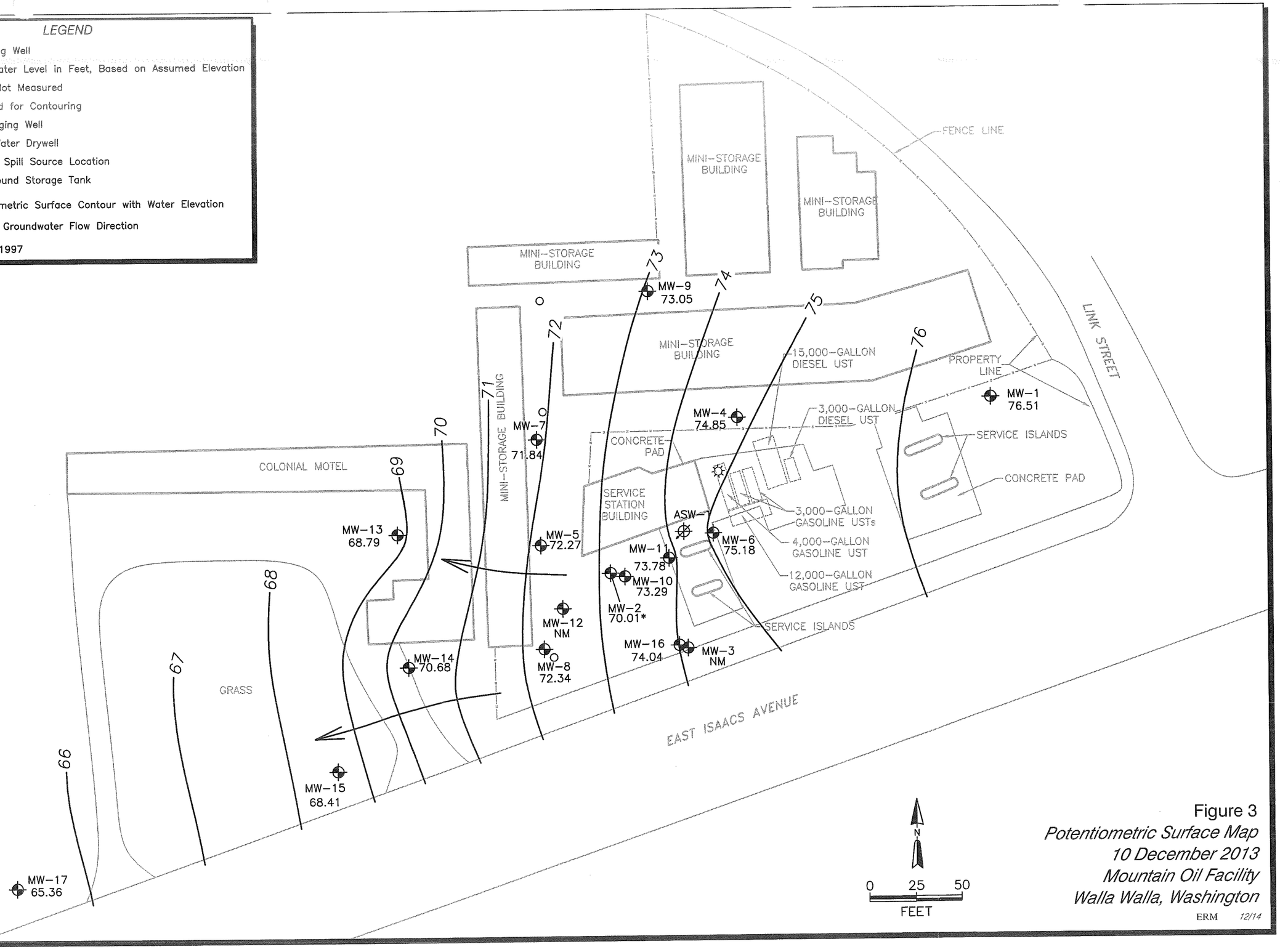


Figure 3
Potentiometric Surface Map
10 December 2013
Mountain Oil Facility
Walla Walla, Washington

ERM 12/14

Project No. 0217514.02
Date: 12/10/14
Drawn By: R. Olson
CAD File: G:\0217514\02\021751402-04.dwg

LEGEND

MW-4 ⊕	Monitoring Well
79.75	Groundwater Level in Feet, Based on Assumed Elevation
NM	Datum Not Measured
*	Not Used for Contouring
ASW-1 ⊛	Air Sparging Well
○	Storm Water Drywell
☼	Gasoline Spill Source Location
UST	Underground Storage Tank
79 ~	Potentiometric Surface Contour with Water Elevation
←	Inferred Groundwater Flow Direction

SOURCE: GeoEngineers, Inc. 1997

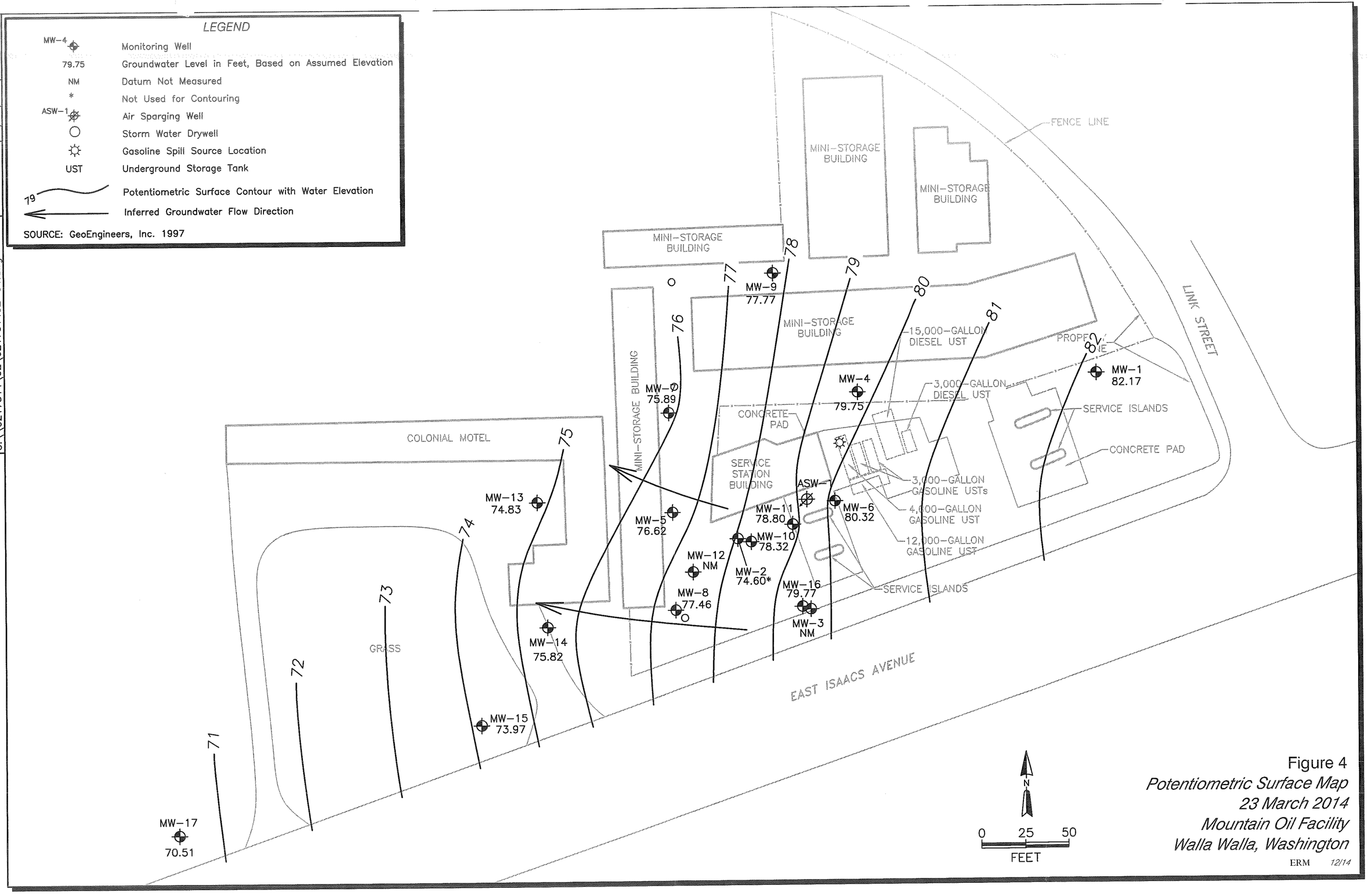


Figure 4
Potentiometric Surface Map
23 March 2014
Mountain Oil Facility
Walla Walla, Washington

ERM 12/14

CAD File: G:\0217514\02\021751402-05.dwg
Drawn By: R. Olson
Date: 12/10/14
Project No. 0217514.02

LEGEND

- MW-4 — Monitoring Well
- 78.53 — Groundwater Level in Feet, Based on Assumed Elevation
- NM — Datum Not Measured
- * — Not Used for Contouring
- ASW-1 — Air Sparging Well
- Storm Water Drywell
- Gasoline Spill Source Location
- UST — Underground Storage Tank
- 78 — Potentiometric Surface Contour with Water Elevation
- Inferred Groundwater Flow Direction

SOURCE: GeoEngineers, Inc. 1997

COLONIAL MOTEL
MINI-STORAGE BUILDING
MINI-STORAGE BUILDING
MINI-STORAGE BUILDING
MINI-STORAGE BUILDING
MINI-STORAGE BUILDING
FENCE LINE
LINK STREET
PROPERTY LINE
15,000-GALLON DIESEL UST
3,000-GALLON DIESEL UST
CONCRETE PAD
SERVICE ISLANDS
CONCRETE PAD
SERVICE STATION BUILDING
3,000-GALLON GASOLINE USTs
4,000-GALLON GASOLINE UST
12,000-GALLON GASOLINE UST
SERVICE ISLANDS
GRASS
EAST ISAACS AVENUE

MW-9 76.71
MW-0 74.72
MW-4 78.53
MW-1 80.84
MW-13 73.28
MW-5 75.59
MW-2 73.30*
MW-11 77.56
MW-10 76.95
MW-12 NM
ASW-1
MW-6 78.99
MW-16 78.35
MW-3 NM
MW-8 76.06
MW-14 74.06
MW-15 72.55
MW-17 68.88

74 75 76 77 78 79 80 73 72 71 70 69

0 25 50
FEET

N

Figure 5
Potentiometric Surface Map
16 June 2014
Mountain Oil Facility
Walla Walla, Washington
ERM 12/14

Tables

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-1	103.55	1/19/1998	-	27.90	-	75.65
		4/9/1998	-	30.94	-	72.61
		7/16/1998	-	35.54	-	68.01
		10/13/1998	-	35.91	-	67.64
		9/30/1999	-	31.76	-	71.79
		10/19/2000	-	30.73	-	72.82
		10/11/2001	-	33.27	-	70.28
		10/17/2002	-	31.44	-	72.11
		10/20/2003	-	26.38	-	77.17
		10/7/2004	-	25.78	-	77.77
		10/13/2005	-	26.76	-	76.79
		10/16/2006	-	28.02	-	75.53
		10/22/2007	-	24.81	-	78.74
		10/7/2008	-	28.35	-	75.20
		10/13/2009	-	27.64	-	75.91
		9/27/2010	-	24.80	-	78.75
		10/6/2011	-	26.15	-	77.40
		12/19/2012	-	21.46	-	82.09
		9/17/2013	-	24.80	-	78.75
		12/10/2013	-	27.04	-	76.51
		3/23/2014	-	21.38	-	82.17
		6/16/2014	-	22.71	-	80.84
MW-2[4]	101.41	1/19/1998	-	32.61	-	68.80
		4/9/1998	-	36.19	-	65.22
		7/16/1998	-	42.25	-	59.16
		10/13/1998	-	43.80	-	57.61
		9/30/1999	-	39.87	-	61.54
		10/19/2000	36.72	38.58	1.86	61.25
		10/11/2001	-	40.76	-	60.65
		10/17/2002	-	37.72	-	63.69
		10/20/2003	-	31.50	-	69.91
		10/7/2004	-	31.40	-	70.01
		10/13/2005	-	32.47	-	68.94
		10/16/2006	-	34.22	-	67.19
		10/22/2007	-	31.32	-	70.09
		10/7/2008	-	34.22	-	67.19
		10/13/2009	-	33.22	-	68.19
		9/27/2010	-	31.35	-	70.06
		10/6/2011	-	31.17	-	70.24
		12/19/2012	-	26.40	-	75.01
		9/17/2013	-	29.30	-	72.11
		12/10/2013	-	31.40	-	70.01
		3/23/2014	-	26.81	-	74.60
		6/16/2014	-	28.11	-	73.30
MW-3	101.09	1/19/1998	-	31.41	-	69.68
		4/9/1998	-	39.69	-	61.40
		7/16/1998	-	40.33	-	60.76
		10/13/1998	41.70	41.87	0.17	59.08
		9/30/1999	-	36.86	-	64.23
		10/19/2000	-	35.38	-	65.71
		10/11/2001	-	38.44	-	62.65
		10/17/2002	-	36.79	-	64.30
		10/20/2003	-	29.70	-	71.39
		10/7/2004	-	29.67	-	71.42
		10/13/2005	-	28.52	-	72.57
		10/16/2006	-	NM[5]	-	-
		10/22/2007	-	NM[5]	-	-
		10/7/2008	-	NM[5]	-	-
		10/13/2009	-	NM[5]	-	-
		9/27/2010	-	NM[5]	-	-
		10/6/2011	-	NM[5]	-	-
		12/19/2012	-	NM[5]	-	-
		9/17/2013	-	NM[5]	-	-
		12/10/2013	-	NM[5]	-	-
		3/23/2014	-	NM[5]	-	-
		6/16/2014	-	NM[5]	-	-

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-4	102.39	1/19/1998	-	27.80	-	74.59
		4/9/1998	-	30.28	-	72.11
		7/16/1998	-	35.71	-	66.68
		10/13/1998	-	36.24	-	66.15
		9/30/1999	-	31.79	-	70.60
		10/19/2000	-	29.76	-	72.63
		10/11/2001	-	31.06	-	71.33
		10/17/2002	-	31.54	-	70.85
		10/20/2003	-	26.84	-	75.55
		10/7/2004	-	26.48	-	75.91
		10/13/2005	-	27.09	-	75.30
		10/16/2006	-	27.44	-	74.95
		10/22/2007	-	25.20	-	77.19
		10/7/2008	-	28.09	-	74.30
		10/13/2009	-	27.74	-	74.65
		9/27/2010	-	26.35	-	76.04
		10/6/2011	-	26.57	-	75.82
		12/19/2012	-	22.68	-	79.71
		9/17/2013	-	25.38	-	77.01
		12/10/2013	-	27.54	-	74.85
		3/23/2014	-	22.64	-	79.75
		6/16/2014	-	23.86	-	78.53
MW-5	100.33	1/19/1998	-	28.60	-	71.73
		4/9/1998	-	32.46	-	67.87
		7/16/1998	-	34.23	-	66.10
		10/13/1998	-	33.93	-	66.40
		9/30/1999	-	32.21	-	68.12
		10/19/2000	-	31.40	-	68.93
		10/11/2001	-	30.90	-	69.43
		10/17/2002	-	31.98	-	68.35
		10/20/2003	-	29.54	-	70.79
		10/7/2004	-	27.15	-	73.18
		10/13/2005	-	27.79	-	72.54
		10/16/2006	-	28.50	-	71.83
		10/22/2007	-	27.10	-	73.23
		10/7/2008	-	28.69	-	71.64
		10/13/2009	-	28.47	-	71.86
		9/27/2010	-	27.15	-	73.18
		10/6/2011	-	26.91	-	73.42
		12/19/2012	-	23.72	-	76.61
		9/17/2013	-	26.50	-	73.83
		12/10/2013	-	28.06	-	72.27
		3/23/2014	-	23.71	-	76.62
		6/16/2014	-	24.74	-	75.59
MW-6	102.29	1/19/1998	-	27.41	-	74.88
		4/9/1998	-	38.08	-	64.21
		7/16/1998	-	36.76	-	65.53
		10/13/1998	-	36.02	-	66.27
		9/30/1999	-	33.29	-	69.00
		10/19/2000	-	31.60	-	70.69
		10/11/2001	-	30.28	-	72.01
		10/17/2002	-	31.95	-	70.34
		10/20/2003	-	26.68	-	75.61
		10/7/2004	-	26.30	-	75.99
		10/13/2005	-	27.03	-	75.26
		10/16/2006	-	27.98	-	74.31
		10/22/2007	-	26.11	-	76.18
		10/7/2008	-	28.89	-	73.40
		10/13/2009	-	27.82	-	74.47
		9/27/2010	-	26.21	-	76.08
		10/6/2011	-	26.21	-	76.08
		12/19/2012	-	22.08	-	80.21
		9/17/2013	-	25.32	-	76.97
		12/10/2013	-	27.11	-	75.18
		3/23/2014	-	21.97	-	80.32
		6/16/2014	-	23.30	-	78.99

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-7	101.11	1/19/1998	-	29.81	-	71.30
		4/9/1998	-	32.39	-	68.72
		7/16/1998	-	36.40	-	64.71
		8/13/1998	-	40.90	-	60.21
		9/30/1999	-	35.11	-	66.00
		10/19/2000	-	32.72	-	68.39
		10/11/2001	-	33.00	-	68.11
		10/17/2002	-	33.18	-	67.93
		10/20/2003	-	30.92	-	70.19
		10/7/2004	-	28.84	-	72.27
		10/13/2005	-	29.21	-	71.90
		10/16/2006	-	29.65	-	71.46
		10/22/2007	-	28.52	-	72.59
		10/7/2008	-	30.01	-	71.10
		10/13/2009	-	29.57	-	71.54
		9/27/2010	-	28.61	-	72.50
		10/6/2011	-	28.55	-	72.56
		12/19/2012	-	25.21	-	75.90
		9/17/2013	-	27.24	-	73.87
		12/10/2013	-	29.27	-	71.84
		3/23/2014	-	25.22	-	75.89
		6/16/2014	-	26.39	-	74.72
MW-8	99.78	1/19/1998	-	25.79	-	73.99
		4/9/1998	-	31.36	-	68.42
		7/16/1998	-	36.39	-	63.39
		10/13/1998	-	36.35	-	63.43
		9/30/1999	-	32.90	-	66.88
		10/19/2000	-	31.59	-	68.19
		10/11/2001	-	29.51	-	70.27
		10/17/2002	-	32.80	-	66.98
		10/20/2003	-	27.92	-	71.86
		10/7/2004	-	25.75	-	74.03
		10/13/2005	-	26.75	-	73.03
		10/16/2006	-	27.81	-	71.97
		10/22/2007	-	25.64	-	74.14
		10/7/2008	-	27.61	-	72.17
		10/13/2009	-	28.04	-	71.74
		9/27/2010	-	26.52	-	73.26
		10/6/2011	-	26.13	-	73.65
		12/19/2012	-	22.42	-	77.36
		9/17/2013	-	25.60	-	74.18
		12/10/2013	-	27.44	-	72.34
		3/23/2014	-	22.32	-	77.46
		6/16/2014	-	23.72	-	76.06
MW-9	102.15	1/19/1998	-	28.86	-	73.29
		4/9/1998	-	32.60	-	69.55
		7/16/1998	-	35.80	-	66.35
		10/13/1998	-	36.14	-	66.01
		9/30/1999	-	33.00	-	69.15
		10/19/2000	-	32.10	-	70.05
		10/11/2001	-	33.12	-	69.03
		10/17/2002	-	32.46	-	69.69
		10/20/2003	-	30.14	-	72.01
		10/7/2004	-	27.85	-	74.30
		10/13/2005	-	28.65	-	73.50
		10/16/2006	-	29.66	-	72.49
		10/22/2007	-	27.89	-	74.26
		10/7/2008	-	29.96	-	72.19
		10/13/2009	-	29.52	-	72.63
		9/27/2010	-	27.98	-	74.17
		10/6/2011	-	28.04	-	74.11
		12/19/2012	-	23.37	-	78.78
		9/17/2013	-	26.38	-	75.77
		12/10/2013	-	29.10	-	73.05
		3/23/2014	-	24.38	-	77.77
		6/16/2014	-	25.44	-	76.71

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-10	101.63	1/19/1998	-	26.99	-	74.64
		4/9/1998	-	32.40	-	69.23
		7/16/1998	-	34.89	-	66.74
		10/13/1998	-	34.10	-	67.53
		9/30/1999	-	33.10	-	68.53
		10/19/2000	-	32.01	-	69.62
		10/11/2001	-	31.22	-	70.41
		10/17/2002	-	32.78	-	68.85
		10/20/2003	-	29.48	-	72.15
		10/7/2004	-	27.23	-	74.40
		10/13/2005	-	28.17	-	73.46
		10/16/2006	-	28.98	-	72.65
		10/22/2007	-	27.15	-	74.48
		10/7/2008	-	29.25	-	72.38
		10/13/2008	-	NM[6]	-	-
		9/27/2010	-	27.48	-	74.15
		10/6/2011	-	27.27	-	74.36
		12/19/2012	-	23.34	-	78.29
		9/17/2013	-	26.68	-	74.95
		12/10/2013	-	28.34	-	73.29
		3/23/2014	-	23.31	-	78.32
		6/16/2014	-	24.68	-	76.95
MW-11	102.14	1/19/1998	-	26.42	-	75.72
		4/9/1998	-	33.41	-	68.73
		7/16/1998	-	38.18	-	63.96
		10/13/1998	39.67	39.82	0.15	62.19
		9/30/1999	-	34.82	-	67.32
		10/19/2000	-	33.83	-	68.31
		10/11/2001	-	34.76	-	67.38
		10/17/2002	-	34.57	-	67.57
		10/20/2003	-	28.12	-	74.02
		10/7/2004	-	27.50	-	74.64
		10/13/2005	-	28.48	-	73.66
		10/16/2006	-	31.12	-	71.02
		10/22/2007	-	27.61	-	74.53
		10/7/2008	-	31.15	-	70.99
		10/13/2009	-	30.66	-	71.48
		9/27/2010	-	27.62	-	74.52
		10/6/2011	-	27.42	-	74.72
		12/19/2012	-	23.30	-	78.84
		9/17/2013	-	26.52	-	75.62
		12/10/2013	-	28.36	-	73.78
		3/23/2014	-	23.34	-	78.80
		6/16/2014	-	24.58	-	77.56
MW-12	100.34	1/19/1998	-	26.71	-	73.63
		4/9/1998	-	30.98	-	69.36
		7/16/1998	-	33.98	-	66.36
		10/13/1998	-	33.26	-	67.08
		9/30/1999	-	31.71	-	68.63
		10/19/2000	-	30.56	-	69.78
		10/11/2001	-	29.86	-	70.48
		10/17/2002	-	32.52	-	67.82
		10/20/2003	-	28.72	-	71.62
		10/7/2004	-	NM[7]	-	-
		10/13/2005	-	NM[7]	-	-
		10/16/2006	-	NM[7]	-	-
		10/22/2007	-	NM[7]	-	-
		10/7/2008	-	NM[7]	-	-
		10/13/2009	-	NM[7]	-	-
		9/27/2010	-	NM[7]	-	-
		10/6/2011	-	NM[7]	-	-
		12/19/2012	-	NM[7]	-	-
		9/17/2013	-	NM[7]	-	-
		12/10/2013	-	NM[7]	-	-
		3/23/2014	-	NM[7]	-	-
		6/16/2014	-	NM[7]	-	-

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-13	98.64	1/19/1998	-	30.00	-	68.64
		4/9/1998	-	35.12	-	63.52
		7/17/1998	-	39.31	-	59.33
		10/13/1998	-	40.75	-	57.89
		9/30/1999	-	37.13	-	61.51
		10/19/2000	-	34.78	-	63.86
		10/11/2001	-	36.56	-	62.08
		10/17/2002	-	35.86	-	62.78
		10/20/2003	-	30.78	-	67.86
		10/7/2004	-	28.68	-	69.96
		10/13/2005	-	29.86	-	68.78
		10/16/2006	-	29.40	-	69.24
		10/22/2007	-	28.96	-	69.68
		10/7/2008	-	31.94	-	66.70
		10/13/2009	-	30.88	-	67.76
		9/27/2010	-	28.75	-	69.89
		10/6/2011	-	28.89	-	69.75
		12/19/2012	-	23.92	-	74.72
		9/17/2013	-	27.71	-	70.93
		12/10/2013	-	29.85	-	68.79
		3/23/2014	-	23.81	-	74.83
		6/16/2014	-	25.36	-	73.28
MW-14	98.57	1/19/1998	-	28.51	-	70.06
		4/9/1998	-	32.58	-	65.99
		7/16/1998	-	36.78	-	61.79
		10/13/1998	-	39.51	-	59.06
		9/30/1999	-	35.69	-	62.88
		10/19/2000	-	33.20	-	65.37
		10/11/2001	-	32.58	-	65.99
		10/17/2002	-	33.68	-	64.89
		10/20/2003	-	30.08	-	68.49
		10/7/2004	-	27.59	-	70.98
		10/13/2005	-	28.35	-	70.22
		10/16/2006	-	29.38	-	69.19
		10/22/2007	-	27.25	-	71.32
		10/7/2008	-	29.79	-	68.78
		10/13/2009	-	29.11	-	69.46
		9/27/2010	-	27.33	-	71.24
		10/6/2011	-	26.89	-	71.68
		12/19/2012	-	22.82	-	75.75
		9/17/2013	-	26.32	-	72.25
		12/10/2013	-	27.89	-	70.68
		3/23/2014	-	22.75	-	75.82
		6/16/2014	-	24.51	-	74.06
MW-15	97.09	1/19/1998	-	27.65	-	69.44
		4/9/1998	-	30.15	-	66.94
		7/16/1998	-	32.70	-	64.39
		10/13/1998	-	36.40	-	60.69
		9/30/1999	-	32.26	-	64.83
		10/19/2000	-	30.97	-	66.12
		10/11/2001	-	30.68	-	66.41
		10/17/2002	-	31.64	-	65.45
		10/20/2003	-	26.80	-	70.29
		10/7/2004	-	25.86	-	71.23
		10/13/2005	-	26.81	-	70.28
		10/16/2006	-	27.71	-	69.38
		10/22/2007	-	27.54	-	69.55
		10/7/2008	-	29.36	-	67.73
		10/13/2009	-	29.31	-	67.78
		9/27/2010	-	27.45	-	69.64
		10/6/2011	-	27.31	-	69.78
		12/19/2012	-	23.32	-	73.77
		9/17/2013	-	26.10	-	70.99
		12/10/2013	-	28.68	-	68.41
		3/23/2014	-	23.12	-	73.97
		6/16/2014	-	24.54	-	72.55

TABLE 1

Summary of Groundwater Elevation Data
Mountain Oil Facility
Walla Walla, Washington

Well Number	Top of Casing Elevation[1] (feet)	Date Measured	Depth to Product[2] (feet btoc)	Depth to Groundwater[2] (feet btoc)	Product Thickness (feet)	Groundwater Elevation[1,3] (feet)
MW-16	101.79	10/13/1998	-	39.89	-	61.90
		9/30/1999	-	35.12	-	66.67
		10/19/2000	-	33.28	-	68.51
		10/11/2001	-	35.49	-	66.30
		10/17/2002	-	34.60	-	67.19
		10/20/2003	-	28.12	-	73.67
		10/7/2004	-	27.48	-	74.31
		10/13/2005	-	28.43	-	73.36
		10/16/2006	-	29.31	-	72.48
		10/22/2007	-	27.11	-	74.68
		10/7/2008	-	28.80	-	72.99
		10/13/2009	-	28.30	-	73.49
		9/27/2010	-	26.58	-	75.21
		10/6/2011	-	26.46	-	75.33
		12/19/2012	-	22.08	-	79.71
		9/17/2013	-	25.62	-	76.17
		12/10/2013	-	27.70	-	74.09
		3/23/2014	-	22.02	-	79.77
		6/16/2014	-	23.44	-	78.35
MW-17	96.62	11/10/1998	-	42.13	-	54.49
		9/30/1999	39.72	39.89	0.17	56.59
		10/19/2000	37.64	38.22	0.58	57.91
		10/11/2001	39.46	39.62	0.16	56.86
		10/17/2002	38.95	39.02	0.07	57.54
		10/20/2003	-	31.62	-	65.00
		10/7/2004	-	32.20	-	64.42
		10/13/2005	-	33.18	-	63.44
		10/16/2006	-	34.98	-	61.64
		10/22/2007	-	32.10	-	64.52
		10/7/2008	-	34.22	-	62.40
		10/13/2009	-	33.60	-	63.02
		9/27/2010	-	31.00	-	65.62
		10/6/2011	-	31.03	-	65.59
		12/19/2012	-	26.46	-	70.16
		9/17/2013	-	29.32	-	67.30
		12/10/2013	-	31.26	-	65.36
		3/23/2014	-	26.11	-	70.51
		6/16/2014	-	27.74	-	68.88

Notes:

[1]Elevations based on an assumed site datum of 100.00 feet.

[2]Measured from top of monitoring well casing.

[3]Groundwater elevation corrected for product. Estimated product density = 0.85.

[4]Well screen placed below groundwater elevation, so measured groundwater level is typically anomalous and not used for contouring groundwater elevations.

[5]Well head damaged and casing filled with debris to 32.48 feet btoc.

[6]Not measured - stuck bolt on well lid, could not open.

[7]Not measured - well obstructed by lodged remediation pump.

btoc = Below top of casing
NM = Not measured

TABLE 2

Summary of Groundwater Quality Data 1998 - 2014
Mountain Oil Facility
Walla Walla, Washington

Well Number	Sample Collection Date	Gasoline-Range Hydrocarbons[1]	Volatile Organic Compounds[2]					Naphthalenes[3]
			Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-1	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/11/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/16/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-4	1/19/1998	290	5.9	1.4	3.5	37	NA	NA
	4/10/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	7/16/1998	630	3.7	1.6	1.5	29	NA	NA
	10/13/1998	880	22	6	7	43	NA	NA
	10/1/1999	374	5.77	<1.00	1.58	11.1	NA	NA
	10/19/2000	<50.0	1.03	<0.500	0.978	1.15	NA	NA
	10/11/2001	814	23.1	3.60	12.5	48.5	NA	NA
	10/19/2002	297	5.40	1.53	6.14	17.5	NA	NA
	10/20/2003	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2004	78.2	0.781	<0.500	1.17	2.11	NA	NA
	10/13/2005	<50	<1	<1	<1	<3	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	114	1.05	<0.500	0.539	<1.00	NA	NA
	10/7/2008	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2009	150	<1	<1	1.9	<3	NA	NA
	9/27/2010	58	<1	<1	<1	<3	NA	NA
	10/6/2011	67	<1.0	<1.0	<1.0	<3.0	NA	NA
	12/19/2012	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/17/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/11/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/16/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-5	1/19/1998	3,400	21	3.9	43	130	NA	NA
	4/10/1998	<100	5.3	<0.50	<0.50	<0.50	NA	NA
	7/16/1998	2,100	14	3.0	14	38	NA	NA
	10/13/1998	3,000	10	3	15	45	NA	NA
	10/1/1999	838	18.0	<0.600	3.42	7.76	NA	NA
	10/19/2000	1,460	<6.89	<2.23	10.1	18.9	NA	NA
	10/12/2001	2,430	24.8	0.867	32.9	47.4	NA	NA
	10/18/2002	249	3.48	<0.500	2.44	3.15	NA	NA
	10/20/2003	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2004	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/13/2005	510	<1	<1	4	4	NA	NA
	10/16/2006	590	5	<1	7	5	NA	NA
	10/23/2007	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2009	120	<1	<1	1.4	<3	NA	NA
	9/28/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	12/19/2012	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-6	1/19/1998	200	0.69	<0.50	<0.50	7.6	NA	NA
	4/10/1998	11,000	290	180	310	1,300	NA	NA
	7/17/1998	23,000	340	580	330	1,900	NA	NA
	10/13/1998	20,000	260	310	320	2,100	NA	NA
	10/1/1999	7,040	129	70.1	163	1,000	NA	NA
	10/19/2000	2,660	86.8	22.3	26.3	193	NA	NA
	10/12/2001	1,310	39.0	9.41	20.1	84	NA	NA
	10/18/2002	166	7.72	0.795	<0.500	9.66	NA	NA
	10/21/2003	2,130	47.8	7.22	85.4	115	NA	NA
	10/7/2004	1,200	24.9	8.04	45.6	100	NA	NA
	10/14/2005	2,000	31	6	60	78	NA	NA
	10/16/2006	650	26	1	11	24	NA	NA
	10/23/2007	545	5.04	2.96	10.9	25.5	NA	NA
	10/7/2008	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2009	1,300	16	2.8	29	39	NA	NA
	9/28/2010	460	2.6	1.1	5.1	7.2	NA	NA
	10/7/2011	240	1.1	<1.0	2.7	<3.0	NA	NA
	12/20/2012	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/25/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA

TABLE 2

Summary of Groundwater Quality Data 1998 - 2014
Mountain Oil Facility
Walla Walla, Washington

Well Number	Sample Collection Date	Gasoline-Range Hydrocarbons[1]	Volatile Organic Compounds[2]					Naphthalenes[3]
			Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-7	1/20/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	4/10/1998	110	<0.50	<0.50	2.1	8.8	NA	NA
	7/16/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	10/13/1998	<50	<1	<1	<1	<3	NA	NA
	9/30/1999	205	3.51	4.75	9.71	33.1	NA	NA
	10/19/2000	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/11/2001	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/17/2002	71.4	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/20/2003	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2004	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/13/2005	<50	<1	<1	<1	<3	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	<50	<0.500	<05.00	<0.500	<1.00	NA	NA
	10/13/2009	<50	<1	<1	<1	<3	NA	NA
	9/27/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/11/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/16/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-8	1/19/1998	<100	<0.50	<0.50	<0.50	0.66	NA	NA
	4/9/1998	800	28	0.89	1.7	26	NA	NA
	7/16/1998	4,600	33	36	72	430	NA	NA
	10/13/1998	2,500	32	10	28	190	NA	NA
	10/1/1999	641	18.7	15.1	13.4	66.6	NA	NA
	10/19/2000	360	4.03	1.22	3.90	16.1	NA	NA
	10/12/2001	1,350	8.52	2.53	30.4	96.1	NA	NA
	10/19/2002	980	8.03	3.69	19.3	66.8	NA	NA
	10/20/2003	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2004	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/13/2005	200	<1	<1	<1	<3	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2009	<50	<1	<1	<1	<3	NA	NA
	9/28/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-9	1/19/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	10/13/2005	<50	<1	<1	<1	<3	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/13/2009	<50	<1	<1	<1	<3	NA	NA
	9/27/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/11/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/16/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-10	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/25/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-11	1/19/1998	1,900	6.2	16	23	200	NA	NA
	4/10/1998	12,000	300	380	280	1,300	NA	NA
	7/16/1998	18,000	220	280	400	2,600	NA	NA
	9/18/2013	960	<1.0	<1.0	<1.0	20	<3.0	3.3
	12/12/2013	690	<1.0	<1.0	7.5	9.1	NA	NA
	3/25/2014	83	<1.0	<1.0	1.1	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA

TABLE 2

Summary of Groundwater Quality Data 1998 - 2014
Mountain Oil Facility
Walla Walla, Washington

Well Number	Sample Collection Date	Gasoline-Range Hydrocarbons[1]	Volatile Organic Compounds[2]					Naphthalenes[3]
			Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-13	1/19/1998	<100	<0.50	<0.50	<0.50	0.99	NA	NA
	4/9/1998	4,200	110	110	64	610	NA	NA
	7/17/1998	1,700	28	28	51	180	NA	NA
	10/13/1998	1,100	26	<1	18	33	NA	NA
	10/1/1999	1,050	18.7	21.6	34.6	117	NA	NA
	10/19/2000	78	0.988	<0.500	1.46	4.05	NA	NA
	10/12/2001	147	1.65	<0.500	2.35	2.34	NA	NA
	10/18/2002	149	0.849	<0.500	1.70	2.41	NA	NA
	10/20/2003	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2004	<50.0	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2005	<50	<1	<1	<1	<3	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	<50.0	0.520	<0.500	0.526	<1.00	NA	NA
	10/14/2009	<50	<1	<1	<1	<3	NA	NA
	9/28/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	69	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-14	1/19/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	4/9/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	7/16/1998	300	2.6	1.1	<0.50	12	NA	NA
	10/13/1998	320	11	<1	2	16	NA	NA
	10/1/1999	247	<2.50	0.825	3.56	11.4	NA	NA
	10/19/2000	1,180	<5.22	<3.38	16.5	49.7	NA	NA
	10/12/2001	315	1.93	<0.500	2.68	11.1	NA	NA
	10/18/2002	709	5.05	0.555	8.16	18.5	NA	NA
	10/20/2003	306	2.74	0.812	8.14	15	NA	NA
	10/7/2004	466	6.36	0.726	12.5	17.5	NA	NA
	10/14/2005	300	4	<1	9	10	NA	NA
	10/16/2006	86	<1	<1	<1	<3	NA	NA
	10/23/2007	270	2.51	<.500	1.61	<1.00	NA	NA
	10/7/2008	127	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2008	260	<1	<1	1.6	<3	NA	NA
	9/28/2010	110	<1	<1	<1	<3	NA	NA
	10/6/2011	150	<1.0	<1.0	<1.0	<3.0	NA	NA
	12/19/2012	<50	<1.0	<1.0	1.2	<3.0	NA	NA
	9/18/2013	180	2.8	<1.0	2.6	<3.0	<3.0	NA
	12/12/2013	110	<1.0	<1.0	1.7	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	820	<1.0	<1.0	3.9	3.1	NA	NA
MW-15	1/19/1998	<100	<0.50	<0.50	<0.50	<0.50	NA	NA
	4/10/1998	4,100	15	5.4	14	68	NA	NA
	7/16/1998	3,000	4.5	5.4	4.7	18	NA	NA
	10/13/1998	4,100	25	<5	10	19	NA	NA
	10/1/1999	4,680	60.4	<26.0	18.2	42.9	NA	NA
	10/19/2000	4,650	<1.00	<4.06	20.5	33.6	NA	NA
	10/12/2001	3,350	29.3	1.12	13.2	21.4	NA	NA
	10/17/2002	2,530	8.07	<1.00	8.60	9.62	NA	NA
	10/21/2003	1,680	15.2	<0.50	2.18	2.18	NA	NA
	10/7/2004	788	11.6	<0.50	3.06	1.47	NA	NA
	10/14/2005	300	<1	<1	<1	<3	NA	NA
	10/16/2006	320	<1	<1	<1	<3	NA	NA
	10/23/2007	350	1.47	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	101	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/14/2009	77	<1	<1	<1	<3	NA	NA
	9/28/2010	430	<1	<1	1.4	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	12/19/2012	<50	<1.0	<1.0	1.0	<3.0	NA	NA
	9/18/2013	<50	<1.0	<1.0	<1.0	<3.0	<3.0	NA
	12/12/2013	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	3/24/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA

TABLE 2

Summary of Groundwater Quality Data 1998 - 2014
Mountain Oil Facility
Walla Walla, Washington

Well Number	Sample Collection Date	Gasoline-Range Hydrocarbons[1]	Volatile Organic Compounds[2]					Naphthalenes[3]
			Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-16	10/13/1998	15,000	60	210	180	1,200	NA	NA
	10/1/1999	8,050	104	78.0	150	757	NA	NA
	10/19/2000	8,020	104	89.2	219	1,060	NA	NA
	10/12/2001	7,030	77.6	70.2	146	820	NA	NA
	10/18/2002	8,660	93.8	58.5	235	888	NA	NA
	10/21/2003	1,570	10.1	5.12	41.4	144	NA	NA
	10/7/2004	421	2.94	0.801	9.24	26.4	NA	NA
	10/16/2006	<50	<1	<1	<1	<3	NA	NA
	10/13/2005	<50	<1	<1	<1	<3	NA	NA
	10/23/2007	<50	<0.500	<0.500	<0.500	<1.00	NA	NA
	10/7/2008	172	1.42	<0.500	2.49	4.84	NA	NA
	10/14/2009	<50	<1	<1	<1	<3	NA	NA
	9/28/2010	<50	<1	<1	<1	<3	NA	NA
	10/6/2011	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
	12/19/2012	<50	<1.0	<1.0	1.1	<3.0	NA	NA
	9/18/2013	67	1.2	<1.0	1.0	<3.0	<3.0	NA
	12/12/2013	95	<1.0	<1.0	1.8	<3.0	NA	NA
	3/25/2014	<50	<1.0	<1.0	1.1	<3.0	NA	NA
	6/17/2014	<50	<1.0	<1.0	<1.0	<3.0	NA	NA
MW-17	11/10/1998	1,100	140	<50	160	660	NA	NA
	10/1/1999	7,790	46.6	<26.5	42.0	199	NA	NA
	10/19/2000	No sample collected - floating product in well						
	10/11/2001	No sample collected - floating product in well						
	10/18/2002	5,890	9.72	<1.00	12.0	25.7	NA	NA
	10/21/2003	2,710	13.2	<1.00	10.6	17.3	NA	NA
	10/7/2004	975	4.27	<0.500	7.62	11.4	NA	NA
	10/14/2005	1,800	<1	<1	7	11	NA	NA
	10/16/2006	1,500	26	3	12	11	NA	NA
	10/23/2007	3,200	24.4	<0.500	7.50	9.16	NA	NA
	10/7/2008	2,250	23.5	0.645	4.12	3.30	NA	NA
	10/14/2009	1,100	<1	1.9	6.2	3.5	NA	NA
	9/28/2010	1,100	<1	1.8	5.2	<3	NA	NA
	10/7/2011	1,400	<1.0	1.8	4.2	<3.0	NA	NA
	12/20/2012	280	<1.0	<1.0	1.9	<3.0	NA	NA
	9/18/2013	380	<1.0	<1.0	1.6	<3.0	<3.0	0.23
	12/12/2013	430	<1.0	<1.0	1.6	<3.0	NA	NA
	3/25/2014	220	<1.0	<1.0	<1.0	<3.0	NA	NA
	6/17/2014	250	<1.0	<1.0	<1.0	<3.0	NA	NA
MTCA Method A Cleanup Level		1,000/800[4]	5	1,000	700	1,000	20	160

Notes:

Concentrations reported in micrograms per liter (µg/l).

Shading indicates detected concentration greater than MTCA Method A Groundwater Cleanup Level.

[1]By Washington State Department of Ecology Method WTPH-G or NWTPH-Gx.

[2]By United States Environmental Protection Agency Method 8020 or 8021B.

[3]By United States Environmental Protection Agency Method 8270SIM.

[4]Standard is 1,000 µg/l if benzene is not present in the sample, and 800 µg/l if benzene is present.

µg/l = Micrograms per liter

MTBE = Methyl tert-butyl ether

MTCA = Model Toxics Control Act (Chapter 173-340 Washington Administrative Code)

NA = Not analyzed

Attachment A
Previous Site Report Summary

Mountain Oil, Inc. Property
aka Pacific Pride
2285 East Isaacs Avenue
Walla Walla, Washington

Site Report Summary

1. 2 December 1993 - *Site Characterization Report,* Pacific Pride, 2285 E. Isaacs, Walla Walla, Washington *by* Shannon Crowell, P.E.

2. 18 February 1994 - *Report of Geoenvironmental Services, Site Characterization,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

3. 22 June 1994 - *Progress Report Number 1, Supplemental Site Characterization Study and Interim Remedial Actions,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

4. 29 July 1994 - *Application for Notice of Construction, Soil and Groundwater Remediation,* Mountain Oil Pacific Pride Property, 2285 East Isaacs Avenue, Walla Walla, Washington *by* GeoEngineers, Inc.

5. 1 December 1994 - *Progress Report Number 2, Supplemental Site Characterization Study and Interim Remedial Actions,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

6. 3 April 1995 - *Progress Report Number 3, Remedial Action Monitoring, October 1994 to January 1995,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

7. 31 May 1995 - *Progress Report Number 4, Remedial Action Monitoring, January 1995 to April 1995,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

8. 8 August 1995 - *Progress Report Number 5, Remedial Action Monitoring, May 1995 to July 1995,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

9. 7 December 1995 - *Progress Report Number 6, Remedial Action Monitoring, August 1995 to November 1995,* Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

10. 26 April 1996 - *Progress Report Number 7, Remedial Action Monitoring, December 1995 to March 1996*, Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

11. 6 August 1996 - *Progress Report Number 8, Remedial Action Monitoring, April to July 1996*, Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

12. 2 December 1996 - *Progress Report Number 9, Remedial Action Monitoring, August to October 1996*, Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

13. 18 February 1997 - *Progress Report Number 10, Remedial Action Monitoring, November 1996 to January 1997*, Pacific Pride Property, Walla Walla, Washington *by* GeoEngineers, Inc.

14. 9 June 1997 - *Progress Report Number 11, Remedial Action and Groundwater Monitoring, February Through April 1997*, 2285 East Isaacs Avenue, Walla Walla, Washington *by* GeoEngineers, Inc.

15. 16 February 1998 - *Progress Report Number 12, Remedial Action and Groundwater Monitoring, May Through December 1997*, 2285 East Isaacs Avenue, Walla Walla, Washington *by* GeoEngineers, Inc.

16. 4 March 1998 - *January 1998 Groundwater Monitoring*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

17. 26 June 1998 - *April 1998 Groundwater Monitoring*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

18. 14 August 1998 - *July 1998 Groundwater Remediation Activities*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

19. 19 January 1999 - *October and November 1998 Groundwater Monitoring and Site Characterization Activities*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

20. 19 November 1999 - *1999 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

21. 11 May 2001 - *2000 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

22. 11 February 2002 - *2001 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

23. 21 February 2003 - *2002 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

24. 30 December 2003 - *2003 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

25. 19 November 2004 - *2004 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

26. 6 December 2005 - *2005 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

27. 20 December 2006 – *2006 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

28. 16 January 2008 – *2007 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

29. 21 November 2008 – *2008 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

30. 13 November 2009 – *2009 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

31. 16 November 2010 – *2010 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

32. 16 November 2011 – *2011 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

33. 24 January 2013 – *2012 Groundwater Monitoring Report*, Mountain Oil Facility, 2285 East Isaacs Avenue, Walla Walla, Washington *by* ERM.

Attachment B
Chemical Analytical Data

September 30, 2013

Mr. Mike Arnold
ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

Dear Mr. Arnold,

On September 20th, 17 samples were received by our laboratory and assigned our laboratory project number EV13090129. The project was identified as your Mountain Oil (MT Oil). The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/17/2013 2:30:00 PM
CLIENT SAMPLE ID	TB-01-091713	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
ethyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**94.0**	09/21/2013	DLC
TFT	EPA-8021	**92.0**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	9/30/2013 EV13090129 -02
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/17/2013 2:35:00 PM
CLIENT SAMPLE ID	MW-4RB	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	115	09/21/2013	DLC
TFT	EPA-8021	98.4	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-03
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/17/2013 3:20:00 PM
CLIENT SAMPLE ID	MW-4	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**94.5**	09/21/2013	DLC
FT	EPA-8021	**87.6**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-04
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 7:11:00 AM
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.1**	09/21/2013	DLC
TFT	EPA-8021	**91.8**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-05
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 7:42:00 AM
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**99.8**	09/21/2013	DLC
FT	EPA-8021	**92.5**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-06
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 8:41:00 AM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.4**	09/21/2013	DLC
TFT	EPA-8021	**91.3**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-07
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 9:31:00 AM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

DATA RESULTS

NALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	99.6	09/21/2013	DLC
FT	EPA-8021	90.9	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-08
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 9:54:00 AM
CLIENT SAMPLE ID	MW-8	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.6**	09/21/2013	DLC
TFT	EPA-8021	**91.5**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-09
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 10:47:00 AM
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**95.2**	09/21/2013	DLC
FT	EPA-8021	**92.2**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-10
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 11:22:00 AM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**960**	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	**11**	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	**20**	3.0	1	UG/L	09/21/2013	DLC
Naphthalene	EPA-8270 SIM	**3.3**	0.020	1	UG/L	09/25/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**123**	09/21/2013	DLC
TFT	EPA-8021	**118**	09/21/2013	DLC
Terphenyl-d14	EPA-8270 SIM	**85.3**	09/25/2013	LAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-11
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 12:04:00 PM
CLIENT SAMPLE ID	MW-13	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	108	09/21/2013	DLC
FT	EPA-8021	96.8	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group . A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-12
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 12:33:00 PM
CLIENT SAMPLE ID	MW-15	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**94.5**	09/21/2013	DLC
TFT	EPA-8021	**91.7**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-13
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 1:04:00 PM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	**180**	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
enzene	EPA-8021	**2.8**	1.0	1	UG/L	09/21/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	**2.6**	1.0	1	UG/L	09/21/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**113**	09/21/2013	DLC
FT	EPA-8021	**101**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	9/30/2013 EV13090129 -14
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 1:33:00 PM
CLIENT SAMPLE ID	MW-16	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**67**	50	1	UG/L	09/21/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	**1.2**	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	**1.0**	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**106**	09/21/2013	DLC
TFT	EPA-8021	**97.0**	09/21/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	9/30/2013
		ALS JOB#:	EV13090129
		ALS SAMPLE#:	-15
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 2:23:00 PM
CLIENT SAMPLE ID	MW-6	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/22/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	96.3	09/22/2013	DLC
TFT	EPA-8021	90.4	09/22/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	9/30/2013 EV13090129 -16
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 3:09:00 PM
CLIENT SAMPLE ID	MW-17	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**380**	50	1	UG/L	09/22/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Ethylbenzene	EPA-8021	**1.6**	1.0	1	UG/L	09/22/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC
Naphthalene	EPA-8270 SIM	**0.23**	0.020	1	UG/L	09/25/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**129**	09/22/2013	DLC
TFT	EPA-8021	**111**	09/22/2013	DLC
Terphenyl-d14	EPA-8270 SIM	**90.4**	09/25/2013	LAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	9/30/2013 EV13090129 -17
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	9/20/2013
CLIENT PROJECT:	Mountain Oil (MT Oil)	COLLECTION DATE:	9/18/2013 3:09:00 PM
CLIENT SAMPLE ID	DUP-01	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	**310**	50	1	UG/L	09/22/2013	DLC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC
enzene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
oluene	EPA-8021	U	1.0	1	UG/L	09/22/2013	DLC
Ethylbenzene	EPA-8021	**1.6**	1.0	1	UG/L	09/22/2013	DLC
ylenes	EPA-8021	U	3.0	1	UG/L	09/22/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
FT	NWTPH-GX	**124**	09/22/2013	DLC
FT	EPA-8021	**106**	09/22/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

CLIENT CONTACT: Mike Arnold
CLIENT PROJECT: Mountain Oil (MT Oil)

DATE: 9/30/2013
ALS SDG#: EV13090129
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-092013W - Batch 7156 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	09/21/2013	DLC

MB-092013W - Batch 7156 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/21/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	09/21/2013	DLC

MB-091913W - Batch 7131 - Water by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	09/19/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	09/19/2013	LAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

CLIENT CONTACT: Mike Arnold
CLIENT PROJECT: Mountain Oil (MT Oil)

DATE: 9/30/2013
ALS SDG#: EV13090129
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 7156 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	70.8			09/21/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	75.5	6		09/21/2013	DLC

ALS Test Batch ID: 7156 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether - BS	EPA-8021	107			09/21/2013	DLC
Methyl T-Butyl Ether - BSD	EPA-8021	109	2		09/21/2013	DLC
Benzene - BS	EPA-8021	99.8			09/21/2013	DLC
Benzene - BSD	EPA-8021	103	3		09/21/2013	DLC
Toluene - BS	EPA-8021	97.7			09/21/2013	DLC
Toluene - BSD	EPA-8021	101	3		09/21/2013	DLC
Ethylbenzene - BS	EPA-8021	95.6			09/21/2013	DLC
Ethylbenzene - BSD	EPA-8021	98.4	3		09/21/2013	DLC
Xylenes - BS	EPA-8021	99.2			09/21/2013	DLC
Xylenes - BSD	EPA-8021	102	3		09/21/2013	DLC

ALS Test Batch ID: 7131 - Water by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	60.9			09/19/2013	LAP
Naphthalene - BSD	EPA-8270 SIM	63.7	5		09/19/2013	LAP
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	64.2			09/19/2013	LAP
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	67.8	5		09/19/2013	LAP

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody / Laboratory Analysis Request

Job# Labor se Or: E113090129

Date 9/17/13 Page 1 Of 2

PROJECT ID: Mountain Oil (MT oil)
REPORT TO COMPANY: ERM
PROJECT MANAGER: Mike Arnold
ADDRESS: 1218 3rd Ave STE 1412
Seattle, Wa 98101
PHONE: 425) 462.8591 FAX: 425) 455.3573
P.O. #: 217514 E-MAIL: mike.arnold@erm.com
INVOICE TO COMPANY: Same As Above
ATTENTION:
ADDRESS:

LABORATORY COPY

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☑ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): * Hold for Naphalene 8270	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. TB-01-091713	9/17/13	1430	H2O	1			X	X	X											X	2	
2. MW-4RB	↓	1435	↓	2			X	X	X											X	3	
3. MW-4	↓	1520	↓	3			X	X	X											X	3	
4. MW-7	9/18/13	0711	H2O	4			X	X	X											X	3	
5. MW-9	↓	0742	↓	5			X	X	X											X	3	
6. MW-1	↓	0841	↓	6			X	X	X											X	3	
7. MW-5	↓	0931	↓	7			X	X	X											X	3	
8. MW-8	↓	0954	↓	8			X	X	X											X	3	
9. MW-10	↓	1047	↓	9			X	X	X											X	3	
10. MW-11	↓	1122	↓	10			X	X	X											X	3	

SPECIAL INSTRUCTIONS * Run Two HighesT TPH-G hits for NapThalene

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: ERM, 9/19/13
Received By:
2. Relinquished By:
Received By: Shawn Rotunno AL 9/20/13 10:00

TURNAROUND REQUESTED in Business Days*

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

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

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV13090129

Date 9/18/13 Page 2 of 2

PROJECT ID: Mountain Oil (MT Oil)
REPORT TO COMPANY: ERM
PROJECT MANAGER: Sara Pg 1
ADDRESS:
PHONE: FAX:
P.O. #: 217514 E-MAIL:
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☑ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): * Hold for Naphalene 8270	NUMBER OF CONTAINERS	RECEIVED IN COOLER? CONDITION?
1. MW-13	9/18/13	1204	H_2O	11			X	X	X											X	3	
2. MW-15		1233		12			X	X	X											X	3	
3. MW-14		1309		13			X	X	X											X	3	
4. MW-16		1333		14			X	X	X											X NO	3	
5. MW-6		1423		15			X	X	X											X	3	
6. MW-17		1509		16			X	X	X											X	3	
7. DUP-01		1509		17			X	X	X											X	3	
8.																						
9.																						
10.																						

LABORATORY COPY

SPECIAL INSTRUCTIONS: * Run Two Highest TPH-G hits for Naphthalene

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: SH ERM 9/19/13
   Received By:
2. Relinquished By:
   Received By: Shawn Roberson ALS 9/20/13 10:00

TURNAROUND REQUESTED in Business Days*

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

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

OTHER: Specify:

turnarou est less ndard r Rush

December 19, 2013

Mr. Mike Arnold
ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

Dear Mr. Arnold,

On December 17th, 16 samples were received by our laboratory and assigned our laboratory project number EV13120106. The project was identified as your Project #217514 / Mt. Oil Walla Walla. The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-01
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/11/2013 2:35:00 PM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**98.1**	12/17/2013	DLC
TFT	EPA-8021	**103**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-02
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/11/2013 2:56:00 PM
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.0**	12/17/2013	DLC
TFT	EPA-8021	**102**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-03
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/11/2013 3:45:00 PM
CLIENT SAMPLE ID	MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	98.3	12/17/2013	DLC
TFT	EPA-8021	100	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-04
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/11/2013 4:18:00 PM
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**98.4**	12/17/2013	DLC
TFT	EPA-8021	**96.2**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-05
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 7:47:00 AM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	114	12/17/2013	DLC
TFT	EPA-8021	112	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-06
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 8:32:00 AM
CLIENT SAMPLE ID	MW-8	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**104**	12/17/2013	DLC
TFT	EPA-8021	**101**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-07
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 9:40:00 AM
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**100**	12/17/2013	DLC
TFT	EPA-8021	**89.7**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-08
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 10:30:00 AM
CLIENT SAMPLE ID	MW-6	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**91.4**	12/17/2013	DLC
TFT	EPA-8021	**89.3**	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-09
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 11:07:00 AM
CLIENT SAMPLE ID	MW-16	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**95**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	**1.8**	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**95.1**	12/18/2013	DLC
TFT	EPA-8021	**95.1**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-10
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 11:07:00 AM
CLIENT SAMPLE ID	DUP-01	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**120**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	**2.2**	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**112**	12/18/2013	DLC
TFT	EPA-8021	**113**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-11
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 11:40:00 AM
CLIENT SAMPLE ID	MW-13-R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	107	12/18/2013	DLC
TFT	EPA-8021	112	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-12
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 12:11:00 PM
CLIENT SAMPLE ID	MW-13	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**69**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**95.5**	12/18/2013	DLC
TFT	EPA-8021	**97.1**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-13
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 12:53:00 PM
CLIENT SAMPLE ID	MW-15	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	88.8	12/18/2013	DLC
TFT	EPA-8021	90.1	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-14
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 1:33:00 PM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**110**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	**1.7**	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.2**	12/18/2013	DLC
TFT	EPA-8021	**100**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	12/19/2013
		ALS JOB#:	EV13120106
		ALS SAMPLE#:	EV13120106-15
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 2:18:00 PM
CLIENT SAMPLE ID	MW-17	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**430**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	**1.6**	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**125**	12/18/2013	DLC
TFT	EPA-8021	**126**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	12/19/2013 EV13120106 EV13120106-16
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	12/17/2013
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla	COLLECTION DATE:	12/12/2013 3:05:00 PM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**690**	50	1	UG/L	12/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/18/2013	DLC
Ethylbenzene	EPA-8021	**7.5**	1.0	1	UG/L	12/18/2013	DLC
Xylenes	EPA-8021	**9.1**	3.0	1	UG/L	12/18/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**117**	12/18/2013	DLC
TFT	EPA-8021	**120**	12/18/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

DATE: 12/19/2013
ALS SDG#: EV13120106
WDOE ACCREDITATION: C601

CLIENT CONTACT: Mike Arnold
CLIENT PROJECT: Project #217514 / Mt. Oil Walla Walla

LABORATORY BLANK RESULTS

MBG-121713W - Batch 7482 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/17/2013	DLC

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

MB-121713W - Batch 7482 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/17/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/17/2013	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	12/19/2013 EV13120106 C601
CLIENT CONTACT:	Mike Arnold		
CLIENT PROJECT:	Project #217514 / Mt. Oil Walla Walla		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 7482 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	64.8			12/17/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	66.6	3		12/17/2013	DLC

ALS Test Batch ID: 7482 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	89.6			12/17/2013	DLC
Benzene - BSD	EPA-8021	94.3	5		12/17/2013	DLC
Toluene - BS	EPA-8021	88.8			12/17/2013	DLC
Toluene - BSD	EPA-8021	93.4	5		12/17/2013	DLC
Ethylbenzene - BS	EPA-8021	89.0			12/17/2013	DLC
Ethylbenzene - BSD	EPA-8021	93.8	5		12/17/2013	DLC
Xylenes - BS	EPA-8021	90.2			12/17/2013	DLC
Xylenes - BSD	EPA-8021	94.9	5		12/17/2013	DLC

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

Ev131-01-0

ERM Seattle office

CHAIN OF CUSTODY RECORD

NO: 1639

~~101 S.W. MAIN STREET, SUITE 804 • PORTLAND, OR 97204 • (503) 488-5282 • FAX (503) 488-5142~~

PROJECT #	PROJECT NAME
217514	MT. Oil Walla Walla

SAMPLER: (PRINT NAME)	(SIGNATURE)
Scott Terramon	

RECEIVING LABORATORY: ALS Everett

	SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	REQUESTED PARAMETERS: BTEX	REQUESTED PARAMETERS: NWTPH-Gx
1	MW-1	12/16/13	1435		X	3 Vol	HCl	Y	80mL	2		X		X	X
2	MW-9		1456							2		X		X	X
3	MW-4		1545							2		X		X	X
4	MW-7		1618							2		X		X	X
5	MW-5	12/12/13	0747		X	3 Vol	HCl	Y	80 mL	2		X		X	X
6	MW-8		0832							2		X		X	X
7	MW-10		0940							2		X		X	X
8	MW-6		1030							2		X		X	X
9	MW-16		1107							2		X		X	X
10	Dup-01		1107							2		X		X	X

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
	12/13/13		Ken Penny ALS	12/17/13	1:20pm
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS:

REMARKS ON SAMPLE RECEIPT

- ☐ BOTTLE INTACT
- ☐ CUSTODY SEALS
- ☐ CHILLED
- ☐ PRESERVED
- ☐ SEALS INTACT
- ☐ SEE REMARKS

ERM REMARKS:

SEND REPORT TO: mike.arnold@erm.com

WHITE - LABORATORY COPY CANARY - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

EV13120106

ERM

CHAIN OF CUSTODY RECORD

NO: 1640

101 S.W. MAIN STREET, SUITE 804 • PORTLAND, OR 97204 • (503) 488-5282 • FAX (503) 488-5142

PROJECT #	PROJECT NAME
217514	MT, O;l walla walla

SAMPLER: (PRINT NAME)	(SIGNATURE)
Scott Terravenn	

RECEIVING LABORATORY: ALS Everett

	SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	REQUESTED PARAMETERS: BTEX	REQUESTED PARAMETERS: NWTPH-Gx
11	MW-13-R	12/12/13	1140		X	3 vol	HCl	Y	80 mL	2		X		X	X
12	MW-13		1211							2		X		X	X
13	MW-15		1253							2		X		X	X
14	MW-14		1333							2		X		X	X
15	MW-17		1418							2		X		X	X
16	MW-11		1505							2		X		X	X

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
	12/13/13		Ellen Penny ALS	12/17/13	1:20 PM

FIELD REMARKS:

REMARKS ON SAMPLE RECEIPT

- ☐ BOTTLE INTACT
- ☐ CUSTODY SEALS
- ☐ CHILLED
- ☐ PRESERVED
- ☐ SEALS INTACT
- ☐ SEE REMARKS

ERM REMARKS:

SEND REPORT TO: mikearnold@erm.com

WHITE - LABORATORY COPY CANARY - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

March 31, 2014

Mr. Mike Arnold
ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

Dear Mr. Arnold,

On March 27th, 16 samples were received by our laboratory and assigned our laboratory project number EV14030191. The project was identified as your Mountain Oil, Walla Walla WA. The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-01
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 8:53:00 AM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
oluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.5**	03/27/2014	DLC
FT	EPA-8021	**88.8**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-02
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 9:42:00 AM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**100**	03/27/2014	DLC
TFT	EPA-8021	**90.5**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-03
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 10:20:00 AM
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.0**	03/27/2014	DLC
TFT	EPA-8021	**89.8**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-04
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 10:41:00 AM
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**101**	03/27/2014	DLC
TFT	EPA-8021	**91.7**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	3/31/2014
		ALS JOB#:	EV14030191
		ALS SAMPLE#:	EV14030191-05
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 11:37:00 AM
CLIENT SAMPLE ID	MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**94.5**	03/27/2014	DLC
TFT	EPA-8021	**83.6**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-06
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 12:04:00 PM
CLIENT SAMPLE ID	MW-8	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.4**	03/27/2014	DLC
TFT	EPA-8021	**87.8**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	3/31/2014
		ALS JOB#:	EV14030191
		ALS SAMPLE#:	EV14030191-07
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 12:49:00 PM
CLIENT SAMPLE ID	MW-13	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**94.1**	03/27/2014	DLC
TFT	EPA-8021	**83.4**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-08
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 1:09:00 PM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.1**	03/27/2014	DLC
TFT	EPA-8021	**89.6**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-09
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/24/2014 1:31:00 PM
CLIENT SAMPLE ID	MW-15	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.7**	03/27/2014	DLC
TFT	EPA-8021	**86.7**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-10
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 8:44:00 AM
CLIENT SAMPLE ID	MW-17	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**220**	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**118**	03/27/2014	DLC
TFT	EPA-8021	**104**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	3/31/2014
		ALS JOB#:	EV14030191
		ALS SAMPLE#:	EV14030191-11
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 8:00:00 AM
CLIENT SAMPLE ID	Dup-01-032514	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	**160**	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**112**	03/27/2014	DLC
TFT	EPA-8021	**98.5**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-12
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 9:08:00 AM
CLIENT SAMPLE ID	MW-10-R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**101**	03/27/2014	DLC
TFT	EPA-8021	**92.5**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	3/31/2014
		ALS JOB#:	EV14030191
		ALS SAMPLE#:	EV14030191-13
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 10:10:00 AM
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**95.2**	03/27/2014	DLC
TFT	EPA-8021	**86.2**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-14
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 10:59:00 AM
CLIENT SAMPLE ID	MW-16	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.1**	03/27/2014	DLC
TFT	EPA-8021	**86.4**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	3/31/2014
		ALS JOB#:	EV14030191
		ALS SAMPLE#:	EV14030191-15
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 12:28:00 PM
CLIENT SAMPLE ID	MW-6	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**102**	03/27/2014	DLC
TFT	EPA-8021	**88.8**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/31/2014 EV14030191 EV14030191-16
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	03/27/2014
CLIENT PROJECT:	Mountain Oil, Walla Walla WA	COLLECTION DATE:	3/25/2014 1:25:00 PM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**83**	50	1	UG/L	03/27/2014	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	**1.1**	1.0	1	UG/L	03/27/2014	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**101**	03/27/2014	DLC
TFT	EPA-8021	**90.6**	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

LIENT:	ERM West	DATE:	3/31/2014
	1218 - 3rd Ave, Suite 1412	ALS SDG#:	EV14030191
	Seattle, WA 98101	WDOE ACCREDITATION:	C601
LIENT CONTACT:	Mike Arnold		
CLIENT PROJECT:	Mountain Oil, Walla Walla WA		

LABORATORY BLANK RESULTS

MB-032714W - Batch 7762 - Water by NWTPH-GX

NALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/27/2014	DLC

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

IB-032714W - Batch 7762 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
enzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
oluene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/27/2014	DLC
lenes	EPA-8021	U	3.0	1	UG/L	03/27/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

CLIENT CONTACT: Mike Arnold
CLIENT PROJECT: Mountain Oil, Walla Walla WA

DATE: 3/31/2014
ALS SDG#: EV14030191
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 7762 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	69.6			03/27/2014	DLC
TPH-Volatile Range - BSD	NWTPH-GX	72.0	3		03/27/2014	DLC

ALS Test Batch ID: 7762 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	93.0			03/27/2014	DLC
Benzene - BSD	EPA-8021	96.2	3		03/27/2014	DLC
Toluene - BS	EPA-8021	93.9			03/27/2014	DLC
Toluene - BSD	EPA-8021	97.0	3		03/27/2014	DLC
Ethylbenzene - BS	EPA-8021	93.0			03/27/2014	DLC
Ethylbenzene - BSD	EPA-8021	95.9	3		03/27/2014	DLC
Xylenes - BS	EPA-8021	93.0			03/27/2014	DLC
Xylenes - BSD	EPA-8021	95.9	3		03/27/2014	DLC

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV14030191

Date 9/24/14 Page 1 Of 2

PROJECT ID: Mountain Oil, Walla Walla Wa
REPORT TO COMPANY: ERM
PROJECT MANAGER: Mike Arnold
ADDRESS: 1218 3rd Ave Ste 1412
Seattle, Wa 98101
PHONE: 425 462-5891 FAX:
P.O. #: 217514 E-MAIL: mike.arnold@erm.com
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-1	3/24/14	0853	H_2O	1			X	X													
2. MW-5		0942		2			X	X													
3. MW-7		1020		3			X	X													
4. MW-9		1041		4			X	X													
5. MW-4		1137		5			X	X													
6. MW-8		1204		6			X	X													
7. MW-13		1249		7			X	X													
8. MW-14		1309		8			X	X													
9. MW-15		1331		9			X	X													
10. MW-17	3/25/14	0844	H_2O	10			X	X													

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: SR ERM 3/26/14
   Received By:
2. Relinquished By:
   Received By: Shawn Robinson ALS 3/27/14 10:10 am

TURNAROUND REQUESTED in Business Days*

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

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

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1403091

Date _____ Page 2 Of 2

PROJECT ID: Mountian Oil Walla Walla Wa.
REPORT TO COMPANY: ERM
PROJECT MANAGER: Mike Arnold
ADDRESS: 1218 3rd Ave STE 1412
PHONE: 425-462-5091 FAX:
P.O. #: 217514 E-MAIL: mike.Arnold@erm.com
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. Dup-01-032514	3/25/14		H_2O	11			X	X														
2. MW-10-R		0908		12			X	X														
3. MW-10		1010		13			X	X														
4. MW-16		1059		14			X	X														
5. MW-6		1228		15			X	X														
6. MW-11		1325		16			X	X														
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: SR ERM 3/26/14
Received By: _____
2. Relinquished By: _____
Received By: Shawn Robinson ALS 3/27/14 10:10 am

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY
Fuels & Hydrocarbon Analysis: X Standard | 3 | 1 | SAME DAY
OTHER: Specify: _____

* Turnaround request less than standard may incur Rush Charges

June 23, 2014

Mr. Mike Arnold
ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

Dear Mr. Arnold,

On June 19th, 17 samples were received by our laboratory and assigned our laboratory project number EV14060118. The project was identified as your Mt Oil Walla Walla, WA. The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Carl Nott
Operations Manager

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-01
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/16/2014 2:00:00 PM
CLIENT SAMPLE ID	TB-061614-01	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**102**	06/19/2014	DLC
TFT	EPA-8021	**83.9**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-02
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/16/2014 2:17:00 PM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**101**	06/19/2014	DLC
TFT	EPA-8021	**84.0**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-03
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/16/2014 2:50:00 PM
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
oluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**98.8**	06/19/2014	DLC
TFT	EPA-8021	**82.8**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-04
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/16/2014 3:09:00 PM
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.0**	06/19/2014	DLC
TFT	EPA-8021	**81.6**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-05
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/16/2014 4:30:00 PM
CLIENT SAMPLE ID	MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.0**	06/19/2014	DLC
TFT	EPA-8021	**82.2**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-06
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 7:46:00 AM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.8**	06/19/2014	DLC
TFT	EPA-8021	**81.0**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-07
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 9:02:00 AM
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.2**	06/19/2014	DLC
TFT	EPA-8021	**80.3**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-08
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 9:36:00 AM
CLIENT SAMPLE ID	MW-8	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.6**	06/19/2014	DLC
TFT	EPA-8021	**80.5**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-09
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 10:14:00 AM
CLIENT SAMPLE ID	MW-13	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.9**	06/19/2014	DLC
TFT	EPA-8021	**80.6**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-10
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 10:43:00 AM
CLIENT SAMPLE ID	MW-15	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**99.8**	06/19/2014	DLC
TFT	EPA-8021	**80.1**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-11
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 11:15:00 AM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	**820**	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
thylbenzene	EPA-8021	**3.9**	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	**3.1**	3.0	1	ug/L	06/19/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**137**	06/19/2014	DLC
TFT	EPA-8021	**110**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-12
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 11:30:00 AM
CLIENT SAMPLE ID	MW-14-R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**98.2**	06/19/2014	DLC
TFT	EPA-8021	**81.2**	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-13
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 12:03:00 PM
CLIENT SAMPLE ID	MW-16	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/20/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/20/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.9**	06/20/2014	DLC
TFT	EPA-8021	**80.8**	06/20/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-14
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 12:33:00 PM
CLIENT SAMPLE ID	MW-17	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**250**	50	1	ug/L	06/20/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/20/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**114**	06/20/2014	DLC
TFT	EPA-8021	**91.2**	06/20/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE:	6/23/2014
		ALS JOB#:	EV14060118
		ALS SAMPLE#:	EV14060118-15
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 12:34:00 PM
CLIENT SAMPLE ID	Dup-01-061714	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	**260**	50	1	ug/L	06/20/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/20/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**119**	06/20/2014	DLC
TFT	EPA-8021	**90.8**	06/20/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-16
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 2:20:00 PM
CLIENT SAMPLE ID	MW-6	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/20/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/20/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.7**	06/20/2014	DLC
TFT	EPA-8021	**81.0**	06/20/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	6/23/2014 EV14060118 EV14060118-17
CLIENT CONTACT:	Mike Arnold	DATE RECEIVED:	06/19/2014
CLIENT PROJECT:	Mt Oil Walla Walla, WA	COLLECTION DATE:	6/17/2014 2:56:00 PM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/20/2014	DLC
Benzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
thylbenzene	EPA-8021	U	1.0	1	ug/L	06/20/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/20/2014	DLC

URROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**94.8**	06/20/2014	DLC
TFT	EPA-8021	**78.0**	06/20/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: ERM West
1218 - 3rd Ave, Suite 1412
Seattle, WA 98101

CLIENT CONTACT: Mike Arnold
CLIENT PROJECT: Mt Oil Walla Walla, WA

DATE: 6/23/2014
ALS SDG#: EV14060118
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-061914W - Batch 83349 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	ug/L	06/19/2014	DLC

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

MB-061914W - Batch 83349 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Toluene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Ethylbenzene	EPA-8021	U	1.0	1	ug/L	06/19/2014	DLC
Xylenes	EPA-8021	U	3.0	1	ug/L	06/19/2014	DLC

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	ERM West 1218 - 3rd Ave, Suite 1412 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	6/23/2014 EV14060118 C601
CLIENT CONTACT:	Mike Arnold		
CLIENT PROJECT:	Mt Oil Walla Walla, WA		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 83349 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
PH-Volatile Range - BS	NWTPH-GX	96.0			06/19/2014	DLC
TPH-Volatile Range - BSD	NWTPH-GX	98.0	2		06/19/2014	DLC

ALS Test Batch ID: 83349 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
enzene - BS	EPA-8021	87.3			06/19/2014	DLC
enzene - BSD	EPA-8021	86.7	1		06/19/2014	DLC
Toluene - BS	EPA-8021	91.8			06/19/2014	DLC
oluene - BSD	EPA-8021	91.3	0		06/19/2014	DLC
thylbenzene - BS	EPA-8021	92.2			06/19/2014	DLC
Ethylbenzene - BSD	EPA-8021	91.9	0		06/19/2014	DLC
Xylenes - BS	EPA-8021	92.2			06/19/2014	DLC
ylenes - BSD	EPA-8021	91.9	0		06/19/2014	DLC

APPROVED BY

Operations Manager

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company
Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

Attachment C
Terrestrial Ecological Evaluation Form

DEPARTMENT OF ECOLOGY
State of Washington

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation. You still need to submit your evaluation as part of your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Mountain Oil, Inc.	
Facility/Site Address: 2285 East Isaacs Avenue	
Facility/Site No: 8187465	VCP Project No.: EA0275

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Mike Arnold			Title: Project Manager
Organization: ERM-West, Inc.			
Mailing address: 1218 3rd Avenue, Suite 1412			
City: Seattle		State: WA	Zip code: 98101
Phone: 425 761 2603	Fax: 425 455 3573	E-mail: mike.arnold@erm.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2**.*

☒ No or Unknown *If you answered **"NO" or "UKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- [X] Yes — *If you answered **"YES,"** then answer **Question 2** below.*
- [ ] No or Unknown — *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- [X] Yes — *If you answered **"YES,"** then answer **Question 3** below.*
- [ ] No — *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- [ ] Yes — *If you answered **"YES,"** then answer **Question 4** below.*
- [X] No — *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- [ ] Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- [ ] Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

- [ ] Area of soil contamination at the Site is not more than 350 square feet.
- [ ] Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- [ ] No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- [X] No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- [ ] No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- [ ] No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- [ ] No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*

☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use? *Check all that apply. See* WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

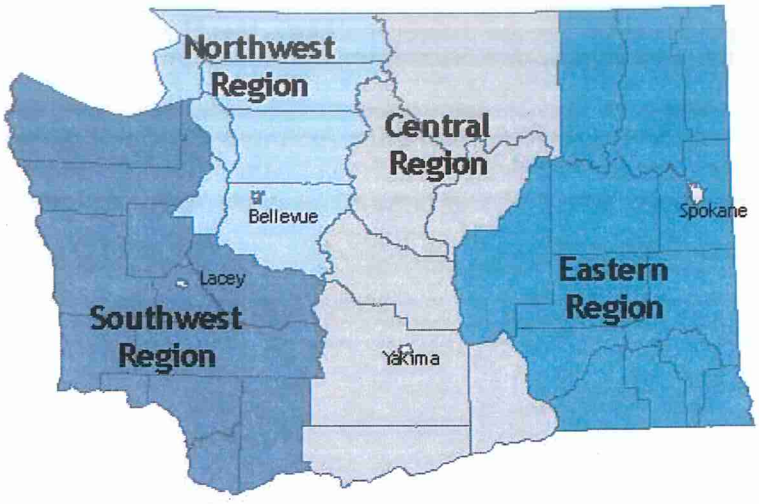
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: Sara Nied 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: Mark Dunbar 15 W. Yakima Ave., Suite 200 Yakima, WA 98902
Southwest Region: Attn: Scott Rose P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: Patti Carter N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

ERM has over 100 offices across the following countries worldwide

Australia
Argentina
Belgium
Brazil
China
France
Germany
Hong Kong
Hungary
India
Indonesia
Ireland
Italy
Japan
Korea
Malaysia
Mexico
Netherlands
Peru
Poland
Portugal
Puerto Rico
Singapore
Spain
Sri Lanka
Sweden
Taiwan
Thailand
UK
USA
Venezuela
Vietnam

ERM®