



July 24, 2014

Mr. Alex Fischer
West Environmental Supervisor
Colorado Oil & Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado

**RE: Groundwater Monitoring Well Installation and
2nd Quarter 2014 Groundwater Monitoring Report
Peakview Operating Company, LLC
Voloshin-Morton 1(-8)
Craig, Colorado**

Dear Mr. Fischer:

LT Environmental, Inc. (LTE) has been requested to submit this report on behalf of Peakview Operating Company, LLC (Peakview) detailing the installation of groundwater monitoring wells and quarterly groundwater monitoring activities at the Voloshin-Morton 1(-8) well pad (Site).

GROUNDWATER MONITORING WELL INSTALLATION

On May 6, 2014, LTE advanced four soil borings at the Site using a track-mounted, hollow stem drill rig owned and operated by GDI of Colorado Springs, Colorado. Soil borings were advanced to a depth of approximately 10 feet below the ground surface and converted into 2-inch polyvinyl chloride groundwater monitoring wells (PMW01, PMW09, PMW13, and PMW18). The monitoring wells were installed near previous wells that were removed or destroyed during excavation activities. Groundwater monitoring well PMW01 was installed due to the well casing of the previous well (MW01) filling up with silt. Groundwater monitoring well MW08 was not reinstalled due to the likelihood of it being destroyed again by onsite traffic. A Site Map illustrating all well locations is provided as Figure 2.

The soil borings were logged and inspected by a LTE geologist. The soil from each boring was characterized by visually inspecting soil samples. Monitoring wells were completed with flush mounts to protect them from being damaged by traffic or agricultural activities. Drill logs detailing the subsurface soil conditions and groundwater monitoring well construction information are included as an attachment.

QUARTERLY GROUNDWATER MONITORING ACTIVITIES

Depth to Groundwater Measurements

Depth to groundwater was measured in monitoring wells PMW01, MW02 through MW05, PMW09, MW16, MW17, PMW18, MW19 and MW20 on June 16, 2014. The recorded



groundwater levels were used to calculate potentiometric surfaces and purge volumes. The depths to static groundwater level ranged from 2.20 feet below top of casing (BTOC) in PMW18 to 4.55 feet BTOC in PMW13 (Table 1).

Calculating the difference in the top of casing and depth to groundwater, LTE determined the groundwater elevation in each monitoring well and generated a Groundwater Elevation Map (Figure 2). Based on the second quarter 2014 Groundwater Elevation Map, groundwater flow was generally to the north, toward the Yampa River. The newly installed wells (PMW01, PMW09, PMW13, and PMW18) will be surveyed and included on next the quarter's groundwater elevation data.

Groundwater Sampling Procedures

Each monitoring well was purged of a minimum of three well casing volumes or until dry prior to collection of groundwater samples. Groundwater samples were collected from each monitoring well utilizing disposable 1.6-inch diameter polyethylene bailers. Groundwater samples were collected in laboratory-prepared sample bottles, placed on ice, and delivered under chain-of-custody protocol to ESC Lab Sciences of Mt. Juliet, Tennessee (ESC) for laboratory analysis of constituents identified in COGCC Table 910-1.

Groundwater Analytical Results

During the June 2014 groundwater monitoring event 12 groundwater samples were collected and submitted to ESC for constituents identified in COGCC Table 910-1. Benzene was detected above the COGCC allowable concentration of 5 micrograms per liter ($\mu\text{g/L}$) in wells PMW01 at 5.2 $\mu\text{g/L}$ and PMW18 at 10 $\mu\text{g/L}$. All other analytes were either below the laboratory detection limits or were within COGCC standards. Groundwater analytical results for the June 2014 monitoring event are depicted on Figure 3. Table 2 summarizes historical analytical data for all sampling events. The laboratory analytical reports are included as an attachment.

Peakview and LTE understand that after four consecutive quarters of groundwater compliance with COGCC Table 910-1 allowable concentrations have been observed, the remediation number associated with the Site shall be closed. The next quarterly monitoring event is scheduled for September, 2014.



Should you have any questions regarding this report, please contact LTE at (970) 285-9985.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'Chris McKisson'.

Chris McKisson
Project Environmental Scientist

A handwritten signature in blue ink, appearing to read 'Rob Fishburn'.

Rob Fishburn, P.G.
Western Slope Office Manager/
Senior Hydrogeologist

Attachments:

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Map

Figure 3 – Groundwater Analytical Data

Table 1 – Groundwater Field Parameters

Table 2 – Groundwater Analytical Results

Drill Logs

Laboratory Analytical Reports

FIGURES

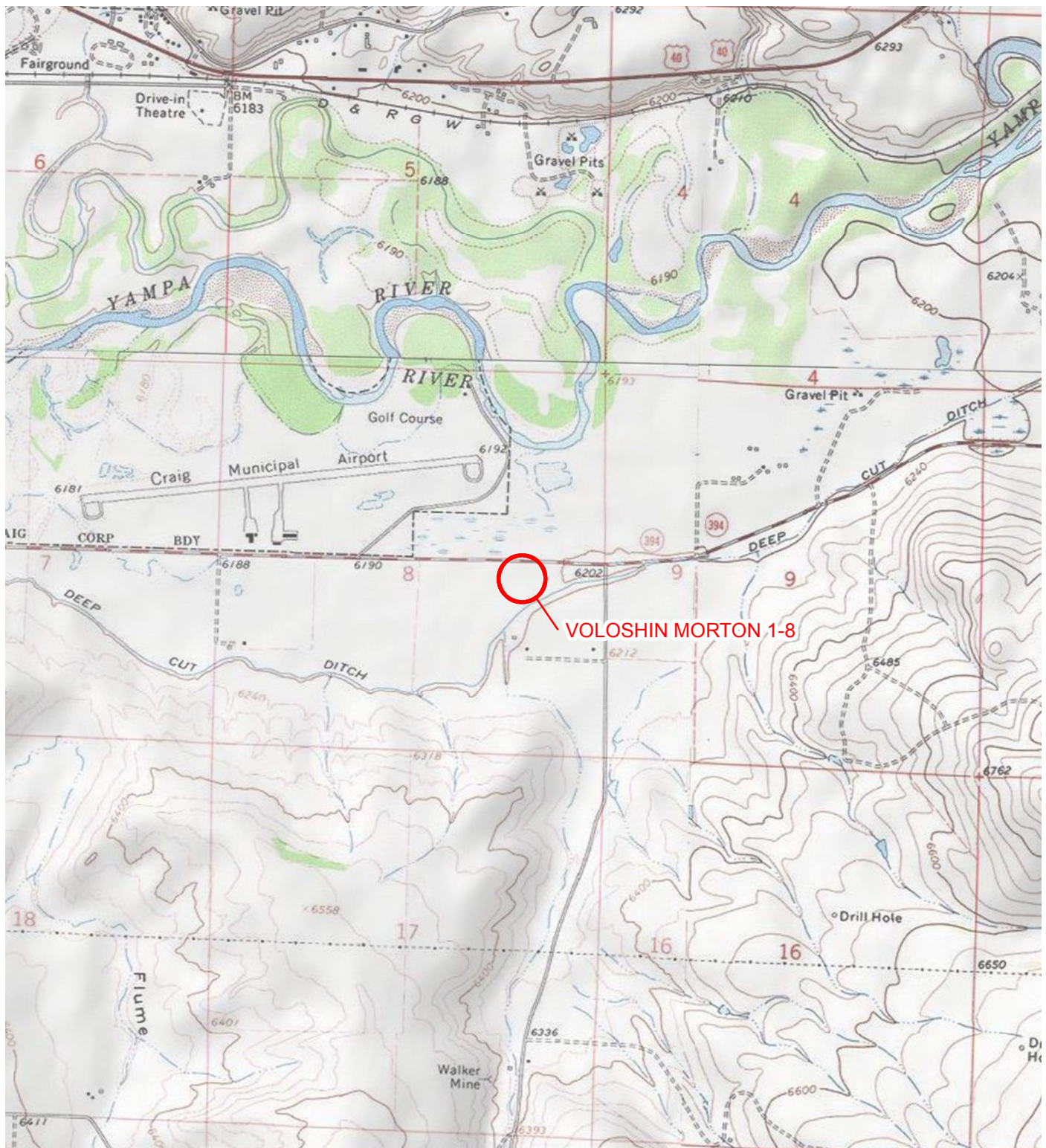


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

○ SITE LOCATION

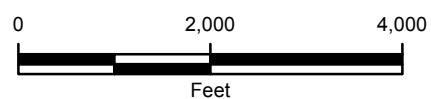


FIGURE 1
SITE LOCATION MAP
VOLOSHIN MORTON 1-8
MOFFAT COUNTY, COLORADO





PEAKVIEW OPERATING COMPANY





IMAGE COURTESY OF ESRI

LEGEND

-  SOIL BORING/MONITORING WELL
-  REMOVED/DESTROYED MONITORING WELL
-  ESTIMATED GROUNDWATER FLOW DIRECTION
-  RELATIVE GROUNDWATER ELEVATION CONTOUR
CONTOUR INTERVAL = 0.50 FEET
GRADIENT = 0.025 FEET/FOOT
NM: NOT MEASURED

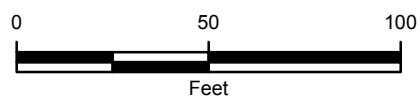
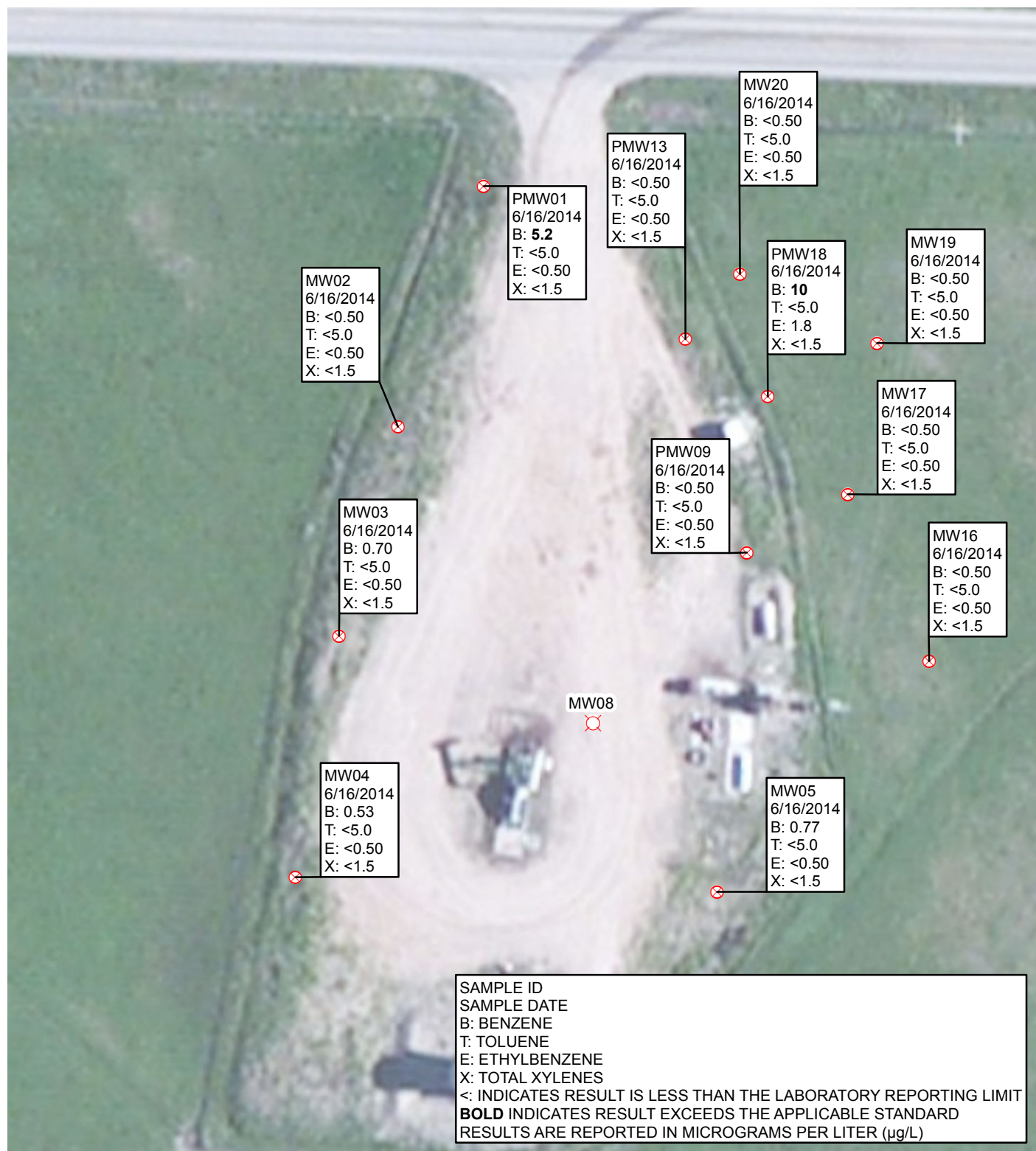


FIGURE 2
RELATIVE GROUNDWATER ELEVATION MAP
 JUNE 16, 2014
 VOLOSHIN MORTON 1-8
 MOFFAT COUNTY, COLORADO
PEAKVIEW OPERATING COMPANY





TABLES

TABLE 1
VOLOSHIN MORTON 1-8
GROUNWATER FIELD PARAMETERS
PEAKVIEW OPERATING COMPANY, LLC

Sample ID	Date	TD ft btoc	DTW ft btoc	DTP ft btoc	Temperature °C	Conductivity μS/cm	TDS g/L	pH
MW01	5/24/2013*	4.56	2.35	NM	NM	NM	NM	NM
	9/17/2013	5.32	1.73	NA	18.1	1,115	0.832	7.15
PMW01	6/16/2014	10.07	3.07	NA	9.64	1,303	1.196	7.12
MW02	5/24/2013	9.63	4.76	NA	10.89	1,544	1.350	8.05
	6/11/2013	9.21	3.43	NA	9.57	1,274	1.176	7.75
	9/17/2013	9.20	4.48	NA	14.4	1,194	0.975	7.47
	3/12/2014	9.55	3.73	NA	5.62	937	0.911	7.97
	6/16/2014	9.55	3.70	NA	11.47	1,780	1.56	7.62
MW03	5/24/2013	9.75	5.02	NA	11.00	627	0.533	7.50
	9/17/2013	9.75	5.29	NA	17.9	717	0.539	7.25
	6/16/2014	9.72	4.55	NA	11.70	662	0.572	7.57
MW04	5/24/2013	9.74	5.42	NA	9.92	1,758	1.592	7.42
	9/17/2013	9.74	5.31	NA	17.2	1,278	0.981	8.26
	6/16/2014	9.75	4.50	NA	10.24	895	0.809	8.23
MW05	5/24/2013	9.50	3.90	NA	10.72	1,379	1.229	7.93
	9/17/2013	9.55	3.95	NA	17.0	1,660	NM	7.17
	6/16/2014	9.55	3.50	NA	11.50	1,293	1.096	7.66
MW08	5/24/2013	9.66	4.32	NA	NM	NM	NM	NM
	9/17/2013	9.66	6.40	NA	18.0	1,114	0.832	7.96
MW09	5/24/2013	7.61	4.30	NA	NM	NM	NM	NM
PMW09	6/16/2014	10.05	3.73	NA	8.53	1,418	1.344	7.84
MW13	5/24/2013	9.75	4.66	NA	12.67	1,649	1.384	7.89
	6/11/2013	9.74	4.43	NA	10.43	1,568	1.409	7.66
	9/17/2013	9.75	5.44	NA	16.7	1,605	1.235	7.34
PMW13	6/16/2014	10.11	4.55	NA	9.93	2,421	2.231	7.53
MW16	5/24/2013	9.43	4.06	NA	12.30	3,371	2.868	8.92
	6/11/2013	9.43	2.14	NA	10.38	3,884	3.489	8.85
	9/17/2013	9.44	4.20	NA	13.8	4,416	3.646	8.22
	6/16/2014	9.43	3.04	NA	9.22	4,872	4.534	8.42



TABLE 1
VOLOSHIN MORTON 1-8
GROUNWATER FIELD PARAMETERS
PEAKVIEW OPERATING COMPANY, LLC

Sample ID	Date	TD ft btoc	DTW ft btoc	DTP ft btoc	Temperature °C	Conductivity µS/cm	TDS g/L	pH
MW17	5/24/2013	9.39	3.91	NA	10.49	1,711	1.538	7.90
	6/11/2013	9.06	2.61	NA	10.60	4,014	3.591	6.71
	9/17/2013	9.14	3.80	NA	13.6	1,371	1.137	7.66
	6/16/2014	9.15	2.41	NA	11.09	1,365	1.216	7.64
MW18	5/24/2013	9.38	3.93	3.57	10.92	1,652	1.445	8.06
	6/11/2013	9.14	2.50	2.44	10.09	4,041	3.670	6.78
	9/17/2013	9.21	3.88	3.76	NM	NM	NM	NM
PMW18	6/16/2014	9.90	2.20	NA	9.77	1,967	1.806	7.75
MW19	5/24/2013	9.70	3.82	NA	10.35	1,507	1.355	7.72
	6/11/2013	9.46	2.19	NA	10.15	1,210	1.093	7.68
	9/17/2013	9.46	3.60	NA	13.3	1,108	0.929	7.53
	3/12/2014	9.45	2.90	NA	3.77	750	0.820	7.29
	6/16/2014	9.45	2.60	NA	10.30	1,022	0.924	7.51
MW20	5/24/2013	9.20	3.78	NA	9.56	1,161	1.066	7.94
	6/11/2013	9.20	1.70	NA	9.47	1,449	1.338	8.42
	9/17/2013	9.20	3.44	NA	13.0	1,139	0.955	8.09
	3/12/2014	9.21	2.78	NA	4.46	1,331	1.423	8.23
	6/16/2014	9.20	2.52	NA	10.20	1,105	0.984	8.20

Notes:

< - less than the stated reporting limit

BOLD - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

g/L - grams per liter

µS/cm - microsiemens per centimeter

NA - not applicable

SU - standard unit

ft - feet

btoc - below top of casing

NM - not measured

TD - total depth

DTW - depth to water

DTP - depth to product (estimated based on visual observation)

* - well casing filled with silt after installation




TABLE 2
VOLOSHIN MORTON 1-8
GROUNDWATER ANALYTICAL RESULTS
PEAKVIEW OPERATING COMPANY, LLC

Sample ID	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Chloride µg/L	Sulfate µg/L	TDS µg/L
MW01	9/17/2013	<0.50	<5.0	<0.50	<1.5	68,000	43,000	740,000
PMW01	6/16/2014	5.2	<5.0	<0.50	<1.5	140,000	43,000	1,000,000
MW02	5/24/2013	460	<5.0	<0.50	2.7	NA	NA	NA
	6/11/2013	160	<25	<2.5	12	NA	NA	NA
	9/17/2013	7.4	<5.0	<0.50	<1.5	46,000	320,000	1,000,000
	3/12/2014	<1.0	<5.0	<1.0	<3.0	NA	NA	NA
	6/16/2014	<0.50	<5.0	<0.50	<1.5	70,000	820,000	1,900,000
MW03	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	22,000	35,000	570,000
	6/16/2014	0.70	<5.0	<0.50	<1.5	22,000	38,000	540,000
MW04	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	21,000	66,000	1,300,000
	6/16/2014	0.53	<5.0	<0.50	<1.5	20,000	52,000	1,000,000
MW05	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	9,500	190,000	890,000
	6/16/2014	0.77	<5.0	<0.50	<1.5	7,300	140,000	1,100,000
MW08	5/24/2013	<0.50	<5.0	1.1	4.1	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
MW09	5/24/2013	2,200	310	390	540	NA	NA	NA
PMW09	6/16/2014	<0.50	<5.0	<0.50	<1.5	71,000	680,000	1,500,000
MW13	5/24/2013	8.9	<5.0	<0.50	1.8	NA	NA	NA
	6/11/2013	31	<5.0	<0.50	1.6	NA	NA	NA
	9/17/2013	7.1	<5.0	<0.50	<1.5	100,000	150,000	1,200,000
PMW13	6/16/2014	<0.50	<5.0	<0.50	<1.5	130,000	1,200,000	2,300,000
MW16	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	6/11/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	76,000	990,000	3,400,000
	6/16/2014	<0.50	<5.0	<0.50	<1.5	140,000	1,600,000	4,600,000
MW17	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	6/11/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	43,000	310,000	1,200,000
	6/16/2014	<0.50	<5.0	<0.50	<1.5	44,000	330,000	1,200,000



TABLE 2
VOLOSHIN MORTON 1-8
GROUNDWATER ANALYTICAL RESULTS
PEAKVIEW OPERATING COMPANY, LLC

Sample ID	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Chloride µg/L	Sulfate µg/L	TDS µg/L
MW18	5/24/2013	5,700	5,800	470	2,400	82,000	360,000	1,400,000
	6/11/2013	4,700	5,200	490	2,500	NA	NA	NA
PMW18	6/16/2014	10	<5.0	1.8	<1.5	53,000	1,000,000	1,800,000
MW19	5/24/2013	0.72	<5.0	<0.50	<1.5	NA	NA	NA
	6/11/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	26,000	320,000	1,000,000
	3/12/2014	<1.0	<5.0	<1.0	<3.0	NA	NA	NA
	6/16/2014	<0.50	<5.0	<0.50	<1.5	23,000	260,000	880,000
MW20	5/24/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	6/11/2013	<0.50	<5.0	<0.50	<1.5	NA	NA	NA
	9/17/2013	<0.50	<5.0	<0.50	<1.5	26,000	220,000	860,000
	3/12/2014	<1.0	<5.0	<1.0	<3.0	NA	NA	NA
	6/16/2014	<0.50	<5.0	<0.50	<1.5	38,000	280,000	970,000
COGCC CONCENTRATION LEVELS		5	560	700	1,400	<1.25 x background	<1.25 x background	<1.25 x background

Notes:

< - less than the stated reporting limit

BOLD - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

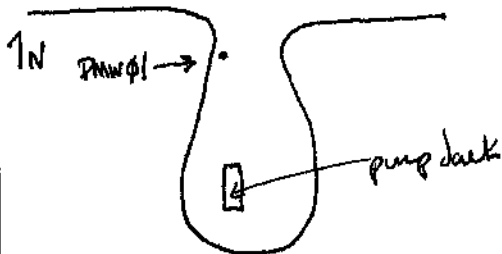
µg/L - micrograms per liter

NA - not analyzed

SU - standard unit



DRILL LOGS

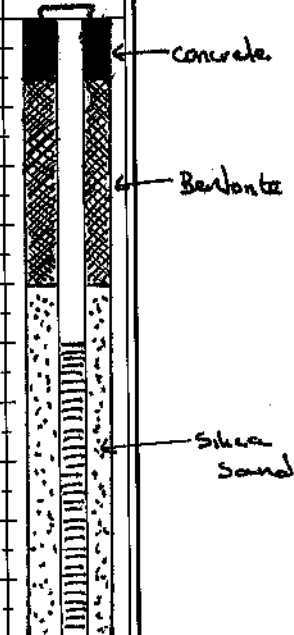


Compliance • Engineering • Remediation
 LT Environmental, Inc.
 820 Megan Ave Unit B
 Rifle, Colorado 81650

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: PMW-01		Project: Voloshin Morton 1-8	
Date: 5/14/14		Project Number: 04781300	
Logged By: Dustin Held		Drilled By: GDI	
Drilling Method: Hollow Stem Auger		Sampling Method: None	
Gravel Pack: Silica Sand		Seal: Bentonite chips	
Casing Type: PVC		Grout: Solunete	
Screen Type: PVC		Diameter: 2"	Length: 5'
Slot: 0.010		Hole Diameter: 8"	Depth to Liquid: NA
Diameter: 2"		Length: 5'	Depth to Water: 4.71'
Total Depth: 10'			

Penetration Resistance	Moisture Content	PID (ppm)	Time	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
				0				
				1		GL	0-3' brown, gravels interbedded w/ sands & clays, light moisture, no staining, no odor	
				2				
				3				
				4				
				5		SL	3-10' brown, 55% clay, 20% sands, 25% silt, no odor, no staining, hydrated	
				6				
				7				
				8				
				9				
				10				
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				
				23				
				24				
				25				



TD=10' bgs

1N

Pump
Suck

PMW-09



Compliance « Engineering « Remediation
LT Environmental, Inc.
820 Megan Ave Unit B
Rifle, Colorado 81650

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	PMW-09	Project:	Voloshin Morton 1-8
Date:	5/2/14	Project Number:	0478300
Logged By:	Dustin Held	Drilled By:	GDI
Elevation:		Drilling Method:	Hollow Stem Auger
Gravel Pack:	Silica Sand	Seal:	Bentonite Chps
Casing Type:	PVC	Hole Diameter:	8"
Screen Type:	PVC	Depth to Liquid:	NA
	Slot: 0.010	Depth to Water:	7.82'
		Total Depth:	10'

Penetration Resistance	Moisture Content	PID (ppm)	Time	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
				0				
				1				
				2				
				3		SC		
				4			0-10' brown, silt matenal, gravel, sands and clays, no odor, no shavng.	
				5			clay 55% sand 35% silt 10%	
				6				
				7				
				8		SC		
				9				
				10			TD = 10' bgs	
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				
				23				
				24				
				25				

Concrete

Bentonite

Silica Sand

1N

PMW-13

pump jack



Compliance « Engineering » Remediation
 LT Environmental, Inc.
 820 Megan Ave Unit B
 Rifle, Colorado 81650

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	PMW-13	Project:	Voloshin Morton 1-8
Date:	5/12/14	Project Number:	04181300
Logged By:	Dustin Held	Drilled By:	GDI

Elevation:	Detector	NA	Drilling Method:	Hollow Stem Auger	Sampling Method:	None
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Gravel Pack:	Silica Sand	Seal:	Bentonite Chips	Grout:	Saturated
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Casing Type:	PVC	Diameter:	2"	Length:	5'	Hole Diameter:	8"	Depth to Liquid:	NA
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Screen Type:	PVC	Slot:	0.010	Diameter:	2"	Length:	5'	Total Depth:	10'	Depth to Water:	6.116'
--------------	-----	-------	-------	-----------	----	---------	----	--------------	-----	-----------------	--------

Penetration Resistance	Moisture Content	PID (ppm)	Time	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
				0				
				1		SC	0-4' - brown, fill material, gravels 50% clay, sands 30%, 30% silts, hydrated, no staining, no odor.	
				2				
				3				
				4				
				5		SC	4-10' bgs brown, 45% clay, 30% sand, 25% silt, no odor, no staining, hydrated	
				6				
				7				
				8				
				9				
				10				
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				
				23				
				24				
				25				

Concrete

Bentonite

Silica Sand

TD = 10' bgs

1N

← PMW-18

← pump
hole

Compliance « Engineering « Remediation
LT Environmental, Inc.
820 Megan Ave Unit B
Rifle, Colorado 81650

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: PMW-18		Project: Voloshin Morton 1-8	
Date: 5/12/14		Project Number: 04781300	
Logged By: Dustin Held		Drilled By: GDI	
Elevation:		Drilling Method: Hollow Stem Auger	
Detector: NA		Sampling Method: None	
Gravel Pack: Silica Sand		Seal: Bentonite chips	
Casing Type: PVC		Grout: Sakrete	
Screen Type: PVC		Diameter: 2" Length: 5'	
Slot: 0.010		Hole Diameter: 8" Depth to Liquid: NA	
		Total Depth: 10' Depth to Water: 4.11	

Penetration Resistance	Moisture Content	PTD (ppm)	Time	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
				0				
				1				
				2				
				3		SC	0-10' brown, fill material, 45% clay, 30% sand, 25% silt, no staining, no odor	
				4				
				5				
				6				
				7				
				8		SC		
				9				
				10				
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				
				23				
				24				
				25				

TD = 10' bgs

Concrete

Bentonite

Silica Sand

LABORATORY ANALYTICAL REPORTS





12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

Report Summary

Wednesday June 25, 2014

Report Number: L705296


Samples Received: 06/18/14

Client Project: 047813001

Description: Voloshin Morton 1(-8)

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jared Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : PMW01
Collected By : Steve Sivigliano
Collection Date : 06/16/14 14:45

ESC Sample # : L705296-01

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	140000	5000	ug/l	9056	06/24/14	5
Sulfate	43000	25000	ug/l	9056	06/24/14	5
Dissolved Solids	1000000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	5.2	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.0		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW02
Collected By : Steve Sivigliano
Collection Date : 06/16/14 14:50

ESC Sample # : L705296-02

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	70000	10000	ug/l	9056	06/24/14	10
Sulfate	820000	50000	ug/l	9056	06/24/14	10
Dissolved Solids	1900000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/25/14	1
Toluene	BDL	5.0	ug/l	8021B	06/25/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/25/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/25/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	06/25/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW03
Collected By : Steve Sivigliano
Collection Date : 06/16/14 14:55

ESC Sample # : L705296-03

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	22000	1000	ug/l	9056	06/24/14	1
Sulfate	38000	5000	ug/l	9056	06/24/14	1
Dissolved Solids	540000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	0.70	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.7		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW04
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:00

ESC Sample # : L705296-04

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	20000	1000	ug/l	9056	06/24/14	1
Sulfate	52000	5000	ug/l	9056	06/24/14	1
Dissolved Solids	1000000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	0.53	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.8		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW05
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:05

ESC Sample # : L705296-05

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	7300	5000	ug/l	9056	06/25/14	5
Sulfate	140000	25000	ug/l	9056	06/25/14	5
Dissolved Solids	1100000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	0.77	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.0		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : PMW09
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:10

ESC Sample # : L705296-06

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	71000	10000	ug/l	9056	06/25/14	10
Sulfate	680000	50000	ug/l	9056	06/25/14	10
Dissolved Solids	1500000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.2		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : PMW13
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:15

ESC Sample # : L705296-07

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	130000	20000	ug/l	9056	06/25/14	20
Sulfate	1200000	100000	ug/l	9056	06/25/14	20
Dissolved Solids	2300000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.2		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW16
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:20

ESC Sample # : L705296-08

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	140000	50000	ug/l	9056	06/25/14	50
Sulfate	1600000	250000	ug/l	9056	06/25/14	50
Dissolved Solids	4600000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.7		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW17
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:25

ESC Sample # : L705296-09

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	44000	10000	ug/l	9056	06/25/14	10
Sulfate	330000	50000	ug/l	9056	06/25/14	10
Dissolved Solids	1200000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	97.0		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : PMW18
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:30

ESC Sample # : L705296-10

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	53000	20000	ug/l	9056	06/25/14	20
Sulfate	1000000	100000	ug/l	9056	06/25/14	20
Dissolved Solids	1800000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	10.	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	1.8	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.9		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW19
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:35

ESC Sample # : L705296-11

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	23000	10000	ug/l	9056	06/25/14	10
Sulfate	260000	50000	ug/l	9056	06/25/14	10
Dissolved Solids	880000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/21/14	1
Toluene	BDL	5.0	ug/l	8021B	06/21/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/21/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/21/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.0		% Rec.	8021B	06/21/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Rob Fishburn
LT Environmental- Rifle, CO
820 Megan Ave, Unit B
Rifle, CO 81650

June 25, 2014

Date Received : June 18, 2014
Description : Voloshin Morton 1(-8)
Sample ID : MW20
Collected By : Steve Sivigliano
Collection Date : 06/16/14 15:40

ESC Sample # : L705296-12

Site ID :

Project # : 047813001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	38000	10000	ug/l	9056	06/25/14	10
Sulfate	280000	50000	ug/l	9056	06/25/14	10
Dissolved Solids	970000	10000	ug/l	2540 C-201	06/20/14	1
Benzene	BDL	0.50	ug/l	8021B	06/22/14	1
Toluene	BDL	5.0	ug/l	8021B	06/22/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	06/22/14	1
Total Xylene	BDL	1.5	ug/l	8021B	06/22/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.3		% Rec.	8021B	06/22/14	1

BDL - Below Detection Limit

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Summary of Remarks For Samples Printed
06/25/14 at 12:58:46

TSR Signing Reports: 358
R5 - Desired TAT

Sample: L705296-01 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-02 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-03 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-04 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-05 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-06 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-07 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-08 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-09 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-10 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-11 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58
Sample: L705296-12 Account: LTENVRCO Received: 06/18/14 09:00 Due Date: 06/25/14 00:00 RPT Date: 06/25/14 12:58



YOUR LAB OF CHOICE

LT Environmental- Rifle, CO
Rob Fishburn
820 Megan Ave, Unit B

Rifle, CO 81650

Quality Assurance Report
Level II

L705296

12065 Lebanon Rd.
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Est. 1970

June 25, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Dissolved Solids	< 10	mg/l			WG727201	06/20/14 13:18
Dissolved Solids	< 10	mg/l			WG727199	06/20/14 14:41
Benzene	< .0005	mg/l			WG727340	06/21/14 17:45
Ethylbenzene	< .0005	mg/l			WG727340	06/21/14 17:45
Toluene	< .005	mg/l			WG727340	06/21/14 17:45
Total Xylene	< .0015	mg/l			WG727340	06/21/14 17:45
a,a,a-Trifluorotoluene(PID)		% Rec.	98.60	55-122	WG727340	06/21/14 17:45
Chloride	< 1	mg/l			WG728197	06/24/14 21:53
Sulfate	< 5	mg/l			WG728197	06/24/14 21:53
Benzene	< .0005	mg/l			WG728243	06/25/14 02:24
Ethylbenzene	< .0005	mg/l			WG728243	06/25/14 02:24
Toluene	< .005	mg/l			WG728243	06/25/14 02:24
Total Xylene	< .0015	mg/l			WG728243	06/25/14 02:24
a,a,a-Trifluorotoluene(PID)		% Rec.	105.0	55-122	WG728243	06/25/14 02:24

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Dissolved Solids	mg/l	57.0	56.0	1.77	5	L705037-01	WG727201
Dissolved Solids	mg/l	334.	333.	0.300	5	L705023-01	WG727199
Chloride	mg/l	20.0	20.5	3.00	20	L705296-04	WG728197
Sulfate	mg/l	52.0	52.2	0.0	20	L705296-04	WG728197
Chloride	mg/l	180.	175.	0.0	20	L705370-02	WG728197

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Dissolved Solids	mg/l	8800	8760	99.5	85-115	WG727201
Dissolved Solids	mg/l	8800	8720	99.1	85-115	WG727199
Benzene	mg/l	.05	0.0508	102.	70-130	WG727340
Ethylbenzene	mg/l	.05	0.0517	103.	70-130	WG727340
Toluene	mg/l	.05	0.0505	101.	70-130	WG727340
Total Xylene	mg/l	.15	0.153	102.	70-130	WG727340
a,a,a-Trifluorotoluene(PID)				102.0	55-122	WG727340
Chloride	mg/l	40	40.1	100.	90-110	WG728197
Sulfate	mg/l	40	40.2	100.	90-110	WG728197
Benzene	mg/l	.05	0.0447	89.5	70-130	WG728243
Ethylbenzene	mg/l	.05	0.0444	88.9	70-130	WG728243
Toluene	mg/l	.05	0.0442	88.3	70-130	WG728243

* Performance of this Analyte is outside of established criteria.

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YOUR LAB OF CHOICE

LT Environmental- Rifle, CO
Rob Fishburn
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Quality Assurance Report
Level II

L705296

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 25, 2014

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Total Xylene	mg/l	.15	0.136	90.8	70-130	WG728243
a,a,a-Trifluorotoluene(PID)				105.0	55-122	WG728243

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Dissolved Solids	mg/l	8740	8760	99.0	85-115	0.229	5	WG727201
Dissolved Solids	mg/l	8610	8720	98.0	85-115	1.27	5	WG727199
Benzene	mg/l	0.0530	0.0508	106.	70-130	4.15	20	WG727340
Ethylbenzene	mg/l	0.0544	0.0517	109.	70-130	5.02	20	WG727340
Toluene	mg/l	0.0529	0.0505	106.	70-130	4.71	20	WG727340
Total Xylene	mg/l	0.161	0.153	107.	70-130	5.25	20	WG727340
a,a,a-Trifluorotoluene(PID)				102.0	55-122			WG727340
Chloride	mg/l	40.2	40.1	100.	90-110	0.0	20	WG728197
Sulfate	mg/l	40.3	40.2	101.	90-110	0.0	20	WG728197
Benzene	mg/l	0.0445	0.0447	89.0	70-130	0.520	20	WG728243
Ethylbenzene	mg/l	0.0438	0.0444	88.0	70-130	1.33	20	WG728243
Toluene	mg/l	0.0436	0.0442	87.0	70-130	1.29	20	WG728243
Total Xylene	mg/l	0.134	0.136	90.0	70-130	1.34	20	WG728243
a,a,a-Trifluorotoluene(PID)				105.0	55-122			WG728243

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0512	0.00523	.05	92.0	57.2-131	L705296-01	WG727340
Ethylbenzene	mg/l	0.0489	0.000295	.05	97.0	67.5-135	L705296-01	WG727340
Toluene	mg/l	0.0475	0.000289	.05	94.0	63.7-134	L705296-01	WG727340
Total Xylene	mg/l	0.144	0.000430	.15	96.0	65.9-138	L705296-01	WG727340
a,a,a-Trifluorotoluene(PID)					102.0	55-122		WG727340
Chloride	mg/l	513.	43.9	5	94.0	80-120	L705296-09	WG728197
Sulfate	mg/l	783.	329.	5	91.0	80-120	L705296-09	WG728197
Benzene	mg/l	0.0492	0.00121	.05	96.0	57.2-131	L706094-02	WG728243
Ethylbenzene	mg/l	0.0487	0.000647	.05	96.0	67.5-135	L706094-02	WG728243
Toluene	mg/l	0.0480	0.000251	.05	96.0	63.7-134	L706094-02	WG728243
Total Xylene	mg/l	0.151	0.00435	.15	98.0	65.9-138	L706094-02	WG728243
a,a,a-Trifluorotoluene(PID)					104.0	55-122		WG728243

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0581	0.0512	106.	57.2-131	12.7	20	L705296-01	WG727340
Ethylbenzene	mg/l	0.0549	0.0489	109.	67.5-135	11.5	20	L705296-01	WG727340
Toluene	mg/l	0.0534	0.0475	106.	63.7-134	11.7	20	L705296-01	WG727340
Total Xylene	mg/l	0.161	0.144	107.	65.9-138	11.6	20	L705296-01	WG727340
a,a,a-Trifluorotoluene(PID)				102.0	55-122				WG727340

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chloride	mg/l	534.	513.	979.*	80-120	4.00	20	L705296-09	WG728197
Sulfate	mg/l	802.	783.	946.*	80-120	2.00	20	L705296-09	WG728197
Benzene	mg/l	0.0481	0.0492	93.8	57.2-131	2.29	20	L706094-02	WG728243
Ethylbenzene	mg/l	0.0472	0.0487	93.1	67.5-135	3.15	20	L706094-02	WG728243
Toluene	mg/l	0.0465	0.0480	92.5	63.7-134	3.15	20	L706094-02	WG728243
Total Xylene	mg/l	0.147	0.151	95.2	65.9-138	2.92	20	L706094-02	WG728243
a,a,a-Trifluorotoluene(PID)				104.0	55-122				WG728243

Batch number /Run number / Sample number cross reference

WG727201: R2945307: L705296-07 08 09 10 11 12
WG727199: R2945399: L705296-01 02 03 04 05 06
WG727340: R2946806: L705296-01 03 04 05 06 07 08 09 10 11 12
WG728197: R2948448: L705296-01 02 03 04 05 06 07 08 09 10 11 12
WG728243: R2948809: L705296-02

* * Calculations are performed prior to rounding of reported values.
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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.