



AJM Incorporated

Full Service Environmental Company

Water Resource Evaluation & Cleanup

Environmental Site Assessments

Fuel System Design and Compliance

Phone/FAX 406 522-0699 Cell 406 600-2045

1805 Kenyon Dr., Bozeman, MT 59715

dennis@ajm-inc.net

www.environmentalconsultantmontana.com

March 14, 2016

The Alsaker Corporation

Damon Borden

PO Box 14646

Spokane, WA 99214

Attn: Dan Alsaker

Subject: Ground Water Sampling Work Plan for the Petroleum Release at
Broadway Flying J, 6505 Jackrabbit Lane Belgrade, MT;
Facility ID #16-05753; DEQ Release #294, Work Plan # 10219

Dear Mr. Borden;

As per a Department of Environmental Quality (DEQ) correspondence dated March 7, 2016, AJM Environmental has prepared this brief work plan and budget to conduct one ground water sampling at the Broadway Flying J facility in Belgrade.

The scope of the proposed work is to sample ground water from RW-1 and RW-2 for the analysis of Extractable Petroleum Hydrocarbons (EPH) and Volatile Petroleum Hydrocarbons (VPH). [If wells RW-1 and RW-2 are dry (no water present) AJM will conduct sampling in MW-4 and BMW-3]. If no sheen or strong hydrocarbon odors are present and the ground is less than 50 feet, parameters of DO, ORP, pH, SC, and temperature will be collected. Sampling will be conducted using disposable bailers. Approximately 10 gallons of groundwater will be purged from each well or when one of the above parameters stabilizes. All water sampling will be conducted in accordance with the AJM Environmental Quality Assurance Project Plan (QAPjP) on file with the DEQ. At the conclusion of the sampling event, a groundwater monitoring report will be submitted to the client and DEQ for their review.

Due to significant truck traffic over the monitoring wells, at least three (3) well boxes have been damaged including MW-1, RW-1 or MW-4 & RW-2. A temporary fix was used for these exposed well boxes by placing gravel within the boxes so that the well casing would not be damaged by truck traffic and the well boxes would not become a trip hazard. The gravel/dirt will need to be cleaned out of boxes prior to sample collection.

AJM will determine if the well boxes can be temporally fixed or if replacement will be necessary. If replacement is necessary, significant amounts of concrete will need to be cut, removed and replaced along with well box replacement. The cost to fix the well boxes may not be appropriate if the samples collected come back clean and the DEQ determines that no further work or sampling will be needed and site closure is recommended.

A unit cost work sheet has been completed for this scope of work and is included. Work at this site can begin upon written approval by the DEQ and the Petroleum Release Section. Please do not hesitate to call if there are any questions or if we can provide any additional information.

Sincerely,
AJM Inc


by Dennis Franks, President

cc & ecc: Donnie McCurry, DEQ, PO Box 200901 Helena, MT 59620-0901
ecc JoAnn Adydan, PRS, PO Box 200902, Helena, MT 59620-0902ecc

Attachments: Site Figure
Unit cost work sheet

LEGEND

- BMW-4 - MONITOR WELLS INSTALLED DURING PREVIOUS INVESTIGATION
- RW-1 - RECOVERY WELLS INSTALLED DURING PREVIOUS INVESTIGATION
- MW-1 - MONITOR WELLS INSTALLED BY RAM ENVIRONMENTAL
- (+482.90) - TOP OF CASING ELEVATION
- 4425 - GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR LINES
- 7/08 - HYDRAULIC GRADIENT: 0.0176
- 8/09 - FLOW DIRECTION: N25E

STATIC WATER ELEVATIONS

MW-1	4421	4416.21
MW-2	4422.53	4418.34
MW-4	4420.89	4416.12
MW-5	4417.53	4412.74
MW-6	4417.34	4412.30
BMW-3	4418.89	4413.97

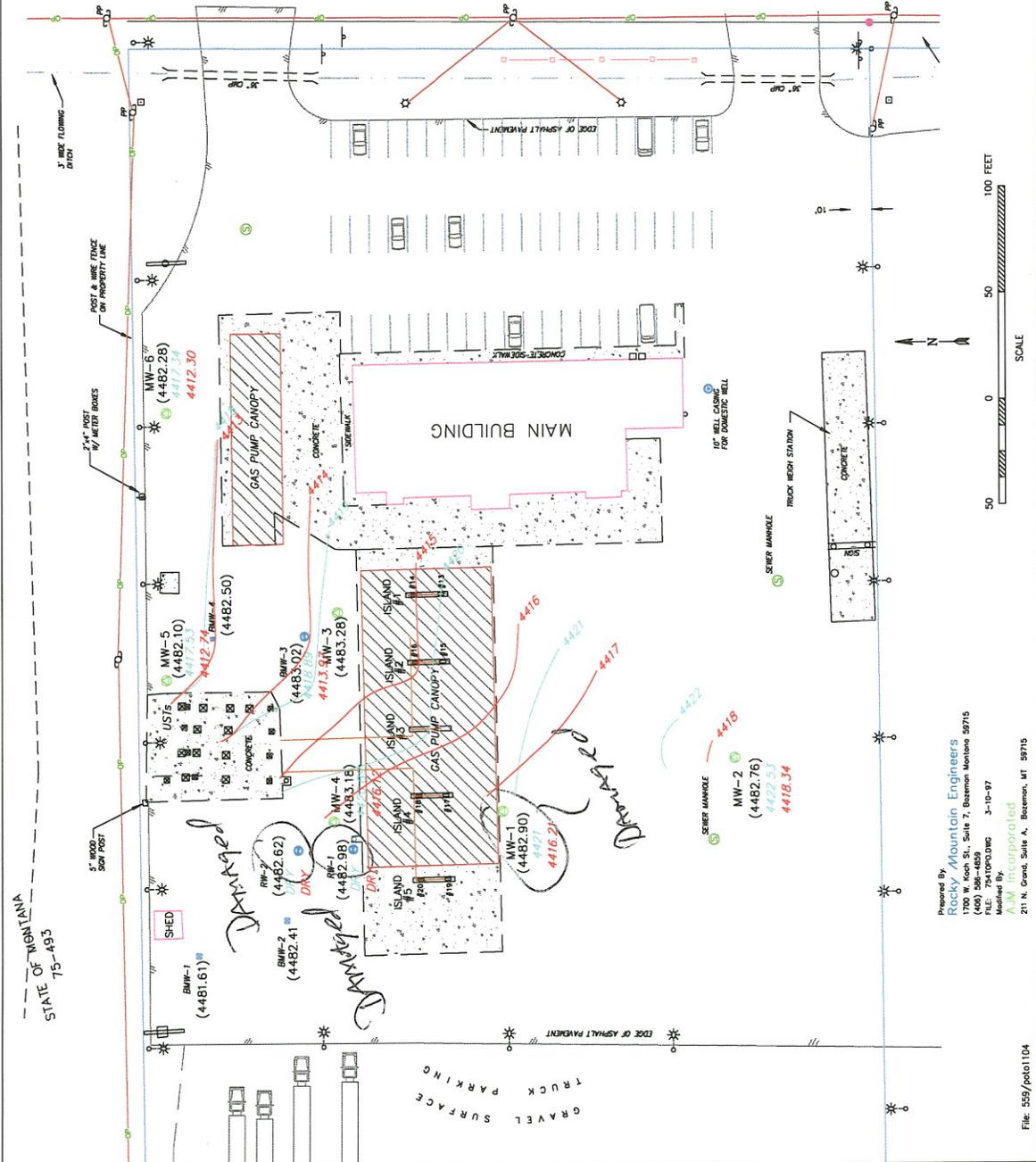
JACKRABBIT LANE
(STATE HWY)

FIGURE 2

POTENTIOMETRIC MAP
July 2008 & August 2009

BROADWAY FLYING J
BELGRADE, MONTANA

AJM INCORPORATED



Prepared By:
Rocky Mountain Engineers
1700 W. Koch St., Suite 7, Bozeman, Montana 59715
File: 254109.DWG 3-10-97
Modified By:
AJM Incorporated
211 N. Grant, Suite A, Bozeman, MT 59715

**GROUNDWATER MONITORING AND SAMPLING
UNIT COST WORKSHEET**
Montana Department of Environmental Quality
Petroleum Release Section/Petroleum Fund Services Section

Consultant Information

Company Name: AJM Inc.
Address: 1805 Kenyon Dr.
City, State, Zip: Bozeman, MT 59715
Phone: 406 522-0699
Cost Estimator: Dennis Franks

Project Information

Site Name: Broadway Truck Stop. Facility ID # 02-08703
Address: I-90 & Jackrabbit Ln Release # 294
City: Belgrade, Montana

Monitoring Well Details

Total Number of Wells at Site 13
Number of Wells to be monitored 2
Number of Wells to be monitored/sampled 2
(RW-1 & 2 or MW-4 & BMW-3)
Well Casing Diameter (inches) 2 & 4
Average Depth to Groundwater (ft) 65
Average Depth of Wells (ft) 55 to 80

Well Purging Method

Hand bailing
 Peristaltic Pump
 Submersible Pump
 Micropurge
 No Purge
 Other (please specify) _____

Monitoring/Sampling Interval

Estimated Start Date: June 2016
 Quarterly (# of events _____)
 Semi-annual (# of events _____)
 Annual (# of events 1)

Other Services

Free Product Recovery
 Groundwater Well Survey
 Wellhead retrofit/reconstruction
 Other (please specify) _____

Cost Estimate Explanation:

⁽¹⁾ Mobilization/Demobilization: Includes all costs and mileage to transport equipment, materials, and personnel to and from the site location. More than one mobilization event will require justification and pre-approval by the DEQ-PRS and DEQ-PFSS staffs. This item should be estimated on a per mile unit rate.

⁽²⁾ Water Level Measurements: Includes all costs (labor, equipment, materials, and well consumables) to measure groundwater depth, collect other groundwater information from well, and decontaminate equipment. The well monitoring costs should be estimated on a per well basis and does not include purging and sampling of the well.

⁽³⁾ Well Monitoring/Purging/Sampling: Includes all costs (labor, equipment, materials, and well consumables) to monitor (see above), purge, sample groundwater, decontaminate equipment, and handle disposal of contaminated purge water. The cost should be estimated on a per well basis.

⁽⁴⁾ Report Preparation: Includes all costs (labor and materials) project management, report preparation, and report submittal, including all office related costs, per groundwater sampling event.

⁽⁵⁾ Laboratory Analysis: Includes all laboratory costs for all wells, for duration of project. It is realized that some laboratory analyses will not be conducted for every event and that the well sampling frequency may change.

⁽⁶⁾ PTRCB Sampling Fee: Includes all costs related to management of the sample including: sample container, cooler, ice, packing, and office related handling charges. The sample is defined as the laboratory ID number on the laboratory invoice.

**GROUNDWATER MONITORING AND SAMPLING
UNIT COST WORKSHEET**

Task	Unit Cost	Number of Units	Total Cost
Project Management Eng II	96/hr	6	576.00
Mobilization/Demobilization⁽¹⁾			
Mobilization/Demobilization/pre/post Decon & 2 additional trips for well box fix as needed	10.99/mile	75	\$824.00
Field Work			
Water Level Measurements ⁽²⁾			
Well Monitoring/Purging/Sampling ⁽³⁾	175/well	2	\$350.00
Other Service (please specify) obtain & clean well box filled with dirt and rock	100/well	3	300
Other Service (please specify) _Fix Well Box	3	1000	3000
Report Preparation⁽⁴⁾			
Quarterly/Semi-annual			
Annual	1692.00	1	1692
Other (please specify) _____			\$
Subtotal Project Expense (3 wells)			\$6742

The costs below are estimates, not bids. Lodging and laboratory analysis will be paid at actual cost when documented by receipts/invoices.

Per Diem (specify number of individuals __ 1 __)			
Per Diem: Motel (4 samplings)			
Per Diem: Food	\$6.00/person per day	2	\$12
Laboratory Analysis⁽⁵⁾ (assume 3 wells)			
Volatile Petroleum Hydrocarbons (VPH)	150/sample	2	300
Extractable Petroleum Hydrocarbons (EPH) EPH "screen"	75/sample	2	150
EPH "fractions" at least during initial sampling	180/sample		
Methane:	50/sample		
Polyaromatic Hydrocarbons (PAHs)	/sample		
Other (please specify) __ NA sampling __	/sample		
Other (please specify) __ NA sampling __	/sample		
Other BOD/COD, methane	/sample		
PTRCB sampling fee ⁽⁶⁾	\$10/sample	2	\$20
Other (please specify) _____	/sample		\$
TOTAL PROJECT EXPENSE			\$7224.00

Special Conditions/Costs: Additional Comments/Costs: Back-up documentation will be provided for lab only. All additional invoice modifications requested by the DEQ and or PFSS will be charged at \$90/hr. All additional hourly costs will be submitted as a line item in the unit cost invoice.