



Energy Fuels Resources (USA) Inc.  
225 Union Blvd. Suite 600  
Lakewood, CO, US, 80228  
303 974 2140  
[www.energyfuels.com](http://www.energyfuels.com)

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May 28, 2013

Sent VIA OVERNIGHT DELIVERY

Mr. Rusty Lundberg  
Division of Radiation Control  
Utah Department of Environmental Quality  
195 North 1950 West  
P.O. Box 144850  
Salt Lake City, UT 84114-4820

**Re: Transmittal of 1st Quarter 2013 Groundwater Monitoring Report  
Groundwater Quality Discharge Permit UGW370004 White Mesa Uranium Mill**

Dear Mr. Lundberg:

Enclosed are two copies of the White Mesa Uranium Mill Groundwater Monitoring Report for the 1st Quarter of 2013 as required by the Groundwater Quality Discharge Permit UGW370004, as well as two CDs each containing a word searchable electronic copy of the report.

If you should have any questions regarding this report please contact me.

Yours very truly,

A handwritten signature in blue ink that reads 'Jo Ann Tischler'.

**ENERGY FUELS RESOURCES (USA) INC.**  
Jo Ann Tischler  
Manager, Compliance and Licensing

cc: David C. Frydenlund  
Harold R. Roberts  
David E. Turk  
Katherine A. Weinel  
Central Files

**White Mesa Uranium Mill**  
**Groundwater Monitoring Report**

**State of Utah**  
**Groundwater Discharge Permit No. UGW370004**

**1st Quarter**  
**(January through March)**  
**2013**

Prepared by:

**Energy Fuels Resources (USA) Inc.**  
225 Union Boulevard, Suite 600  
Lakewood, CO 80228

**May 28, 2013**

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## **1.0 INTRODUCTION**

This is the Routine Groundwater Monitoring Report, as required under Part I.F.1 of State of Utah Groundwater Discharge Permit No. UGW370004 (the “GWDP”) for the first quarter of 2013 (the “quarter”) for Energy Fuels Resources (USA) Inc’s. (“EFRI’s”) White Mesa Uranium Mill (the “Mill”). As required under Parts I.E.1, I.E.2 and I.E.5 of the GWDP this Report includes all recorded field measurements and laboratory analyses for well monitoring conducted during the quarter.

## **2.0 GROUNDWATER MONITORING**

### **2.1 Samples and Measurements Taken During the Quarter**

A map showing the location of all groundwater monitoring wells, piezometers, existing wells, chloroform contaminant investigation wells and nitrate contaminant investigation wells is attached under Tab A. Groundwater samples and measurements were taken during this reporting period (January through March), as discussed in the remainder of this section.

#### **2.1.1 Groundwater Compliance Monitoring**

Groundwater samples and field measurements collected during the quarter included both quarterly and accelerated monitoring. Accelerated monitoring is discussed below in Section 2.1.2. In this report, samples classified as being collected quarterly include those wells which are routinely sampled every quarter as well as semi-annual wells which are sampled on an accelerated quarterly schedule due to exceedances reported in previous quarterly reports. Wells which are sampled routinely every quarter were analyzed for the parameters listed in Table 2 and Part I.E.1.c) 2)ii of the GWDP dated August 24, 2012. The semi-annual wells which have been accelerated to quarterly are analyzed only for those parameters which exceeded the GWCLs in Table 2 and Part I.E.1.c) 2)ii of the GWDP as described in previous reports.

Table 1 of this report provides an overview of all wells sampled during the current period, along with the required sampling frequency applicable to each well during the current monitoring period, the date samples were collected from each well, and the date(s) analytical data were received from the contract laboratory(ies). Table 1 also indicates which sample numbers are associated with the required duplicates.

#### **2.1.2 Accelerated Groundwater Monitoring**

Accelerated monthly sampling was also performed (quarterly wells accelerated to monthly), and results reported, for the wells indicated in Table 1. The accelerated sampling frequency, analyte list and well list were determined based on the previous analytical results as shown in Table 2.

Table 1 provides an overview of the wells sampled for the accelerated monthly program along with the routine sampling frequency as well as the accelerated sampling frequency, the date samples were collected from each well, the associated duplicates and the date(s) which analytical data were received from the contract laboratory(ies).

### **2.1.3 Background Well Monitoring**

A requirement was added to the GWDP on February 15, 2011, which required the Mill to begin quarterly sampling of wells MW-35, MW-36 and MW-37 to develop eight quarters of background data. MW-35, which was installed in the third quarter 2010, has been sampled quarterly since the fourth quarter of 2010. With the first quarter 2013 sample, ten full quarters of data have been collected for MW-35. Preliminary statistical analysis of the MW-35 data showed extremes in the nickel and sulfate data. Per the logic flow diagram included as Figure 17 of the *New Wells Background Report* (INTERA, 2008), extreme values are excluded from the background calculations. The removal of the extremes resulted in less than the eight required data points needed for background calculations. DRC personnel agreed via telephone on February 20, 2013 that EFRI should delay the submission of the MW-35 background report until at least eight quarters of statistically valid data, suitable for background calculations, were collected for all constituents. DRC and EFRI agreed that the background report for MW-35 would be submitted after the second quarter 2013 if at least eight quarters of data were collected for every constituent by that time. If there are not eight data points for each constituent, DRC and EFRI would discuss an alternate schedule or further actions.

MW-36 and MW-37, which were installed during the second quarter of 2011, were sampled for the first time during the second quarter of 2011. Quarterly samples will continue to be collected until 8 quarters of statistically valid data for all constituents are available to complete the background report as required by the GWDP.

### **2.1.4 Parameters Analyzed**

All routine quarterly groundwater monitoring samples were analyzed for the parameters listed in Table 2 and Part I.E.1.c) 2) ii of the GWDP dated August 24, 2012. The accelerated monitoring samples were analyzed for a more limited and specific parameter list as shown in Table 2.

### **2.1.5 Groundwater Head Monitoring**

Depth to groundwater was measured in the following wells and/or piezometers, pursuant to Part I.E.2 of the GWDP dated August 24, 2012:

- The quarterly groundwater compliance monitoring wells (including, MW-34).
- Existing monitoring well MW-4 and all of the temporary chloroform investigation wells.

- Piezometers – P-1, P-2, P-3, P-4 and P-5.
- Nitrate monitoring wells.
- The DR piezometers which were installed during the Southwest Hydrogeologic Investigation.
- In addition to the above, depth to water measurements are routinely observed in conjunction with sampling events for all wells sampled during quarterly and accelerated efforts, regardless of the sampling purpose.

All water levels used for groundwater contour mapping were measured and recorded within 5 calendar days of each other as indicated by the measurement dates in the summary sheet under Tab D.

## **2.2 Field Data**

Attached under Tab B are copies of all field data sheets recorded in association with the quarterly effort (sampled in May) for the groundwater compliance monitoring wells referred to in paragraph 2.1.1, above. Sampling dates are listed in Table 1.

Attached under Tab C are copies of all field data sheets recorded in association with the January and March 2013 accelerated monthly monitoring and sampling efforts.

## **2.3 Laboratory Results - Quarterly Sampling**

### **2.3.1 Copy of Laboratory Results**

All analytical results are provided by one of the Mill's two contract analytical laboratories GEL Laboratories, Inc. ("GEL") or American West Analytical Laboratories ("AWAL").

Table 1 lists the dates when analytical results were reported to the Quality Assurance ("QA") Manager for each well.

Results from analysis of samples collected under the GWDP (i.e., all regular quarterly and accelerated semi-annual samples) are provided in Tab E. Also included under Tab E are the results of analyses for duplicate samples as identified in Table 1.

The laboratory report dates for samples collected for the January and March accelerated sampling (i.e. quarterly accelerated to monthly) are provided in Table 1. Results from analysis of samples collected for the January and March accelerated sampling (i.e. quarterly accelerated to monthly) are provided in Tab F. Also included under Tab F are the results of analyses for duplicate samples for this sampling effort, as identified in Table 1.

Copies of laboratory QA/Quality Control (“QC”) Summaries are included with the reported data under their corresponding Tabs.

### **2.3.2 Regulatory Framework and Groundwater Background**

Under the GWDP dated August 24, 2012, background groundwater quality has been determined on a well-by-well basis, as defined by the mean plus second standard deviation concentration or the equivalent. GWCLs that reflect this background groundwater quality have been set for all compliance monitoring wells except MW-35, MW-36, and MW-37. It is important to note that the GWDP dated February 15, 2011 also set GWCLs for MW-35. The GWCLs for MW-35 have been set at one-quarter of the Utah Groundwater Quality Standard (“GWQS”), pending determination of background for the well, and are not based on eight quarters of data from that well. A background report for MW-35 will be completed after the collection of eight quarters of statistically valid data for all constituents.

Exceedances of the GWCLs during the preceding quarter determined the accelerated monthly monitoring program implemented during this quarter as noted in Tables 1 and 2.

Exceedances of the GWCLs for this quarter are listed in Table 2 for sampling required under the revised GWDP dated August 24, 2012. Table 3 shows the accelerated sampling program which started in the second quarter 2010 and shows the results and frequency of the accelerated sampling conducted since that time.

It should be noted, however, that, because the GWCLs have been set at the mean plus second standard deviation, or the equivalent, un-impacted groundwater would normally be expected to exceed the GWCLs approximately 2.5% of the time. Therefore, exceedances are expected in approximately 2.5% of all sample results, and do not necessarily represent impacts to groundwater from Mill operations. In fact, more frequent sampling of a given analyte will increase the number of exceedances due to statistical variation and not due to Mill activity. Additionally, given the slow velocity of groundwater movement, accelerated sampling monthly may result in resampling of the same water and may lead to repeat exceedances for accelerated constituents not due to Mill activities, but due to repeat sampling of the same water.

## **2.4 Laboratory Results – Accelerated Monitoring**

### **2.4.1 Copy of Laboratory Results**

The analytical results for the accelerated monthly monitoring of the various constituents in certain monitoring wells for the quarter are provided at Tab F.

## **2.4.2 Regulatory Framework and Groundwater Background**

As a result of the issuance of a revised GWDP on January 20, 2010, which sets revised GWCLs, all requirements to perform accelerated monitoring under Part I.G.1 of the previous GWDP ceased effective on January 20, 2010, and the effect of the issuance of the revised GWDP was to create a “clean slate” for all constituents in all wells going forward.

This means that accelerated monitoring during this quarter was required under the revised GWDP for only those constituents that exceeded the GWCLs since January 20, 2010.

## **2.4.3 Compliance Status**

Analytes which have exceeded the GWCLs set forth in the GWDP are summarized in Table 2. The analytes which exceeded their respective GWCLs during the quarter will be sampled on an accelerated schedule as noted in Table 2. Analytes which exceeded their respective GWCLs during 2010 are currently sampled on an accelerated schedule. A review of the accelerated data collected during the quarter indicate that several analytes have exceeded their respective GWCLs for two consecutive sampling periods as reported in EFRI’s letter to DRC on May 10, 2013. Table 3 summarizes the results of the accelerated sampling program from first quarter 2010 through first quarter 2013.

Part I.G.1 c) of the GWDP states, with respect to exceedances of GWCLs, “that the Permittee shall prepare and submit within 30 calendar days to the Executive Secretary a plan and a time schedule for assessment of the sources, extent and potential dispersion of the contamination, and an evaluation of potential remedial action to restore and maintain groundwater quality to insure that Permit limits will not be exceeded at the compliance monitoring point and that DMT or BAT will be reestablished.” EFRI submitted an exceedance notice on May 10, 2013 for the first quarter 2013 results. The summary in the Exceedance Notice includes, for each exceedance, a brief discussion of whether such a plan and schedule is required at this time in light of other actions currently being undertaken by EFRI, as determined by DRC Staff and stated in teleconferences with EFRI on April 27 and May 2, 2011 and the Stipulated Consent Agreement (“SCA”) dated July 12, 2012.

## **2.5 Depth to Groundwater and Water Table Contour Map**

As stated above, a listing of groundwater level readings for the quarter (shown as depth to groundwater in feet) is included under Tab D. The data from Tab D has been interpreted (kriged) and plotted in a water table contour map, provided under Tab H.

The water table contour map provides the location and identity of all of the wells and piezometers for which depth to groundwater is recorded. The groundwater elevation at each well and piezometer, measured in feet above mean sea level, and isocontour lines to delineate groundwater flow directions observed during the quarter’s sampling event are displayed on the map.

### **3.0 QUALITY ASSURANCE AND DATA VALIDATION**

The Mill QA Manager performed a QA/QC review to confirm compliance of the monitoring program with requirements of the QAP. As required in the QAP, data QA includes preparation and analysis of QC samples in the field, review of field procedures, an analyte completeness review, and quality control review of laboratory data methods and data. Identification of field QC samples collected and analyzed is provided in Section 3.1. Discussion of adherence to Mill sampling Standard Operating Procedures (“SOPs”) is provided in Section 3.2. Analytical completeness review results are provided in Section 3.3. The steps and tests applied to check laboratory data QA/QC are discussed in Sections 3.4.4 through 3.4.10 below.

The Analytical Laboratories have provided summary reports of the analytical QA/QC measurements necessary to maintain conformance with National Environmental Laboratory Accreditation Conference (“NELAC”) certification and reporting protocol. The analytical laboratory QA/QC Summary Reports, including copies of the Mill’s Chain of Custody and Analytical Request Record forms for each set of Analytical Results, follow the analytical results under Tabs E and F. Results of review of the laboratory QA/QC information are provided under Tab G and discussed in Section 3.4, below.

#### **3.1 Field QC Samples**

The following field QC samples were generated by Mill personnel and submitted to the analytical laboratory in order to assess the quality of data resulting from the field sampling program:

Two duplicate samples were collected during quarterly sampling as indicated in Table 1. The QC samples were sent blind to the analytical laboratory and analyzed for the same parameters as permit-required samples.

One duplicate sample was collected during each month of accelerated sampling as indicated in Table 1. The QC samples were sent blind to the analytical laboratory and analyzed for the same accelerated parameters as the parent sample.

Four trip blanks were provided by AWAL and returned and analyzed with the quarterly monitoring samples.

One trip blank per month was provided by AWAL and returned and analyzed with the accelerated monthly monitoring samples.

Rinsate samples were not collected during the quarter because all equipment used during sample collection was dedicated and did not require decontamination. All wells except MW-37 have dedicated pumps for purging and sampling and as such no rinsate blank samples are required. MW-37 was sampled with a disposable bailer and no rinsate blank was required. A deionized field blank (DIFB) was not required because equipment decontamination was not required and deionized water was not used during this sampling

event.

### **3.2 Adherence to Mill Sampling SOPs**

On a review of adherence by Mill personnel to the existing sampling SOPs, the QA Manager observed that QA/QC requirements established in the QAPs were being adhered to and that the SOP's were implemented, except as described below.

### **3.3 Analyte Completeness Review**

All analyses required by the GWDP for the quarterly and semi-annual wells were performed. The accelerated sampling for the semi-annual wells (semi-annual to quarterly) was completed as required by the GWDP and as shown in Tables 2 and 3. The accelerated quarterly sampling (quarterly to monthly) required for this quarter, as shown in Tables 2 and 3, was performed as required with one exception as noted below.

The monthly accelerated sampling program shown on Tables 2 and 3 is required as a result of exceedances in quarterly wells reported during sampling in the first, second and third quarters of 2012. The accelerated monthly samples which were required due to exceedances reported for the first and second quarters of 2012 were collected commencing in the third quarter of 2012. The monthly samples required due to exceedances reported in third quarter were collected commencing with the first quarter sampling event in February 2013. EFRI intended to commence the monthly sampling for the third quarter exceedances (selenium in MW-31) in December 2012, which was the first monthly sampling event after receipt of the third quarter 2012 data. However, although the data were reviewed, the information was not communicated to the Mill Staff in sufficient time to allow for the collection of the samples before the end of the fourth quarter 2012 or in the January 2013 monthly sampling events. Corrective actions are described in more detail in Section 4 of this report.

It is important to note that although two required data points were missed, there has been no delay in the implementation of compliance actions. Selenium in MW-31 has exceeded the GWCL in two successive quarterly sampling periods (third and fourth quarter 2012) and, as a result, a 30 day plan and time schedule is required to be submitted per the GWDP. The missed data points did not delay that submission or the schedule in any way, and there is no adverse effect on the compliance actions required by EFRI. The March 15, 2013 due date for the plan and time schedule for the fourth quarter exceedances was not affected by the absence of the December 2012 and January 2013 data.

### **3.4 Data Validation**

The QAPs and GWDP identify the data validation steps and data quality control checks required for the groundwater monitoring program. Consistent with these requirements, the QA Manager performed the following evaluations: a field data QA/QC evaluation, a receipt temperature check, a holding time check, an analytical method check, a reporting

limit check, a trip blank check, a QA/QC evaluation of routine sample duplicates, a QA/QC evaluation of accelerated sample duplicates, a gross alpha counting error evaluation and a review of each laboratory's reported QA/QC information. Each evaluation is discussed in the following sections. Data check tables indicating the results of each test are provided under Tab G.

### **3.4.1 Field Data QA/QC Evaluation**

The QA Manager performs a review of all field recorded parameters to assess their adherence with QAP requirements. The assessment involved review of two sources of information: the Field Data Sheets and the Quarterly Depth to Water summary sheet. Review of the Field Data Sheets addresses well purging volumes and the stability of the following field parameters (based upon the purging method chosen): conductance, pH, temperature, redox potential, and turbidity. Stability of field parameters and well sampling techniques are dependent on the purging technique employed. Review of the Depth to Water data confirms that all depth measurements were conducted within a five-day period. The results of this quarter's review are provided in Tab G.

There are three purging strategies specified in Revision 7.2 of the QAP that are used to remove stagnant water from the casing during groundwater sampling at the Mill. The three strategies are as follows:

1. Purging three well casing volumes with a single measurement of field parameters
2. Purging two casing volumes with stable field parameters (within 10% RPD)
3. Purging a well to dryness and stability (within 10% RPD) of a limited list of field parameters after recovery

During both the first quarter sampling event and the two monthly events, the purging technique used was two casing volumes with stable field parameters (pH, Conductivity, Redox, temperature and turbidity) except for the following three wells that were purged to dryness: MW-03A, MW-24, and MW-37.

Based upon the review of the Field Data Sheets, all quarterly and semi-annually sampled locations conformed to the QAP requirement for purging using the two casing volume technique except for MW-03A, MW-24, and MW-37. These wells were evacuated to dryness before two casing volumes could be removed. MW-37 has insufficient water to purge using a pump. Due to the small volume of water present, this well is purged and sampled using a disposable bailer. MW-37 conformed to the QAP, Revision 7.2 requirement for sampling low yield wells which includes the collection of three field parameters (pH, specific conductance ["conductivity"] and temperature) immediately prior to and immediately following sample collection. Stabilization of pH, conductivity and temperature were within the 10% RPD required by QAP, Revision 7.2.

Additionally, two casing volumes were not purged from MW-26, prior to sampling because MW-26 is a continuously pumped well. If a well is continuously pumped, it is pumped on a set schedule per the remediation plan and is considered sufficiently

evacuated to immediately collect a sample; however, if a pumping well has been out of service for 48 hours or more, EFRI will follow the purging requirements outlined in Attachment 2-3 of the QAP.

The review of the field sheets for compliance with QAP, Revision 7.2 requirements resulted in the observations noted below. The QAP requirements in Attachment 2-3 specifically state that field parameters must be stabilized to within 10% over at least two consecutive measurements. The QAP Attachment 2-3 states that turbidity should be less than 5 NTU prior to sampling unless the well is characterized by water that has a higher turbidity. The QAP Attachment 2-3 does not require that turbidity measurements be less than 5 NTU prior to sampling. As such, the noted observations regarding turbidity measurements greater than 5 NTU below are included for information purposes only.

- Turbidity measurements were less than 5 NTU for all of the quarterly and semi-annual wells except MW-01, MW-11, MW-23, MW-28, MW-29, MW-31 and MW-32. Per the QAP, Revision 7.2, Attachment 2-3, Turbidity measurements prior to sampling were within a 10% RPD for all quarterly and semi-annual wells.
- Turbidity measurements were less than 5 NTU for all of the accelerated sampling wells except MW-31 in the January event and MW-25 and MW-31 in the March monthly event. As previously stated, the QAP does not require that turbidity be less than 5 NTU. Turbidity measurements prior to sampling were within a 10% RPD for all accelerated sampling wells

All other field parameters (conductance, pH, redox potential, and temperature) for all wells were within the required RPD for the quarterly, semi-annual and accelerated sampling.

During review of all of the field data sheets, it was observed that sampling personnel consistently recorded depth to water for the quarterly, semi-annual and accelerated sampling programs to the nearest 0.01 foot.

EFRI's letter to DRC of March 26, 2010 discusses further why turbidity does not appear to be an appropriate parameter for assessing well stabilization. In response to DRC's subsequent correspondence dated June 1, 2010 and June 24, 2010, EFRI has completed a monitoring well redevelopment program. The redevelopment report was submitted to DRC on September 30, 2011. DRC responded to the redevelopment report via letter on November 15, 2012. Per the DRC letter dated November 15, 2012, the field data generated this quarter are compliant with the turbidity requirements of the approved QAP.

### **3.4.2 Holding Time Evaluation**

QAP Table 1 identifies the method holding times for each suite of parameters. Sample holding time checks are provided under Tab G. All samples were received and analyzed within the required holding time.

### **3.4.3 Receipt Temperature Evaluation**

Chain of Custody sheets were reviewed to confirm compliance with the QAP requirement in Table 1 that samples be received at 6°C or lower. Sample receipt temperature checks are provided under Tab G. All quarterly, semi-annual and accelerated samples were received within the required temperature limit.

As noted in Tab G, samples for metals and gross alpha analyses were shipped without using ice. Per Table 1 in the approved QAP, samples submitted for metals and gross alpha analyses do not have a sample temperature requirement.

### **3.4.4 Analytical Method Checklist**

All analytical methods reported by both laboratories were checked against the required methods specified in the QAP. Analytical method check results are provided in Tab G. The review indicated that all quarterly, semi-annual and accelerated samples were analyzed in accordance with Table 1 of the QAP.

### **3.4.5 Reporting Limit Evaluation**

All analytical method reporting limits reported by both laboratories were checked against the reporting limits specified in the QAP Table 1. Reporting limit evaluations are provided in Tab G. All analytes were measured and reported to the required reporting limits except that several sets of quarterly, semi-annual and accelerated sample results had the reporting limit raised for at least one analyte due to matrix interference and/or sample dilution as noted in Section 3.4.9. In all cases the reported value for the analyte was higher than the increased detection limit.

*It should be noted that in the GEL data, the reporting limit is shown under the heading "CRDL" (client required reporting limit) in the hardcopy data packages included in Tabs E and F.*

### **3.4.6 Trip Blank Evaluation**

All trip blank results were reviewed to identify any VOC sample contamination which is the result of sample handling and shipment. Trip blank evaluations are provided in Tab G. All trip blank results associated with the quarterly, semi-annual and accelerated samples were less than detection level for all VOCs.

### **3.4.7 QA/QC Evaluation for Routine Sample Duplicates**

Section 9.1.4 a) of the QAP state that RPDs will be calculated for the comparison of duplicate and original field samples. The QAP acceptance limits for RPDs between the duplicate and original field sample is less than or equal to 20% unless the measured results are less than 5 times the required detection limit. This standard is based on the

EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994, 9240.1-05-01 as cited in the QAP. The RPDs are calculated for all duplicate pairs for all analytes regardless of whether or not the reported concentrations are greater than 5 times the required detection limits; however, data will be considered noncompliant only when the results are greater than 5 times the required detection limit and the RPD is greater than 20%. The additional duplicate information is provided for information purposes.

All duplicate results were within a 20% RPD in the quarterly and semi-annual samples except ammonia in duplicate pair MW-14/MW-65. Both of the sample results reported for MW-14/MW-65 were not five times greater than the reporting limit of 0.05 and as such the deviation from the 20% RPD requirement is acceptable. Results of the RPD test are provided under Tab G.

All duplicate results were within a 20% RPD in the monthly accelerated samples. Results of the RPD test are provided under Tab G.

#### **3.4.8 Radiologics Counting Error and Duplicate Evaluation**

Section 9.14 of the QAP require that all gross alpha analysis reported with an activity equal to or greater than the GWCL, shall have a counting variance that is equal to or less than 20% of the reported activity concentration. An error term may be greater than 20% of the reported activity concentration when the sum of the activity concentration and error term is less than or equal to the GWCL.

Section 9.4 of the QAP also requires a comparability check between the sample and field duplicate sample results utilizing the formula provided in the text.

Results of quarterly, semi-annual, and accelerated radiologic sample QC are provided under Tab G. All quarterly, semi-annual, and accelerated radiologic sample results met the counting error requirements specified in the QAPs.

#### **3.4.9 Other Laboratory QA/QC.**

Section 9.2 of all revisions of the QAP require that the laboratory's QA/QC Manager check the following items in developing data reports: (1) sample preparation information is correct and complete, (2) analysis information is correct and complete, (3) appropriate analytical laboratory procedures are followed, (4) analytical results are correct and complete, (5) QC samples are within established control limits, (6) blanks are within QC limits, (7) special sample preparation and analytical requirements have been met, and (8) documentation is complete. In addition to other laboratory checks described above, EFRI's QA Manager rechecks QC samples and blanks (items (5) and (6)) to confirm that the percent recovery for spikes and the relative percent difference for spike duplicates are within the method-specific required limits, or that the case narrative sufficiently explains any deviation from these limits. Results of this quantitative check are provided under Tab G. All lab QA/QC results from both GEL and AWAL samples for compounds

regulated under the GWDP met these requirements. There were QC results which did not meet laboratory established acceptance limits, as identified in Tab G and described below.

Multiple sets of quarterly, semi-annual and accelerated sample results had the reporting limit raised for at least one analyte due to matrix interference and/or sample dilution. In all cases the reported value for the analyte was higher than the increased detection limit.

The check samples included at least the following: a method blank, a laboratory control spike ("LCS"), a matrix spike ("MS") and a matrix spike duplicate ("MSD"), or the equivalent, where applicable. It should be noted that:

- Laboratory fortified blanks are equivalent to LCSs.
- Laboratory reagent blanks are equivalent to method blanks.
- Post digestion spikes are equivalent to MSs.
- Post digestion spike duplicates are equivalent to MSDs.
- Laboratory Duplicates are equivalent to MSDs.

All qualifiers, and the corresponding explanations reported in the QA/QC Summary Reports for any of the check samples for any of the analytical methods were reviewed by the QA Manager.

The QAP, Section 8.1.2 requires that a MS/MSD pair be analyzed with each analytical batch. The QAP does not specify acceptance limits for the MS/MSD pair, and the QAP does not specify that the MS/MSD pair be prepared on EFRI samples only. Acceptance limits for MS/MSDs are set by the laboratories. The review of the information provided by the laboratories in the data packages verified that the requirements in the QAP to analyze a MS/MSD pair with each analytical batch was met. While the QAP does not require it, the recoveries were reviewed for compliance with the laboratory established acceptance limits. The QAP does not require this level of review and the results of this review are provided for information only.

The information from the Laboratory QA/QC Summary Reports indicates that the MS/MSDs recoveries and the associated RPDs for all quarterly and semi-annual samples were within acceptable laboratory limits for all regulated compounds except as indicated in Tab G. The AWAL data recoveries and RPDs which are outside the laboratory established acceptance limits do not affect the quality or usability of the data because the recoveries and RPDs above or below the acceptance limits are indicative of matrix interference. Matrix interferences are applicable to the individual sample results only. The requirement in the QAPs to analyze a MS/MSD pair with each analytical batch was met and as such the data are compliant with the QAPs.

The information from the Laboratory QA/QC Summary Reports indicates that the MS/MSDs recoveries and the associated RPDs for all accelerated samples were within acceptable laboratory limits for all regulated compounds except as indicated in Tab G. The recoveries and RPDs which are outside of the laboratory established acceptance

limits do not affect the quality or usability of the data because the recoveries and RPDs above the acceptance limits are indicative of matrix interference. The requirement in the QAP to analyze a MS/MSD pair with each analytical batch was met and as such the data are compliant with the QAP.

The QAP specifies that surrogate compounds shall be employed for all organic analyses but the QAP does not specify acceptance limits for surrogate recoveries. The information from the Laboratory QA/QC Summary Reports indicates that the surrogate recoveries for all quarterly and accelerated samples were within acceptable laboratory limits for all surrogate compounds.

The information from the Laboratory QA/QC Summary Reports indicates that the LCS recoveries for both the quarterly and accelerated samples were within acceptable laboratory limits for all LCS compounds as noted in Tab G.

The QAP, Section 8.1.2 requires that each analytical batch shall be accompanied by a method blank. All analytical batches routinely contain a blank, which is a blank sample made and carried through all analytical steps. For the Mill samples, a method blank was prepared for all analytical methods. Per the approved QAP, contamination detected in analysis of method blanks will be used to evaluate any analytical laboratory contamination of environmental samples. QAP Revision 7.2 states that non-conformance conditions will exist when contaminant levels in the samples(s) are not an order of magnitude greater than the blank result. The method blanks for the quarterly samples and the accelerated samples reported no detections of any analyte. Method blank results are included in Tab E.

#### **4.0 CORRECTIVE ACTION REPORT**

Necessary corrective actions identified during the current monitoring period are described below, in accordance with Part I.F.1.e of the GWDP. The issue discussed below was discovered during the data review for fourth quarter 2012. This corrective action is repeated from the fourth quarter 2012 report because an accelerated sample was not collected as required in both the fourth quarter 2012 and the first quarter 2013. Assessment of the effectiveness of the corrective action will be completed after the second quarter 2013.

##### **4.1 Identification and Definition of the Problem**

The problem identified was:

###### Accelerated Monitoring Frequency

The accelerated monitoring conducted in the December 2012 and January 2013 monthly sampling events did not include the collection of the analyte identified during the third quarter 2012 (selenium in MW-31) in the accelerated monthly sampling.

It is important to note that although two required data points were missed, there was no delay in implementation of compliance actions. Selenium in MW-31 has exceeded the GWCL in two successive sampling periods (third and fourth quarter 2012) and a 30 day plan and time schedule will be submitted as required by the GWDP. The missed data points did not delay that submission or the schedule in any way, and there is no adverse effect on the compliance actions required by EFRI.

#### **4.2 Assignment of Responsibility for Investigating the Problem**

The problem has been investigated by the Manager of Compliance and Licensing.

#### **4.3 Investigation and Determination of Cause of the Problem**

##### Accelerated Monitoring Frequency

The additional analyte for the monthly accelerated program identified during the third quarter 2012 was inadvertently omitted from the December monthly sampling. The third quarter data were reviewed for submission of the third quarter Exceedance Notice on November 15, 2012. The results of the review and the additional monitoring requirements were not communicated to the Mill Field Personnel by the Quality Assurance Manager in time to be included in the monthly accelerated sampling events for December 2012 and January 2013.

#### **4.4 Determination of a Corrective Action to Eliminate the Problem**

##### Accelerated Monitoring Frequency

The omission of the analytes from the December 2012 and January 2013 monthly events has prompted the QA Manager to revise the exceedance tracking procedures and procedures for review of the analytical data received from the laboratory. Additional review using database reports will be implemented immediately upon receipt of the data at the time the analytical data are uploaded to the database by the QA Manager. Specifically, the QA Manager reviews all analytical data prior to loading into the electronic database. After loading each analytical data set the QA Manager will query the database for exceedances. Any exceedances identified in that analytical data set will be forwarded to the Mill Field Personnel with the new accelerated frequency. Mill Personnel will not schedule accelerated monthly sampling until the review of exceedances has been completed.

#### **4.5 Assigning and Accepting Responsibility for Implementing the Corrective Action**

It will be the responsibility of the QA Manager to implement the corrective action.

#### Accelerated Monitoring Frequency

The QA Manager is in the process of implementing the new exceedance tracking procedure described above.

#### **4.6 Implementing the Corrective Action and Evaluating Effectiveness**

##### Accelerated Monitoring Frequency

Implementation of the corrective action for the accelerated monitoring program review will begin with the next data sets received.

#### **4.7 Verifying That the Corrective Action Has Eliminated the Problem**

Verification of the accelerated sample frequency and analyte tracking procedure will occur after the collection of the second quarter 2013 samples are collected and the data are received.

#### **4.8 Assessment of Corrective Actions from Previous Period**

The corrective actions required in the fourth quarter 2012 report are on-going. No assessment is required at this time.

### **5.0 TIME CONCENTRATION PLOTS**

Time concentration plots for each monitoring well for the following constituents: chloride, fluoride, sulfate, and uranium, are included under Tab I. All data points collected to date are reflected on the plots.

Time concentration plots included with quarterly groundwater reports prior to and including first quarter 2012 did not include data which were determined to be outliers using the statistical methods used for the background determinations at the Mill. Based on conversations with DRC, all data have been included in the quarterly time concentration plots since first quarter 2012. All future time concentration plots will include all data points.

### **6.0 ELECTRONIC DATA FILES AND FORMAT**

EFRI has provided to the Director electronic copies of all laboratory results from groundwater quality monitoring conducted during the quarter in Comma Separated Values ("CSV") format, from the analytical laboratories. A copy of the transmittal e-mail is included under Tab J.

**7.0 SIGNATURE AND CERTIFICATION**

This document was prepared by Energy Fuels Resources (USA) Inc. on May 28, 2013.

ENERGY FUELS RESOURCES (USA) INC.

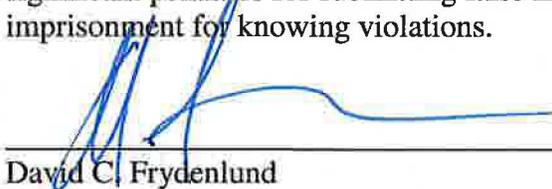
By:

A handwritten signature in blue ink, appearing to read 'D. Frydenlund', with a long horizontal flourish extending to the right.

David C. Frydenlund  
Senior Vice President, General Counsel and Corporate Secretary

Certification:

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



---

David C. Frydenlund  
Senior Vice President, General Counsel and Corporate Secretary  
Energy Fuels Resources (USA) Inc.

## Tables

Table 1: Summary of Well Sampling

Well	Normal Frequency	Purpose for Sampling this Quarter	Sample Date	Date of Lab Report
<b>Quarterly Samples</b>				
MW-11	Quarterly	Quarterly	2/20/2013	[3/5/13] [3/6/13] (3/11/13)
MW-14	Quarterly	Quarterly	2/26/2013	[3/8/2013] (3/20/13)
MW-25	Quarterly	Quarterly	2/20/2013	[3/5/13] [3/6/13] (3/11/13)
MW-26	Quarterly	Quarterly	2/20/2013	[3/5/13] [3/6/13] (3/11/13)
MW-30	Quarterly	Quarterly	2/26/2013	[3/8/2013] (3/20/13)
MW-31	Quarterly	Quarterly	2/19/2013	[3/5/13] [3/6/13] (3/11/13)
MW-35	Quarterly	Background	2/26/2013	[3/8/2013] (3/20/13)
MW-36	Quarterly	Background	2/26/2013	[3/8/2013] (3/20/13)
MW-37	Quarterly	Background	3/20/2013	[4/2/13] (4/10/13)
MW-65	1 per Batch	Duplicate of MW-14	2/26/2013	[3/8/2013] (3/20/13)
<b>Accelerated Samples</b>				
<b>Accelerated Quarterly Samples</b>				
MW-01	Semi-annually	Accelerated	3/12/2013	[3/26/13]
MW-02	Semi-annually	Accelerated	3/5/2013	(3/20/13)
MW-03	Semi-annually	Accelerated	3/12/2013	[3/26/13]
MW-03A	Semi-annually	Accelerated	3/13/2013	[3/26/13]
MW-05	Semi-annually	Accelerated	3/11/2013	[3/26/13]
MW-12	Semi-annually	Accelerated	3/6/2013	[3/18/13]
MW-15	Semi-annually	Accelerated	3/5/2013	[3/18/13]
MW-18	Semi-annually	Accelerated	2/25/2013	[3/8/2013]
MW-19	Semi-annually	Accelerated	3/13/2013	[3/26/13] (4/10/13)
MW-23	Semi-annually	Accelerated	3/11/2013	[3/26/13]
MW-24	Semi-annually	Accelerated	3/13/2013	[3/26/13]
MW-27	Semi-annually	Accelerated	2/25/2013	[3/8/2013] (3/20/13)
MW-28	Semi-annually	Accelerated	3/5/2013	[3/18/13]
MW-29	Semi-annually	Accelerated	3/6/2013	[3/18/13]
MW-32	Semi-annually	Accelerated	2/19/2013	(3/11/13)
MW-70	1 per Batch	Duplicate of MW-19	3/13/2013	[3/26/13] (4/10/13)
<b>Accelerated January Monthly</b>				
MW-11	Monthly	Accelerated	1/23/2013	(2/11/13)
MW-14	Monthly	Accelerated	1/23/2013	(2/11/13)
MW-25	Monthly	Accelerated	1/22/2013	(2/11/13)
MW-26	Monthly	Accelerated	1/24/2013	[2/1/2013] [4/19/2013] (2/11/13)
MW-30	Monthly	Accelerated	1/23/2013	[2/1/2013] [4/19/2013] (2/11/13)
MW-31	Monthly	Accelerated	1/22/2013	[2/1/2013] [4/19/2013]
MW-35	Monthly	Accelerated	1/23/2013	(2/11/13)
MW-65	1 per Batch	Duplicate of MW-35	1/23/2013	(2/11/13)
<b>Accelerated March Monthly</b>				
MW-11	Monthly	Accelerated	3/20/2013	[4/2/13]
MW-14	Monthly	Accelerated	3/20/2013	[4/2/13]
MW-25	Monthly	Accelerated	3/19/2013	[4/2/13]
MW-26	Monthly	Accelerated	3/20/2013	[4/2/13]
MW-30	Monthly	Accelerated	3/20/2013	[4/2/13]
MW-31	Monthly	Accelerated	3/19/2013	[4/2/13]
MW-35	Monthly	Accelerated	3/19/2013	[4/2/13] (4/10/13)
MW-65	1 per Batch	Duplicate of MW-14	3/20/2013	[4/2/13]

## Notes:

Date in brackets depicts the date that data were reported from American West Analytical Laboratories. Date in parentheses depicts the date that the data were reported from GEL Laboratories.

Date in italics font is the date the corrected data package was reported.

Table 2

Monitoring Well (Water Class)	Constituent Exceeding GWCL	GWCL in Current GWDP	First Result Exceeding the GWCL	Routine Sample Frequency	Accelerated Frequency	Exceedance Sample Period	Start of Accelerated Monitoring
<b>Quarterly Wells Accelerated to Monthly Sampling<sup>1</sup></b>							
MW-11 (Class II)	Manganese (ug/L)	131.29	134	Quarterly	Monthly	Q1 2010	May 2010
MW-14 (Class III)	Manganese (ug/L)	2230.30	2360	Quarterly	Monthly	Q2 2012	August 2012
	Field pH (S.U.)	6.5 - 8.5	6.45	Quarterly	Monthly	Q1 2010	May 2010
MW-25 (Class III)	Uranium (ug/L)	6.5	6.57	Quarterly	Monthly	Q3 2010	January 2011
	Cadmium (ug/L)	1.5	1.56	Quarterly	Monthly	Q4 2012	March 2013
	Chloride (mg/L)	35	36.1	Quarterly	Monthly	Q1 2013	June 2013
	Field pH (S.U.)	6.5 - 8.5	6.47	Quarterly	Monthly	Q4 2012	February 2013
MW-26 (Class III)	Nitrate + Nitrite (as N) (mg/L)	0.62	1.3	Quarterly	Monthly	Q1 2010	May 2010
	Uranium (ug/L)	41.8	58.7	Quarterly	Monthly	Q1 2010	May 2010
	Chloroform (ug/L)	70	700	Quarterly	Monthly	Q1 2010	May 2010
	Chloride (mg/L)	58.31	72	Quarterly	Monthly	Q1 2010	May 2010
	Methylene Chloride (ug/L)	5	9.9	Quarterly	Monthly	Q2 2010	June 2010
MW-30 (Class II)	Field pH (S.U.)	6.74 - 8.5	6.59	Quarterly	Monthly	Q1 2010	May 2010
	Nitrate + Nitrite (as N) (mg/L)	2.5	16.1	Quarterly	Monthly	Q1 2010	May 2010
MW-31 (Class III)	Chloride (mg/L)	128	134	Quarterly	Monthly	Q1 2011	May 2011
	Uranium (ug/L)	8.32	8.36	Quarterly	Monthly	Q1 2013	June 2013
	Selenium (ug/L)	34	35.3	Quarterly	Monthly	Q2 2010	July 2010
	Nitrate + Nitrite (as N) (mg/L)	5	21.7	Quarterly	Monthly	Q1 2010	May 2010
MW-35 (Class II)	TDS (mg/L)	1320	1330	Quarterly	Monthly	Q3 2010	January 2011
	Sulfate (mg/L)	532	539	Quarterly	Monthly	Q4 2010	March 2011
	Selenium (ug/L)	71	74	Quarterly	Monthly	Q3 2012	December 2012
	Chloride (mg/L)	143	145	Quarterly	Monthly	Q1 2011	May 2011
	Uranium (ug/L)	7.5	21.7	Quarterly	Monthly	Q3 2011	July 2011
MW-35 (Class II)	Thallium (ug/L)	0.5	1.14	Quarterly	Monthly	Q4 2011	July 2011
	Selenium (ug/L)	12.5	19.7	Quarterly	Monthly	Q1 2012	June 2012
	Gross Alpha minus Rn & U (pCi/L)	3.75	4.5	Quarterly	Monthly	Q3 2011	Q4 2011
	Molybdenum (ug/L)	10	30.4	Quarterly	Monthly	Q4 2012	March 2013
	Manganese (ug/L)	200	369	Quarterly	Monthly	Q3 2011	July 2011
	<b>Semi-Annual Wells Accelerated to Quarterly Sampling<sup>1</sup></b>						
Monitoring Well	Constituent Exceeding GWCL	GWCL in	First Result	Sample	Accelerated	Exceedance	Start of Accelerated
MW-1 (Class II)	Tetrahydrofuran (ug/L)	11.5	21.8	Semi-Annually	Quarterly	Q4 2012	Q1 2013
	Sulfate (mg/L)	838	846	Semi-Annually	Quarterly	Q4 2012	Q1 2013
	Manganese (ug/L)	289	315	Semi-Annually	Quarterly	Q4 2012	Q1 2013
MW-3 (Class III)	Selenium (ug/L)	37	37.2	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Field pH (S.U.)	6.5 - 8.5	6.14 (6.25)	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Fluoride (mg/L)	0.68	0.71	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-3A (Class III)	Field pH (S.U.)	6.5 - 8.5	6.23 (6.24)	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Sulfate (mg/L)	3640	3680	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	TDS (mg/L)	5805	5860	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Nitrate + Nitrite (as N) (mg/L)	1.3	1.31	Semi-Annually	Quarterly	Q4 2012	Q1 2013
	Selenium (ug/L)	89	94.8	Semi-Annually	Quarterly	Q4 2010	Q1 2011
MW-5 (Class II)	Uranium (ug/L)	7.5	11.6	Semi-Annually	Quarterly	Q4 2010	Q1 2011
MW-12 (Class III)	Field pH (S.U.)	6.5 - 8.5	6.47	Semi-Annually	Quarterly	Q4 2010	Q1 2011
	Selenium (ug/L)	25	25.7	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-15 (Class III)	Selenium (ug/L)	128.7	152	Semi-Annually	Quarterly	Q2 2012	Q3 2012
	Iron (ug/L)	81.7	137	Semi-Annually	Quarterly	Q4 2011	Q1 2012
MW-18 (Class III)	Thallium (ug/L)	1.95	3.73	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Sulfate (mg/L)	1938.9	1950	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Field pH (S.U.)	6.25-8.5	6.2	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	TDS (mg/L)	3198.77	3280	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-19 (Class III)	Nitrate + Nitrite (as N) (mg/L)	2.83	4	Semi-Annually	Quarterly	Q4 2011	Q1 2012
	Gross Alpha minus Rn & U (pCi/L)	2.36	4.86	Semi-Annually	Quarterly	Q4 2012	Q1 2013
	Field pH (S.U.)	6.78-8.5	6.61 (6.66)	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-23 (Class III)	Manganese (ug/L)	550	551	Semi-Annually	Quarterly	Q4 2011	Q1 2012
	Field pH (S.U.)	6.5 - 8.5	6.18	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-24 (Class III)	Cadmium (ug/L)	2.5	4.28	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Fluoride (mg/L)	0.36	0.558	Semi-Annually	Quarterly	Q4 2012	Q1 2013
	Thallium (ug/L)	1	1.3	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Field pH (S.U.)	6.5 - 8.5	5.91 (5.78)	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-27 (Class III)	Nitrate + Nitrite (as N) (mg/L)	5.6	5.8	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Chloride (mg/L)	38	42	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Gross Alpha minus Rn & U (pCi/L)	2	2.4	Semi-Annually	Quarterly	Q4 2010	Q1 2011
	Field pH (S.U.)	6.5 - 8.5	6.39	Semi-Annually	Quarterly	Q3 2011	Q4 2011
	TDS (mg/L)	1075	1160	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-28 (Class III)	Chloride (mg/L)	105	108	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Manganese (ug/L)	1837	1850	Semi-Annually	Quarterly	Q2 2012	Q3 2012
	Field pH (S.U.)	6.1 - 8.5	5.67	Semi-Annually	Quarterly	Q2 2010	Q3 2010
MW-29 (Class III)	Field pH (S.U.)	6.46 - 8.5	6.17	Semi-Annually	Quarterly	Q4 2010	Q2 2011
	Manganese (ug/L)	5624	6140	Semi-Annually	Quarterly	Q2 2012	Q3 2012
	TDS (mg/L)	4400	4600	Semi-Annually	Quarterly	Q2 2012	Q3 2012
	Iron (ug/L)	1869	3010	Semi-Annually	Quarterly	Q3 2011	Q4 2011
MW-32 (Class III)	Gross Alpha minus Rn & U (pCi/L)	3.33	5.4	Semi-Annually	Quarterly	Q2 2010	Q3 2010
	Field pH (S.U.)	6.4 - 8.5	6.03	Semi-Annually	Quarterly	Q2 2010	Q3 2010

Notes:

<sup>1</sup> GWCL Values are taken from August 24, 2012 versions of the GWDP sample period.

Highlighted text shows accelerated requirements resulting from Q1 2013 sampling event.

Gross Alpha analysis in MW-02 and sulfate analysis in MW-27 have returned to routine frequency of semi-annually as approved by DRC in correspondence dated April 22, 2013.



Q1 2013 Results									
Monitoring Well (Water Class)	Constituent Exceeding GWCL	GWCL in Current GWDP	January 2013 Monthly Sample Date	January 2013 Monthly Result	Q1 2013 Sample Date	Q1 2013 Result	March 2013 Monthly Sample Date	March 2013 Monthly Result	Sample Frequency
Required Semi-Annual Sampling Wells, continued									
MW-19 (Class III)	Field pH (S.U.)	6.78-8.5	NS	NA	3/13/2013	6.50	NS	NA	Semi-Annually
	Gross Alpha minus Rn & U (pCi/L)	2.36		NA		1.11		NA	Semi-Annually
	Nitrate + Nitrite (as N) (mg/L)	2.83		NA		3.61		NA	Semi-Annually
MW-23 (Class III)	Field pH (S.U.)	6.5 - 8.5	NS	NA	3/11/2013	6.37	NS	NA	Semi-Annually
	Manganese (ug/L)	550		NA		137		NA	Semi-Annually
MW-24 (Class III)	Cadmium (ug/L)	2.5	NS	NA	3/13/2013	2.0	NS	NA	Semi-Annually
	Fluoride (Mg/L)	0.36		NA		0.355		NA	
	Thallium (ug/L)	1		NA		0.88		NA	Semi-Annually
	Field pH (S.U.)	6.5 - 8.5		NA		6.29		NA	Semi-Annually
MW-27 (Class III)	Nitrate + Nitrite (as N) (mg/L)	5.6	NS	NA	2/25/2013	7.94	NS	NA	Semi-Annually
	Chloride (mg/L)	38		NA		50.3		NA	Semi-Annually
	Sulfate (mg/L)	462		NA		431		NA	Semi-Annually
	Field pH (S.U.)	6.5-8.5		NA		7.03		NA	Semi-Annually
	TDS (mg/L)	1075		NA		1140		NA	Semi-Annually
	Gross Alpha minus Rn & U (pCi/L)	2		NA		<1.0		NA	Semi-Annually
MW-28 (Class III)	Chloride (mg/L)	105	NS	NA	3/5/2013	110	NS	NA	Semi-Annually
	Manganese (ug/L)	1837		NA		1680		NA	Semi-Annually
	Field pH (S.U.)	6.1 - 8.5		NA		6.00		NA	Semi-Annually
MW-29 (Class III)	Iron (ug/L)	1869	NS	NA	3/6/2013	1350	NS	NA	Semi-Annually
	Manganese (ug/L)	5624		NA		5340		NA	Semi-Annually
	TDS (mg/L)	4400		NA		4500		NA	Semi-Annually
	Field pH (S.U.)	6.46 - 8.5		NA		6.36		NA	Semi-Annually
MW-32 (Class III)	Gross Alpha minus Rn & U (pCi/L)	3.33	NS	NA	2/19/2013	5.02	NS	NA	Semi-Annually
	Field pH (S.U.)	6.4 - 8.5		NA		6.52		NA	Semi-Annually

Notes:

GWCL values are taken from August 24, 2012 version of GWDP.

NS = Not Required and Not Sampled

NR = Required and Not Reported

NA = Not Applicable

Exceedances are shown in yellow

Values in () parentheses are the field pH measurements for the resampled analyses.

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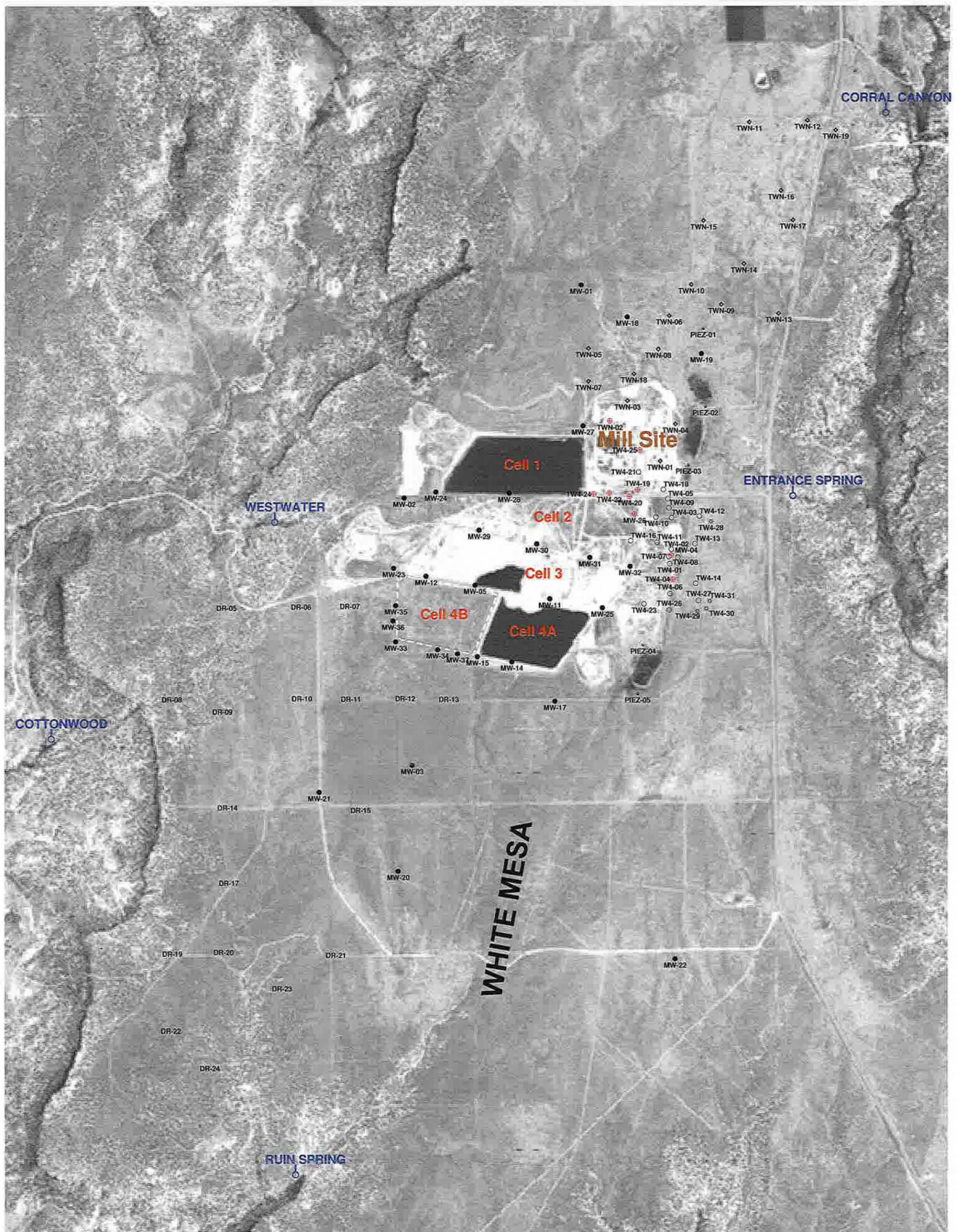
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Tab A

Site Plan and Perched Well Locations White Mesa Site



**EXPLANATION**

- TW4-19  perched chloroform or nitrate pumping well
- MW-5  perched monitoring well
- TW4-12  temporary perched monitoring well
- TWN-10  temporary perched nitrate monitoring well
- PIEZ-1  perched piezometer
- TW4-28  temporary perched monitoring well installed March, 2013
- RUIN SPRING  seep or spring



**HYDRO  
GEO  
CHEM, INC.**

**SITE PLAN SHOWING PERCHED WELL  
AND PIEZOMETER LOCATIONS  
WHITE MESA SITE**

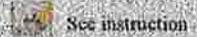
APPROVED	DATE	REFERENCE	FIGURE
--		H:/718000/may13/Uwelloc13.srf	A-1

**Tab B**

**Field Data Worksheets Quarterly Sampling**



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-01 Sampler Name and initials: Garcia Palmer / GP

Field Sample ID: MW-01-03122013

Date and Time for Purging 03/12/2013 and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-03A

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 µMHOS/cm Well Depth(0.01ft): 118.00

Depth to Water Before Purging 64.20 Casing Volume (V) 4" Well: 0 (.653h)  
3" Well: 19.74 (.367h)

Conductance (avg) 1801 pH of Water (avg) 6.76

Well Water Temp. (avg) 14.51 Redox Potential (Eh) 288 Turbidity 5.35

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 11°

Time 1455 Gal. Purged 53.16  
Conductance 1812 pH 6.77  
Temp. °C 14.58  
Redox Potential Eh (mV) 298  
Turbidity (NTU) 6.1

Time 1456 Gal. Purged 53.38  
Conductance 1804 pH 6.76  
Temp. °C 14.76  
Redox Potential Eh (mV) 286  
Turbidity (NTU) 5.0

Time 1457 Gal. Purged 53.59  
Conductance 1791 pH 6.76  
Temp. °C 14.35  
Redox Potential Eh (mV) 285  
Turbidity (NTU) 5.2

Time 1458 Gal. Purged 53.81  
Conductance 1797 pH 6.77  
Temp. °C 14.36  
Redox Potential Eh (mV) 284  
Turbidity (NTU) 5.1

11-2110-01-15 04-00 (rev. 2-04-06-11) Page 1 of 11 7-11-06 (rev. 11-06-06)

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

~~THF~~  
 Sulfate

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

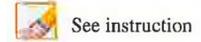
**Comment**

Arrived on site at 1045. Gamma present for purge and sampling event. Purge began at 1050. Water was clear. Purged well for a total of 250 minutes. Samples were collected at 1500. Left site at 1505.

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ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Ground Water 2013

Location (well name): MW-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-02\_03052013

Date and Time for Purging 3/5/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) GED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly

Prev. Well Sampled in Sampling Event MW-28

pH Buffer 7.0 70

pH Buffer 4.0 40

Specific Conductance 999  $\mu$ MHOS/ cm

Well Depth(0.01ft): 128.80

Depth to Water Before Purging 109.85

Casing Volume (V) 4" Well: 12.37 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 3657

pH of Water (avg) 6.92

Well Water Temp. (avg) 14.34

Redox Potential (Eh) 497

Turbidity 0.4

Weather Cond. Partly Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 3°

Time	<u>1245</u>	Gal. Purged	<u>24.95</u>
Conductance	<u>3664</u>	pH	<u>6.75</u>
Temp. °C	<u>14.30</u>		
Redox Potential Eh (mV)	<u>497</u>		
Turbidity (NTU)	<u>1.6</u>		

Time	<u>1246</u>	Gal. Purged	<u>25.17</u>
Conductance	<u>3656</u>	pH	<u>6.98</u>
Temp. °C	<u>14.40</u>		
Redox Potential Eh (mV)	<u>497</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1247</u>	Gal. Purged	<u>25.38</u>
Conductance	<u>3652</u>	pH	<u>6.98</u>
Temp. °C	<u>14.34</u>		
Redox Potential Eh (mV)	<u>497</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1248</u>	Gal. Purged	<u>25.60</u>
Conductance	<u>3658</u>	pH	<u>6.99</u>
Temp. °C	<u>14.33</u>		
Redox Potential Eh (mV)	<u>497</u>		
Turbidity (NTU)	<u>0</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 1046 Tanner and Garrin present for purge and sampling event. Purge began at 1050. Purged well for a total of 120 minutes water was clear. Purge ended and sample collected at 1250.  
 Left site at 1254

**MW-02 03-05-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-03 Sampler Name and initials: Carrin Palmer / CP

Field Sample ID MW-03\_03122013

Date and Time for Purging 03/12/2013 and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-23

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 µMHOS/cm Well Depth(0.01ft): 97.00

Depth to Water Before Purging 83.17 Casing Volume (V) 4" Well: 0 (.653h)  
3" Well: 5.06 (.367h)

Conductance (avg) 5539 pH of Water (avg) 6.17

Well Water Temp. (avg) 14.35 Redox Potential (Eh) 527 Turbidity 1.0

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 10°

Time 0940 Gal. Purged 13.52  
Conductance 5545 pH 6.14  
Temp. °C 14.36  
Redox Potential Eh (mV) 523  
Turbidity (NTU) 1.0

Time 0941 Gal. Purged 13.72  
Conductance 5540 pH 6.17  
Temp. °C 14.34  
Redox Potential Eh (mV) 527  
Turbidity (NTU) 1.0

Time 0942 Gal. Purged 13.93  
Conductance 5535 pH 6.19  
Temp. °C 14.37  
Redox Potential Eh (mV) 530  
Turbidity (NTU) 1.0

Time 0943 Gal. Purged 14.14  
Conductance 5537 pH 6.20  
Temp. °C 14.34  
Redox Potential Eh (mV) 528  
Turbidity (NTU) 1.0

01-2006-1-24 - 01-048-0007 - 2-08-05-13 / Temp/Redox / pH / Conductance / Turbidity / Time / Date

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 0827. Gamma present for purge and sampling event. Purge began at 0835. Purged well for a total of 70 minutes. Water was clear during purge. Samples were collected at 0945. Left site at 0950.



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-03A Sampler Name and initials: Garcia Palmer / GP

Field Sample ID MW-03A\_03132013

Date and Time for Purging 3/12/13 and Sampling (if different) 3/13/2013

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-03

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 95.00

Depth to Water Before Purging 85.04 Casing Volume (V) 4" Well: 6.47 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 6105 pH of Water (avg) 6.86

Well Water Temp. (avg) 14.82 Redox Potential (Eh) 360 Turbidity 0

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 11°

Time	<u>1100</u>	Gal. Purged	<u>11.44</u>
Conductance	<u>5868</u>	pH	<u>6.40</u>
Temp. °C	<u>14.40</u>		
Redox Potential Eh (mV)	<u>360</u>		
Turbidity (NTU)	<u>0</u>		

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>1254</u>	Gal. Purged	<u>0</u>
Conductance	<u>6233</u>	pH	<u>6.86</u>
Temp. °C	<u>15.01</u>		
Redox Potential Eh (mV)	<u>NA</u>		
Turbidity (NTU)	<u>NA</u>		

Time	<u>1259</u>	Gal. Purged	<u>0</u>
Conductance	<u>6216</u>	pH	<u>6.84</u>
Temp. °C	<u>15.06</u>		
Redox Potential Eh (mV)	<u>NA</u>		
Turbidity (NTU)	<u>NA</u>		

Before

After

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 1000. Purge began at 1005. Garrin present for well purge. Purged well for a total of 55 minutes. Purged well dry. water was clear during purge.  
Arrived on site at 1250. Garrin present for sampling event. Depth to water before samples were collected was 88.50. Samples were collected at 1255. left site at 1303.

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

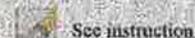
**Comment**

Arrived on site at 06:07:55. Tanner and Garrin present for purge and sampling event. Purge began at 0800. Purged well for a total of 210 minutes water was clear. Purge ended and sample collected at 1130. Left site at 1133

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-11

Sampler Name and initials: Tanner Holliday / TH

Field Sample ID: MW-11-02202013

Date and Time for Purging: 2/20/2013

and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Quarterly GW

Prev. Well Sampled in Sampling Event: MW-32

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 130.00

Depth to Water Before Purging: 86.95

Casing Volume (V) 4" Well: 28.11 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 2828

pH of Water (avg): 7.45

Well Water Temp. (avg): 13.92

Redox Potential (Eh): 248

Turbidity: 19

Weather Cond.: cloudy

Ext'l Amb. Temp. °C (prior sampling event): -2°

Time	<u>1040</u>	Gal. Purged	<u>55.33</u>
Conductance	<u>2831</u>	pH	<u>7.42</u>
Temp. °C	<u>13.95</u>		
Redox Potential Eh (mV)	<u>267</u>		
Turbidity (NTU)	<u>20</u>		

Time	<u>1041</u>	Gal. Purged	<u>55.55</u>
Conductance	<u>2827</u>	pH	<u>7.47</u>
Temp. °C	<u>13.95</u>		
Redox Potential Eh (mV)	<u>248</u>		
Turbidity (NTU)	<u>20</u>		

Time	<u>1042</u>	Gal. Purged	<u>55.76</u>
Conductance	<u>2823</u>	pH	<u>7.47</u>
Temp. °C	<u>13.86</u>		
Redox Potential Eh (mV)	<u>242</u>		
Turbidity (NTU)	<u>19</u>		

Time	<u>1043</u>	Gal. Purged	<u>55.98</u>
Conductance	<u>2831</u>	pH	<u>7.46</u>
Temp. °C	<u>13.93</u>		
Redox Potential Eh (mV)	<u>235</u>		
Turbidity (NTU)	<u>19</u>		

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

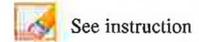
 See instruction

**Comment**

Arrived on site at 0622. Tanner and Garrin present to collect samples. Purge began at 0625. Purged well for a total of 260 minutes, water was clear. Purge ended and samples collected at 1045. Left site at 1056.



**ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-12

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-12\_03062013

Date and Time for Purging 3/6/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW

Prev. Well Sampled in Sampling Event MW-29

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 130.40

Depth to Water Before Purging 108.45

Casing Volume (V) 4" Well: 14.33 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 4124

pH of Water (avg) 6.56

Well Water Temp. (avg) 14.88

Redox Potential (Eh) 450

Turbidity 1.7

Weather Cond. Clear

Ext'l Amb. Temp. °C (prior sampling event) 3°

Time	<u>1050</u>	Gal. Purged	<u>28.21</u>
Conductance	<u>4123</u>	pH	<u>6.58</u>
Temp. °C	<u>14.92</u>		
Redox Potential Eh (mV)	<u>451</u>		
Turbidity (NTU)	<u>1.7</u>		

Time	<u>1051</u>	Gal. Purged	<u>28.42</u>
Conductance	<u>4126</u>	pH	<u>6.55</u>
Temp. °C	<u>14.91</u>		
Redox Potential Eh (mV)	<u>450</u>		
Turbidity (NTU)	<u>1.7</u>		

Time	<u>1052</u>	Gal. Purged	<u>28.64</u>
Conductance	<u>4128</u>	pH	<u>6.56</u>
Temp. °C	<u>14.85</u>		
Redox Potential Eh (mV)	<u>450</u>		
Turbidity (NTU)	<u>1.8</u>		

Time	<u>1053</u>	Gal. Purged	<u>28.86</u>
Conductance	<u>4120</u>	pH	<u>6.56</u>
Temp. °C	<u>14.82</u>		
Redox Potential Eh (mV)	<u>449</u>		
Turbidity (NTU)	<u>1.8</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 $S/60 =$

Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

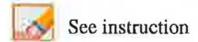
Comment

Arrived on site at 0836. Tanner and Garrin present for purge and sampling event. Purge began at 0840. Purged well for a total of 135 minutes. water was mostly clear. Purge ended and sample collected at 1055  
 Left site at 1058

**MW-12 03-06-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Ground Water 2013

Location (well name): MW-14 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-14-02262013 MW-14.02262013

Date and Time for Purging 2/26/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-30

pH Buffer 7.0 70 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/ cm Well Depth(0.01ft): 128.70

Depth to Water Before Purging 103.40 Casing Volume (V) 4" Well: 16.52 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 3823 pH of Water (avg) 6.52

Well Water Temp. (avg) 13.96 Redox Potential (Eh) 458 Turbidity 1.4

Weather Cond. Clear and Windy Ext'l Amb. Temp. °C (prior sampling event) -4°

Time	<u>0945</u>	Gal. Purged	<u>33.63</u>
Conductance	<u>3828</u>	pH	<u>6.51</u>
Temp. °C	<u>14.00</u>		
Redox Potential Eh (mV)	<u>458</u>		
Turbidity (NTU)	<u>1.4</u>		

Time	<u>0946</u>	Gal. Purged	<u>33.85</u>
Conductance	<u>3825</u>	pH	<u>6.52</u>
Temp. °C	<u>13.95</u>		
Redox Potential Eh (mV)	<u>458</u>		
Turbidity (NTU)	<u>1.4</u>		

Time	<u>0947</u>	Gal. Purged	<u>34.06</u>
Conductance	<u>3823</u>	pH	<u>6.53</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>459</u>		
Turbidity (NTU)	<u>1.4</u>		

Time	<u>0948</u>	Gal. Purged	<u>34.28</u>
Conductance	<u>3818</u>	pH	<u>6.52</u>
Temp. °C	<u>13.94</u>		
Redox Potential Eh (mV)	<u>459</u>		
Turbidity (NTU)	<u>1.4</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0705 Tanner Holliday present for purge and sampling event. Purge began at 0710. Purged well for a total of 2 Hours and 40 minutes water was clear. Purge ended and samples collected at 0950. Left site at 1010 Really Windy at time of sampling

**MW-14 02-26-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-15

Sampler Name and initials: Tanner Hellday/TH

Field Sample ID: MW-15\_03052013

Date and Time for Purging: 3/5/2013

and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Quarterly GW

Prev. Well Sampled in Sampling Event: MW-36

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 137.00

Depth to Water Before Purging: 106.54

Casing Volume (V) 4" Well: 19.89 (.653h)  
3" Well: 6 (.367h)

Conductance (avg): 4192

pH of Water (avg): 6.73

Well Water Temp. (avg): 14.49

Redox Potential (Eh): 484

Turbidity: 1.6

Weather Cond.: Partly cloudy

Ext'l Amb. Temp. °C (prior sampling event): -3°

Time	<u>0955</u>	Gal. Purged	<u>41.23</u>
Conductance	<u>491</u>	pH	<u>6.73</u>
Temp. °C	<u>14.52</u>		
Redox Potential Eh (mV)	<u>483</u>		
Turbidity (NTU)	<u>1.5</u>		

Time	<u>0956</u>	Gal. Purged	<u>41.44</u>
Conductance	<u>491</u>	pH	<u>6.73</u>
Temp. °C	<u>14.53</u>		
Redox Potential Eh (mV)	<u>484</u>		
Turbidity (NTU)	<u>1.6</u>		

Time	<u>0957</u>	Gal. Purged	<u>41.66</u>
Conductance	<u>494</u>	pH	<u>6.74</u>
Temp. °C	<u>14.51</u>		
Redox Potential Eh (mV)	<u>485</u>		
Turbidity (NTU)	<u>1.6</u>		

Time	<u>0958</u>	Gal. Purged	<u>41.88</u>
Conductance	<u>495</u>	pH	<u>6.75</u>
Temp. °C	<u>14.43</u>		
Redox Potential Eh (mV)	<u>485</u>		
Turbidity (NTU)	<u>1.7</u>		

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 0640 Tanner and Garrin Present for purge and sampling event. Purge began at 0645. Purged well for a total of ~~183~~ 195 minutes. Water was clear. Purge ended and samples collected at 1000. Left site at 1003

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

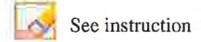
See instruction

**Comment**

Arrived on site at 0703 Tanner and Garcia present for purge and sampling event. Purge began at 0710. Purged well for a total of 390 minutes water was clear. Purge ended and samples collected at 1340. Left site at 1345



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-19

Sampler Name and initials: Garrin Palmer / GP

Field Sample ID MW-19\_03132013

Date and Time for Purging 03/13/2013

and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW

Prev. Well Sampled in Sampling Event ~~MW-24~~

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

MW-01

Specific Conductance 999  $\mu$ MHOS/ cm

Well Depth(0.01ft): 149.00

Depth to Water Before Purging 56.00

Casing Volume (V) 4" Well: 60.72 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 1727

pH of Water (avg) 6.48

Well Water Temp. (avg) 14.45

Redox Potential (Eh) 395

Turbidity 1.5

Weather Cond. Sunny

Ext'l Amb. Temp. °C (prior sampling event) 12°

Time	<u>1535</u>	Gal. Purged	<u>123.69</u>
Conductance	<u>1726</u>	pH	<u>6.46</u>
Temp. °C	<u>14.48</u>		
Redox Potential Eh (mV)	<u>391</u>		
Turbidity (NTU)	<u>1.6</u>		

Time	<u>1536</u>	Gal. Purged	<u>123.90</u>
Conductance	<u>1728</u>	pH	<u>6.48</u>
Temp. °C	<u>14.49</u>		
Redox Potential Eh (mV)	<u>395</u>		
Turbidity (NTU)	<u>1.5</u>		

Time	<u>1537</u>	Gal. Purged	<u>124.12</u>
Conductance	<u>1727</u>	pH	<u>6.50</u>
Temp. °C	<u>14.44</u>		
Redox Potential Eh (mV)	<u>397</u>		
Turbidity (NTU)	<u>1.5</u>		

Time	<u>1538</u>	Gal. Purged	<u>124.34</u>
Conductance	<u>1727</u>	pH	<u>6.50</u>
Temp. °C	<u>14.42</u>		
Redox Potential Eh (mV)	<u>399</u>		
Turbidity (NTU)	<u>1.6</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0600. Garrin and Tanner present for purge and sampling event. Purge began at 0605. Purged well for 575 minutes. Water was clear during purge. Samples were collected at 1540. Left site at 1545.

**MW-19 03-13-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-23 Sampler Name and initials: Tanner Holliday / TH

Field Sample ID MW-23\_03112013

Date and Time for Purging 3/11/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-05

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 132.00

Depth to Water Before Purging 114.06 Casing Volume (V) 4" Well: 11.71 (653h)  
3" Well: 0 (367h)

Conductance (avg) 3777 pH of Water (avg) 6.36

Well Water Temp. (avg) 16.22 Redox Potential (Eh) 519 Turbidity 9.2

Weather Cond: Partly cloudy Ext'l Amb. Temp. °C (prior sampling event) -3°

Time 1025 Gal. Purged 25.50  
Conductance 3780 pH 6.36  
Temp. °C 16.21  
Redox Potential Eh (mV) 515  
Turbidity (NTU) 9.1

Time 1026 Gal. Purged 25.70  
Conductance 3777 pH 6.36  
Temp. °C 16.22  
Redox Potential Eh (mV) 515  
Turbidity (NTU) 9.2

Time 1027 Gal. Purged 25.90  
Conductance 3779 pH 6.37  
Temp. °C 16.23  
Redox Potential Eh (mV) 519  
Turbidity (NTU) 9.2

Time 1028 Gal. Purged 26.11  
Conductance 3775 pH 6.37  
Temp. °C 16.22  
Redox Potential Eh (mV) 514  
Turbidity (NTU) 9.4 9.4

EN 2785-4-05 - 01/04/05 v01.2 Rev. 01.11 - Temp. 1026 - 1144

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

26.52

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs  AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

Comment

Arrived on site at 0816 Tanner and Garrin present for purge and sampling event  
Purge began at 0820. Purged well for a total of 130 minutes.  
water was mostly clear. Flow Rate decreased as well purged.  
Purge ended and sample collected at 1030 Left site at 1045.

Do not touch this cell (SheetName)



ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-24 Sampler Name and initials: Garrin Palmer / GP

Field Sample ID: MW-24-03142013

Date and Time for Purging: 03/13/2013 and Sampling (if different): 03/14/2013

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Quarterly GW Prev. Well Sampled in Sampling Event: MW-03A

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm Well Depth(0.01ft): 120

Depth to Water Before Purging: 114.13 Casing Volume (V) 4" Well: 3.83 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg): 4490 pH of Water (avg): 6.21

Well Water Temp. (avg): 14.24 Redox Potential (Eh): 330 Turbidity: 0

Weather Cond.: Sunny Ext'l Amb. Temp. °C (prior sampling event): 12°

Time: 1359 Gal. Purged: 7.48

Conductance: 4584 pH: 6.10

Temp. °C: 16.78

Redox Potential Eh (mV): 330

Turbidity (NTU): 0

Time: 0710 Gal. Purged: 0

Conductance: 4405 pH: 6.26

Temp. °C: 13.01

Redox Potential Eh (mV): ~~402~~

Turbidity (NTU):     

Before

Time:      Gal. Purged:     

Conductance:      pH:     

Temp. °C:     

Redox Potential Eh (mV):     

Turbidity (NTU):     

Time: 0718 Gal. Purged: 0

Conductance: 4481 pH: 6.29

Temp. °C: 12.94

Redox Potential Eh (mV):     

Turbidity (NTU):     

After

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 1310. Garrin present for purge and sampling event. Purge began at 1320. Purged well for a total of 39 minutes. Well ran dry. Water was clear during purge. Arrived on site for sampling at 0703. Garrin present for sampling. Depth to water was 114.56. Samples were collected at 0712. Left site at 0725.



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-25 Sampler Name and initials: Tanner Holiday/TH

Field Sample ID MW-25\_02202013

Date and Time for Purging 2/20/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-11

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 115.00

Depth to Water Before Purging 72.65 Casing Volume (V) 4" Well: 27.65 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 3176 pH of Water (avg) 6.61

Well Water Temp. (avg) 13.85 Redox Potential (Eh) 380 Turbidity 3.4

Weather Cond. Cloudy Ext'l Amb. Temp. °C (prior sampling event) -2°

Time	<u>1105</u>	Gal. Purged	<u>57.50</u>
Conductance	<u>3185</u>	pH	<u>6.61</u>
Temp. °C	<u>13.87</u>		
Redox Potential Eh (mV)	<u>380</u>		
Turbidity (NTU)	<u>3.0</u>		

Time	<u>1106</u>	Gal. Purged	<u>57.72</u>
Conductance	<u>3171</u>	pH	<u>6.61</u>
Temp. °C	<u>13.75</u>		
Redox Potential Eh (mV)	<u>380</u>		
Turbidity (NTU)	<u>3.5</u>		

Time	<u>1107</u>	Gal. Purged	<u>57.93</u>
Conductance	<u>3171</u>	pH	<u>6.62</u>
Temp. °C	<u>13.88</u>		
Redox Potential Eh (mV)	<u>380</u>		
Turbidity (NTU)	<u>3.5</u>		

Time	<u>1108</u>	Gal. Purged	<u>58.15</u>
Conductance	<u>3179</u>	pH	<u>6.62</u>
Temp. °C	<u>13.91</u>		
Redox Potential Eh (mV)	<u>380</u>		
Turbidity (NTU)	<u>3.7</u>		

20-2005-1-144 - 200-008-0007-3-05-09-12 / Temp/Date / 11:14 AM / Form: 02/02/2008

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 6:06:35. Tanner and Garrin present for purge and sampling event. Purge began at 0640. Purged well for a total of 270 minutes. Water was clear. Purge ended and samples collected at 1110. Left site at 1120.

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-26 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: MW-26-02202013

Date and Time for Purging: 2/20/2013 and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): Continuous

Purging Method Used:  2 casings  3 casings

Sampling Event: Quarterly GW Prev. Well Sampled in Sampling Event: MW-25

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/cm Well Depth(0.01ft): 121.33

Depth to Water Before Purging: 7 58.12 Casing Volume (V) 4" Well: 41.27 (.653h)  
58.12 3" Well: 0 (.367h)

Conductance (avg): 3312 pH of Water (avg): 6.71

Well Water Temp. (avg): 13.35 Redox Potential (Eh): 381 Turbidity: 1.0

Weather Cond.: cloudy Ext'l Amb. Temp. °C (prior sampling event): 1°

Time	<u>1359</u>	Gal. Purged	<u>0</u>
Conductance	<u>3312</u>	pH	<u>6.71</u>
Temp. °C	<u>13.35</u>		
Redox Potential Eh (mV)	<u>381</u>		
Turbidity (NTU)	<u>1.0</u>		

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

MS-2011-049 06/06/2012 14:08:12 / 1300 / 1300

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 1355. Tanner and Garcia present to collect samples. Samples collected at 1400. Water was clear. Left site at 1403.

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

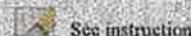
 See instruction

**Comment**

Arrived on site at 07:35 Tanner and Garrin present for purge and sampling event. Purge began at 0740. Purged well for a total of 300 minutes water was clear. Purge ended and samples collected at 1240. Left site at 1248



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-28 Sampler Name and initials: Tanner Holliday / TH

Field Sample ID MW-28\_03052013

Date and Time for Purging 3/5/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-15

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 110.00

Depth to Water Before Purging 76.35 Casing Volume (V) 4" Well: 21.97 (.653h)  
3" Well:            (.367h)

Conductance (avg) 3885 pH of Water (avg) 5.99

Well Water Temp. (avg) 14.25 Redox Potential (Eh) 470 Turbidity 10.05

Weather Cond. Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event) -3°

Time 1055 Gal. Purged 52.08  
Conductance 3893 pH 6.00  
Temp. °C 14.31  
Redox Potential Eh (mV) 472  
Turbidity (NTU) 10.9

Time 1056 Gal. Purged 52.29  
Conductance 3888 pH 5.99  
Temp. °C 14.25  
Redox Potential Eh (mV) 471  
Turbidity (NTU) 10.0

Time 1057 Gal. Purged 52.51  
Conductance 3878 pH 5.98  
Temp. °C 14.22  
Redox Potential Eh (mV) 469  
Turbidity (NTU) 9.7

Time 1058 Gal. Purged 52.73  
Conductance 3883 pH 6.00  
Temp. °C 14.24  
Redox Potential Eh (mV) 468  
Turbidity (NTU) 9.6

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Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0650. Tanner and Garrin Present for purge and sampling event  
Purge began at 0655. Purged well for a total of 245 minutes  
water was mostly clear. Purge ended and samples collected at 1100  
Left site at 1104



Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TDS

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

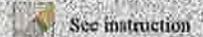
Comment

Arrived on site at 0826. Tanner and Garcia Present for purge and sampling event. Purge began at 0830. Purged well for a total of 160 minutes. Water was a little murky. Purge ended and samples collected at 1110. Left site at 1115.

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Ground water 2013

Location (well name): MW-30 Sampler Name and initials: Tanner Holliday /TH

Field Sample ID MW-30\_0226\_2013

Date and Time for Purging 2/26/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-27

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 110.00

Depth to Water Before Purging 75.21 Casing Volume (V) 4" Well: 22.71 (653h)  
3" Well: 0 (367h)

Conductance (avg) 2003 pH of Water (avg) 6.93

Well Water Temp. (avg) 13.90 Redox Potential (Eh) 375 Turbidity 0

Weather Cond. clear and windy Ext'l Amb. Temp. °C (prior sampling event) -4"

Time 1045 Gal. Purged 50.99  
Conductance 2003 pH 6.93  
Temp. °C 13.95  
Redox Potential Eh (mV) 381  
Turbidity (NTU) 0

Time 1046 Gal. Purged 51.21  
Conductance 2002 pH 6.93  
Temp. °C 13.90  
Redox Potential Eh (mV) 375  
Turbidity (NTU) 0

Time 1047 Gal. Purged 51.42  
Conductance 2003 pH 6.93  
Temp. °C 13.87  
Redox Potential Eh (mV) 374  
Turbidity (NTU) 0

Time 1048 Gal. Purged 51.64  
Conductance 2004 pH 6.93  
Temp. °C 13.88  
Redox Potential Eh (mV) 372  
Turbidity (NTU) 0

61-2285-5.3 (Rev. 03/2007) 2 of 10 (Rev. 11/2011) - Printed 2/27/2013 11:17 AM from dmschubert@dm

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 0646. Tanner and Garrin present for purge and sampling event. Purge began at 0650. Purged well for a total of 240 minutes. water was clear. Purge ended and samples collected at 1050. Left site at 1100



ATTACHMENT I-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-31 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-31-02192013

Date and Time for Purging 2/19/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event N/A

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μMHOS/cm Well Depth(0.01ft): 130.00

Depth to Water Before Purging 67.30 Casing Volume (V) 4" Well: 40.94 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 1931 pH of Water (avg) 7.31

Well Water Temp. (avg) 13.44 Redox Potential (Eh) 354 Turbidity 47

Weather Cond. clear Ext'l Amb. Temp. °C (prior sampling event) -4°

Time	<u>1310</u>	Gal. Purged	<u>81.37</u>
Conductance	<u>1932</u>	pH	<u>7.30</u>
Temp. °C	<u>13.90</u>		
Redox Potential Eh (mV)	<u>351</u>		
Turbidity (NTU)	<u>45</u>		

Time	<u>1311</u>	Gal. Purged	<u>81.59</u>
Conductance	<u>1931</u>	pH	<u>7.33</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>353</u>		
Turbidity (NTU)	<u>47</u>		

Time	<u>1312</u>	Gal. Purged	<u>81.80</u>
Conductance	<u>1931</u>	pH	<u>7.31</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>356</u>		
Turbidity (NTU)	<u>48</u>		

Time	<u>1313</u>	Gal. Purged	<u>82.02</u>
Conductance	<u>1932</u>	pH	<u>7.32</u>
Temp. °C	<u>13.97</u>		
Redox Potential Eh (mV)	<u>357</u>		
Turbidity (NTU)	<u>49</u>		

63-2302-2-2014 - 00-000-0007-2 of 06.13 / 7/19/14/14-111111 - include 4/22/2012 12:07 PM from 0000000004

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

Comment

Arrived on site at 0646. Tanner and Garrin present for purge and sampling event. Purge began at 0655. Purged well for a total of 380 minutes. water was clear. Purge ended and samples collected at 1315. Left site at 1326

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-32

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: MW-32\_02192013

Date and Time for Purging: 2/19/2013 and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Quarterly G-W Prev. Well Sampled in Sampling Event: MW-31

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm Well Depth(0.01ft): 132.50

Depth to Water Before Purging: 73.80 Casing Volume (V) 4" Well: 38.33 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 3747 pH of Water (avg): 6.52

Well Water Temp. (avg): 13.95 Redox Potential (Eh): 290 Turbidity: 53

Weather Cond.: Clear

Ext'l Amb. Temp. °C (prior sampling event): -4°

Time	<u>1300</u>	Gal. Purged	<u>77.03</u>
Conductance	<u>3748</u>	pH	<u>6.52</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>291</u>		
Turbidity (NTU)	<u>50</u>		

Time	<u>1301</u>	Gal. Purged	<u>77.25</u>
Conductance	<u>3747</u>	pH	<u>6.52</u>
Temp. °C	<u>13.95</u>		
Redox Potential Eh (mV)	<u>291</u>		
Turbidity (NTU)	<u>55</u>		

Time	<u>1302</u>	Gal. Purged	<u>77.46</u>
Conductance	<u>3748</u>	pH	<u>6.52</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>289</u>		
Turbidity (NTU)	<u>55</u>		

Time	<u>1303</u>	Gal. Purged	<u>77.68</u>
Conductance	<u>3745</u>	pH	<u>6.52</u>
Temp. °C	<u>13.95</u>		
Redox Potential Eh (mV)	<u>289</u>		
Turbidity (NTU)	<u>55.8</u>		

03-2009-1-211 - 02-QAP-REV. 2 04-06-12 / Template-11137 - Printed 4/23/13 12:47 PM from 2002020703

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

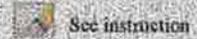
Comment

Arrived on site at 0659. Tanner and Garrin present for purge and sampling event. Purge began at 0705. Purged well for a total of 360 minutes. water was a little murky. Purge ended and sample collected at 1305. Left site at 1307

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ATTACHMENT I-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1<sup>st</sup> Quarter Groundwater 2013

Location (well name): MW-35 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-35-02262013

Date and Time for Purging 2/26/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-14

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 499  $\mu$ MHOS/cm Well Depth(0.01 ft): 12450

Depth to Water Before Purging 112.30 Casing Volume (V) 4" Well: 7.96 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 4074 pH of Water (avg) 6.68

Well Water Temp. (avg) 13.50 Redox Potential (Eh) 348 Turbidity 0

Weather Cond. Partly cloudy with wind Ext'l Amb. Temp. °C (prior sampling event) -1°

Time	<u>1310</u>	Gal. Purged	<u>15.19</u>
Conductance	<u>4079</u>	pH	<u>6.68</u>
Temp. °C	<u>13.52</u>		
Redox Potential Eh (mV)	<u>352</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1311</u>	Gal. Purged	<u>15.40</u>
Conductance	<u>4075</u>	pH	<u>6.68</u>
Temp. °C	<u>13.41</u>		
Redox Potential Eh (mV)	<u>349</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1312</u>	Gal. Purged	<u>15.62</u>
Conductance	<u>4073</u>	pH	<u>6.68</u>
Temp. °C	<u>13.52</u>		
Redox Potential Eh (mV)	<u>348</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1313</u>	Gal. Purged	<u>15.84</u>
Conductance	<u>4071</u>	pH	<u>6.68</u>
Temp. °C	<u>13.55</u>		
Redox Potential Eh (mV)	<u>346</u>		
Turbidity (NTU)	<u>0</u>		

41 1573 5 4 - 06/04/2007 2:46:38 PM - 277941 - 211 MW from 06/06/2012

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

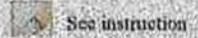
Comment

Arrived on site at 1155. Tanner Holliday present for purge and sampling event. Purge began at 1200. Purged well for a total of 75 minutes. water was clear. Purge ended and samples collected at 1315. Left site at 1325

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-36 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-36\_02262013

Date and Time for Purging 2/26/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-35

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 121.60

Depth to Water Before Purging 110.45 Casing Volume (V) 4" Well: 7.28 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 4846 pH of Water (avg) 6.85

Well Water Temp. (avg) 13.56 Redox Potential (Eh) 453 Turbidity 3.3

Weather Cond. Partly cloudy and windy Ext'l Amb. Temp. °C (prior sampling event) -1°

Time 1355 Gal. Purged 14.10  
Conductance 4859 pH 6.86  
Temp. °C 13.56  
Redox Potential Eh (mV) 451  
Turbidity (NTU) 3.4

Time 1356 Gal. Purged 14.32  
Conductance 4846 pH 6.86  
Temp. °C 13.56  
Redox Potential Eh (mV) 452  
Turbidity (NTU) 3.4

Time 1357 Gal. Purged 14.53  
Conductance 4841 pH 6.85  
Temp. °C 13.54  
Redox Potential Eh (mV) 454  
Turbidity (NTU) 3.3

Time 1358 Gal. Purged 14.75  
Conductance 4840 pH 6.85  
Temp. °C 13.60  
Redox Potential Eh (mV) 456  
Turbidity (NTU) 3.3

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 1245. Tanner Halliday present for purge and sampling event. Purge began at 1250. Purged well for a total of 70 minutes. water was clear. Purge ended and samples collected at 1400. Left site at 1411.



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): MW-37

Sampler Name and initials: Tanner Holliday/AH

Field Sample ID MW-37\_03202013

Date and Time for Purging 3/6/2013

and Sampling (if different) 3/20/2013

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) N/A

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW

Prev. Well Sampled in Sampling Event MW-12

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 449  $\mu$ MHOS/cm

Well Depth(0.01ft): 121.80

Depth to Water Before Purging 106.80

Casing Volume (V) 4" Well: 9.79 (.653h)

3" Well: 0 (.367h)

Conductance (avg) 4366

pH of Water (avg) 6.79

Well Water Temp. (avg) 13.67

Redox Potential (Eh) 482

Turbidity 49

Weather Cond. clear and windy

Ext'l Amb. Temp. °C (prior sampling event) 13°

Time	<u>1253</u>	Gal. Purged	<u>5</u>
Conductance	<u>4317</u>	pH	<u>6.63</u>
Temp. °C	<u>14.88</u>		
Redox Potential Eh (mV)	<u>482</u>		
Turbidity (NTU)	<u>49</u>		

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>0844</u>	Gal. Purged	<u>0</u>
Conductance	<u>4393</u>	pH	<u>6.88</u>
Temp. °C	<u>13.03</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>0848</u>	Gal. Purged	<u>0</u>
Conductance	<u>4389</u>	pH	<u>6.86</u>
Temp. °C	<u>13.10</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)			

Before

After

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Inorganics

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

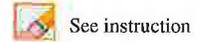
**Comment**

Arrived on site at 1245. Tanner and Garrin present to bail Mw-37 started bailing at 1248. parameters taken with the first 5 Gallons of water in a bucket. Bailing ended at 1305. Bailed well dry! Left site at 1307. Arrived on site at 0840. Tanner and Garrin present to bail samples. Depth to water was 114.58. samples bailed at 0845. Left site at 0849

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**ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event:

Location (well name):

Sampler Name and initials:

Field Sample ID

Date and Time for Purging

and Sampling (if different)

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet)

Purging Method Used:  2 casings  3 casings

Sampling Event

Prev. Well Sampled in Sampling Event

pH Buffer 7.0

pH Buffer 4.0

Specific Conductance   $\mu$ MHOS/ cm

Well Depth(0.01ft):

Depth to Water Before Purging

Casing Volume (V) 4" Well:  (.653h)  
3" Well:  (.367h)

Conductance (avg)

pH of Water (avg)

Well Water Temp. (avg)

Redox Potential (Eh)

Turbidity

Weather Cond.

Ext'l Amb. Temp. °C (prior sampling event)

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 $S/60 =$

Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

---

Final Depth

Sample Time

 See instruction

Comment

Duplicate of MW-14

MW-65 02-26-2013 Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: 1st Quarter Groundwater 2013

Location (well name): M60-19 MW-70 Sampler Name and initials: Garrin Palmer / GP

Field Sample ID MW-70-03132013

Date and Time for Purging 3/13/2013 and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Quarterly GW Prev. Well Sampled in Sampling Event MW-01

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 149.00

Depth to Water Before Purging 56.00 Casing Volume (V) 4" Well: 60.72 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 1727 pH of Water (avg) 6.48

Well Water Temp. (avg) 14.45 Redox Potential (Eh) 395 Turbidity 1.5

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 12°

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Duplicate of MW-19.

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Tab C

Field Data Worksheets Accelerated Monitoring

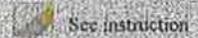
Tab C1

Field Data Worksheets Accelerated Monitoring

January 2013



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-11

Sampler Name and initials: Tanner Holliday /TH

Field Sample ID: MW-11-01232013

Date and Time for Purging: 1/23/2013 and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW Prev. Well Sampled in Sampling Event: MW-25

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 130.00

Depth to Water Before Purging: 87.80

Casing Volume (V) 4" Well: 27.55 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 2910

pH of Water (avg): 7.42

Well Water Temp. (avg): 13.64

Redox Potential (Eh): 154

Turbidity: 0

Weather Cond.: Partly cloudy

Ext'l Amb. Temp. °C (prior sampling event): -6°

Time	<u>1145</u>	Gal. Purged	<u>56.42</u>
Conductance	<u>2908</u>	pH	<u>7.39</u>
Temp. °C	<u>13.51</u>		
Redox Potential Eh (mV)	<u>160</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1146</u>	Gal. Purged	<u>56.63</u>
Conductance	<u>2906</u>	pH	<u>7.42</u>
Temp. °C	<u>13.61</u>		
Redox Potential Eh (mV)	<u>156</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1147</u>	Gal. Purged	<u>56.85</u>
Conductance	<u>2914</u>	pH	<u>7.45</u>
Temp. °C	<u>13.42</u>		
Redox Potential Eh (mV)	<u>153</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1148</u>	Gal. Purged	<u>57.07</u>
Conductance	<u>2912</u>	pH	<u>7.45</u>
Temp. °C	<u>13.73</u>		
Redox Potential Eh (mV)	<u>147</u>		
Turbidity (NTU)	<u>0</u>		

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologies	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 0720. Tanner and Garrin Present for purge and sampling event. Purge began at 0725, Purged well for a total of 265 Minutes. Water was clear during Purge. Purge ended and samples were collected at 1150. Left site at 1156.

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-14 Sampler Name and initials: Tanner Holliday / TH

Field Sample ID MW-14-01232013

Date and Time for Purging 1/23/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly G-W Prev. Well Sampled in Sampling Event MW-11

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 128.70

Depth to Water Before Purging 103.89 Casing Volume (V) 4" Well: 16.20 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 4008 pH of Water (avg) 6.47

Well Water Temp. (avg) 14.07 Redox Potential (Eh) 452 Turbidity 0

Weather Cond. Partly cloudy Ext'l Amb. Temp. °C (prior sampling event) -6°

Time	<u>0955</u>	Gal. Purged	<u>31.46</u>
Conductance	<u>4011</u>	pH	<u>6.46</u>
Temp. °C	<u>14.04</u>		
Redox Potential Eh (mV)	<u>459</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0956</u>	Gal. Purged	<u>31.68</u>
Conductance	<u>4005</u>	pH	<u>6.46</u>
Temp. °C	<u>14.05</u>		
Redox Potential Eh (mV)	<u>454</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0957</u>	Gal. Purged	<u>31.89</u>
Conductance	<u>4007</u>	pH	<u>6.48</u>
Temp. °C	<u>14.10</u>		
Redox Potential Eh (mV)	<u>449</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0958</u>	Gal. Purged	<u>32.11</u>
Conductance	<u>4011</u>	pH	<u>6.48</u>
Temp. °C	<u>14.10</u>		
Redox Potential Eh (mV)	<u>446</u>		
Turbidity (NTU)	<u>0</u>		

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 0726 Tanner and Garcia present for purge and sampling event  
Purge began at 0730. Purged well for a total of 150 minutes.  
water was clear. Purge ended and sample collected at 1000  
Left site at 1004

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ATTACHMENT I-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-25

Sampler Name and initials: Tanner Holliday / TH

Field Sample ID: MW-25-01222013

Date and Time for Purging: 1/22/2013

and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW

Prev. Well Sampled in Sampling Event: MW-31

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0 01ft): 115.00

Depth to Water Before Purging: 73.40

Casing Volume (V) 4" Well: 27.16 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 3311

pH of Water (avg): 6.63

Well Water Temp. (avg): 14.30

Redox Potential (Eh): 406

Turbidity: 0

Weather Cond: Clear

Ext'l Amb. Temp. °C (prior sampling event): -5°

Time	<u>1300</u>	Gal. Purged	<u>54.25</u>
	<u>1200</u>		
Conductance	<u>3314</u>	pH	<u>6.62</u>
Temp. °C	<u>14.28</u>		
Redox Potential Eh (mV)	<u>414</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1301</u>	Gal. Purged	<u>54.46</u>
	<u>1201</u>		
Conductance	<u>3313</u>	pH	<u>6.63</u>
Temp. °C	<u>14.30</u>		
Redox Potential Eh (mV)	<u>408</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1302</u>	Gal. Purged	<u>54.68</u>
	<u>1202</u>		
Conductance	<u>3310</u>	pH	<u>6.63</u>
Temp. °C	<u>14.30</u>		
Redox Potential Eh (mV)	<u>404</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1303</u>	Gal. Purged	<u>54.90</u>
	<u>1203</u>		
Conductance	<u>3308</u>	pH	<u>6.65</u>
Temp. °C	<u>14.32</u>		
Redox Potential Eh (mV)	<u>399</u>		
Turbidity (NTU)	<u>0</u>		

33-20207-222 - 03-2007 MW-25-04-12 - Temp-Data (1779) - Printed: 6/21/2012 10:47 AM Local: 2012062109

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative

Final Depth

Sample Time

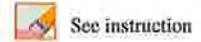
See instruction

Comment

Arrived on site at 0745. Tanner and Gurrin Present for purge and sampling event  
 Purge began at 0750. Purged well for a total of 255 minutes.  
 water was clear. Purge ended and sample collected at 1205  
 Left site at 1208



ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-26

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-26-01242013

Date and Time for Purging 1/24/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW

Prev. Well Sampled in Sampling Event MW-35

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/ cm

Well Depth(0.01ft): 121.33

Depth to Water Before Purging 60.60

Casing Volume (V) 4" Well:          (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 3530

pH of Water (avg) 6.51

Well Water Temp. (avg) 14.97

Redox Potential (Eh) 207

Turbidity 0

Weather Cond. Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 0°

Time	<u>0844</u>	Gal. Purged	<u>0</u>
Conductance	<u>3530</u>	pH	<u>6.51</u>
Temp. °C	<u>14.97</u>		
Redox Potential Eh (mV)	<u>207</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>        </u>	Gal. Purged	<u>        </u>
Conductance	<u>        </u>	pH	<u>        </u>
Temp. °C	<u>        </u>		
Redox Potential Eh (mV)	<u>        </u>		
Turbidity (NTU)	<u>        </u>		

Time	<u>        </u>	Gal. Purged	<u>        </u>
Conductance	<u>        </u>	pH	<u>        </u>
Temp. °C	<u>        </u>		
Redox Potential Eh (mV)	<u>        </u>		
Turbidity (NTU)	<u>        </u>		

Time	<u>        </u>	Gal. Purged	<u>        </u>
Conductance	<u>        </u>	pH	<u>        </u>
Temp. °C	<u>        </u>		
Redox Potential Eh (mV)	<u>        </u>		
Turbidity (NTU)	<u>        </u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0835. Tanner and Garrin Present to collect samples. Samples collected at 0845. water was clear. Left site at 0848

**MW-26 01-24-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-30 Sampler Name and initials: Tanner Holliday / TH

Field Sample ID: MW-30-01232013

Date and Time for Purging: 1/23/2013 and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW Prev. Well Sampled in Sampling Event: MW-14

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm Well Depth(0.01ft): 110.00

Depth to Water Before Purging: 75.80 Casing Volume (V) 4" Well: 22.33 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 2104 pH of Water (avg): 6.86

Well Water Temp. (avg): 14.07 Redox Potential (Eh): 229 Turbidity: 0

Weather Cond.: Partly cloudy Ext'l Amb. Temp. °C (prior sampling event): -4°

Time: 1345 Gal. Purged: 44.48

Conductance: 2108 pH: 6.87

Temp. °C: 14.10

Redox Potential Eh (mV): 231

Turbidity (NTU): 0

Time: 1346 Gal. Purged: 44.70

Conductance: 2103 pH: 6.86

Temp. °C: 14.10

Redox Potential Eh (mV): 230

Turbidity (NTU): 0

Time: 1347 Gal. Purged: 44.91

Conductance: 2104 pH: 6.86

Temp. °C: 14.05

Redox Potential Eh (mV): 229

Turbidity (NTU): 0

Time: 1348 Gal. Purged: 45.13

Conductance: 2103 pH: 6.88

Temp. °C: 14.05

Redox Potential Eh (mV): 227

Turbidity (NTU): 0

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Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm  
S/60 =

Time to evacuate two casing volumes (2V)  
T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologies	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Chloride

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

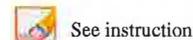
**Comment**

Arrived on site at 1016. Turner and Garrin present for purge and sampling event. Purge began at 1020. Purged well for a total of 210 minutes. Water was clear. Purge ended and samples collected at 1350. Left site at 1357.

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**ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-31

Sampler Name and initials: Tanner Holliday TH

Field Sample ID MW-31\_01222013

Date and Time for Purging 1/22/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW

Prev. Well Sampled in Sampling Event N/A

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/ cm

Well Depth(0.01ft): 130.00

Depth to Water Before Purging 67.7

Casing Volume (V) 4" Well: 40.67 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 2029

pH of Water (avg) 6.87

Well Water Temp. (avg) 14.16

Redox Potential (Eh) 383

Turbidity 28

Weather Cond. Clear

Ext'l Amb. Temp. °C (prior sampling event) -6°

Time	<u>1355</u>	Gal. Purged	<u>81.37</u>
Conductance	<u>2028</u>	pH	<u>6.80</u>
Temp. °C	<u>14.16</u>		
Redox Potential Eh (mV)	<u>387</u>		
Turbidity (NTU)	<u>27</u>		

Time	<u>1356</u>	Gal. Purged	<u>81.59</u>
Conductance	<u>2029</u>	pH	<u>6.85</u>
Temp. °C	<u>14.17</u>		
Redox Potential Eh (mV)	<u>384</u>		
Turbidity (NTU)	<u>28</u>		

Time	<u>1357</u>	Gal. Purged	<u>81.80</u>
Conductance	<u>2032</u>	pH	<u>6.90</u>
Temp. °C	<u>14.16</u>		
Redox Potential Eh (mV)	<u>382</u>		
Turbidity (NTU)	<u>28</u>		

Time	<u>1358</u>	Gal. Purged	<u>82.02</u>
Conductance	<u>2030</u> <u>2030</u>	pH	<u>6.94</u>
Temp. °C	<u>14.16</u>		
Redox Potential Eh (mV)	<u>380</u>		
Turbidity (NTU)	<u>29</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 $S/60 =$

Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Ali* TDS  
 Sulfate  
 Chloride

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

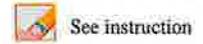
 See instruction

Comment  
 Arrived on site at 0735. Tanner and Garrin present for purge and sampling event. Purge began at 0740. Purged well for a total of 380 minutes. Water had little bubbles in it and was a little murky. Purge ended and samples collected at 1400. Left site at 1406

**MW-31 01-22-2013** Do not touch this cell (SheetName)



**ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-35

Sampler Name and initials: Garrin Palmer / GP

Field Sample ID MW-35\_01232013

Date and Time for Purging 01/23/2013

and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW

Prev. Well Sampled in Sampling Event MW-11

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 124.50

Depth to Water Before Purging 112.45

Casing Volume (V) 4" Well: 7.86 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 4284

pH of Water (avg) 6.53

Well Water Temp. (avg) 13.91

Redox Potential (Eh) 243

Turbidity 0

Weather Cond. Partly cloudy

Ext'l Amb. Temp. °C (prior sampling event) 1°

Time	<u>1325</u>	Gal. Purged	<u>16.27</u>
Conductance	<u>4286</u>	pH	<u>6.54</u>
Temp. °C	<u>13.93</u>		
Redox Potential Eh (mV)	<u>250</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1326</u>	Gal. Purged	<u>16.49</u>
Conductance	<u>4290</u>	pH	<u>6.53</u>
Temp. °C	<u>13.91</u>		
Redox Potential Eh (mV)	<u>245</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1327</u>	Gal. Purged	<u>16.70</u>
Conductance	<u>4281</u>	pH	<u>6.54</u>
Temp. °C	<u>13.91</u>		
Redox Potential Eh (mV)	<u>241</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1328</u>	Gal. Purged	<u>16.92</u>
Conductance	<u>4280</u>	pH	<u>6.54</u>
Temp. °C	<u>13.91</u>		
Redox Potential Eh (mV)	<u>239</u>		
Turbidity (NTU)	<u>0</u>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

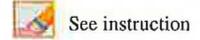
 See instruction

Comment  
 Arrived on site at 1205. Garrin present for purge. Purge began at 1210. Purged well for a total of 80 minutes, water was clear. Purge ended and samples collected at 1330. Left site at 1340.

**MW-35 01-23-2013** Do not touch this cell (SheetName)



**ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: January Monthly Groundwater 2013

Location (well name): MW-65 Sampler Name and initials: Tanner Holliday /TH

Field Sample ID MW-65\_01232013

Date and Time for Purging MW-65\_01232013 1/23/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW Prev. Well Sampled in Sampling Event MW-11

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/ cm Well Depth(0.01ft): 124.50

Depth to Water Before Purging 112.45 Casing Volume (V) 4" Well: 7.86 (.653h)  
 3" Well: 6 (.367h)

Conductance (avg) 4284 pH of Water (avg) 6.53

Well Water Temp. (avg) 13.91 Redox Potential (Eh) 243 Turbidity 0

Weather Cond. Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event) 1°

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 $S/60 =$

Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Duplicate of MW-35

**MW-65 01-23-2013** Do not touch this cell (SheetName)

Tab C2

Field Data Worksheets Accelerated Monitoring

March 2013



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: March Ground water 2013

Location (well name): MW-11

Sampler Name and initials: Tanner Holliday/ATH

Field Sample ID: MW-11\_03202013

Date and Time for Purging: 3/20/2013

and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet): GED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW

Prev. Well Sampled in Sampling Event: MW-30

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 130.00

Depth to Water Before Purging: 87.47

Casing Volume (V) 4" Well: 27.77 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 2874

pH of Water (avg): 7.32

Well Water Temp. (avg): 14.30

Redox Potential (Eh): 191

Turbidity: 0

Weather Cond.: Partly cloudy

Ext'l Amb. Temp. °C (prior sampling event): 2°

Time	<u>1155</u>	Gal. Purged	<u>56.42</u>
Conductance	<u>2874</u>	pH	<u>7.30</u>
Temp. °C	<u>14.29</u>		
Redox Potential Eh (mV)	<u>198</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1156</u>	Gal. Purged	<u>56.63</u>
Conductance	<u>2874</u>	pH	<u>7.33</u>
Temp. °C	<u>14.30</u>		
Redox Potential Eh (mV)	<u>190</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1157</u>	Gal. Purged	<u>56.85</u>
Conductance	<u>2874</u>	pH	<u>7.34</u>
Temp. °C	<u>14.32</u>		
Redox Potential Eh (mV)	<u>191</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1158</u>	Gal. Purged	<u>57.07</u>
Conductance	<u>2875</u>	pH	<u>7.33</u>
Temp. °C	<u>14.31</u>		
Redox Potential Eh (mV)	<u>187</u>		
Turbidity (NTU)	<u>0</u>		

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

**Comment**

Arrived on site at 0730. Tenner and Garrin present for purge and sampling event.  
Purge began at 0735. Purged well for a total of 265 minutes  
water was clear. Purge ended and sample collected at 1200.  
Left site at 1203

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ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: March Groundwater 2013

Location (well name): MW-14

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: MW-14\_03202013

Date and Time for Purging: 3/20/2013

and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW

Prev. Well Sampled in Sampling Event: MW-26

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 128.70

Depth to Water Before Purging: 103.60

Casing Volume (V) 4" Well: 16.39 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 3836

pH of Water (avg): 6.45

Well Water Temp. (avg): 14.20

Redox Potential (Eh): 281

Turbidity: 0

Weather Cond.: cloudy

Ext'l Amb. Temp. °C (prior sampling event): 7°

Time	<u>1500</u>	Gal. Purged	<u>32.55</u>
Conductance	<u>3835</u>	pH	<u>6.42</u>
Temp. °C	<u>14.18</u>		
Redox Potential Eh (mV)	<u>279</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1501</u>	Gal. Purged	<u>32.76</u>
Conductance	<u>3837</u>	pH	<u>6.45</u>
Temp. °C	<u>14.23</u>		
Redox Potential Eh (mV)	<u>280</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1502</u>	Gal. Purged	<u>32.98</u>
Conductance	<u>3837</u>	pH	<u>6.45</u>
Temp. °C	<u>14.21</u>		
Redox Potential Eh (mV)	<u>283</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>1503</u>	Gal. Purged	<u>33.20</u>
Conductance	<u>3838</u>	pH	<u>6.48</u>
Temp. °C	<u>14.21</u>		
Redox Potential Eh (mV)	<u>285</u>		
Turbidity (NTU)	<u>0</u>		

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 1225 Tanner and Garrin present for purge and sampling event  
Purge began at 1230. Purged well for a total of 155 minutes  
water was clear. Purge ended and sample collected at 1505  
Left site at 1508



Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologies	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

See instruction

**Comment**

Arrived on site at 0755. Garrin and Tanner present for purge. Purge began at 0800. Purged well for a total of 275 minutes. Water was <sup>clear</sup> during purge. Samples were collected at 1235. Left site at 1237.



**ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: March Groundwater 2013

Location (well name): MW-26

Sampler Name and initials: Tanner Holliday TH

Field Sample ID MW-26-03202013

Date and Time for Purging 3/20/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) Continuous

Purging Method Used:  2 casings  3 casings

Sampling Event March GW

Prev. Well Sampled in Sampling Event MW-11

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 121.33

Depth to Water Before Purging 62.85

Casing Volume (V) 4" Well: 38.18 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 3379

pH of Water (avg) 6.70

Well Water Temp. (avg) 13.91

Redox Potential (Eh) 287

Turbidity 3.4

Weather Cond. Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 3°

Time	<u>0939</u>	Gal. Purged	<u>0</u>
Conductance	<u>3379</u>	pH	<u>6.70</u>
Temp. °C	<u>13.91</u>		
Redox Potential Eh (mV)	<u>287</u>		
Turbidity (NTU)	<u>3.4</u>		

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time		Gal. Purged	
Conductance		pH	
Temp. °C			
Redox Potential Eh (mV)			
Turbidity (NTU)			

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 $S/60 =$

Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HCL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0934. Tanner and Garrin present to collect samples  
 Samples collected at 0940. Water was clear.  
 Left site at 0944

**MW-26 03-20-2013** Do not touch this cell (SheetName)



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER

See instruction

Description of Sampling Event: March Groundwater 2013

Location (well name): MW-28 MW-30 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: MW-28-03202013 MW-30-03202013

Date and Time for Purging: 3/26/2013 and Sampling (if different): N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet): QED

Purging Method Used:  2 casings  3 casings

Sampling Event: Monthly GW Prev. Well Sampled in Sampling Event: MW-35

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999  $\mu$ MHOS/cm Well Depth(0.01ft): 110.00

Depth to Water Before Purging: 75.47 Casing Volume (V) 4" Well: 22.54 (.653h)  
3" Well: 0 (.367h)

Conductance (avg): 2015 pH of Water (avg): 6.88

Well Water Temp. (avg): 14.06 Redox Potential (Eh): 285 Turbidity: 0

Weather Cond.: Partly cloudy Ext'l Amb. Temp. °C (prior sampling event): 2°

Time: 1055 Gal. Purged: 46.65

Conductance: 2013 pH: 6.89

Temp. °C: 14.06

Redox Potential Eh (mV): 283

Turbidity (NTU): 0

Time: 1056 Gal. Purged: 46.87

Conductance: 2017 pH: 6.86

Temp. °C: 14.06

Redox Potential Eh (mV): 284

Turbidity (NTU): 0

Time: 1057 Gal. Purged: 47.08

Conductance: 2016 pH: 6.87

Temp. °C: 14.07

Redox Potential Eh (mV): 286

Turbidity (NTU): 0

Time: 1058 Gal. Purged: 47.30

Conductance: 2016 pH: 6.91

Temp. °C: 14.07

Redox Potential Eh (mV): 288

Turbidity (NTU): 0

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

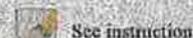
 See instruction

**Comment**

Arrived on site at 0715. Tanner and Garrin present for purge and sampling event. Purge began at 0720. Purged well for a total of 220 minutes. Water was clear. Purge ended and samples collected at 1100. Left site at 1105.



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: March Groundwater 2013

Location (well name): MW-31

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID MW-31-03192013

Date and Time for Purging 3/19/2013

and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer

Well Pump (if other than Bennet) GED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW

Prev. Well Sampled in Sampling Event N/A

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm

Well Depth(0.01ft): 130.00

Depth to Water Before Purging 67.32

Casing Volume (V) 4" Well: 40.43 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 1975

pH of Water (avg) 7.24

Well Water Temp. (avg) 14.36

Redox Potential (Eh) 444

Turbidity 31

Weather Cond. Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 2°

Time	<u>1405</u>	Gal. Purged	<u>83.54</u>
Conductance	<u>1968</u>	pH	<u>7.22</u>
Temp. °C	<u>14.13</u>		
Redox Potential Eh (mV)	<u>444</u>		
Turbidity (NTU)	<u>30</u>		

Time	<u>1406</u>	Gal. Purged	<u>83.76</u>
Conductance	<u>1976</u>	pH	<u>7.20</u>
Temp. °C	<u>14.36</u>		
Redox Potential Eh (mV)	<u>445</u>		
Turbidity (NTU)	<u>32</u>		

Time	<u>1407</u>	Gal. Purged	<u>83.97</u>
Conductance	<u>1981</u>	pH	<u>7.26</u>
Temp. °C	<u>14.44</u>		
Redox Potential Eh (mV)	<u>443</u>		
Turbidity (NTU)	<u>31</u>		

Time	<u>1408</u>	Gal. Purged	<u>84.19</u>
Conductance	<u>1977</u>	pH	<u>7.28</u>
Temp. °C	<u>14.54</u>		
Redox Potential Eh (mV)	<u>443</u>		
Turbidity (NTU)	<u>32</u>		

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

TDS  
sulfate  
chloride

Final Depth

Sample Time

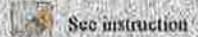
 See instruction

**Comment**

Arrived on site at 0735 Tanner and Garrin present for purge and sampling event. Purge began at 0740. Purged well for 385 minutes. Water was clear during purge. Collected samples at 1410. Left site at 1414. Water had bubbles in it during the purge and slightly bigger bubbles at sampling time than when purge started.



ATTACHMENT 1-2  
WHITE MESA URANIUM MILL  
FIELD DATA WORKSHEET FOR GROUNDWATER



Description of Sampling Event: MW-35 March Groundwater 2013

Location (well name): MW-35 Sampler Name and initials: Garcia Palmer / GP

Field Sample ID MW-35 03142013

Date and Time for Purging 3/14/2013 and Sampling (if different) NA

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW Prev. Well Sampled in Sampling Event MW-25

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 124.50

Depth to Water Before Purging 112.48 Casing Volume (V) 4" Well: 7.84 (.653h)  
3" Well: 0 (.367h)

Conductance (avg) 4081 pH of Water (avg) 6.41

Well Water Temp. (avg) 14.25 Redox Potential (Eh) 363 Turbidity 0.5

Weather Cond. Cloudy Ext'l Amb. Temp. °C (prior sampling event) 9°

Time 1435 Gal. Purged 23.87  
Conductance 4074 pH 6.40  
Temp. °C 14.21  
Redox Potential Eh (mV) 367  
Turbidity (NTU) 0.5

Time 1436 Gal. Purged 24.08  
Conductance 4087 pH 6.41  
Temp. °C 14.28  
Redox Potential Eh (mV) 364  
Turbidity (NTU) 0.5

Time 1437 Gal. Purged 24.30  
Conductance 4078 pH 6.42  
Temp. °C 14.25  
Redox Potential Eh (mV) 363  
Turbidity (NTU) 0.5

Time 1438 Gal. Purged 24.52  
Conductance 4085 pH 6.43  
Temp. °C 14.24  
Redox Potential Eh (mV) 359  
Turbidity (NTU) 0.5

EL 2528-1-10 ON QAP 10/07/10 04:54:13 / Version: 1.055 / 20120406 10:23:20 1:22 AM Date: 06/06/2012

Volume of Water Purged  gallon(s)

**Pumping Rate Calculation**

Flow Rate (Q), in gpm.

S/60 =

Time to evacuate two casing volumes (2V)

T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologies	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

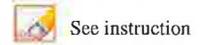
**Comment**

Arrived on site at 1240. Garrin and David present for purge and sampling event. Purge began at 1245. Purged well for 115 minutes. Water was clear during purge. Samples were collected at 1440. Left site at 1445.

Do not touch this cell (SheetName)



**ATTACHMENT 1-2  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: Murch Groundwater 2013

Location (well name): MW-65

Sampler Name and initials: Tanner Holliday/TA

Field Sample ID MW-65\_03202013

Date and Time for Purging 3/20/2013 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bennet) QED

Purging Method Used:  2 casings  3 casings

Sampling Event Monthly GW Prev. Well Sampled in Sampling Event MW-26

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999  $\mu$ MHOS/cm Well Depth(0.01ft): 128.70

Depth to Water Before Purging 103.60 Casing Volume (V) 4" Well: 16.39 (.653h)  
 3" Well: 0 (.367h)

Conductance (avg) 3836 pH of Water (avg) 6.45

Well Water Temp. (avg) 14.20 Redox Potential (Eh) 281 Turbidity 0

Weather Cond. cloudy Ext'l Amb. Temp. °C (prior sampling event) 7°

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Time	<input type="text"/>	Gal. Purged	<input type="text"/>
Conductance	<input type="text"/>	pH	<input type="text"/>
Temp. °C	<input type="text"/>		
Redox Potential Eh (mV)	<input type="text"/>		
Turbidity (NTU)	<input type="text"/>		

Volume of Water Purged  gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.  
 S/60 =

Time to evacuate two casing volumes (2V)  
 T = 2V/Q =

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input type="checkbox"/>	H2SO4	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 ml	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Other Non Radiologics	<input type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	No Preserv.	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/>	<input type="checkbox"/>	1,000 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	Sample volume	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

If preservative is used, specify Type and Quantity of Preservative:

Final Depth

Sample Time

 See instruction

Comment

Duplicate of MW-14

**MW-65 03-20-2013** Do not touch this cell (SheetName)

Tab D

Quarterly Depth to Water

NAME: Garrin Palmer, Tanner Holliday

DATE: 3/28/2013

TIME	WELL	Static level	TIME	WELL	Static Level	TIME	WELL	Static Level	TIME	WELL	Static Level
852	MW-1	64.26	1011	MW-4	70.03	815	PIEZ-1	62.33	NA	DR-1	ABANDON
944	MW-2	109.65	1009	TW4-1	63.85	808	PIEZ-2	30.12	NA	DR-2	ABANDON
952	MW-3	83.15	1013	TW4-2	65.33	900	PIEZ-3	43.80	853	DR-5	83.09
955	MW-3A	85.11	1005	TW4-3	50.71	938	PIEZ-4	47.97	1008	DR-6	94.38
1040	MW-5	106.12	1017	TW4-4	70.00	941	PIEZ-5	43.55	1006	DR-7	92.26
1046	MW-11	87.41	1001	TW4-5	57.82	928	TWN-1	54.55	848	DR-8	51
1018	MW-12	108.51	1019	TW4-6	69.25	1010	TWN-2	28.41	845	DR-9	86.55
1050	MW-14	103.60	1010	TW4-7	64.84	906	TWN-3	35.90	842	DR-10	78.15
1037	MW-15	106.37	1007	TW4-8	64.92	858	TWN-4	46.30	1000	DR-11	98.28
947	MW-17	73.65	1003	TW4-9	55.62	847	TWN-5	69.50	958	DR-12	89.34
844	MW-18	70.21	959	TW4-10	56.32	839	TWN-6	75.49	950	DR-13	69.86
812	MW-19	55.88	1015	TW4-11	56.73	849	TWN-7	87.25	834	DR-14	76.38
859	MW-20	85.80	1028	TW4-12	41.52	842	TWN-8	62.53	838	DR-15	92.94
807	MW-22	66.83	1032	TW4-13	46.91	817	TWN-9	62.10	NA	DR-16	ABANDON
1015	MW-23	119.15	1034	TW4-14	85.86	837	TWN-10	80.70	830	DR-17	64.8
941	MW-24	114.00	957	TW4-15	60.08	831	TWN-11	69.13	NA	DR-18	ABANDON
936	MW-25	73.14	1048	TW4-16	59.28	829	TWN-12	28.25	819	DR-19	63.15
957	MW-26	60.08	1045	TW4-17	73.70	820	TWN-13	45.45	816	DR-20	55.22
936	MW-27	51.80	931	TW4-18	58.40	822	TWN-14	62.10	901	DR-21	107.33
947	MW-28	76.05	1104	TW4-19	58.88	835	TWN-15	91.56	826	DR-22	DRY
1057	MW-29	101.65	955	TW4-20	58.01	827	TWN-16	47.48	812	DR-23	70.62
1053	MW-30	75.25	934	TW4-21	56.61	825	TWN-17	33.64	823	DR-24	43.85
1050	MW-31	67.26	952	TW4-22	55.50	904	TWN-18	58.13	NA	DR-25	ABANDON
1045	MW-32	73.70	1021	TW4-23	63.89	1330	TWN-19	52.19			
1007	MW-33	Dry	950	TW4-24	61.30						
1053	MW-34	107.92	1047	TW4-25	47.48						
1013	MW-35	112.40	1023	TW4-26	62.55						
1010	MW-36	110.56	1036	TW4-27	81.57						
1055	MW-37	110.15	1030	TW4-28	36.31						
			1037	TW4-29	72.06						
			1039	TW4-30	78.03						
			1041	TW4-31	84.41						

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Tab E

Laboratory Analytical Reports – Quarterly Sampling



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-001  
**Client Sample ID:** MW-01\_03122013  
**Collection Date:** 3/12/2013 1500h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/15/2013 1210h	3/20/2013 128h	E200.8	0.0100	<b>0.173</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-001  
**Client Sample ID:** MW-01\_03122013  
**Collection Date:** 3/12/2013 1500h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Sulfate	mg/L		3/18/2013 1910h	E300.0	100	<b>761</b>	

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Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



## ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-001A  
**Client Sample ID:** MW-01\_03122013  
**Collection Date:** 3/12/2013 1500h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

### Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/15/2013 1301h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Tetrahydrofuran	109-99-9	1.00	12.6	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	47.7	50.00	95.4	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	52.7	50.00	105	80-128	
Surr: Dibromofluoromethane	1868-53-7	48.2	50.00	96.3	80-124	
Surr: Toluene-d8	2037-26-5	51.6	50.00	103	77-129	

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-02\_03052013  
Sample ID: 321572007  
Matrix: Ground Water  
Collect Date: 05-MAR-13 12:50  
Receive Date: 08-MAR-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.06	+/-0.282	0.489	1.00	pCi/L		KDF1	03/17/13	1003	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			99.8	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc. **Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-002  
**Client Sample ID:** MW-03\_03122013  
**Collection Date:** 3/12/2013 945h  
**Received Date:** 3/15/2013 1020h

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Selenium	mg/L	3/15/2013 1210h	3/20/2013 210h	E200.8	0.00500	<b>0.0518</b>	

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web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-002  
**Client Sample ID:** MW-03\_03122013  
**Collection Date:** 3/12/2013 945h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

### Analytical Results

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Fluoride	mg/L		3/19/2013 514h	E300.0	0.100	<b>0.902</b>	

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-003  
**Client Sample ID:** MW-03A\_03132013  
**Collection Date:** 3/13/2013 1255h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

### Analytical Results

### DISSOLVED METALS

<u>Compound</u>	<u>Units</u>	<u>Date</u>		<u>Method</u>	<u>Reporting</u>	<u>Analytical</u>	<u>Qual</u>
		<u>Prepared</u>	<u>Analyzed</u>	<u>Used</u>	<u>Limit</u>	<u>Result</u>	
Selenium	mg/L	3/15/2013 1210h	3/20/2013 216h	E200.8	0.00500	<b>0.0887</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-003  
**Client Sample ID:** MW-03A\_03132013  
**Collection Date:** 3/13/2013 1255h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Nitrate/Nitrite (as N)	mg/L		3/25/2013 2038h	E353.2	0.100	<b>1.22</b>	
Sulfate	mg/L		3/18/2013 2029h	E300.0	500	<b>3,480</b>	
Total Dissolved Solids	mg/L		3/19/2013 2100h	SM2540C	20.0	<b>5,750</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-004  
**Client Sample ID:** MW-05\_03112013  
**Collection Date:** 3/11/2013 1130h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Uranium	mg/L	3/15/2013 1210h	3/20/2013 221h	E200.8	0.000300	<b>0.0360</b>	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
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 Fax: (801) 263-8687  
 e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
 web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-001  
**Client Sample ID:** MW-11\_02202013  
**Collection Date:** 2/20/2013 1045h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/22/2013 1405h	2/26/2013 1559h	E200.7	10.0	<b>66.1</b>	
Chromium	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.0100	<b>0.0128</b>	
Iron	mg/L	2/22/2013 1405h	3/3/2013 2131h	E200.8	0.0300	<b>0.187</b>	
Lead	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/22/2013 1405h	2/26/2013 1559h	E200.7	10.0	<b>19.6</b>	
Manganese	mg/L	2/22/2013 1405h	3/3/2013 2131h	E200.8	0.0100	<b>0.139</b>	
Mercury	mg/L	2/26/2013 1210h	2/28/2013 1051h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/22/2013 1405h	2/26/2013 1616h	E200.7	1.00	<b>7.21</b>	
Selenium	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.00500	< 0.00500	
Silver	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/22/2013 1405h	2/26/2013 1514h	E200.7	100	<b>578</b>	
Thallium	mg/L	2/22/2013 1405h	3/3/2013 2131h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/22/2013 1405h	2/28/2013 2315h	E200.8	0.000300	<b>0.000594</b>	
Vanadium	mg/L	2/22/2013 1405h	2/26/2013 1616h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/22/2013 1405h	2/27/2013 2233h	E200.8	0.0100	< 0.0100	

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**Lab Sample ID:** 1302339-001

**Client Sample ID:** MW-11\_02202013

**Collection Date:** 2/20/2013 1045h

**Received Date:** 2/22/2013 1110h

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/26/2013 1100h	2/26/2013 2024h	E350.1	0.0500	<b>0.628</b>	<sup>1</sup>
Bicarbonate (as CaCO <sub>3</sub> )	mg/L		2/25/2013 1009h	SM2320B	1.00	<b>312</b>	
Carbonate (as CaCO <sub>3</sub> )	mg/L		2/25/2013 1009h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/27/2013 420h	E300.0	10.0	<b>33.7</b>	
Fluoride	mg/L		2/27/2013 617h	E300.0	0.100	<b>0.483</b>	
Ion Balance	%		3/1/2013 820h	Calc.	-15.0	<b>0.991</b>	
Nitrate/Nitrite (as N)	mg/L		2/22/2013 1459h	E353.2	0.100	< 0.100	
Sulfate	mg/L		2/27/2013 2234h	E300.0	100	<b>1,080</b>	
Total Anions, Measured	meq/L		3/1/2013 820h	Calc.		29.6	
Total Cations, Measured	meq/L		3/1/2013 820h	Calc.		30.2	
Total Dissolved Solids	mg/L		2/22/2013 1225h	SM2540C	20.0	<b>1,970</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/1/2013 820h	Calc.		1.00	
Total Dissolved Solids, Calculated	mg/L		3/1/2013 820h	Calc.		1,970	

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-001A  
**Client Sample ID:** MW-11\_02202013  
**Collection Date:** 2/20/2013 1045h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/23/2013 1704h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.1	50.00	104	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	57.0	50.00	114	80-128	
Surr: Dibromofluoromethane	1868-53-7	49.8	50.00	99.6	80-124	
Surr: Toluene-d8	2037-26-5	51.3	50.00	103	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 2, 2013

Company : Energy Fuels Resources (USA), Inc.  
 Address : 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-11_02202013	Project: DNMI00100
Sample ID: 320825002	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 20-FEB-13 10:45	
Receive Date: 22-FEB-13	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.04	+/-0.268	0.478	1.00	pCi/L		KDF1	03/01/13	0943	1284926	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments										
	EPA 900.1 Modified											
Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits							
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			102	(25%-125%)							

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-002  
**Client Sample ID:** MW-12\_03062013  
**Collection Date:** 3/6/2013 1055h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Selenium	mg/L	3/8/2013 1005h	3/14/2013 1914h	E200.8	0.00500	<b>0.0196</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)

web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-003  
**Client Sample ID:** MW-14\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/28/2013 1000h	3/7/2013 1820h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.000500	<b>0.00148</b>	
Calcium	mg/L	2/28/2013 1000h	3/1/2013 1120h	E200.7	100	<b>488</b>	2
Chromium	mg/L	2/28/2013 1000h	3/7/2013 1820h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/28/2013 1000h	3/7/2013 1820h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.0300	< 0.0300	
Lead	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/28/2013 1000h	3/1/2013 1120h	E200.7	100	<b>159</b>	
Manganese	mg/L	2/28/2013 1000h	3/7/2013 1913h	E200.8	0.0100	<b>2.25</b>	
Mercury	mg/L	2/28/2013 1515h	3/1/2013 807h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/28/2013 1000h	3/7/2013 1820h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/28/2013 1000h	3/1/2013 1446h	E200.7	10.0	<b>12.1</b>	
Selenium	mg/L	2/28/2013 1000h	3/7/2013 456h	E200.8	0.00500	< 0.00500	
Silver	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/28/2013 1000h	3/5/2013 1236h	E200.7	100	<b>353</b>	3
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1802h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/28/2013 1000h	3/7/2013 1802h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/28/2013 1000h	3/7/2013 352h	E200.8	0.000300	<b>0.0584</b>	
Vanadium	mg/L	2/28/2013 1000h	3/1/2013 1353h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/28/2013 1000h	3/8/2013 1102h	E200.8	0.0100	<b>0.0140</b>	

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-003  
**Client Sample ID:** MW-14\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/28/2013 1015h	2/28/2013 1742h	E350.1	0.0500	< 0.0500	1
Bicarbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	<b>386</b>	
Carbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/28/2013 1528h	E300.0	10.0	<b>20.9</b>	
Fluoride	mg/L		3/1/2013 2327h	E300.0	0.100	<b>0.172</b>	1
Ion Balance	%		3/5/2013 1247h	Calc.	-15.0	<b>11.5</b>	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1502h	E353.2	0.100	< 0.100	
Sulfate	mg/L		3/6/2013 1307h	E300.0	1,000	<b>1,630</b>	1
Total Anions, Measured	meq/L		3/5/2013 1247h	Calc.		<b>42.2</b>	
Total Cations, Measured	meq/L		3/5/2013 1247h	Calc.		<b>53.1</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>3,500</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/5/2013 1247h	Calc.		<b>0.827</b>	
Total Dissolved Solids, Calculated	mg/L		3/5/2013 1247h	Calc.		<b>2,890</b>	

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-003A  
**Client Sample ID:** MW-14\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1736h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.7	50.00	105	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	54.8	50.00	110	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.3	50.00	101	80-124	
Surr: Toluene-d8	2037-26-5	51.4	50.00	103	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-14\_02262013  
Sample ID: 321572002  
Matrix: Ground Water  
Collect Date: 26-FEB-13 09:50  
Receive Date: 08-MAR-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting											
GFPC, Total Alpha Radium, Liquid "As Received"											
Gross Radium Alpha	U	1.00	+/-0.252	0.625	1.00	pCi/L		KDF1	03/16/13	1431 1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			99.4	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-001  
**Client Sample ID:** MW-15\_03052013  
**Collection Date:** 3/5/2013 1000h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

**Analytical Results**

**DISSOLVED METALS**

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Iron	mg/L	3/8/2013 1005h	3/14/2013 1831h	E200.8	0.0300	< 0.0300	
Selenium	mg/L	3/8/2013 1005h	3/14/2013 1831h	E200.8	0.00500	<b>0.137</b>	

463 West 3600 South  
Salt Lake City, UT 84115

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web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-001  
**Client Sample ID:** MW-18\_02252013  
**Collection Date:** 2/25/2013 1340h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

### Analytical Results

### DISSOLVED METALS

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1753h	E200.8	0.000500	<b>0.00326</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-001  
**Client Sample ID:** MW-18\_02252013  
**Collection Date:** 2/25/2013 1340h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## **Analytical Results**

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Sulfate	mg/L		2/28/2013 1308h	E300.0	1,000	<b>1,270</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>3,350</b>	@

@ - High RPD due to suspected sample non-homogeneity or matrix interference.

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**Lab Sample ID:** 1303335-005

**Client Sample ID:** MW-19\_03132013

**Collection Date:** 3/13/2013 1540h

**Received Date:** 3/15/2013 1020h

### **Analytical Results**

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Nitrate/Nitrite (as N)	mg/L		3/25/2013 2047h	E353.2	0.500	3.61	1

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 28, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-19\_03132013  
Sample ID: 322413002  
Matrix: Ground Water  
Collect Date: 13-MAR-13 15:40  
Receive Date: 22-MAR-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.11	+/-0.261	0.645	1.00	pCi/L		KDF1	03/27/13	1039	1290657	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			98.8	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-006  
**Client Sample ID:** MW-23\_03112013  
**Collection Date:** 3/11/2013 1030h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

### Analytical Results

### DISSOLVED METALS

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>		<u>Date Analyzed</u>		<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Manganese	mg/L	3/15/2013	1210h	3/20/2013	226h	E200.8	0.0100	0.137	

463 West 3600 South  
Salt Lake City, UT 84115

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Toll Free: (888) 263-8686

Fax: (801) 263-8687

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web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-007  
**Client Sample ID:** MW-24\_03142013  
**Collection Date:** 3/14/2013 712h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Cadmium	mg/L	3/15/2013 1210h	3/20/2013 232h	E200.8	0.000500	<b>0.00200</b>	
Thallium	mg/L	3/15/2013 1210h	3/22/2013 1543h	E200.8	0.000500	<b>0.000880</b>	

463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-007  
**Client Sample ID:** MW-24\_03142013  
**Collection Date:** 3/14/2013 712h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Fluoride	mg/L		3/19/2013 540h	E300.0	0.100	<b>0.355</b>	

463 West 3600 South

Salt Lake City, UT 84115

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web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-002  
**Client Sample ID:** MW-25\_02202013  
**Collection Date:** 2/20/2013 1110h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/22/2013 1405h	2/27/2013 2331h	E200.8	0.000500	<b>0.00135</b>	
Calcium	mg/L	2/22/2013 1405h	2/26/2013 1530h	E200.7	100	<b>364</b>	
Chromium	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/22/2013 1405h	2/27/2013 2331h	E200.8	0.0100	<b>0.0101</b>	
Copper	mg/L	2/22/2013 1405h	3/1/2013 1352h	E200.8	0.0100	< 0.0100	^
Iron	mg/L	2/22/2013 1405h	3/3/2013 2146h	E200.8	0.0300	< 0.0300	
Lead	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/22/2013 1405h	2/26/2013 1530h	E200.7	100	<b>120</b>	
Manganese	mg/L	2/22/2013 1405h	3/1/2013 1352h	E200.8	0.0100	<b>1.75</b>	
Mercury	mg/L	2/26/2013 1210h	2/28/2013 1101h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.0100	<b>0.0115</b>	
Nickel	mg/L	2/22/2013 1405h	3/1/2013 1352h	E200.8	0.0200	< 0.0200	^
Potassium	mg/L	2/22/2013 1405h	2/26/2013 1628h	E200.7	1.00	<b>10.5</b>	
Selenium	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.00500	< 0.00500	
Silver	mg/L	2/22/2013 1405h	2/27/2013 2331h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/22/2013 1405h	2/26/2013 1530h	E200.7	100	<b>301</b>	
Thallium	mg/L	2/22/2013 1405h	3/3/2013 2146h	E200.8	0.000500	<b>0.00105</b>	
Tin	mg/L	2/22/2013 1405h	2/27/2013 2331h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/22/2013 1405h	2/28/2013 2331h	E200.8	0.000300	<b>0.00539</b>	
Vanadium	mg/L	2/22/2013 1405h	2/26/2013 1628h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/22/2013 1405h	3/1/2013 1352h	E200.8	0.0100	< 0.0100	^

^ - Reissue of a previously generated report. Information has been updated. Information herein supersedes that of the previously issued reports.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-002  
**Client Sample ID:** MW-25\_02202013  
**Collection Date:** 2/20/2013 1110h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/26/2013 1100h	2/26/2013 2027h	E350.1	0.0500	<b>0.390</b>	
Bicarbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	<b>326</b>	
Carbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/27/2013 444h	E300.0	10.0	<b>36.1</b>	
Fluoride	mg/L		2/27/2013 640h	E300.0	0.100	<b>0.320</b>	
Ion Balance	%		3/1/2013 820h	Calc.	-15.0	<b>-2.57</b>	
Nitrate/Nitrite (as N)	mg/L		2/22/2013 1501h	E353.2	0.100	< 0.100	
Sulfate	mg/L		2/28/2013 030h	E300.0	100	<b>1,730</b>	
Total Anions, Measured	meq/L		3/1/2013 820h	Calc.		43.6	
Total Cations, Measured	meq/L		3/1/2013 820h	Calc.		41.4	
Total Dissolved Solids	mg/L		2/22/2013 1225h	SM2540C	20.0	<b>2,770</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/1/2013 820h	Calc.		0.997	
Total Dissolved Solids, Calculated	mg/L		3/1/2013 820h	Calc.		2,760	



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-002A  
**Client Sample ID:** MW-25\_02202013  
**Collection Date:** 2/20/2013 1110h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/23/2013 1723h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.9	50.00	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.4	50.00	113	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.9	50.00	102	80-124	
Surr: Toluene-d8	2037-26-5	52.9	50.00	106	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 2, 2013

Company : Energy Fuels Resources (USA), Inc.  
 Address : 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-25_02202013	Project: DNMI00100
Sample ID: 320825003	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 20-FEB-13 11:10	
Receive Date: 22-FEB-13	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.14	+/-0.285	0.495	1.00	pCi/L		KDF1	03/01/13	0943	1284926	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments										
	EPA 900.1 Modified											
Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits							
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			101	(25%-125%)							

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-003  
**Client Sample ID:** MW-26\_02202013  
**Collection Date:** 2/20/2013 1400h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director  
  
 Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/22/2013 1405h	2/27/2013 2337h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/22/2013 1405h	2/26/2013 1534h	E200.7	100	<b>505</b>	
Chromium	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/22/2013 1405h	2/27/2013 2337h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/22/2013 1405h	3/1/2013 1357h	E200.8	0.0100	< 0.0100	^
Iron	mg/L	2/22/2013 1405h	3/4/2013 1353h	E200.8	0.0500	<b>0.553</b>	
Lead	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/22/2013 1405h	2/26/2013 1534h	E200.7	100	<b>169</b>	
Manganese	mg/L	2/22/2013 1405h	3/1/2013 1357h	E200.8	0.0100	<b>1.20</b>	
Mercury	mg/L	2/26/2013 1210h	2/28/2013 1102h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/22/2013 1405h	3/1/2013 1357h	E200.8	0.0200	< 0.0200	^
Potassium	mg/L	2/22/2013 1405h	2/26/2013 1632h	E200.7	1.00	<b>12.4</b>	
Selenium	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.00500	<b>0.00905</b>	
Silver	mg/L	2/22/2013 1405h	2/27/2013 2337h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/22/2013 1405h	2/26/2013 1534h	E200.7	100	<b>174</b>	
Thallium	mg/L	2/22/2013 1405h	3/3/2013 2152h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/22/2013 1405h	2/27/2013 2337h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/22/2013 1405h	2/28/2013 2336h	E200.8	0.000300	<b>0.0578</b>	
Vanadium	mg/L	2/22/2013 1405h	2/26/2013 1632h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/22/2013 1405h	3/1/2013 1357h	E200.8	0.0100	< 0.0100	^

^ - Reissue of a previously generated report. Information has been updated. Information herein supersedes that of the previously issued reports.



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**Lab Sample ID:** 1302339-003

**Client Sample ID:** MW-26\_02202013

**Collection Date:** 2/20/2013 1400h

**Received Date:** 2/22/2013 1110h

### Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/26/2013 1100h	2/26/2013 2029h	E350.1	0.0500	<b>0.262</b>	
Bicarbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	<b>329</b>	
Carbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/27/2013 507h	E300.0	10.0	<b>77.0</b>	
Fluoride	mg/L		2/27/2013 703h	E300.0	0.100	<b>0.305</b>	
Ion Balance	%		3/1/2013 820h	Calc.	-15.0	<b>-1.16</b>	
Nitrate/Nitrite (as N)	mg/L		2/22/2013 1513h	E353.2	0.100	<b>1.38</b>	
Sulfate	mg/L		2/28/2013 054h	E300.0	100	<b>1,890</b>	
Total Anions, Measured	meq/L		3/1/2013 820h	Calc.		48.1	
Total Cations, Measured	meq/L		3/1/2013 820h	Calc.		47.0	
Total Dissolved Solids	mg/L		2/22/2013 1225h	SM2540C	20.0	<b>2,940</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/1/2013 820h	Calc.		/ 1.03	
Total Dissolved Solids, Calculated	mg/L		3/1/2013 820h	Calc.		3,020	



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-003A  
**Client Sample ID:** MW-26\_02202013  
**Collection Date:** 2/20/2013 1400h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/23/2013 2130h

**Units:** µg/L

**Dilution Factor:** 20

**Method:** SW8260C

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Chloroform	67-66-3	20.0	1,500	~

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 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	1,030	1,000	103	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	1,120	1,000	112	80-128	
Surr: Dibromofluoromethane	1868-53-7	1,020	1,000	102	80-124	
Surr: Toluene-d8	2037-26-5	1,020	1,000	102	77-129	

~ - The reporting limits were raised due to high analyte concentrations.

web: www.awal-labs.com

**Analyzed:** 2/23/2013 1742h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	3.15	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	5.53	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.8	50.00	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.4	50.00	113	80-128	
Surr: Dibromofluoromethane	1868-53-7	53.9	50.00	108	80-124	
Surr: Toluene-d8	2037-26-5	51.4	50.00	103	77-129	

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: March 2, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-26\_02202013  
Sample ID: 320825004  
Matrix: Ground Water  
Collect Date: 20-FEB-13 14:00  
Receive Date: 22-FEB-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		3.81	+/-0.497	0.463	1.00	pCi/L		KDF1	03/01/13	0943	1284926	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			99.4	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-002  
**Client Sample ID:** MW-27\_02252013  
**Collection Date:** 2/25/2013 1240h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

### Analytical Results

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Chloride	mg/L		2/28/2013 1441h	E300.0	10.0	<b>50.3</b>	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1452h	E353.2	1.00	<b>7.94</b>	
Sulfate	mg/L		2/28/2013 1418h	E300.0	100	<b>431</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>1,140</b>	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: March 21, 2013

Company: Energy Fuels Resources (USA), Inc.  
 Address: 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-27\_02252013  
 Sample ID: 321572001  
 Matrix: Ground Water  
 Collect Date: 25-FEB-13 12:40  
 Receive Date: 08-MAR-13  
 Collector: Client

Project: DNMI00100  
 Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha	U	1.00	+/-0.309	0.787	1.00	pCi/L		KDF1	03/16/13	1431	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			101	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-003  
**Client Sample ID:** MW-28\_03052013  
**Collection Date:** 3/5/2013 1100h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/8/2013 1005h	3/15/2013 2313h	E200.8	0.0100	1.68	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
 web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-003  
**Client Sample ID:** MW-28\_03052013  
**Collection Date:** 3/5/2013 1100h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

### Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		3/8/2013 025h	E300.0	1.00	110	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-004  
**Client Sample ID:** MW-29\_03062013  
**Collection Date:** 3/6/2013 1110h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Iron	mg/L	3/8/2013 1005h	3/14/2013 1924h	E200.8	0.100	1.35	
Manganese	mg/L	3/8/2013 1005h	3/15/2013 2318h	E200.8	0.0100	5.34	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303130-004  
**Client Sample ID:** MW-29\_03062013  
**Collection Date:** 3/6/2013 1110h  
**Received Date:** 3/7/2013 1720h

**Contact:** Garrin Palmer

## Analytical Results

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Total Dissolved Solids	mg/L		3/8/2013 1200h	SM2540C	20.0	<b>4,500</b>	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-004  
**Client Sample ID:** MW-30\_02262013  
**Collection Date:** 2/26/2013 1050h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
 Salt Lake City, UT 84115  
  
 Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
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 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director  
  
 Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/28/2013 1000h	3/7/2013 1836h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/28/2013 1000h	3/1/2013 1136h	E200.7	100	<b>264</b>	
Chromium	mg/L	2/28/2013 1000h	3/7/2013 1836h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/28/2013 1000h	3/7/2013 1836h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.0300	<b>0.0391</b>	
Lead	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/28/2013 1000h	3/1/2013 1315h	E200.7	10.0	<b>72.1</b>	
Manganese	mg/L	2/28/2013 1000h	3/7/2013 1836h	E200.8	0.0100	<b>0.0276</b>	
Mercury	mg/L	2/28/2013 1515h	3/1/2013 816h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/28/2013 1000h	3/7/2013 1836h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/28/2013 1000h	3/1/2013 1405h	E200.7	1.00	<b>7.16</b>	
Selenium	mg/L	2/28/2013 1000h	3/7/2013 501h	E200.8	0.00500	<b>0.0423</b>	
Silver	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/28/2013 1000h	3/1/2013 1136h	E200.7	100	<b>109</b>	
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1829h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/28/2013 1000h	3/7/2013 1829h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/28/2013 1000h	3/7/2013 419h	E200.8	0.000300	<b>0.00740</b>	
Vanadium	mg/L	2/28/2013 1000h	3/1/2013 1405h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/28/2013 1000h	3/8/2013 1118h	E200.8	0.0100	< 0.0100	



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-004  
**Client Sample ID:** MW-30\_02262013  
**Collection Date:** 2/26/2013 1050h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/28/2013 1015h	2/28/2013 1751h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	<b>153</b>	
Carbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/28/2013 1701h	E300.0	100	<b>129</b>	
Fluoride	mg/L		3/2/2013 036h	E300.0	0.100	<b>0.373</b>	
Ion Balance	%		3/5/2013 1247h	Calc.	-15.0	<b>1.93</b>	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1508h	E353.2	2.00	<b>21.4</b>	
Sulfate	mg/L		2/28/2013 1701h	E300.0	100	<b>772</b>	
Total Anions, Measured	meq/L		3/5/2013 1247h	Calc.		<b>23.1</b>	
Total Cations, Measured	meq/L		3/5/2013 1247h	Calc.		<b>24.0</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>1,620</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/5/2013 1247h	Calc.		<b>0.905</b>	
Total Dissolved Solids, Calculated	mg/L		3/5/2013 1247h	Calc.		<b>1,470</b>	



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**Lab Sample ID:** 1302409-004A

**Client Sample ID:** MW-30\_02262013

**Collection Date:** 2/26/2013 1050h

**Received Date:** 2/27/2013 1335h

**Analytical Results**

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1755h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

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Jose Rocha

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.8	50.00	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.4	50.00	113	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.4	50.00	101	80-124	
Surr: Toluene-d8	2037-26-5	51.0	50.00	102	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
 Address : 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-30_02262013	Project: DNMI00100
Sample ID: 321572003	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 26-FEB-13 10:50	
Receive Date: 08-MAR-13	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha	U	1.00	+/-0.227	0.630	1.00	pCi/L		KDF1	03/16/13	1430	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			98.2	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-004  
**Client Sample ID:** MW-31\_02192013  
**Collection Date:** 2/19/2013 1315h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
 Salt Lake City, UT 84115  
  
 Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director  
  
 Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/22/2013 1405h	2/26/2013 1538h	E200.7	100	<b>200</b>	
Chromium	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/22/2013 1405h	3/3/2013 2157h	E200.8	0.0300	< 0.0300	
Lead	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/22/2013 1405h	2/26/2013 1611h	E200.7	10.0	<b>91.6</b>	
Manganese	mg/L	2/22/2013 1405h	3/3/2013 2157h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	2/26/2013 1210h	2/28/2013 1104h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/22/2013 1405h	2/26/2013 1636h	E200.7	1.00	<b>6.37</b>	
Selenium	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.00500	<b>0.0741</b>	
Silver	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/22/2013 1405h	2/26/2013 1611h	E200.7	10.0	<b>98.6</b>	
Thallium	mg/L	2/22/2013 1405h	3/3/2013 2157h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/22/2013 1405h	2/28/2013 2342h	E200.8	0.000300	<b>0.00733</b>	
Vanadium	mg/L	2/22/2013 1405h	2/26/2013 1636h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/22/2013 1405h	2/27/2013 2343h	E200.8	0.0100	< 0.0100	



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-004  
**Client Sample ID:** MW-31\_02192013  
**Collection Date:** 2/19/2013 1315h  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
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 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/26/2013 1100h	2/26/2013 2030h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	178	
Carbonate (as CaCO3)	mg/L		2/25/2013 1009h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/27/2013 357h	E300.0	100	174	
Fluoride	mg/L		2/27/2013 727h	E300.0	0.100	0.733	
Ion Balance	%		3/1/2013 820h	Calc.	-15.0	-0.453	
Nitrate/Nitrite (as N)	mg/L		2/22/2013 1508h	E353.2	10.0	19.3	
Sulfate	mg/L		2/27/2013 357h	E300.0	100	644	
Total Anions, Measured	meq/L		3/1/2013 820h	Calc.		22.2	
Total Cations, Measured	meq/L		3/1/2013 820h	Calc.		22.0	
Total Dissolved Solids	mg/L		2/22/2013 1225h	SM2540C	20.0	1,390	
Total Dissolved Solids Ratio, Measured/Calculated			3/1/2013 820h	Calc.		0.963	
Total Dissolved Solids, Calculated	mg/L		3/1/2013 820h	Calc.		1,340	



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**Lab Sample ID:** 1302339-004A

**Client Sample ID:** MW-31\_02192013

**Collection Date:** 2/19/2013 1315h

**Received Date:** 2/22/2013 1110h

**Analytical Results**

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/23/2013 1801h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com  
web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	51.9	50.00	104	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.9	50.00	114	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.3	50.00	101	80-124	
Surr: Toluene-d8	2037-26-5	51.7	50.00	103	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 2, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-31\_02192013  
Sample ID: 320825005  
Matrix: Ground Water  
Collect Date: 19-FEB-13 13:15  
Receive Date: 22-FEB-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.54	+/-0.327	0.468	1.00	pCi/L		KDF1	03/01/13	0943	1284926	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			101	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

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## Certificate of Analysis

Report Date: March 2, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-32\_02192013      Project: DNMI00100  
Sample ID: 320825001      Client ID: DNMI001  
Matrix: Ground Water  
Collect Date: 19-FEB-13 13:05  
Receive Date: 22-FEB-13  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		5.02	+/-0.614	0.939	1.00	pCi/L		KDF1	03/01/13	0943	1284926	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			103	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-006  
**Client Sample ID:** MW-35\_02262013  
**Collection Date:** 2/26/2013 1315h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/28/2013 1000h	3/1/2013 1203h	E200.7	100	<b>502</b>	
Chromium	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.0300	<b>0.184</b>	
Lead	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/28/2013 1000h	3/1/2013 1203h	E200.7	100	<b>163</b>	
Manganese	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.0100	<b>0.272</b>	
Mercury	mg/L	2/28/2013 1515h	3/1/2013 820h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/28/2013 1000h	3/1/2013 1413h	E200.7	1.00	<b>12.4</b>	
Selenium	mg/L	2/28/2013 1000h	3/7/2013 512h	E200.8	0.00500	<b>0.0108</b>	
Silver	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/28/2013 1000h	3/1/2013 1203h	E200.7	100	<b>410</b>	
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/28/2013 1000h	3/7/2013 1847h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/28/2013 1000h	3/7/2013 445h	E200.8	0.000300	<b>0.0213</b>	
Vanadium	mg/L	2/28/2013 1000h	3/1/2013 1413h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/28/2013 1000h	3/8/2013 1128h	E200.8	0.0100	< 0.0100	

463 West 3600 South  
Salt Lake City, UT 84115

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 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-006  
**Client Sample ID:** MW-35\_02262013  
**Collection Date:** 2/26/2013 1315h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
 Salt Lake City, UT 84115  
  
 Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
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 web: www.awal-labs.com

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/28/2013 1015h	2/28/2013 1753h	E350.1	0.0500	0.0726	
Bicarbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	333	
Carbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/28/2013 1834h	E300.0	10.0	65.3	
Fluoride	mg/L		3/2/2013 123h	E300.0	0.100	0.351	
Ion Balance	%		3/5/2013 1247h	Calc.	-15.0	3.81	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1516h	E353.2	0.100	< 0.100	
Sulfate	mg/L		2/28/2013 1811h	E300.0	1,000	2,110	
Total Anions, Measured	meq/L		3/5/2013 1247h	Calc.		52.4	
Total Cations, Measured	meq/L		3/5/2013 1247h	Calc.		56.6	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	3,760	
Total Dissolved Solids Ratio, Measured/Calculated			3/5/2013 1247h	Calc.		0.922	
Total Dissolved Solids, Calculated	mg/L		3/5/2013 1247h	Calc.		3,460	

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-006A  
**Client Sample ID:** MW-35\_02262013  
**Collection Date:** 2/26/2013 1315h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

**Analytical Results**

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1833h

**Units:** µg/L                      **Dilution Factor:** 1                      **Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

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 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	54.2	50.00	108	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	55.8	50.00	112	80-128	
Surr: Dibromofluoromethane	1868-53-7	51.3	50.00	103	80-124	
Surr: Toluene-d8	2037-26-5	50.6	50.00	101	77-129	

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## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-35\_02262013      Project: DNMI00100  
Sample ID: 321572005      Client ID: DNMI001  
Matrix: Ground Water  
Collect Date: 26-FEB-13 13:15  
Receive Date: 08-MAR-13  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		5.09	+/-0.685	0.755	1.00	pCi/L		KDF1	03/16/13	1432	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			94.5	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-007  
**Client Sample ID:** MW-36\_02262013  
**Collection Date:** 2/26/2013 1400h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/28/2013 1000h	3/7/2013 1852h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	2/28/2013 1000h	3/1/2013 1207h	E200.7	100	<b>426</b>	
Chromium	mg/L	2/28/2013 1000h	3/7/2013 1852h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/28/2013 1000h	3/7/2013 1852h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.0300	< 0.0300	
Lead	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/28/2013 1000h	3/1/2013 1207h	E200.7	100	<b>144</b>	
Manganese	mg/L	2/28/2013 1000h	3/7/2013 1852h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	2/28/2013 1515h	3/1/2013 821h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/28/2013 1000h	3/7/2013 1852h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/28/2013 1000h	3/1/2013 1417h	E200.7	1.00	<b>11.4</b>	
Selenium	mg/L	2/28/2013 1000h	3/7/2013 517h	E200.8	0.00500	<b>0.273</b>	
Silver	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/28/2013 1000h	3/1/2013 1207h	E200.7	100	<b>738</b>	
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1855h	E200.8	0.000500	<b>0.000672</b>	
Tin	mg/L	2/28/2013 1000h	3/7/2013 1855h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/28/2013 1000h	3/7/2013 451h	E200.8	0.000300	<b>0.0218</b>	
Vanadium	mg/L	2/28/2013 1000h	3/1/2013 1417h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/28/2013 1000h	3/8/2013 1134h	E200.8	0.0100	< 0.0100	

463 West 3600 South  
Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-007  
**Client Sample ID:** MW-36\_02262013  
**Collection Date:** 2/26/2013 1400h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
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Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/28/2013 1015h	2/28/2013 1754h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	<b>289</b>	
Carbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/28/2013 1921h	E300.0	10.0	<b>58.0</b>	
Fluoride	mg/L		3/2/2013 146h	E300.0	0.100	<b>0.290</b>	
Ion Balance	%		3/5/2013 1247h	Calc.	-15.0	<b>11.3</b>	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1512h	E353.2	0.100	<b>0.259</b>	
Sulfate	mg/L		2/28/2013 1857h	E300.0	1,000	<b>2,150</b>	
Total Anions, Measured	meq/L		3/5/2013 1247h	Calc.		<b>52.2</b>	
Total Cations, Measured	meq/L		3/5/2013 1247h	Calc.		<b>65.5</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>4,220</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/5/2013 1247h	Calc.		<b>0.878</b>	
Total Dissolved Solids, Calculated	mg/L		3/5/2013 1247h	Calc.		<b>3,700</b>	



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-007A  
**Client Sample ID:** MW-36\_02262013  
**Collection Date:** 2/26/2013 1400h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1852h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	53.2	50.00	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	55.2	50.00	110	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.9	50.00	102	80-124	
Surr: Toluene-d8	2037-26-5	51.0	50.00	102	77-129	

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Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-36\_02262013  
Sample ID: 321572006  
Matrix: Ground Water  
Collect Date: 26-FEB-13 14:00  
Receive Date: 08-MAR-13  
Collector: Client

Project: DNM100100  
Client ID: DNM1001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.85	+/-0.407	0.606	1.00	pCi/L		KDF1	03/16/13	1432	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			98.5	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303550-001  
**Client Sample ID:** MW-37\_03202013  
**Collection Date:** 3/20/2013 0845h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	3/25/2013 1505h	3/28/2013 1224h	E200.7	100	<b>487</b>	<sup>2</sup>
Chromium	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.0100	< 0.0100	
Copper	mg/L	3/25/2013 1505h	3/29/2013 1316h	E200.8	0.0100	< 0.0100	
Iron	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.0300	< 0.0300	
Lead	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	3/25/2013 1505h	3/28/2013 1224h	E200.7	100	<b>139</b>	<sup>2</sup>
Manganese	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	3/23/2013 1100h	3/25/2013 0907h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	3/25/2013 1505h	3/28/2013 1313h	E200.7	10.0	<b>14.7</b>	
Selenium	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.00500	<b>0.00907</b>	
Silver	mg/L	3/25/2013 1505h	3/27/2013 0758h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	3/25/2013 1505h	3/28/2013 1224h	E200.7	100	<b>546</b>	<sup>2</sup>
Thallium	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.000500	<b>0.000626</b>	
Tin	mg/L	3/25/2013 1505h	3/28/2013 0012h	E200.8	0.100	< 0.100	
Uranium	mg/L	3/25/2013 1505h	3/27/2013 2059h	E200.8	0.000300	<b>0.0103</b>	
Vanadium	mg/L	3/25/2013 1505h	3/28/2013 1337h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	3/25/2013 1505h	3/29/2013 1316h	E200.8	0.0100	<b>0.0260</b>	

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303550-001  
**Client Sample ID:** MW-37\_03202013  
**Collection Date:** 3/20/2013 0845h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	3/28/2013 1030h	3/28/2013 2050h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO <sub>3</sub> )	mg/L		3/27/2013 0630h	SM2320B	1.00	<b>210</b>	
Carbonate (as CaCO <sub>3</sub> )	mg/L		3/27/2013 0630h	SM2320B	1.00	< 1.00	
Chloride	mg/L		3/23/2013 0747h	E300.0	10.0	<b>44.5</b>	
Fluoride	mg/L		3/23/2013 0816h	E300.0	0.100	<b>0.268</b>	
Ion Balance	%		3/28/2013 1457h	Calc.	-15.0	<b>9.12</b>	
Nitrate/Nitrite (as N)	mg/L		3/27/2013 1223h	E353.2	0.100	<b>0.775</b>	
Sulfate	mg/L		3/23/2013 0719h	E300.0	500	<b>2,130</b>	
Total Anions, Measured	meq/L		3/28/2013 1457h	Calc.		<b>49.8</b>	
Total Cations, Measured	meq/L		3/28/2013 1457h	Calc.		<b>59.9</b>	
Total Dissolved Solids	mg/L		3/22/2013 1240h	SM2540C	20.0	<b>3,770</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/28/2013 1457h	Calc.		<b>0.925</b>	
Total Dissolved Solids, Calculated	mg/L		3/28/2013 1457h	Calc.		<b>3,490</b>	

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303550-001A  
**Client Sample ID:** MW-37\_03202013  
**Collection Date:** 3/20/2013 0845h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/22/2013 1403h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	54.3	50.00	109	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	54.4	50.00	109	80-128	
Surr: Dibromofluoromethane	1868-53-7	53.2	50.00	106	80-124	
Surr: Toluene-d8	2037-26-5	51.5	50.00	103	77-129	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 28, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-37\_03202013  
Sample ID: 322413001  
Matrix: Ground Water  
Collect Date: 20-MAR-13 08:45  
Receive Date: 22-MAR-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		3.89	+/-0.628	0.789	1.00	pCi/L		KDF1	03/27/13	0751	1290657	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			96.0	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-005  
**Client Sample ID:** MW-65\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

463 West 3600 South  
 Salt Lake City, UT 84115  
  
 Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director  
  
 Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	2/28/2013 1000h	3/7/2013 1841h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.000500	<b>0.00144</b>	
Calcium	mg/L	2/28/2013 1000h	3/1/2013 1159h	E200.7	100	<b>509</b>	
Chromium	mg/L	2/28/2013 1000h	3/7/2013 1841h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.0100	< 0.0100	
Copper	mg/L	2/28/2013 1000h	3/7/2013 1841h	E200.8	0.0100	< 0.0100	
Iron	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.0300	< 0.0300	
Lead	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	2/28/2013 1000h	3/1/2013 1159h	E200.7	100	<b>165</b>	
Manganese	mg/L	2/28/2013 1000h	3/7/2013 1929h	E200.8	0.0100	<b>2.25</b>	
Mercury	mg/L	2/28/2013 1515h	3/1/2013 818h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	2/28/2013 1000h	3/7/2013 1841h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	2/28/2013 1000h	3/1/2013 1409h	E200.7	1.00	<b>13.3</b>	
Selenium	mg/L	2/28/2013 1000h	3/7/2013 507h	E200.8	0.00500	< 0.00500	
Silver	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	2/28/2013 1000h	3/1/2013 1159h	E200.7	100	<b>372</b>	
Thallium	mg/L	2/28/2013 1000h	3/7/2013 1838h	E200.8	0.000500	< 0.000500	
Tin	mg/L	2/28/2013 1000h	3/7/2013 1838h	E200.8	0.100	< 0.100	
Uranium	mg/L	2/28/2013 1000h	3/7/2013 424h	E200.8	0.000300	<b>0.0623</b>	
Vanadium	mg/L	2/28/2013 1000h	3/1/2013 1409h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	2/28/2013 1000h	3/8/2013 1123h	E200.8	0.0100	<b>0.0125</b>	



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-005  
**Client Sample ID:** MW-65\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	2/28/2013 1015h	2/28/2013 1752h	E350.1	0.0500	<b>0.0799</b>	
Bicarbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	<b>393</b>	
Carbonate (as CaCO3)	mg/L		2/28/2013 800h	SM2320B	1.00	< 1.00	
Chloride	mg/L		2/28/2013 1748h	E300.0	10.0	<b>18.8</b>	
Fluoride	mg/L		3/2/2013 100h	E300.0	0.100	<b>0.165</b>	
Ion Balance	%		3/5/2013 1247h	Calc.	-15.0	<b>14.4</b>	
Nitrate/Nitrite (as N)	mg/L		2/28/2013 1509h	E353.2	0.100	< 0.100	
Sulfate	mg/L		2/28/2013 1724h	E300.0	1,000	<b>1,590</b>	
Total Anions, Measured	meq/L		3/5/2013 1247h	Calc.		<b>41.6</b>	
Total Cations, Measured	meq/L		3/5/2013 1247h	Calc.		<b>55.5</b>	
Total Dissolved Solids	mg/L		3/1/2013 1145h	SM2540C	20.0	<b>3,570</b>	
Total Dissolved Solids Ratio, Measured/Calculated			3/5/2013 1247h	Calc.		<b>0.815</b>	
Total Dissolved Solids, Calculated	mg/L		3/5/2013 1247h	Calc.		<b>2,910</b>	

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-005A  
**Client Sample ID:** MW-65\_02262013  
**Collection Date:** 2/26/2013 950h  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1814h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	53.1	50.00	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	53.3	50.00	107	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.3	50.00	101	80-124	
Surr: Toluene-d8	2037-26-5	50.0	50.00	100	77-129	

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: March 21, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-65\_02262013  
Sample ID: 321572004  
Matrix: Ground Water  
Collect Date: 26-FEB-13 09:50  
Receive Date: 08-MAR-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha	U	1.00	+/-0.295	0.740	1.00	pCi/L		KDF1	03/16/13	1432	1287727	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			95.7	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-008  
**Client Sample ID:** MW-70\_03132013  
**Collection Date:** 3/13/2013 1540h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Nitrate/Nitrite (as N)	mg/L		3/25/2013 2048h	E353.2	0.500	<b>3.93</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: March 28, 2013

Company : Energy Fuels Resources (USA), Inc.  
 Address : 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-70_03132013	Project: DNMI00100
Sample ID: 322413003	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 13-MAR-13 15:40	
Receive Date: 22-MAR-13	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		1.60	+/-0.402	0.675	1.00	pCi/L		KDF1	03/27/13	0752	1290657	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments										
	EPA 900.1 Modified											
Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits							
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			97.3	(25%-125%)							

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302409-008A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 2/25/2013  
**Received Date:** 2/27/2013 1335h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/27/2013 1911h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	53.5	50.00	107	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.3	50.00	113	80-128	
Surr: Dibromofluoromethane	1868-53-7	51.0	50.00	102	80-124	
Surr: Toluene-d8	2037-26-5	51.7	50.00	103	77-129	



## ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303335-009A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 3/12/2013 1500h  
**Received Date:** 3/15/2013 1020h

**Contact:** Garrin Palmer

### Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/15/2013 1320h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

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<u>Compound</u>	<u>CAS Number</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Tetrahydrofuran	109-99-9	1.00	< 1.00	

<u>Surrogate</u>	<u>CAS</u>	<u>Result</u>	<u>Amount Spiked</u>	<u>% REC</u>	<u>Limits</u>	<u>Qual</u>
Surr: 1,2-Dichloroethane-d4	17060-07-0	47.4	50.00	94.9	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	51.3	50.00	103	80-128	
Surr: Dibromofluoromethane	1868-53-7	48.0	50.00	96.0	80-124	
Surr: Toluene-d8	2037-26-5	50.4	50.00	101	77-129	

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1302339-005A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 2/19/2013  
**Received Date:** 2/22/2013 1110h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 2/23/2013 1646h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.2	50.00	104	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	56.8	50.00	114	80-128	
Surr: Dibromofluoromethane	1868-53-7	49.7	50.00	99.4	80-124	
Surr: Toluene-d8	2037-26-5	51.3	50.00	103	77-129	

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com  
web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Sample ID:** 1303550-002A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 3/20/2013  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

**Analytical Results**

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/22/2013 1422h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	55.7	50.00	111	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	55.2	50.00	110	80-128	
Surr: Dibromofluoromethane	1868-53-7	54.1	50.00	108	80-124	
Surr: Toluene-d8	2037-26-5	52.1	50.00	104	77-129	



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: 1st Quarter Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1302409

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 8 sample(s) on 2/27/2013 for the analyses presented in the following report.

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
web: [www.awal-labs.com](http://www.awal-labs.com)

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Thank You,

**Kyle F. Gross**  
Digitally signed by Kyle F. Gross  
DN: cn=Kyle F. Gross, o=AWAL,  
ou=AWAL-Laboratory Director,  
email=kyle@awal-labs.com, c=US  
Date: 2013.03.08 15:39:37 -0700

Approved by:

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302409  
**Date Received:** 2/27/2013 1335h

**Contact:** Garrin Palmer

463 West 3600 South  
 Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1302409-001A	MW-18_02252013	2/25/2013 1340h	Aqueous	Anions, E300.0
1302409-001A	MW-18_02252013	2/25/2013 1340h	Aqueous	Total Dissolved Solids, A2540C
1302409-001B	MW-18_02252013	2/25/2013 1340h	Aqueous	ICPMS Metals, Dissolved
1302409-002A	MW-27_02252013	2/25/2013 1240h	Aqueous	Total Dissolved Solids, A2540C
1302409-002A	MW-27_02252013	2/25/2013 1240h	Aqueous	Anions, E300.0
1302409-002B	MW-27_02252013	2/25/2013 1240h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-003A	MW-14_02262013	2/26/2013 950h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302409-003B	MW-14_02262013	2/26/2013 950h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302409-003B	MW-14_02262013	2/26/2013 950h	Aqueous	Anions, E300.0
1302409-003C	MW-14_02262013	2/26/2013 950h	Aqueous	Total Dissolved Solids, A2540C
1302409-003D	MW-14_02262013	2/26/2013 950h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-003D	MW-14_02262013	2/26/2013 950h	Aqueous	Ammonia, Aqueous
1302409-003E	MW-14_02262013	2/26/2013 950h	Aqueous	Ion Balance
1302409-003E	MW-14_02262013	2/26/2013 950h	Aqueous	ICP Metals, Dissolved
1302409-003E	MW-14_02262013	2/26/2013 950h	Aqueous	ICPMS Metals, Dissolved
1302409-003E	MW-14_02262013	2/26/2013 950h	Aqueous	Mercury, Drinking Water Dissolved
1302409-004A	MW-30_02262013	2/26/2013 1050h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302409-004B	MW-30_02262013	2/26/2013 1050h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302409-004B	MW-30_02262013	2/26/2013 1050h	Aqueous	Anions, E300.0
1302409-004C	MW-30_02262013	2/26/2013 1050h	Aqueous	Total Dissolved Solids, A2540C
1302409-004D	MW-30_02262013	2/26/2013 1050h	Aqueous	Ammonia, Aqueous
1302409-004D	MW-30_02262013	2/26/2013 1050h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-004E	MW-30_02262013	2/26/2013 1050h	Aqueous	ICP Metals, Dissolved
1302409-004E	MW-30_02262013	2/26/2013 1050h	Aqueous	ICPMS Metals, Dissolved
1302409-004E	MW-30_02262013	2/26/2013 1050h	Aqueous	Mercury, Drinking Water Dissolved
1302409-004E	MW-30_02262013	2/26/2013 1050h	Aqueous	Ion Balance
1302409-005A	MW-65_02262013	2/26/2013 950h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302409-005B	MW-65_02262013	2/26/2013 950h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302409-005B	MW-65_02262013	2/26/2013 950h	Aqueous	Anions, E300.0
1302409-005C	MW-65_02262013	2/26/2013 950h	Aqueous	Total Dissolved Solids, A2540C



**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302409  
**Date Received:** 2/27/2013 1335h

**Contact:** Garrin Palmer

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686

Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1302409-005D	MW-65_02262013	2/26/2013 950h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-005D	MW-65_02262013	2/26/2013 950h	Aqueous	Ammonia, Aqueous
1302409-005E	MW-65_02262013	2/26/2013 950h	Aqueous	Ion Balance
1302409-005E	MW-65_02262013	2/26/2013 950h	Aqueous	Mercury, Drinking Water Dissolved
1302409-005E	MW-65_02262013	2/26/2013 950h	Aqueous	ICPMS Metals, Dissolved
1302409-005E	MW-65_02262013	2/26/2013 950h	Aqueous	ICP Metals, Dissolved
1302409-006A	MW-35_02262013	2/26/2013 1315h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302409-006B	MW-35_02262013	2/26/2013 1315h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302409-006B	MW-35_02262013	2/26/2013 1315h	Aqueous	Anions, E300.0
1302409-006C	MW-35_02262013	2/26/2013 1315h	Aqueous	Total Dissolved Solids, A2540C
1302409-006D	MW-35_02262013	2/26/2013 1315h	Aqueous	Ammonia, Aqueous
1302409-006D	MW-35_02262013	2/26/2013 1315h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-006E	MW-35_02262013	2/26/2013 1315h	Aqueous	Ion Balance
1302409-006E	MW-35_02262013	2/26/2013 1315h	Aqueous	Mercury, Drinking Water Dissolved
1302409-006E	MW-35_02262013	2/26/2013 1315h	Aqueous	ICP Metals, Dissolved
1302409-006E	MW-35_02262013	2/26/2013 1315h	Aqueous	ICPMS Metals, Dissolved
1302409-007A	MW-36_02262013	2/26/2013 1400h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302409-007B	MW-36_02262013	2/26/2013 1400h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302409-007B	MW-36_02262013	2/26/2013 1400h	Aqueous	Anions, E300.0
1302409-007C	MW-36_02262013	2/26/2013 1400h	Aqueous	Total Dissolved Solids, A2540C
1302409-007D	MW-36_02262013	2/26/2013 1400h	Aqueous	Ammonia, Aqueous
1302409-007D	MW-36_02262013	2/26/2013 1400h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302409-007E	MW-36_02262013	2/26/2013 1400h	Aqueous	Ion Balance
1302409-007E	MW-36_02262013	2/26/2013 1400h	Aqueous	ICP Metals, Dissolved
1302409-007E	MW-36_02262013	2/26/2013 1400h	Aqueous	ICPMS Metals, Dissolved
1302409-007E	MW-36_02262013	2/26/2013 1400h	Aqueous	Mercury, Drinking Water Dissolved
1302409-008A	Trip Blank	2/25/2013	Aqueous	VOA by GC/MS Method 8260C/5030C



# Inorganic Case Narrative

<b>Client:</b>	Energy Fuels Resources, Inc.
<b>Contact:</b>	Garrin Palmer
<b>Project:</b>	1st Quarter Groundwater 2013
<b>Lab Set ID:</b>	1302409

463 West 3600 South  
Salt Lake City, UT 84115

**Sample Receipt Information:**

<b>Date of Receipt:</b>	2/27/2013
<b>Date(s) of Collection:</b>	2/25 & 2/26/2013
<b>Sample Condition:</b>	Intact
<b>C-O-C Discrepancies:</b>	None

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com  
web: www.awal-labs.com

**Holding Time and Preservation Requirements:** The analysis and preparation of all samples were performed within the method holding times. All samples were properly preserved.

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Kyle F. Gross  
Laboratory Director

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

Jose Rocha  
QA Officer

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1302409-003E	Calcium	MS	High analyte concentration
1302409-003E	Sodium	MS/MSD	High analyte concentration
1302409-001A	Total Dissolved Solids	DUP	Suspected sample non-homogeneity or matrix interference
1302409-003D	Ammonia	MS/MSD	Sample matrix interference
1302409-003B	Fluoride	MS/MSD	Sample matrix interference
1302409-003B	Sulfate	MS	Sample matrix interference
1320409-005D	Nitrate/Nitrite	MS	Sample matrix interference



**Duplicates (DUP):** The parameters that require a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.

463 West 3600 South  
Salt Lake City, UT 84115

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Toll Free: (888) 263-8686

Fax: (801) 263-8687

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web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302409

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463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

### **Sample Receipt Information:**

**Date of Receipt:** 2/27/2013  
**Date of Collection:** 2/25 & 2/26/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None  
**Method:** SW-846 8260C/5030C  
**Analysis:** Volatile Organic Compounds

**General Set Comments:** No target analytes were observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



463 West 3600 South

Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-23909	Calcium	mg/L	E200.7	9.28	10.00	0	92.8	85-115				3/1/2013 1112h
LCS-23909	Magnesium	mg/L	E200.7	10.1	10.00	0	101	85-115				3/1/2013 1112h
LCS-23909	Potassium	mg/L	E200.7	10.3	10.00	0	103	85-115				3/1/2013 1112h
LCS-23909	Sodium	mg/L	E200.7	10.2	10.00	0	102	85-115				3/1/2013 1112h
LCS-23909	Vanadium	mg/L	E200.7	0.193	0.2000	0	96.6	85-115				3/1/2013 1112h
LCS-23910	Beryllium	mg/L	E200.8	0.225	0.2000	0	113	85-115				3/7/2013 347h
LCS-23910	Cobalt	mg/L	E200.8	0.191	0.2000	0	95.7	85-115				3/7/2013 347h
LCS-23910	Iron	mg/L	E200.8	1.02	1.000	0	102	85-115				3/7/2013 347h
LCS-23910	Lead	mg/L	E200.8	0.223	0.2000	0	111	85-115				3/7/2013 347h
LCS-23910	Nickel	mg/L	E200.8	0.207	0.2000	0	103	85-115				3/7/2013 347h
LCS-23910	Selenium	mg/L	E200.8	0.222	0.2000	0	111	85-115				3/7/2013 347h
LCS-23910	Silver	mg/L	E200.8	0.213	0.2000	0	107	85-115				3/7/2013 347h
LCS-23910	Uranium	mg/L	E200.8	0.211	0.2000	0	105	85-115				3/7/2013 347h
LCS-23910	Arsenic	mg/L	E200.8	0.212	0.2000	0	106	85-115				3/7/2013 1815h
LCS-23910	Chromium	mg/L	E200.8	0.207	0.2000	0	104	85-115				3/7/2013 1815h
LCS-23910	Copper	mg/L	E200.8	0.207	0.2000	0	104	85-115				3/7/2013 1815h
LCS-23910	Manganese	mg/L	E200.8	0.204	0.2000	0	102	85-115				3/7/2013 1815h
LCS-23910	Molybdenum	mg/L	E200.8	0.190	0.2000	0	94.9	85-115				3/7/2013 1815h
LCS-23910	Thallium	mg/L	E200.8	0.202	0.2000	0	101	85-115				3/7/2013 1745h
LCS-23910	Tin	mg/L	E200.8	1.02	1.000	0	102	85-115				3/7/2013 1745h
LCS-23910	Cadmium	mg/L	E200.8	0.200	0.2000	0	99.9	85-115				3/8/2013 1056h
LCS-23910	Zinc	mg/L	E200.8	0.997	1.000	0	99.7	85-115				3/8/2013 1056h
LCS-23924	Mercury	mg/L	E245.1	0.00320	0.003330	0	96.0	85-115				3/1/2013 803h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-23909	Calcium	mg/L	E200.7	< 1.00	-	-	-	-	-	-	-	3/1/2013 1108h
MB-23909	Magnesium	mg/L	E200.7	< 1.00	-	-	-	-	-	-	-	3/1/2013 1108h
MB-23909	Potassium	mg/L	E200.7	< 1.00	-	-	-	-	-	-	-	3/1/2013 1108h
MB-23909	Sodium	mg/L	E200.7	< 1.00	-	-	-	-	-	-	-	3/1/2013 1108h
MB-23909	Vanadium	mg/L	E200.7	< 0.0150	-	-	-	-	-	-	-	3/1/2013 1108h
MB-23910	Beryllium	mg/L	E200.8	< 0.000500	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Cadmium	mg/L	E200.8	< 0.000500	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Cobalt	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Iron	mg/L	E200.8	< 0.0300	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Lead	mg/L	E200.8	< 0.00100	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Nickel	mg/L	E200.8	< 0.0200	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Selenium	mg/L	E200.8	< 0.00500	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Silver	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Uranium	mg/L	E200.8	< 0.000300	-	-	-	-	-	-	-	3/7/2013 342h
MB-23910	Arsenic	mg/L	E200.8	< 0.00500	-	-	-	-	-	-	-	3/7/2013 1809h
MB-23910	Chromium	mg/L	E200.8	< 0.0250	-	-	-	-	-	-	-	3/7/2013 1809h
MB-23910	Copper	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/7/2013 1809h
MB-23910	Manganese	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/7/2013 1809h
MB-23910	Molybdenum	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/7/2013 1809h
MB-23910	Thallium	mg/L	E200.8	< 0.000500	-	-	-	-	-	-	-	3/7/2013 1736h
MB-23910	Tin	mg/L	E200.8	< 0.100	-	-	-	-	-	-	-	3/7/2013 1736h
MB-23910	Zinc	mg/L	E200.8	< 0.0100	-	-	-	-	-	-	-	3/8/2013 1051h
MB-23924	Mercury	mg/L	E245.1	< 0.000500	-	-	-	-	-	-	-	3/1/2013 802h



463 West 3600 South

Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-003EMS	Calcium	mg/L	E200.7	507	10.00	488.2	191	70-130			2	3/1/2013 1128h
1302409-003EMS	Magnesium	mg/L	E200.7	169	10.00	159.2	99.3	70-130				3/1/2013 1128h
1302409-003EMS	Potassium	mg/L	E200.7	22.0	10.00	12.09	98.9	70-130				3/1/2013 1450h
1302409-003EMS	Vanadium	mg/L	E200.7	0.195	0.2000	0	97.7	70-130				3/1/2013 1357h
1302409-003EMS	Sodium	mg/L	E200.7	386	10.00	353.4	329	70-130			2	3/5/2013 1245h
1302409-003EMS	Beryllium	mg/L	E200.8	0.189	0.2000	0	94.6	75-125				3/7/2013 408h
1302409-003EMS	Cadmium	mg/L	E200.8	0.207	0.2000	0.001475	103	75-125				3/7/2013 408h
1302409-003EMS	Cobalt	mg/L	E200.8	0.197	0.2000	0.002854	97.2	75-125				3/7/2013 408h
1302409-003EMS	Iron	mg/L	E200.8	1.01	1.000	0.005995	100	75-125				3/7/2013 408h
1302409-003EMS	Lead	mg/L	E200.8	0.204	0.2000	0.00005400	102	75-125				3/7/2013 408h
1302409-003EMS	Nickel	mg/L	E200.8	0.208	0.2000	0.004588	102	75-125				3/7/2013 408h
1302409-003EMS	Selenium	mg/L	E200.8	0.225	0.2000	0.0003870	112	75-125				3/7/2013 408h
1302409-003EMS	Silver	mg/L	E200.8	0.192	0.2000	0.00001700	95.8	75-125				3/7/2013 408h
1302409-003EMS	Uranium	mg/L	E200.8	0.256	0.2000	0.05840	98.9	75-125				3/7/2013 408h
1302409-003EMS	Arsenic	mg/L	E200.8	0.222	0.2000	0.0001750	111	75-125				3/7/2013 1825h
1302409-003EMS	Chromium	mg/L	E200.8	0.201	0.2000	0	101	75-125				3/7/2013 1825h
1302409-003EMS	Copper	mg/L	E200.8	0.198	0.2000	0.0003150	98.9	75-125				3/7/2013 1825h
1302409-003EMS	Molybdenum	mg/L	E200.8	0.203	0.2000	0.003698	99.8	75-125				3/7/2013 1825h
1302409-003EMS	Manganese	mg/L	E200.8	2.44	0.2000	2.250	92.9	75-125				3/7/2013 1919h
1302409-003EMS	Thallium	mg/L	E200.8	0.187	0.2000	0.0004050	93.4	75-125				3/7/2013 1811h
1302409-003EMS	Tin	mg/L	E200.8	1.01	1.000	0.00007300	101	75-125				3/7/2013 1811h
1302409-003EMS	Zinc	mg/L	E200.8	1.02	1.000	0.01398	100	75-125				3/8/2013 1107h
1302409-003EMS	Mercury	mg/L	E245.1	0.00322	0.003330	0	96.8	85-115				3/1/2013 810h

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-003EMSD	Calcium	mg/L	E200.7	497	10.00	488.2	86.9	70-130	2.07	20		3/1/2013 1132h
1302409-003EMSD	Magnesium	mg/L	E200.7	168	10.00	159.2	86.3	70-130	0.773	20		3/1/2013 1132h
1302409-003EMSD	Potassium	mg/L	E200.7	21.4	10.00	12.09	93.1	70-130	2.67	20		3/1/2013 1454h
1302409-003EMSD	Vanadium	mg/L	E200.7	0.197	0.2000	0	98.4	70-130	0.785	20		3/1/2013 1401h
1302409-003EMSD	Sodium	mg/L	E200.7	369	10.00	353.4	154	70-130	4.65	20	<sup>2</sup>	3/5/2013 1249h
1302409-003EMSD	Beryllium	mg/L	E200.8	0.195	0.2000	0	97.6	75-125	3.13	20		3/7/2013 414h
1302409-003EMSD	Cadmium	mg/L	E200.8	0.214	0.2000	0.001475	106	75-125	3.32	20		3/7/2013 414h
1302409-003EMSD	Cobalt	mg/L	E200.8	0.199	0.2000	0.002854	97.9	75-125	0.693	20		3/7/2013 414h
1302409-003EMSD	Iron	mg/L	E200.8	1.01	1.000	0.005995	100	75-125	0.203	20		3/7/2013 414h
1302409-003EMSD	Lead	mg/L	E200.8	0.204	0.2000	0.00005400	102	75-125	0.239	20		3/7/2013 414h
1302409-003EMSD	Nickel	mg/L	E200.8	0.209	0.2000	0.004588	102	75-125	0.672	20		3/7/2013 414h
1302409-003EMSD	Selenium	mg/L	E200.8	0.226	0.2000	0.0003870	113	75-125	0.644	20		3/7/2013 414h
1302409-003EMSD	Silver	mg/L	E200.8	0.197	0.2000	0.00001700	98.7	75-125	3.05	20		3/7/2013 414h
1302409-003EMSD	Uranium	mg/L	E200.8	0.257	0.2000	0.05840	99.2	75-125	0.305	20		3/7/2013 414h
1302409-003EMSD	Arsenic	mg/L	E200.8	0.223	0.2000	0.0001750	111	75-125	0.19	20		3/7/2013 1831h
1302409-003EMSD	Chromium	mg/L	E200.8	0.207	0.2000	0	104	75-125	2.78	20		3/7/2013 1831h
1302409-003EMSD	Copper	mg/L	E200.8	0.203	0.2000	0.0003150	101	75-125	2.43	20		3/7/2013 1831h
1302409-003EMSD	Molybdenum	mg/L	E200.8	0.204	0.2000	0.003698	100	75-125	0.207	20		3/7/2013 1831h
1302409-003EMSD	Manganese	mg/L	E200.8	2.42	0.2000	2.250	84.5	75-125	0.692	20		3/7/2013 1924h
1302409-003EMSD	Thallium	mg/L	E200.8	0.187	0.2000	0.0004050	93.3	75-125	0.128	20		3/7/2013 1820h
1302409-003EMSD	Tin	mg/L	E200.8	1.01	1.000	0.00007300	101	75-125	0.0391	20		3/7/2013 1820h
1302409-003EMSD	Zinc	mg/L	E200.8	1.02	1.000	0.01398	100	75-125	0.121	20		3/8/2013 1112h
1302409-003EMSD	Mercury	mg/L	E245.1	0.00322	0.003330	0	96.8	85-115	0	20		3/1/2013 812h

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



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Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-001ADUP	Total Dissolved Solids	mg/L	SM2540C	3,030		3,352			10	5	@	3/1/2013 1145h

@ - High RPD due to suspected sample non-homogeneity or matrix interference.



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QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R51061	Chloride	mg/L	E300.0	5.03	5.000	0	101	90-110				2/28/2013 1245h
LCS-R51061	Sulfate	mg/L	E300.0	5.09	5.000	0	102	90-110				2/28/2013 1245h
LCS-R51088	Fluoride	mg/L	E300.0	5.20	5.000	0	104	90-110				3/1/2013 1910h
LCS-R51191	Sulfate	mg/L	E300.0	5.24	5.000	0	105	90-110				3/6/2013 1241h
LCS-R50982	Alkalinity (as CaCO3)	mg/L	SM2320B	51,900	50,000	0	104	90-110				2/28/2013 800h
LCS-23912	Ammonia (as N)	mg/L	E350.1	0.952	1.000	0	95.2	90-110				2/28/2013 1736h
LCS-R51018	Nitrate/Nitrite (as N)	mg/L	E353.2	1.08	1.000	0	108	90-110				2/28/2013 1451h
LCS-R51101	Total Dissolved Solids	mg/L	SM2540C	206	205.0	0	100	80-120				3/1/2013 1145h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
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**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R51061	Chloride	mg/L	E300.0	< 1.00				-				2/28/2013 1222h
MB-R51061	Sulfate	mg/L	E300.0	< 1.00				-				2/28/2013 1222h
MB-R51088	Fluoride	mg/L	E300.0	< 0.100				-				3/1/2013 1847h
MB-R51191	Sulfate	mg/L	E300.0	< 0.750				-				3/6/2013 1218h
MB-R50982	Bicarbonate (as CaCO <sub>3</sub> )	mg/L	SM2320B	< 1.00				-				2/28/2013 800h
MB-R50982	Carbonate (as CaCO <sub>3</sub> )	mg/L	SM2320B	< 1.00				-				2/28/2013 800h
MB-23912	Ammonia (as N)	mg/L	E350.1	< 0.0500				-				2/28/2013 1735h
MB-R51018	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				2/28/2013 1500h
MB-R51101	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				3/1/2013 1145h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

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**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-001AMS	Chloride	mg/L	E300.0	51,100	50,000	57.21	102	90-110				2/28/2013 1331h
1302409-001AMS	Sulfate	mg/L	E300.0	54,100	50,000	1,267	106	90-110				2/28/2013 1331h
1302409-003BMS	Fluoride	mg/L	E300.0	591	500.0	0.1720	118	90-110				3/1/2013 2350h
1302409-003BMS	Sulfate	mg/L	E300.0	7,820	5,000	1,628	124	90-110				3/6/2013 1354h
1302409-003BMS	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	439	50.00	385.7	107	80-120				2/28/2013 800h
1302409-003DMS	Ammonia (as N)	mg/L	E350.1	0.937	1.000	0.04380	89.3	90-110				2/28/2013 1744h
1302409-005DMS	Nitrate/Nitrite (as N)	mg/L	E353.2	1.12	1.000	0	112	90-110				2/28/2013 1513h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-001AMSD	Chloride	mg/L	E300.0	53,400	50,000	57.21	107	90-110	4.41	20		2/28/2013 1355h
1302409-001AMSD	Sulfate	mg/L	E300.0	55,200	50,000	1,267	108	90-110	2.15	20		2/28/2013 1355h
1302409-003BMSD	Fluoride	mg/L	E300.0	602	500.0	0.1720	120	90-110	1.85	20		3/2/2013 013h
1302409-003BMSD	Sulfate	mg/L	E300.0	6,980	5,000	1,628	107	90-110	11.3	20		3/6/2013 1417h
1302409-003BMSD	Alkalinity (as CaCO3)	mg/L	SM2320B	439	50.00	385.7	106	80-120	0.182	10		2/28/2013 800h
1302409-003DMSD	Ammonia (as N)	mg/L	E350.1	0.934	1.000	0.04380	89.1	90-110	0.299	10		2/28/2013 1745h
1302409-005DMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	1.06	1.000	0	106	90-110	5.14	10		2/28/2013 1514h

*† - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.*



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 022713A	Benzene	µg/L	SW8260C	21.7	20.00	0	109	62-127				2/27/2013 1020h
LCS VOC 022713A	Chloroform	µg/L	SW8260C	23.9	20.00	0	120	67-132				2/27/2013 1020h
LCS VOC 022713A	Methylene chloride	µg/L	SW8260C	24.9	20.00	0	125	32-185				2/27/2013 1020h
LCS VOC 022713A	Naphthalene	µg/L	SW8260C	11.7	20.00	0	58.3	28-136				2/27/2013 1020h
LCS VOC 022713A	Tetrahydrofuran	µg/L	SW8260C	17.6	20.00	0	88.0	43-146				2/27/2013 1020h
LCS VOC 022713A	Toluene	µg/L	SW8260C	23.7	20.00	0	118	64-128				2/27/2013 1020h
LCS VOC 022713A	Xylenes, Total	µg/L	SW8260C	63.8	60.00	0	106	52-134				2/27/2013 1020h
LCS VOC 022713A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	51.6	50.00		103	76-138				2/27/2013 1020h
LCS VOC 022713A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	47.1	50.00		94.1	77-121				2/27/2013 1020h
LCS VOC 022713A	Surr: Dibromofluoromethane	%REC	SW8260C	51.2	50.00		102	67-128				2/27/2013 1020h
LCS VOC 022713A	Surr: Toluene-d8	%REC	SW8260C	47.8	50.00		95.7	81-135				2/27/2013 1020h
LCS VOC 022813A	Benzene	µg/L	SW8260C	20.6	20.00	0	103	62-127				2/28/2013 1045h
LCS VOC 022813A	Chloroform	µg/L	SW8260C	22.8	20.00	0	114	67-132				2/28/2013 1045h
LCS VOC 022813A	Methylene chloride	µg/L	SW8260C	23.9	20.00	0	120	32-185				2/28/2013 1045h
LCS VOC 022813A	Naphthalene	µg/L	SW8260C	11.2	20.00	0	55.8	28-136				2/28/2013 1045h
LCS VOC 022813A	Tetrahydrofuran	µg/L	SW8260C	15.4	20.00	0	77.2	43-146				2/28/2013 1045h
LCS VOC 022813A	Toluene	µg/L	SW8260C	22.7	20.00	0	113	64-128				2/28/2013 1045h
LCS VOC 022813A	Xylenes, Total	µg/L	SW8260C	60.5	60.00	0	101	52-134				2/28/2013 1045h
LCS VOC 022813A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	50.6	50.00		101	76-138				2/28/2013 1045h
LCS VOC 022813A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	46.8	50.00		93.5	77-121				2/28/2013 1045h
LCS VOC 022813A	Surr: Dibromofluoromethane	%REC	SW8260C	50.6	50.00		101	67-128				2/28/2013 1045h
LCS VOC 022813A	Surr: Toluene-d8	%REC	SW8260C	47.7	50.00		95.4	81-135				2/28/2013 1045h
LCS VOC 030113A	Benzene	µg/L	SW8260C	21.3	20.00	0	106	62-127				3/1/2013 746h
LCS VOC 030113A	Chloroform	µg/L	SW8260C	23.4	20.00	0	117	67-132				3/1/2013 746h
LCS VOC 030113A	Methylene chloride	µg/L	SW8260C	23.9	20.00	0	119	32-185				3/1/2013 746h
LCS VOC 030113A	Naphthalene	µg/L	SW8260C	12.4	20.00	0	61.8	28-136				3/1/2013 746h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 030113A	Tetrahydrofuran	µg/L	SW8260C	17.7	20.00	0	88.6	43-146				3/1/2013 746h
LCS VOC 030113A	Toluene	µg/L	SW8260C	22.6	20.00	0	113	64-128				3/1/2013 746h
LCS VOC 030113A	Xylenes, Total	µg/L	SW8260C	61.5	60.00	0	103	52-134				3/1/2013 746h
LCS VOC 030113A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	51.5	50.00		103	76-138				3/1/2013 746h
LCS VOC 030113A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	46.5	50.00		93.1	77-121				3/1/2013 746h
LCS VOC 030113A	Surr: Dibromofluoromethane	%REC	SW8260C	50.8	50.00		102	67-128				3/1/2013 746h
LCS VOC 030113A	Surr: Toluene-d8	%REC	SW8260C	46.2	50.00		92.5	81-135				3/1/2013 746h



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## QC SUMMARY REPORT

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**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
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**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 022713A	2-Butanone	µg/L	SW8260C	< 20.0				-				2/27/2013 1058h
MB VOC 022713A	Acetone	µg/L	SW8260C	< 20.0				-				2/27/2013 1058h
MB VOC 022713A	Benzene	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Carbon tetrachloride	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Chloroform	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Chloromethane	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Methylene chloride	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Naphthalene	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Tetrahydrofuran	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Toluene	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Xylenes, Total	µg/L	SW8260C	< 1.00				-				2/27/2013 1058h
MB VOC 022713A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.9	50.00		106	76-138				2/27/2013 1058h
MB VOC 022713A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	55.6	50.00		111	77-121				2/27/2013 1058h
MB VOC 022713A	Surr: Dibromofluoromethane	%REC	SW8260C	51.1	50.00		102	67-128				2/27/2013 1058h
MB VOC 022713A	Surr: Toluene-d8	%REC	SW8260C	50.7	50.00		101	81-135				2/27/2013 1058h
MB VOC 022813A	2-Butanone	µg/L	SW8260C	< 20.0				-				2/28/2013 1123h
MB VOC 022813A	Acetone	µg/L	SW8260C	< 20.0				-				2/28/2013 1123h
MB VOC 022813A	Benzene	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Carbon tetrachloride	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Chloroform	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Chloromethane	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Methylene chloride	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Naphthalene	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Tetrahydrofuran	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Toluene	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h
MB VOC 022813A	Xylenes, Total	µg/L	SW8260C	< 1.00				-				2/28/2013 1123h

Analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 022813A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.5	50.00		105	76-138				2/28/2013 1123h
MB VOC 022813A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	54.2	50.00		108	77-121				2/28/2013 1123h
MB VOC 022813A	Surr: Dibromofluoromethane	%REC	SW8260C	50.6	50.00		101	67-128				2/28/2013 1123h
MB VOC 022813A	Surr: Toluene-d8	%REC	SW8260C	50.3	50.00		101	81-135				2/28/2013 1123h
MB VOC 030113A	2-Butanone	µg/L	SW8260C	< 20.0				-				3/1/2013 823h
MB VOC 030113A	Acetone	µg/L	SW8260C	< 20.0				-				3/1/2013 823h
MB VOC 030113A	Benzene	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Carbon tetrachloride	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Chloroform	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Chloromethane	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Methylene chloride	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Naphthalene	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Tetrahydrofuran	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Toluene	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Xylenes, Total	µg/L	SW8260C	< 1.00				-				3/1/2013 823h
MB VOC 030113A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.4	50.00		105	76-138				3/1/2013 823h
MB VOC 030113A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	55.2	50.00		110	77-121				3/1/2013 823h
MB VOC 030113A	Surr: Dibromofluoromethane	%REC	SW8260C	49.8	50.00		99.7	67-128				3/1/2013 823h
MB VOC 030113A	Surr: Toluene-d8	%REC	SW8260C	49.1	50.00		98.2	81-135				3/1/2013 823h



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-003AMS	Benzene	µg/L	SW8260C	116	100.0	0	116	66-145				2/28/2013 1220h
1302409-003AMS	Chloroform	µg/L	SW8260C	126	100.0	0	126	50-146				2/28/2013 1220h
1302409-003AMS	Methylene chloride	µg/L	SW8260C	133	100.0	0	133	30-192				2/28/2013 1220h
1302409-003AMS	Naphthalene	µg/L	SW8260C	61.8	100.0	0	61.8	41-131				2/28/2013 1220h
1302409-003AMS	Tetrahydrofuran	µg/L	SW8260C	103	100.0	0	103	43-146				2/28/2013 1220h
1302409-003AMS	Toluene	µg/L	SW8260C	125	100.0	0	125	18-192				2/28/2013 1220h
1302409-003AMS	Xylenes, Total	µg/L	SW8260C	327	300.0	0	109	42-167				2/28/2013 1220h
1302409-003AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	269	250.0		108	72-151				2/28/2013 1220h
1302409-003AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	230	250.0		91.9	80-128				2/28/2013 1220h
1302409-003AMS	Surr: Dibromofluoromethane	%REC	SW8260C	258	250.0		103	80-124				2/28/2013 1220h
1302409-003AMS	Surr: Toluene-d8	%REC	SW8260C	231	250.0		92.4	77-129				2/28/2013 1220h
1302409-004AMS	Benzene	µg/L	SW8260C	21.8	20.00	0	109	66-145				3/1/2013 1205h
1302409-004AMS	Chloroform	µg/L	SW8260C	24.0	20.00	0	120	50-146				3/1/2013 1205h
1302409-004AMS	Methylene chloride	µg/L	SW8260C	24.9	20.00	0	125	30-192				3/1/2013 1205h
1302409-004AMS	Naphthalene	µg/L	SW8260C	11.7	20.00	0	58.3	41-131				3/1/2013 1205h
1302409-004AMS	Tetrahydrofuran	µg/L	SW8260C	21.4	20.00	0	107	43-146				3/1/2013 1205h
1302409-004AMS	Toluene	µg/L	SW8260C	23.3	20.00	0	116	18-192				3/1/2013 1205h
1302409-004AMS	Xylenes, Total	µg/L	SW8260C	61.7	60.00	0	103	42-167				3/1/2013 1205h
1302409-004AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	53.8	50.00		108	72-151				3/1/2013 1205h
1302409-004AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	44.9	50.00		89.7	80-128				3/1/2013 1205h
1302409-004AMS	Surr: Dibromofluoromethane	%REC	SW8260C	51.7	50.00		103	80-124				3/1/2013 1205h
1302409-004AMS	Surr: Toluene-d8	%REC	SW8260C	45.9	50.00		91.8	77-129				3/1/2013 1205h



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302409  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302409-003AMSD	Benzene	µg/L	SW8260C	110	100.0	0	110	66-145	5.01	25		2/28/2013 1239h
1302409-003AMSD	Chloroform	µg/L	SW8260C	120	100.0	0	120	50-146	4.85	25		2/28/2013 1239h
1302409-003AMSD	Methylene chloride	µg/L	SW8260C	128	100.0	0	128	30-192	3.79	25		2/28/2013 1239h
1302409-003AMSD	Naphthalene	µg/L	SW8260C	61.2	100.0	0	61.2	41-131	0.976	25		2/28/2013 1239h
1302409-003AMSD	Tetrahydrofuran	µg/L	SW8260C	106	100.0	0	106	43-146	2.25	25		2/28/2013 1239h
1302409-003AMSD	Toluene	µg/L	SW8260C	120	100.0	0	120	18-192	3.83	25		2/28/2013 1239h
1302409-003AMSD	Xylenes, Total	µg/L	SW8260C	314	300.0	0	105	42-167	3.97	25		2/28/2013 1239h
1302409-003AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	272	250.0		109	72-151				2/28/2013 1239h
1302409-003AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	230	250.0		92.1	80-128				2/28/2013 1239h
1302409-003AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	260	250.0		104	80-124				2/28/2013 1239h
1302409-003AMSD	Surr: Toluene-d8	%REC	SW8260C	235	250.0		93.9	77-129				2/28/2013 1239h
1302409-004AMSD	Benzene	µg/L	SW8260C	20.6	20.00	0	103	66-145	5.51	25		3/1/2013 1224h
1302409-004AMSD	Chloroform	µg/L	SW8260C	22.5	20.00	0	113	50-146	6.4	25		3/1/2013 1224h
1302409-004AMSD	Methylene chloride	µg/L	SW8260C	23.4	20.00	0	117	30-192	6.16	25		3/1/2013 1224h
1302409-004AMSD	Naphthalene	µg/L	SW8260C	11.0	20.00	0	55.1	41-131	5.64	25		3/1/2013 1224h
1302409-004AMSD	Tetrahydrofuran	µg/L	SW8260C	19.7	20.00	0	98.6	43-146	8.27	25		3/1/2013 1224h
1302409-004AMSD	Toluene	µg/L	SW8260C	22.2	20.00	0	111	18-192	4.66	25		3/1/2013 1224h
1302409-004AMSD	Xylenes, Total	µg/L	SW8260C	58.4	60.00	0	97.3	42-167	5.5	25		3/1/2013 1224h
1302409-004AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	53.1	50.00		106	72-151				3/1/2013 1224h
1302409-004AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	46.2	50.00		92.4	80-128				3/1/2013 1224h
1302409-004AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	51.3	50.00		103	80-124				3/1/2013 1224h
1302409-004AMSD	Surr: Toluene-d8	%REC	SW8260C	46.5	50.00		93.0	77-129				3/1/2013 1224h

## WORK ORDER Summary

Work Order: **1302409** Page 1 of 4

**Client:** Energy Fuels Resources, Inc.

Due Date: 3/8/2013

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**QC Level:** III

WO Type: Project 

**Comments:** PA Rush. QC 3 & Summary. Project specific DL's: see COC. EDD-Denison and EIM-Locus. Email Group.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1302409-001A	MW-18_02252013	2/25/2013 1340h	2/27/2013 1335h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	DF - tds/so4 *SHARE*	1
				<i>1 SEL Analytes: SO4</i>				
				TDS-W-2540C		<input checked="" type="checkbox"/>	DF - tds/so4 *SHARE*	
				<i>1 SEL Analytes: TDS</i>				
1302409-001B				200.8-DIS		<input checked="" type="checkbox"/>	MET	
				<i>1 SEL Analytes: TL</i>				
				200.8-DIS-PR		<input type="checkbox"/>	MET	
1302409-002A	MW-27_02252013	2/25/2013 1240h	2/27/2013 1335h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	DF - tds/so4/cl *SHARE*	1
				<i>2 SEL Analytes: CL SO4</i>				
				TDS-W-2540C		<input checked="" type="checkbox"/>	DF - tds/so4/cl *SHARE*	
				<i>1 SEL Analytes: TDS</i>				
1302409-002B				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	DF - no2/no3	
				<i>1 SEL Analytes: NO3NO2N</i>				
1302409-003A	MW-14_02262013	2/26/2013 0950h	2/27/2013 1335h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
				<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>				
1302409-003B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1
				<i>3 SEL Analytes: CL F SO4</i>				
				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc	
				<i>2 SEL Analytes: ALKB ALKC</i>				
1302409-003C				TDS-W-2540C		<input checked="" type="checkbox"/>	df - wc	
				<i>1 SEL Analytes: TDS</i>				
1302409-003D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				<i>1 SEL Analytes: NH3N</i>				
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				<i>1 SEL Analytes: NO3NO2N</i>				
1302409-003E				200.7-DIS		<input checked="" type="checkbox"/>	MET/HG	
				<i>5 SEL Analytes: CA MG K NA V</i>				
				200.7-DIS-PR		<input type="checkbox"/>	MET/HG	
				200.8-DIS		<input checked="" type="checkbox"/>	MET/HG	
				<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>				

# WORK ORDER Summary

Work Order: **1302409** Page 2 of 4

Client: Energy Fuels Resources, Inc.

Due Date: 3/8/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage					
1302409-003E	MW-14_02262013	2/26/2013 0950h	2/27/2013 1335h	200.8-DIS-PR	Aqueous	<input type="checkbox"/>	MET/HG	1				
				HG-DW-DIS-245.1		<input type="checkbox"/>	MET/HG					
				HG-DW-DIS-PR		<input type="checkbox"/>	MET/HG					
				IONBALANCE		<input checked="" type="checkbox"/>	MET/HG					
<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>												
1302409-004A	MW-30_02262013	2/26/2013 1050h	2/27/2013 1335h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3				
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>												
1302409-004B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1				
				<i>3 SEL Analytes: CL F SO4</i>								
1302409-004C				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc					
				<i>2 SEL Analytes: ALKB ALKC</i>								
1302409-004D				TDS-W-2540C		<input checked="" type="checkbox"/>	df - wc					
				<i>1 SEL Analytes: TDS</i>								
1302409-004E				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3					
				<i>1 SEL Analytes: NH3N</i>								
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3					
1302409-004E				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3					
				<i>1 SEL Analytes: NO3NO2N</i>								
				200.7-DIS		<input checked="" type="checkbox"/>	MET/HG					
				<i>5 SEL Analytes: CA MG K NA V</i>								
				200.7-DIS-PR		<input type="checkbox"/>	MET/HG					
				200.8-DIS		<input checked="" type="checkbox"/>	MET/HG					
				<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>								
1302409-005A	MW-65_02262013	2/26/2013 0950h	2/27/2013 1335h	200.8-DIS-PR		<input type="checkbox"/>	MET/HG					
				HG-DW-DIS-245.1		<input type="checkbox"/>	MET/HG					
				HG-DW-DIS-PR		<input type="checkbox"/>	MET/HG					
				IONBALANCE		<input checked="" type="checkbox"/>	MET/HG					
<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>												
1302409-005A	MW-65_02262013	2/26/2013 0950h	2/27/2013 1335h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3				
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>												
1302409-005B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1				
				<i>3 SEL Analytes: CL F SO4</i>								
1302409-005C				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc					
				<i>2 SEL Analytes: ALKB ALKC</i>								
1302409-005D				TDS-W-2540C		<input checked="" type="checkbox"/>	df - wc					
				<i>1 SEL Analytes: TDS</i>								
1302409-005D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3					
				<i>1 SEL Analytes: NH3N</i>								
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3					

# WORK ORDER Summary

Work Order: **1302409** Page 3 of 4

Client: Energy Fuels Resources, Inc.

Due Date: 3/8/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1302409-005D	MW-65_02262013	2/26/2013 0950h	2/27/2013 1335h	NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>	Aqueous	<input checked="" type="checkbox"/>	df - no2/no3 & nh3	1
1302409-005E				200.7-DIS <i>5 SEL Analytes: CA MG K NA V</i>		<input checked="" type="checkbox"/>	MET/HG	
				200.7-DIS-PR		<input type="checkbox"/>	MET/HG	
				200.8-DIS <i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>		<input checked="" type="checkbox"/>	MET/HG	
				200.8-DIS-PR		<input type="checkbox"/>	MET/HG	
				HG-DW-DIS-245.1		<input type="checkbox"/>	MET/HG	
				HG-DW-DIS-PR		<input type="checkbox"/>	MET/HG	
				IONBALANCE <i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>		<input checked="" type="checkbox"/>	MET/HG	
1302409-006A	MW-35_02262013	2/26/2013 1315h	2/27/2013 1335h	8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
1302409-006B				300.0-W <i>3 SEL Analytes: CL F SO4</i>		<input checked="" type="checkbox"/>	df - wc	1
				ALK-W-2320B <i>2 SEL Analytes: ALKB ALKC</i>		<input checked="" type="checkbox"/>	df - wc	
1302409-006C				TDS-W-2540C <i>1 SEL Analytes: TDS</i>		<input checked="" type="checkbox"/>	df - wc	
1302409-006D				NH3-W-350.1 <i>1 SEL Analytes: NH3N</i>		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
1302409-006E				200.7-DIS <i>5 SEL Analytes: CA MG K NA V</i>		<input checked="" type="checkbox"/>	MET/HG	
				200.7-DIS-PR		<input type="checkbox"/>	MET/HG	
				200.8-DIS <i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>		<input checked="" type="checkbox"/>	MET/HG	
				200.8-DIS-PR		<input type="checkbox"/>	MET/HG	
				HG-DW-DIS-245.1		<input type="checkbox"/>	MET/HG	
				HG-DW-DIS-PR		<input type="checkbox"/>	MET/HG	
				IONBALANCE <i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>		<input checked="" type="checkbox"/>	MET/HG	
1302409-007A	MW-36_02262013	2/26/2013 1400h	2/27/2013 1335h	8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3

# WORK ORDER Summary

Work Order: **1302409** Page 4 of 4

Client: Energy Fuels Resources, Inc.

Due Date: 3/8/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage			
1302409-007B	MW-36_02262013	2/26/2013 1400h	2/27/2013 1335h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df - wc	1		
				<i>3 SEL Analytes: CL F SO4</i>						
1302409-007C				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc			
				<i>2 SEL Analytes: ALKB ALKC</i>						
1302409-007D				TDS-W-2540C		<input checked="" type="checkbox"/>	df - wc			
				<i>1 SEL Analytes: TDS</i>						
1302409-007E				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3			
				<i>1 SEL Analytes: NH3N</i>						
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3			
1302409-007E				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3			
				<i>1 SEL Analytes: NO3NO2N</i>						
				200.7-DIS		<input checked="" type="checkbox"/>	MET/HG			
				<i>5 SEL Analytes: CA MG K NA V</i>						
				200.7-DIS-PR		<input type="checkbox"/>	MET/HG			
				200.8-DIS		<input checked="" type="checkbox"/>	MET/HG			
				<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>						
200.8-DIS-PR		<input type="checkbox"/>	MET/HG							
1302409-008A	Trip Blank	2/25/2013	2/27/2013 1335h	HG-DW-DIS-245.1		<input type="checkbox"/>	MET/HG			
				HG-DW-DIS-PR		<input type="checkbox"/>	MET/HG			
				IONBALANCE		<input checked="" type="checkbox"/>	MET/HG			
<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>										
1302409-008A	Trip Blank	2/25/2013	2/27/2013 1335h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	2		
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>										



Table 3 – GEL Groundwater, Tailings Impoundment, and Seeps and Springs Sampling

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
<b>Heavy Metals</b>					
Arsenic	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Beryllium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cadmium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Chromium	E200.7 or E200.8	25 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cobalt	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Copper	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Iron	E200.7 or E200.7	30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Lead	E200.7 or E200.8	1.0 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Manganese	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Mercury	E 245.1 or E200.7 or E200.8	0.50 µg/L	28 days	HNO <sub>3</sub> to pH<2	None
Molybdenum	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Nickel	E200.7 or E200.8	20 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Selenium	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Silver	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Thallium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Tin	E200.7 or E200.8	100 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Uranium	E200.7 or E200.8	0.30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Vanadium	E200.7 or E200.8	15 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Zinc	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Sodium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Potassium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Magnesium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Calcium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
<b>Radiologics</b>					
<del>Gross Alpha</del>	<del>E 900.0 or E900.1</del>	<del>1.0 pCi/L</del>	<del>6 months</del>	<del>HNO<sub>3</sub> to pH&lt;2</del>	<del>None</del>

-RW 2/27/13

Table 4 Fee Schedule

Analyte/ Group	Cost per Sample
Full Suite Metals	
Partial Suite Metals (cost per individual metal)	
Gross alpha	

Lab Set ID: 1302409

<b>Samples Were:</b>	<b>COC Tape Was:</b>	<b>Container Type:</b>	<b>No. Rec.</b>
<input type="checkbox"/> Shipped By:	<b>Present on Outer Package</b>	<input type="checkbox"/> AWAL Supplied Plastic	
<input checked="" type="checkbox"/> Hand Delivered	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> AWAL Supplied Clear Glass	
<input type="checkbox"/> Ambient	<b>Unbroken on Outer package</b>	<input type="checkbox"/> AWAL Supplied Amber Glass	
<input checked="" type="checkbox"/> Chilled	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> AWAL Supplied VOA/TOC/TOX Vials	
Temperature <u>3.2</u> °C	<b>Present on Sample</b>	<input type="checkbox"/> Amber <input type="checkbox"/> Clear <input type="checkbox"/> Headspace <input type="checkbox"/> No Headspace	
Rec. Broken/Leaking <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Non AWAL Supplied Container	
<b>Notes:</b>	<b>Unbroken on Sample</b>	<b>Notes:</b>	
Properly Preserved <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<u>2/27/13</u>	
<b>Notes:</b>	<b>Notes:</b>		
Rec. Within Hold <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>Discrepancies Between Labels and COC</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Notes:</b>		<b>Notes:</b>	

Bottle Type	Preservative	All pHs OK	1	2	3	4	5	6	7								
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>				yes	yes	yes	yes	yes								
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	pH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>	yes			yes	yes	yes	yes	yes								
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>			yes	yes	yes	yes	yes	yes								
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, ZnAC																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) Do Not dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC and notify client for further instructions
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted at client request



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: 1st Quarter Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1303335

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 9 sample(s) on 3/15/2013 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)

web: [www.awal-labs.com](http://www.awal-labs.com)

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

**Kyle F.  
Gross**

Digitally signed by Kyle F. Gross  
DN: cn=Kyle F. Gross, o=AWAL,  
ou=AWAL-Laboratory Director,  
email=kylc@awal-labs.com, c=US  
Date: 2013.03.25 16:20:41 -06'00'

Approved by:

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303335  
**Date Received:** 3/15/2013 1020h

**Contact:** Garrin Palmer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1303335-001A	MW-01_03122013	3/12/2013 1500h	Aqueous	VOA by GC/MS Method 8260C/5030C
1303335-001B	MW-01_03122013	3/12/2013 1500h	Aqueous	Anions, E300.0
1303335-001C	MW-01_03122013	3/12/2013 1500h	Aqueous	ICPMS Metals, Dissolved
1303335-002A	MW-03_03122013	3/12/2013 945h	Aqueous	Anions, E300.0
1303335-002B	MW-03_03122013	3/12/2013 945h	Aqueous	ICPMS Metals, Dissolved
1303335-003A	MW-03A_03132013	3/13/2013 1255h	Aqueous	Anions, E300.0
1303335-003B	MW-03A_03132013	3/13/2013 1255h	Aqueous	ICPMS Metals, Dissolved
1303335-003C	MW-03A_03132013	3/13/2013 1255h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303335-003D	MW-03A_03132013	3/13/2013 1255h	Aqueous	Total Dissolved Solids, A2540C
1303335-004A	MW-05_03112013	3/11/2013 1130h	Aqueous	ICPMS Metals, Dissolved
1303335-005A	MW-19_03132013	3/13/2013 1540h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303335-006A	MW-23_03112013	3/11/2013 1030h	Aqueous	ICPMS Metals, Dissolved
1303335-007A	MW-24_03142013	3/14/2013 712h	Aqueous	Anions, E300.0
1303335-007B	MW-24_03142013	3/14/2013 712h	Aqueous	ICPMS Metals, Dissolved
1303335-008A	MW-70_03132013	3/13/2013 1540h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303335-009A	Trip Blank	3/12/2013 1500h	Aqueous	VOA by GC/MS Method 8260C/5030C

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303335

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

### Sample Receipt Information:

**Date of Receipt:** 3/15/2013  
**Dates of Collection:** 3/11-3/14/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

**Holding Time and Preservation Requirements:** The analysis and preparation of all samples were performed within the method holding times. All samples were properly preserved.

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1303335-005A	Nitrate/Nitrite	MSD	Sample matrix interference

**Duplicates (DUP):** The parameters that require a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.



## Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303335

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

---

### Sample Receipt Information:

**Date of Receipt:** 3/15/2013  
**Dates of Collection:** 3/11-3/14/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None  
**Method:** SW-846 8260C/5030C  
**Analysis:** Volatile Organic Compounds

**General Set Comments:** One target analyte was observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303335

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-24155	Cadmium	mg/L	E200.8	0.190	0.2000	0	95.2	85-115				3/20/2013 122h
LCS-24155	Manganese	mg/L	E200.8	0.203	0.2000	0	102	85-115				3/20/2013 122h
LCS-24155	Selenium	mg/L	E200.8	0.184	0.2000	0	92.0	85-115				3/20/2013 122h
LCS-24155	Uranium	mg/L	E200.8	0.184	0.2000	0	92.0	85-115				3/20/2013 122h
LCS-24155	Thallium	mg/L	E200.8	0.188	0.2000	0	94.0	85-115				3/22/2013 1506h



463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303335

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-24155	Cadmium	mg/L	E200.8	< 0.000500				-				3/20/2013 117h
MB-24155	Manganese	mg/L	E200.8	< 0.0100				-				3/20/2013 117h
MB-24155	Selenium	mg/L	E200.8	< 0.00500				-				3/20/2013 117h
MB-24155	Uranium	mg/L	E200.8	< 0.000300				-				3/20/2013 117h
MB-24155	Thallium	mg/L	E200.8	< 0.000500				-				3/22/2013 1457h



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001CMS	Cadmium	mg/L	E200.8	0.190	0.2000	0.00005200	95.1	75-125				3/20/2013 144h
1303335-001CMS	Manganese	mg/L	E200.8	0.375	0.2000	0.1729	101	75-125				3/20/2013 144h
1303335-001CMS	Selenium	mg/L	E200.8	0.196	0.2000	0.0002350	98.0	75-125				3/20/2013 144h
1303335-001CMS	Uranium	mg/L	E200.8	0.183	0.2000	0.0002120	91.2	75-125				3/20/2013 144h
1303335-001CMS	Thallium	mg/L	E200.8	0.192	0.2000	0.0001780	96.0	75-125				3/22/2013 1524h



463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

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Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001CMSD	Cadmium	mg/L	E200.8	0.190	0.2000	0.00005200	95.2	75-125	0.131	20		3/20/2013 149h
1303335-001CMSD	Manganese	mg/L	E200.8	0.370	0.2000	0.1729	98.4	75-125	1.49	20		3/20/2013 149h
1303335-001CMSD	Selenium	mg/L	E200.8	0.189	0.2000	0.0002350	94.6	75-125	3.47	20		3/20/2013 149h
1303335-001CMSD	Uranium	mg/L	E200.8	0.182	0.2000	0.0002120	91.0	75-125	0.186	20		3/20/2013 149h
1303335-001CMSD	Thallium	mg/L	E200.8	0.188	0.2000	0.0001780	94.0	75-125	2.16	20		3/22/2013 1534h

Analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility



463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-003DDUP	Total Dissolved Solids	mg/L	SM2540C	5,740		6,036		-	4.96	5		3/19/2013 2100h



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R51630	Fluoride	mg/L	E300.0	4.88	5.000	0	97.7	90-110				3/18/2013 1844h
LCS-R51630	Sulfate	mg/L	E300.0	4.86	5.000	0	97.2	90-110				3/18/2013 1844h
LCS-R51916	Nitrate/Nitrite (as N)	mg/L	E353.2	1.03	1.000	0	103	90-110				3/25/2013 2037h
LCS-R51702	Total Dissolved Solids	mg/L	SM2540C	200	205.0	0	97.6	80-120				3/19/2013 2100h



463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R51630	Fluoride	mg/L	E300.0	< 0.100				-				3/18/2013 1818h
MB-R51630	Sulfate	mg/L	E300.0	< 1.00				-				3/18/2013 1818h
MB-R51916	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				3/25/2013 2036h
MB-R51702	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				3/19/2013 2100h



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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303335

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** WC

**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001BMS	Fluoride	mg/L	E300.0	4,820	5,000	0	96.5	90-110				3/18/2013 1936h
1303335-001BMS	Sulfate	mg/L	E300.0	5,620	5,000	761.1	97.2	90-110				3/18/2013 1936h
1303335-005AMS	Nitrate/Nitrite (as N)	mg/L	E353.2	8.99	5.000	3.606	108	90-110				3/25/2013 2057h



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Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001BMSD	Fluoride	mg/L	E300.0	5,020	5,000	0	100	90-110	3.9	20		3/18/2013 2003h
1303335-001BMSD	Sulfate	mg/L	E300.0	5,810	5,000	761.1	101	90-110	3.27	20		3/18/2013 2003h
1303335-005AMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	9.46	5,000	3.606	117	90-110	5.1	10		3/25/2013 2058h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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Jose Rocha  
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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 031513A	Tetrahydrofuran	µg/L	SW8260C	18.4	20.00	0	92.2	43-146				3/15/2013 719h
LCS VOC 031513A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.2	50.00		104	76-138				3/15/2013 719h
LCS VOC 031513A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	49.3	50.00		98.6	77-121				3/15/2013 719h
LCS VOC 031513A	Surr: Dibromofluoromethane	%REC	SW8260C	51.2	50.00		102	67-128				3/15/2013 719h
LCS VOC 031513A	Surr: Toluene-d8	%REC	SW8260C	48.4	50.00		96.9	81-135				3/15/2013 719h



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Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 031513A	Tetrahydrofuran	µg/L	SW8260C	< 1.00				-				3/15/2013 757h
MB VOC 031513A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	54.0	50.00		108	76-138				3/15/2013 757h
MB VOC 031513A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	51.4	50.00		103	77-121				3/15/2013 757h
MB VOC 031513A	Surr: Dibromofluoromethane	%REC	SW8260C	50.2	50.00		100	67-128				3/15/2013 757h
MB VOC 031513A	Surr: Toluene-d8	%REC	SW8260C	49.7	50.00		99.4	81-135				3/15/2013 757h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001AMS	Tetrahydrofuran	µg/L	SW8260C	34.5	20.00	12.62	109	43-146				3/15/2013 1339h
1303335-001AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	48.4	50.00		96.8	72-151				3/15/2013 1339h
1303335-001AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	50.8	50.00		102	80-128				3/15/2013 1339h
1303335-001AMS	Surr: Dibromofluoromethane	%REC	SW8260C	49.7	50.00		99.4	80-124				3/15/2013 1339h
1303335-001AMS	Surr: Toluene-d8	%REC	SW8260C	51.1	50.00		102	77-129				3/15/2013 1339h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303335  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303335-001AMSD	Tetrahydrofuran	µg/L	SW8260C	34.1	20.00	12.62	108	43-146	1.02	25		3/15/2013 1358h
1303335-001AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	48.2	50.00		96.4	72-151				3/15/2013 1358h
1303335-001AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	50.6	50.00		101	80-128				3/15/2013 1358h
1303335-001AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	49.7	50.00		99.3	80-124				3/15/2013 1358h
1303335-001AMSD	Surr: Toluene-d8	%REC	SW8260C	50.3	50.00		101	77-129				3/15/2013 1358h

## WORK ORDER Summary

Work Order: **1303335** Page 1 of 2

**Client:** Energy Fuels Resources, Inc.

Due Date: 3/26/2013

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**QC Level:** III

**WO Type:** Project

**Comments:** PA Rush. QC 3 & Summary. Project specific DL's: see COC. Run 200.8 on the Agilent. EDD-Denison and EIM-Locus. Email Group;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303335-001A	MW-01_03122013	3/12/2013 1500h	3/15/2013 1020h	8260-W	Aqueous	<input checked="" type="checkbox"/>	vOC	3
				<i>Test Group: 8260-W-Custom; # of Analytes: 1 / # of Surr: 4</i>				
1303335-001B				300.0-W		<input checked="" type="checkbox"/>	df / wc	1
				<i>1 SEL Analytes: SO4</i>				
1303335-001C				200.8-DIS		<input checked="" type="checkbox"/>	df / dis metals	
				<i>1 SEL Analytes: MN</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df / dis metals	
1303335-002A	MW-03_03122013	3/12/2013 0945h	3/15/2013 1020h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df / wc	1
				<i>1 SEL Analytes: F</i>				
1303335-002B				200.8-DIS		<input checked="" type="checkbox"/>	df / dis metals	
				<i>1 SEL Analytes: SE</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df / dis metals	
1303335-003A	MW-03A_03132013	3/13/2013 1255h	3/15/2013 1020h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df / wc	1
				<i>1 SEL Analytes: SO4</i>				
1303335-003B				200.8-DIS		<input checked="" type="checkbox"/>	df / dis metals	
				<i>1 SEL Analytes: SE</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df / dis metals	
1303335-003C				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df / no2/no3	
				<i>1 SEL Analytes: NO3NO2N</i>				
1303335-003D				TDS-W-2540C		<input checked="" type="checkbox"/>	ww - tds	
				<i>1 SEL Analytes: TDS</i>				
1303335-004A	MW-05_03112013	3/11/2013 1130h	3/15/2013 1020h	200.8-DIS	Aqueous	<input checked="" type="checkbox"/>	df / dis metals	1
				<i>1 SEL Analytes: U</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df / dis metals	
1303335-005A	MW-19_03132013	3/13/2013 1540h	3/15/2013 1020h	NO2/NO3-W-353.2	Aqueous	<input checked="" type="checkbox"/>	df - no2/no3	1
				<i>1 SEL Analytes: NO3NO2N</i>				
1303335-006A	MW-23_03112013	3/11/2013 1030h	3/15/2013 1020h	200.8-DIS	Aqueous	<input checked="" type="checkbox"/>	df / dis metals	1
				<i>1 SEL Analytes: MN</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df / dis metals	
1303335-007A	MW-24_03142013	3/14/2013 0712h	3/15/2013 1020h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df / wc	1
				<i>1 SEL Analytes: F</i>				
1303335-007B				200.8-DIS		<input checked="" type="checkbox"/>	df / dis metals	
				<i>2 SEL Analytes: CD TL</i>				

# WORK ORDER Summary

Work Order: **1303335** Page 2 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 3/26/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303335-007B	MW-24_03142013	3/14/2013 0712h	3/15/2013 1020h	200.8-DIS-PR	Aqueous	<input type="checkbox"/>	df / dis metals	1
1303335-008A	MW-70_03132013	3/13/2013 1540h	3/15/2013 1020h	NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>	Aqueous	<input checked="" type="checkbox"/>	df - no2/no3	1
1303335-009A	Trip Blank	3/12/2013 1500h	3/15/2013 1020h	8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 1 / # of Surr: 4</i>	Aqueous	<input checked="" type="checkbox"/>	vOC	3

Client Energy Fuels  
 Address 6425 S Hwy 191  
Blanding UT 84511  
 City State Zip  
 Phone 435 678 2221 Fax \_\_\_\_\_



AMERICAN WEST ANALYTICAL LABORATORIES  
 463 West 3600 South Salt Lake City, Utah 84115  
**CHAIN OF CUSTODY**  
 (801) 263-8686 (888) 263-8686  
 Fax (801) 263-8687 Email: [awal@awal-labs.com](mailto:awal@awal-labs.com)

Lab Sample Set # 1303335  
 Page 1 of 1

Turn Around Time (Circle One)  
 1 day 2 day 3 day 4 day 5 day Standard

Contact Garrin Palmer  
 E-mail gpalmer@energyfuels.com  
 Project Name 1st Quarter Groundwater 2013  
 Project Number/P.O.# \_\_\_\_\_  
 Sampler Name Tanner Holliday

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED										QC LEVEL			COMMENTS								
				THF	Sulfate	Manganese	Selenium	Fluoride	Nitrate + Nitrite	Uranium	Cadmium	Thallium	FDS	1	2	2+									
MW-01_03122013	3/12/13 1500	W	2	X	X	X																			
MW-03_03122013	3/12/13 0945	W	2				X	X																	
MW-03A_03132013	3/13/13 1255	W	3		X		X	X																	
MW-05_03112013	3/11/13 1130	W	1								X														
MW-19_03132013	3/13/13 1540	W	1						X																
MW-23_03112013	3/11/13 1030	W	1			X																			
MW-24_03142013	3/14/13 0712	W	2					X				X	X												
MW-70_03132013	3/13/13 1540	W	1						X																
Trip Blank	3/12/13 1500	W		X																					
Temp Blank	3/14/13	W																							

LABORATORY USE ONLY

SAMPLES WERE:

- Shipped or hand delivered  
Notes: Fed-X
- Ambient or Chilled  
Notes: Chilled
- Temperature 2.8
- Received Broken/Leaking (Improperly Sealed)  
Y N  
Notes: (N)
- Properly Preserved  
Y N  
Checked at Bench  
Y N  
Notes: \_\_\_\_\_
- Received Within Holding Times  
Y N  
Notes: \_\_\_\_\_

COC Tape Was:

- Present on Outer Package  
Y N NA
- Unbroken on Outer Package  
Y N NA
- Present on Sample  
Y N NA
- Unbroken on Sample  
Y N NA

Discrepancies Between Sample Labels and COC Record?  
 Y N  
 Notes: \_\_\_\_\_

Relinquished By: Signature <u>Tanner Holliday</u>	Date <u>3/14/13</u>	Received By: Signature <u>[Signature]</u>	Date <u>3/15/13</u>
PRINT NAME <u>Tanner Holliday</u>	Time <u>1100</u>	PRINT NAME ,,	Time ,,
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:  
PER KATHY WEINER, UNLESS OTHERWISE NOTED, ALL METALS HAVE BEEN FIELD FILTERED. REPORT ALL METALS AS DISSOLVED - RW 3/15/13 (REF EMAIL DATED 3/13/13)

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	Except 1	Except 2	Except 3	Except 4	Except 5	Except 6	Except 7	Except 8	Except						
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>																
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	pH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>		yes	yes	yes	yes		yes	yes								
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>				yes		yes	yes		yes							
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
TOX	pH <2 H <sub>2</sub> SO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

*3/15/13*

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC, notify client if requested
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted

Frequency: All samples requiring preservation



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: 1st Quarter Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1302339

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 5 sample(s) on 2/22/2013 for the analyses presented in the following report.

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
web: [www.awal-labs.com](http://www.awal-labs.com)

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

This is a revision to a report originally issued on 3/5/2013. The results on samples 1302339-002E and -003E have been updated for copper, nickel and zinc. Pages 1 and 7-8 have been revised.

Thank You,

Approved by:

**Kyle F. Gross**  
Digitally signed by Kyle F. Gross  
DN: cn=Kyle F. Gross, o=AWAL,  
ou=AWAL-Laboratory Director,  
email=kyle@awal-labs.com, c=US  
Date: 2013.03.06 13:52:09 -07'00'

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302339  
**Date Received:** 2/22/2013 1110h

**Contact:** Garrin Palmer

463 West 3600 South  
 Salt Lake City, UT 84115

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 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1302339-001A	MW-11_02202013	2/20/2013 1045h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302339-001B	MW-11_02202013	2/20/2013 1045h	Aqueous	Anions, E300.0
1302339-001B	MW-11_02202013	2/20/2013 1045h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302339-001C	MW-11_02202013	2/20/2013 1045h	Aqueous	Total Dissolved Solids, A2540C
1302339-001D	MW-11_02202013	2/20/2013 1045h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302339-001D	MW-11_02202013	2/20/2013 1045h	Aqueous	Ammonia, Aqueous
1302339-001E	MW-11_02202013	2/20/2013 1045h	Aqueous	Mercury, Drinking Water Dissolved
1302339-001E	MW-11_02202013	2/20/2013 1045h	Aqueous	ICPMS Metals, Dissolved
1302339-001E	MW-11_02202013	2/20/2013 1045h	Aqueous	Ion Balance
1302339-001E	MW-11_02202013	2/20/2013 1045h	Aqueous	ICP Metals, Dissolved
1302339-002A	MW-25_02202013	2/20/2013 1110h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302339-002B	MW-25_02202013	2/20/2013 1110h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302339-002B	MW-25_02202013	2/20/2013 1110h	Aqueous	Anions, E300.0
1302339-002C	MW-25_02202013	2/20/2013 1110h	Aqueous	Total Dissolved Solids, A2540C
1302339-002D	MW-25_02202013	2/20/2013 1110h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302339-002D	MW-25_02202013	2/20/2013 1110h	Aqueous	Ammonia, Aqueous
1302339-002E	MW-25_02202013	2/20/2013 1110h	Aqueous	ICPMS Metals, Dissolved
1302339-002E	MW-25_02202013	2/20/2013 1110h	Aqueous	ICP Metals, Dissolved
1302339-002E	MW-25_02202013	2/20/2013 1110h	Aqueous	Mercury, Drinking Water Dissolved
1302339-002E	MW-25_02202013	2/20/2013 1110h	Aqueous	Ion Balance
1302339-003A	MW-26_02202013	2/20/2013 1400h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302339-003B	MW-26_02202013	2/20/2013 1400h	Aqueous	Anions, E300.0
1302339-003B	MW-26_02202013	2/20/2013 1400h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302339-003C	MW-26_02202013	2/20/2013 1400h	Aqueous	Total Dissolved Solids, A2540C
1302339-003D	MW-26_02202013	2/20/2013 1400h	Aqueous	Ammonia, Aqueous
1302339-003D	MW-26_02202013	2/20/2013 1400h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302339-003E	MW-26_02202013	2/20/2013 1400h	Aqueous	ICPMS Metals, Dissolved
1302339-003E	MW-26_02202013	2/20/2013 1400h	Aqueous	Ion Balance
1302339-003E	MW-26_02202013	2/20/2013 1400h	Aqueous	Mercury, Drinking Water Dissolved
1302339-003E	MW-26_02202013	2/20/2013 1400h	Aqueous	ICP Metals, Dissolved



**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302339  
**Date Received:** 2/22/2013 1110h

**Contact:** Garrin Palmer

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com  
 web: www.awal-labs.com

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1302339-004A	MW-31_02192013	2/19/2013 1315h	Aqueous	VOA by GC/MS Method 8260C/5030C
1302339-004B	MW-31_02192013	2/19/2013 1315h	Aqueous	Anions, E300.0
1302339-004B	MW-31_02192013	2/19/2013 1315h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1302339-004C	MW-31_02192013	2/19/2013 1315h	Aqueous	Total Dissolved Solids, A2540C
1302339-004D	MW-31_02192013	2/19/2013 1315h	Aqueous	Nitrite/Nitrate (as N), E353.2
1302339-004D	MW-31_02192013	2/19/2013 1315h	Aqueous	Ammonia, Aqueous
1302339-004E	MW-31_02192013	2/19/2013 1315h	Aqueous	Ion Balance
1302339-004E	MW-31_02192013	2/19/2013 1315h	Aqueous	ICPMS Metals, Dissolved
1302339-004E	MW-31_02192013	2/19/2013 1315h	Aqueous	ICP Metals, Dissolved
1302339-004E	MW-31_02192013	2/19/2013 1315h	Aqueous	Mercury, Drinking Water Dissolved
1302339-005A	Trip Blank	2/19/2013	Aqueous	VOA by GC/MS Method 8260C/5030C

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302339

463 West 3600 South  
Salt Lake City, UT 84115

### Sample Receipt Information:

**Date of Receipt:** 2/22/2013  
**Date(s) of Collection:** 2/19 & 2/20/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

**Holding Time and Preservation Requirements:** The analysis and preparation of all samples were performed within the method holding times. All samples were properly preserved.

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**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Kyle F. Gross  
Laboratory Director

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

Jose Rocha  
QA Officer

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1302339-001E	Sodium	MS/MSD	High analyte concentration
1302339-001D	Ammonia	MS/MSD	Sample matrix interference

**Duplicates (DUP):** The parameters that require a duplicate analysis had RPD's within the control limits.

**Corrective Action:** None required.



## Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1302339

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463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

### **Sample Receipt Information:**

**Date of Receipt:** 2/22/2013  
**Date of Collection:** 2/19 & 2/20/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None  
**Method:** SW-846 8260C/5030C  
**Analysis:** Volatile Organic Compounds

**General Set Comments:** Multiple target analytes were observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



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Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-23832	Calcium	mg/L	E200.7	10.4	10.00	0	104	85-115				2/26/2013 1506h
LCS-23832	Magnesium	mg/L	E200.7	10.7	10.00	0	107	85-115				2/26/2013 1506h
LCS-23832	Potassium	mg/L	E200.7	10.9	10.00	0	109	85-115				2/26/2013 1506h
LCS-23832	Sodium	mg/L	E200.7	10.8	10.00	0	108	85-115				2/26/2013 1506h
LCS-23832	Vanadium	mg/L	E200.7	0.210	0.2000	0	105	85-115				2/26/2013 1506h
LCS-23833	Cadmium	mg/L	E200.8	0.205	0.2000	0	103	85-115				2/27/2013 2227h
LCS-23833	Cobalt	mg/L	E200.8	0.203	0.2000	0	101	85-115				2/27/2013 2227h
LCS-23833	Copper	mg/L	E200.8	0.212	0.2000	0	106	85-115				2/27/2013 2227h
LCS-23833	Nickel	mg/L	E200.8	0.207	0.2000	0	104	85-115				2/27/2013 2227h
LCS-23833	Silver	mg/L	E200.8	0.205	0.2000	0	102	85-115				2/27/2013 2227h
LCS-23833	Tin	mg/L	E200.8	1.03	1.000	0	103	85-115				2/27/2013 2227h
LCS-23833	Zinc	mg/L	E200.8	1.04	1.000	0	104	85-115				2/27/2013 2227h
LCS-23833	Lead	mg/L	E200.8	0.199	0.2000	0	99.7	85-115				2/28/2013 2310h
LCS-23833	Iron	mg/L	E200.8	1.04	1.000	0	104	85-115				3/3/2013 2125h
LCS-23833	Manganese	mg/L	E200.8	0.210	0.2000	0	105	85-115				3/3/2013 2125h
LCS-23833	Molybdenum	mg/L	E200.8	0.214	0.2000	0	107	85-115				3/3/2013 2125h
LCS-23833	Thallium	mg/L	E200.8	0.181	0.2000	0	90.5	85-115				3/3/2013 2125h
LCS-23833	Arsenic	mg/L	E200.8	0.219	0.2000	0	109	85-115				3/1/2013 1346h
LCS-23833	Beryllium	mg/L	E200.8	0.208	0.2000	0	104	85-115				3/1/2013 1346h
LCS-23833	Chromium	mg/L	E200.8	0.213	0.2000	0	107	85-115				3/1/2013 1346h
LCS-23833	Selenium	mg/L	E200.8	0.212	0.2000	0	106	85-115				3/1/2013 1346h
LCS-23833	Uranium	mg/L	E200.8	0.196	0.2000	0	97.8	85-115				3/1/2013 1346h
LCS-23873	Mercury	mg/L	E245.1	0.00336	0.003330	0	101	85-115				2/28/2013 1047h



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Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-23832	Calcium	mg/L	E200.7	< 1.00				-				2/26/2013 1501h
MB-23832	Magnesium	mg/L	E200.7	< 1.00				-				2/26/2013 1501h
MB-23832	Potassium	mg/L	E200.7	< 1.00				-				2/26/2013 1501h
MB-23832	Sodium	mg/L	E200.7	< 1.00				-				2/26/2013 1501h
MB-23832	Vanadium	mg/L	E200.7	< 0.0150				-				2/26/2013 1501h
MB-23833	Cadmium	mg/L	E200.8	< 0.000500				-				2/27/2013 2221h
MB-23833	Cobalt	mg/L	E200.8	< 0.0100				-				2/27/2013 2221h
MB-23833	Copper	mg/L	E200.8	< 0.0100				-				2/27/2013 2221h
MB-23833	Nickel	mg/L	E200.8	< 0.0200				-				2/27/2013 2221h
MB-23833	Silver	mg/L	E200.8	< 0.0100				-				2/27/2013 2221h
MB-23833	Tin	mg/L	E200.8	< 0.100				-				2/27/2013 2221h
MB-23833	Zinc	mg/L	E200.8	< 0.0100				-				2/27/2013 2221h
MB-23833	Arsenic	mg/L	E200.8	< 0.00500				-				2/28/2013 2305h
MB-23833	Beryllium	mg/L	E200.8	< 0.000500				-				2/28/2013 2305h
MB-23833	Chromium	mg/L	E200.8	< 0.0250				-				2/28/2013 2305h
MB-23833	Lead	mg/L	E200.8	< 0.00100				-				2/28/2013 2305h
MB-23833	Molybdenum	mg/L	E200.8	< 0.0100				-				2/28/2013 2305h
MB-23833	Selenium	mg/L	E200.8	< 0.00500				-				2/28/2013 2305h
MB-23833	Uranium	mg/L	E200.8	< 0.000300				-				2/28/2013 2305h
MB-23833	Iron	mg/L	E200.8	< 0.0300				-				3/3/2013 2119h
MB-23833	Manganese	mg/L	E200.8	< 0.0100				-				3/3/2013 2119h
MB-23833	Thallium	mg/L	E200.8	< 0.000500				-				3/3/2013 2119h
MB-23873	Mercury	mg/L	E245.1	< 0.000500				-				2/28/2013 1046h



463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001EMS	Sodium	mg/L	E200.7	597	10.00	578.0	190	70-130			<sup>2</sup>	2/26/2013 1522h
1302339-001EMS	Calcium	mg/L	E200.7	75.7	10.00	66.10	95.6	70-130				2/26/2013 1603h
1302339-001EMS	Magnesium	mg/L	E200.7	29.7	10.00	19.63	101	70-130				2/26/2013 1603h
1302339-001EMS	Potassium	mg/L	E200.7	18.5	10.00	7.211	113	70-130				2/26/2013 1620h
1302339-001EMS	Vanadium	mg/L	E200.7	0.209	0.2000	0	105	70-130				2/26/2013 1620h
1302339-001EMS	Cadmium	mg/L	E200.8	0.200	0.2000	0	100	75-125				2/27/2013 2320h
1302339-001EMS	Cobalt	mg/L	E200.8	0.181	0.2000	0.0006950	90.3	75-125				2/27/2013 2320h
1302339-001EMS	Copper	mg/L	E200.8	0.193	0.2000	0.01278	90.3	75-125				2/27/2013 2320h
1302339-001EMS	Nickel	mg/L	E200.8	0.192	0.2000	0.006849	92.3	75-125				2/27/2013 2320h
1302339-001EMS	Silver	mg/L	E200.8	0.200	0.2000	0	99.9	75-125				2/27/2013 2320h
1302339-001EMS	Tin	mg/L	E200.8	1.01	1.000	0	101	75-125				2/27/2013 2320h
1302339-001EMS	Zinc	mg/L	E200.8	1.07	1.000	0.007308	106	75-125				2/27/2013 2320h
1302339-001EMS	Beryllium	mg/L	E200.8	0.194	0.2000	0	97.0	75-125				3/1/2013 008h
1302339-001EMS	Chromium	mg/L	E200.8	0.199	0.2000	0.00002900	99.4	75-125				2/28/2013 2321h
1302339-001EMS	Lead	mg/L	E200.8	0.188	0.2000	0.00008900	93.9	75-125				2/28/2013 2321h
1302339-001EMS	Molybdenum	mg/L	E200.8	0.216	0.2000	0.002484	107	75-125				3/1/2013 008h
1302339-001EMS	Selenium	mg/L	E200.8	0.211	0.2000	0.0001420	105	75-125				3/1/2013 008h
1302339-001EMS	Uranium	mg/L	E200.8	0.198	0.2000	0.0005940	98.5	75-125				2/28/2013 2321h
1302339-001EMS	Iron	mg/L	E200.8	1.31	1.000	0.1866	112	75-125				3/3/2013 2136h
1302339-001EMS	Manganese	mg/L	E200.8	0.377	0.2000	0.1391	119	75-125				3/3/2013 2136h
1302339-001EMS	Thallium	mg/L	E200.8	0.173	0.2000	0.0001680	86.5	75-125				3/3/2013 2136h
1302339-001EMS	Arsenic	mg/L	E200.8	0.214	0.2000	0.0005170	107	75-125				3/5/2013 1303h
1302339-001EMS	Mercury	mg/L	E245.1	0.00336	0.003330	0	101	85-115				2/28/2013 1054h

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1302339

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001EMSD	Sodium	mg/L	E200.7	600	10.00	578.0	220	70-130	0.501	20	*	2/26/2013 1526h
1302339-001EMSD	Calcium	mg/L	E200.7	75.8	10.00	66.10	96.6	70-130	0.14	20		2/26/2013 1607h
1302339-001EMSD	Magnesium	mg/L	E200.7	29.5	10.00	19.63	98.8	70-130	0.748	20		2/26/2013 1607h
1302339-001EMSD	Potassium	mg/L	E200.7	18.2	10.00	7.211	110	70-130	1.53	20		2/26/2013 1624h
1302339-001EMSD	Vanadium	mg/L	E200.7	0.207	0.2000	0	103	70-130	1.29	20		2/26/2013 1624h
1302339-001EMSD	Cadmium	mg/L	E200.8	0.199	0.2000	0	99.3	75-125	0.752	20		2/27/2013 2326h
1302339-001EMSD	Cobalt	mg/L	E200.8	0.182	0.2000	0.0006950	90.4	75-125	0.154	20		2/27/2013 2326h
1302339-001EMSD	Copper	mg/L	E200.8	0.193	0.2000	0.01278	90.4	75-125	0.0838	20		2/27/2013 2326h
1302339-001EMSD	Nickel	mg/L	E200.8	0.193	0.2000	0.006849	93.1	75-125	0.842	20		2/27/2013 2326h
1302339-001EMSD	Silver	mg/L	E200.8	0.197	0.2000	0	98.7	75-125	1.2	20		2/27/2013 2326h
1302339-001EMSD	Tin	mg/L	E200.8	1.01	1.000	0	101	75-125	0.181	20		2/27/2013 2326h
1302339-001EMSD	Zinc	mg/L	E200.8	1.07	1.000	0.007308	106	75-125	0.0965	20		2/27/2013 2326h
1302339-001EMSD	Beryllium	mg/L	E200.8	0.192	0.2000	0	95.8	75-125	1.3	20		3/1/2013 013h
1302339-001EMSD	Chromium	mg/L	E200.8	0.194	0.2000	0.00002900	96.9	75-125	2.56	20		2/28/2013 2326h
1302339-001EMSD	Lead	mg/L	E200.8	0.187	0.2000	0.00008900	93.2	75-125	0.692	20		2/28/2013 2326h
1302339-001EMSD	Molybdenum	mg/L	E200.8	0.217	0.2000	0.002484	107	75-125	0.507	20		3/1/2013 013h
1302339-001EMSD	Selenium	mg/L	E200.8	0.210	0.2000	0.0001420	105	75-125	0.602	20		3/1/2013 013h
1302339-001EMSD	Uranium	mg/L	E200.8	0.199	0.2000	0.0005940	99.0	75-125	0.528	20		2/28/2013 2326h
1302339-001EMSD	Iron	mg/L	E200.8	1.21	1.000	0.1866	102	75-125	8.1	20		3/3/2013 2141h
1302339-001EMSD	Manganese	mg/L	E200.8	0.350	0.2000	0.1391	106	75-125	7.36	20		3/3/2013 2141h
1302339-001EMSD	Thallium	mg/L	E200.8	0.180	0.2000	0.0001680	89.9	75-125	3.87	20		3/3/2013 2141h
1302339-001EMSD	Arsenic	mg/L	E200.8	0.209	0.2000	0.0005170	104	75-125	2.24	20		3/5/2013 1308h
1302339-001EMSD	Mercury	mg/L	E245.1	0.00336	0.003330	0	101	85-115	0.0595	20		2/28/2013 1056h

\* - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



463 West 3600 South

Salt Lake City, UT 84115

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1302339

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** WC

**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001CDUP	Total Dissolved Solids	mg/L	SM2540C	1,890		1,968		-	3.94	5		2/22/2013 1225h



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Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R50945	Chloride	mg/L	E300.0	5.04	5.000	0	101	90-110				2/26/2013 1202h
LCS-R50945	Fluoride	mg/L	E300.0	5.20	5.000	0	104	90-110				2/26/2013 1202h
LCS-R50945	Sulfate	mg/L	E300.0	5.05	5.000	0	101	90-110				2/26/2013 1202h
LCS-R50993	Sulfate	mg/L	E300.0	5.15	5.000	0	103	90-110				2/27/2013 1535h
LCS-R50848	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	50,100	50,000	0	100	90-110				2/25/2013 1009h
LCS-23865	Ammonia (as N)	mg/L	E350.1	0.973	1.000	0	97.3	90-110				2/26/2013 2021h
LCS-R50830	Nitrate/Nitrite (as N)	mg/L	E353.2	1.02	1.000	0	102	90-110				2/22/2013 1432h
LCS-R50865	Total Dissolved Solids	mg/L	SM2540C	218	205.0	0	106	80-120				2/22/2013 1225h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R50945	Chloride	mg/L	E300.0	< 1.00				-				2/26/2013 1139h
MB-R50945	Fluoride	mg/L	E300.0	< 0.100				-				2/26/2013 1139h
MB-R50945	Sulfate	mg/L	E300.0	< 1.00				-				2/26/2013 1139h
MB-R50993	Sulfate	mg/L	E300.0	< 1.00				-				2/27/2013 1511h
MB-R50848	Bicarbonate (as CaCO <sub>3</sub> )	mg/L	SM2320B	< 1.00				-				2/25/2013 1009h
MB-R50848	Carbonate (as CaCO <sub>3</sub> )	mg/L	SM2320B	< 1.00				-				2/25/2013 1009h
MB-23865	Ammonia (as N)	mg/L	E350.1	< 0.0500				-				2/26/2013 2020h
MB-R50830	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				2/22/2013 1431h
MB-R50865	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				2/22/2013 1225h

*U - This flag indicates the compound was analyzed for but not detected above the MDL.*



463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001BMS	Chloride	mg/L	E300.0	5,190	5,000	33.67	103	90-110				2/27/2013 224h
1302339-001BMS	Fluoride	mg/L	E300.0	5,260	5,000	0	105	90-110				2/27/2013 224h
1302339-001BMS	Sulfate	mg/L	E300.0	6,170	5,000	686.0	110	90-110				2/27/2013 224h
1302339-001BMS	Sulfate	mg/L	E300.0	6,210	5,000	1,079	103	90-110				2/27/2013 2257h
1302339-001BMS	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	359	50.00	311.5	94.8	80-120				2/25/2013 1009h
1302339-001DMS	Ammonia (as N)	mg/L	E350.1	1.50	1.000	0.6285	86.7	90-110				2/26/2013 2025h
1302338-001BMS	Nitrate/Nitrite (as N)	mg/L	E353.2	1.00	1.000	0	100	90-110				2/22/2013 1441h
1302339-001DMS	Nitrate/Nitrite (as N)	mg/L	E353.2	0.996	1.000	0.008600	98.8	90-110				2/22/2013 1511h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001BMSD	Chloride	mg/L	E300.0	5,170	5,000	33.67	103	90-110	0.32	20		2/27/2013 247h
1302339-001BMSD	Fluoride	mg/L	E300.0	5,230	5,000	0	105	90-110	0.543	20		2/27/2013 247h
1302339-001BMSD	Sulfate	mg/L	E300.0	5,970	5,000	686.0	106	90-110	3.41	20		2/27/2013 247h
1302339-001BMSD	Sulfate	mg/L	E300.0	6,410	5,000	1,079	107	90-110	3.26	20		2/27/2013 2320h
1302339-001BMSD	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	360	50.00	311.5	96.6	80-120	0.25	10		2/25/2013 1009h
1302339-001DMSD	Ammonia (as N)	mg/L	E350.1	1.51	1.000	0.6285	88.3	90-110	1.06	10	†	2/26/2013 2026h
1302338-001BMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	1.07	1.000	0	107	90-110	6.3	10		2/22/2013 1443h
1302339-001DMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	1.02	1.000	0.008600	101	90-110	2.64	10		2/22/2013 1512h

† - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1302339

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** MSVOA

**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 022313A	Benzene	µg/L	SW8260C	21.8	20.00	0	109	62-127				2/23/2013 1549h
LCS VOC 022313A	Chloroform	µg/L	SW8260C	23.2	20.00	0	116	67-132				2/23/2013 1549h
LCS VOC 022313A	Methylene chloride	µg/L	SW8260C	23.8	20.00	0	119	32-185				2/23/2013 1549h
LCS VOC 022313A	Naphthalene	µg/L	SW8260C	12.5	20.00	0	62.7	28-136				2/23/2013 1549h
LCS VOC 022313A	Tetrahydrofuran	µg/L	SW8260C	17.5	20.00	0	87.4	43-146				2/23/2013 1549h
LCS VOC 022313A	Toluene	µg/L	SW8260C	23.8	20.00	0	119	64-128				2/23/2013 1549h
LCS VOC 022313A	Xylenes, Total	µg/L	SW8260C	63.9	60.00	0	106	52-134				2/23/2013 1549h
LCS VOC 022313A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	50.4	50.00		101	76-138				2/23/2013 1549h
LCS VOC 022313A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	48.0	50.00		96.0	77-121				2/23/2013 1549h
LCS VOC 022313A	Surr: Dibromofluoromethane	%REC	SW8260C	49.8	50.00		99.7	67-128				2/23/2013 1549h
LCS VOC 022313A	Surr: Toluene-d8	%REC	SW8260C	48.0	50.00		96.0	81-135				2/23/2013 1549h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 022313A	2-Butanone	µg/L	SW8260C	< 20.0								2/23/2013 1626h
MB VOC 022313A	Acetone	µg/L	SW8260C	< 20.0								2/23/2013 1626h
MB VOC 022313A	Benzene	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Carbon tetrachloride	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Chloroform	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Chloromethane	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Methylene chloride	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Naphthalene	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Tetrahydrofuran	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Toluene	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Xylenes, Total	µg/L	SW8260C	< 1.00								2/23/2013 1626h
MB VOC 022313A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	51.7	50.00		103	76-138				2/23/2013 1626h
MB VOC 022313A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	54.6	50.00		109	77-121				2/23/2013 1626h
MB VOC 022313A	Surr: Dibromofluoromethane	%REC	SW8260C	48.9	50.00		97.9	67-128				2/23/2013 1626h
MB VOC 022313A	Surr: Toluene-d8	%REC	SW8260C	50.9	50.00		102	81-135				2/23/2013 1626h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001AMS	Benzene	µg/L	SW8260C	20.8	20.00	0	104	66-145				2/23/2013 2052h
1302339-001AMS	Chloroform	µg/L	SW8260C	22.4	20.00	0	112	50-146				2/23/2013 2052h
1302339-001AMS	Methylene chloride	µg/L	SW8260C	23.0	20.00	0	115	30-192				2/23/2013 2052h
1302339-001AMS	Naphthalene	µg/L	SW8260C	11.5	20.00	0	57.3	41-131				2/23/2013 2052h
1302339-001AMS	Tetrahydrofuran	µg/L	SW8260C	22.5	20.00	0	112	43-146				2/23/2013 2052h
1302339-001AMS	Toluene	µg/L	SW8260C	22.4	20.00	0	112	18-192				2/23/2013 2052h
1302339-001AMS	Xylenes, Total	µg/L	SW8260C	59.4	60.00	0	99.0	42-167				2/23/2013 2052h
1302339-001AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.2	50.00		104	72-151				2/23/2013 2052h
1302339-001AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	46.7	50.00		93.4	80-128				2/23/2013 2052h
1302339-001AMS	Surr: Dibromofluoromethane	%REC	SW8260C	50.6	50.00		101	80-124				2/23/2013 2052h
1302339-001AMS	Surr: Toluene-d8	%REC	SW8260C	47.2	50.00		94.5	77-129				2/23/2013 2052h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1302339  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1302339-001AMSD	Benzene	µg/L	SW8260C	22.1	20.00	0	111	66-145	6.05	25		2/23/2013 2111h
1302339-001AMSD	Chloroform	µg/L	SW8260C	23.9	20.00	0	120	50-146	6.74	25		2/23/2013 2111h
1302339-001AMSD	Methylene chloride	µg/L	SW8260C	24.4	20.00	0	122	30-192	5.74	25		2/23/2013 2111h
1302339-001AMSD	Naphthalene	µg/L	SW8260C	12.0	20.00	0	59.9	41-131	4.44	25		2/23/2013 2111h
1302339-001AMSD	Tetrahydrofuran	µg/L	SW8260C	23.0	20.00	0	115	43-146	2.5	25		2/23/2013 2111h
1302339-001AMSD	Toluene	µg/L	SW8260C	24.2	20.00	0	121	18-192	7.39	25		2/23/2013 2111h
1302339-001AMSD	Xylenes, Total	µg/L	SW8260C	63.4	60.00	0	106	42-167	6.64	25		2/23/2013 2111h
1302339-001AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.8	50.00		106	72-151				2/23/2013 2111h
1302339-001AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	47.7	50.00		95.4	80-128				2/23/2013 2111h
1302339-001AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	51.2	50.00		102	80-124				2/23/2013 2111h
1302339-001AMSD	Surr: Toluene-d8	%REC	SW8260C	48.3	50.00		96.6	77-129				2/23/2013 2111h

# American West Analytical Laboratories

**REVISED**

2/27/13

*Project name updated and  
Ion Balance added.*

UL  
Denison

## WORK ORDER Summary

Work Order: **1302339**

Page 1 of 3

**Client:** Energy Fuels Resources, Inc.

Due Date: 3/5/2013

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**QC Level:** III

**WO Type:** Project

**Comments:** PA Rush. QC 3 & Summary. Project specific DL's: see COC. EDD-Denison. Email Group. Samples were field filtered.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1302339-001A	MW-11_02202013	2/20/2013 1045h	2/22/2013 1110h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>								
1302339-001B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1
<i>3 SEL Analytes: CL F SO4</i>								
				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc	
<i>2 SEL Analytes: ALKB ALKC</i>								
1302339-001C				TDS-W-2540C		<input checked="" type="checkbox"/>	ww - tds	
<i>1 SEL Analytes: TDS</i>								
1302339-001D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
<i>1 SEL Analytes: NH3N</i>								
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
<i>1 SEL Analytes: NO3NO2N</i>								
1302339-001E				200.7-DIS		<input checked="" type="checkbox"/>	df - dis met	
<i>5 SEL Analytes: CA MG K NA V</i>								
				200.7-DIS-PR		<input type="checkbox"/>	df - dis met	
				200.8-DIS		<input checked="" type="checkbox"/>	df - dis met	
<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>								
				200.8-DIS-PR		<input type="checkbox"/>	df - dis met	
				HG-DW-DIS-245.1		<input type="checkbox"/>	df - dis met	
				HG-DW-DIS-PR		<input type="checkbox"/>	df - dis met	
				IONBALANCE		<input checked="" type="checkbox"/>	df - dis met	
<i>5 SEL Analytes:</i>								
1302339-002A	MW-25_02202013	2/20/2013 1110h	2/22/2013 1110h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>								
1302339-002B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1
<i>3 SEL Analytes: CL F SO4</i>								
				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc	
<i>2 SEL Analytes: ALKB ALKC</i>								
1302339-002C				TDS-W-2540C		<input checked="" type="checkbox"/>	ww - tds	
<i>1 SEL Analytes: TDS</i>								
1302339-002D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
<i>1 SEL Analytes: NH3N</i>								

# WORK ORDER Summary

Work Order: **1302339** Page 2 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 3/5/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage				
1302339-002D	MW-25_02202013	2/20/2013 1110h	2/22/2013 1110h	NH3-W-PR	Aqueous	<input checked="" type="checkbox"/>	df - no2/no3 & nh3	1			
				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3				
				1 SEL Analytes: NO3NO2N							
1302339-002E				200.7-DIS		<input checked="" type="checkbox"/>	df - dis met				
				5 SEL Analytes: CA MG K NA V							
				200.7-DIS-PR		<input type="checkbox"/>	df - dis met				
				200.8-DIS		<input checked="" type="checkbox"/>	df - dis met				
				17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN							
				200.8-DIS-PR		<input type="checkbox"/>	df - dis met				
				HG-DW-DIS-245.1		<input type="checkbox"/>	df - dis met				
	HG-DW-DIS-PR	<input type="checkbox"/>	df - dis met								
	IONBALANCE	<input checked="" type="checkbox"/>	df - dis met								
	5 SEL Analytes:										
1302339-003A	MW-26_02202013	2/20/2013 1400h	2/22/2013 1110h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3			
				Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4							
1302339-003B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1			
				3 SEL Analytes: CL F SO4							
				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc				
				2 SEL Analytes: ALKB ALKC							
1302339-003C				TDS-W-2540C		<input checked="" type="checkbox"/>	ww - tds				
				1 SEL Analytes: TDS							
1302339-003D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3				
				1 SEL Analytes: NH3N							
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3				
				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3				
				1 SEL Analytes: NO3NO2N							
1302339-003E				200.7-DIS		<input checked="" type="checkbox"/>	df - dis met				
				5 SEL Analytes: CA MG K NA V							
				200.7-DIS-PR		<input type="checkbox"/>	df - dis met				
				200.8-DIS		<input checked="" type="checkbox"/>	df - dis met				
				17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN							
				200.8-DIS-PR		<input type="checkbox"/>	df - dis met				
				HG-DW-DIS-245.1		<input type="checkbox"/>	df - dis met				
				HG-DW-DIS-PR		<input type="checkbox"/>	df - dis met				
				IONBALANCE		<input checked="" type="checkbox"/>	df - dis met				
				5 SEL Analytes:							
1302339-004A	MW-31_02192013	2/19/2013 1315h	2/22/2013 1110h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3			
				Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4							

# WORK ORDER Summary

Work Order: **1302339** Page 3 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 3/5/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1302339-004B	MW-31_02192013	2/19/2013 1315h	2/22/2013 1110h	300.0-W <i>3 SEL Analytes: CL F SO4</i>	Aqueous	<input checked="" type="checkbox"/>	df - wc	1
				ALK-W-2320B <i>2 SEL Analytes: ALKB ALKC</i>		<input checked="" type="checkbox"/>	df - wc	
1302339-004C				TDS-W-2540C <i>1 SEL Analytes: TDS</i>		<input checked="" type="checkbox"/>	ww - tds	
1302339-004D				NH3-W-350.1 <i>1 SEL Analytes: NH3N</i>		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
1302339-004E				200.7-DIS <i>5 SEL Analytes: CA MG K NA V</i>		<input checked="" type="checkbox"/>	df - dis met	
				200.7-DIS-PR		<input type="checkbox"/>	df - dis met	
				200.8-DIS <i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>		<input checked="" type="checkbox"/>	df - dis met	
				200.8-DIS-PR		<input type="checkbox"/>	df - dis met	
				HG-DW-DIS-245.1		<input type="checkbox"/>	df - dis met	
				HG-DW-DIS-PR		<input type="checkbox"/>	df - dis met	
				IONBALANCE <i>5 SEL Analytes:</i>		<input checked="" type="checkbox"/>	df - dis met	
1302339-005A	Trip Blank	2/19/2013	2/22/2013 1110h	8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	2

# American West Analytical Laboratories

Chain of Custody

Lab Sample Set # 1302339

Client: **Energy Fuels Resources, Inc.**  
Address: **6425 S. Hwy. 191**

Contact: **Garrin Palmer**  
Phone: **(435) 678-2221**

Page 1 of 1

Blanding, UT 84511

Email: **gpalmer@energyfuels.com**

QC Level: 3

Project Name: 2013  
~~Semiannual Groundwater 2012~~ per  
PO#: 1st QUARTER GROUNDWATER 2013 2/22/13  
Sampler Name: Tanner Holliday per Tanner 2/21/13 per Kathy Weinel

Turn Around Time  
**Standard**

Sample ID:	Date Sampled	Time	# of Containers	Sample Matrix	NO2/NO3 (353.2)	NH3 (4500G or 350.1)	VOCs (8260C)	FI, CI, SO4 (4500E or 300)	TDS (2540C)	Carb/Bicarb (2320B)	Heavy Metals *	Ion Balance $\Delta$	Comments
1 MW-11_02202013	2/20/2013	1045	6	W	X	X	X	X	X	X	X	/	
2 MW-25_02202013	2/20/2013	1110	6	W	X	X	X	X	X	X	X	/	
3 MW-26_02202013	2/20/2013	1400	6	W	X	X	X	X	X	X	X	/	
4 MW-31_02192013	2/19/2013	1315	6	W	X	X	X	X	X	X	X	/	
5 Trip Blank	2/19/2013		2	W									
6 Temp Blank													
7													
8													
9													
10													
11													
12													
13													
14													
15													

Laboratory Use Only

Sample Weighing

Sample Volume Measured

Temperature 28°C

Received from Customer

Improperly Sealed

Received within

Sample Sealed

Not into Wash

Seal on Outer Package

Seal on Outer Package

Present on Sample

Impress on Sample

Discrepancies between Sample

Label and CDC Record

\*per Kathy Weinel, metals samples were filtered in the field. per 2/22/13

$\Delta$  Ion Balance to include

- TOTAL ANIONS, MEASURED
- TOTAL CATIONS, MEASURED
- TDS RATIO, MEASURED/CALC.
- TDS, CALC.

Special Instructions: **Email results to Tanner Holliday, Kethy Weinel, and David Turk ,**

Relinquished by: Signature <u>Tanner Holliday</u>	Date: <u>2/21/2013</u>	Received by: Signature <u>Denise Brown</u>	Date: <u>2/22/13</u>
Print Name <u>Tanner Holliday</u>	Time: <u>1100</u>	Print Name <u>Denise Brown</u>	Time: <u>11:10</u>
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name	Time:	Print Name	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name	Time:	Print Name	Time:

Table 3 – GEL Groundwater, Tailings Impoundment, and Seeps and Springs Sampling

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
<b>Heavy Metals</b>					
Arsenic	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Beryllium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cadmium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Chromium	E200.7 or E200.8	25 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cobalt	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Copper	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Iron	E200.7 or E200.7	30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Lead	E200.7 or E200.8	1.0 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Manganese	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Mercury	E 245.1 or E200.7 or E200.8	0.50 µg/L	28 days	HNO <sub>3</sub> to pH<2	None
Molybdenum	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Nickel	E200.7 or E200.8	20 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Selenium	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Silver	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Thallium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Tin	E200.7 or E200.8	100 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Uranium	E200.7 or E200.8	0.30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Vanadium	E200.7 or E200.8	15 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Zinc	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Sodium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Potassium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Magnesium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Calcium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
<b>Radiologics</b>					
Gross Alpha	E 900.0 or E900.1	1.0 pCi/L	6 months	HNO <sub>3</sub> to pH<2	None

Table 4 Fee Schedule

Analyte/ Group	Cost per Sample
Full Suite Metals	
Partial Suite Metals (cost per individual metal)	
Gross alpha	

*pu*  
2-22-13

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	Except -001	Except -002	Except -003	Except -004	Except										
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>		yes	yes	yes	yes											
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	PH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>		yes	yes	yes	yes											
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>		yes	yes	yes	yes											
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
TOX	pH <2 H <sub>2</sub> SO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

DB 2/22/13

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC, notify client if requested
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted

Frequency: All samples requiring preservation



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: 1st Quarter Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1303130

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 4 sample(s) on 3/7/2013 for the analyses presented in the following report.

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
web: [www.awal-labs.com](http://www.awal-labs.com)

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

Thank You,

Approved by:

**Kyle F.  
Gross**  
Digitally signed by Kyle F. Gross  
DN: cn=Kyle F. Gross, o=AWAL,  
ou=AWAL-Laboratory Director,  
email=kyle@awal-labs.com, c=US  
Date: 2013.03.18 12:33:18 -06'00'

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303130  
**Date Received:** 3/7/2013 1720h

**Contact:** Garrin Palmer

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Date Collected</u>	<u>Matrix</u>	<u>Analysis</u>
1303130-001A	MW-15_03052013	3/5/2013 1000h	Aqueous	ICPMS Metals, Dissolved
1303130-002A	MW-12_03062013	3/6/2013 1055h	Aqueous	ICPMS Metals, Dissolved
1303130-003A	MW-28_03052013	3/5/2013 1100h	Aqueous	ICPMS Metals, Dissolved
1303130-003B	MW-28_03052013	3/5/2013 1100h	Aqueous	Anions, E300.0
1303130-004A	MW-29_03062013	3/6/2013 1110h	Aqueous	ICPMS Metals, Dissolved
1303130-004B	MW-29_03062013	3/6/2013 1110h	Aqueous	Total Dissolved Solids, A2540C

463 West 3600 South  
Salt Lake City, UT 84115

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Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303130

---

463 West 3600 South  
Salt Lake City, UT 84115

### **Sample Receipt Information:**

**Date of Receipt:** 3/7/2013  
**Date(s) of Collection:** 3/5 & 3/6/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

**Holding Time and Preservation Requirements:** The analysis and preparation of all samples were performed within the method holding times. All samples were properly preserved.

web: www.awal-labs.com

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Kyle F. Gross  
Laboratory Director

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

Jose Rocha  
QA Officer

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Duplicates (DUP):** The parameters that require a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-24033	Iron	mg/L	E200.8	1.04	1.000	0	104	85-115				3/14/2013 1826h
LCS-24033	Selenium	mg/L	E200.8	0.207	0.2000	0	103	85-115				3/14/2013 1826h
LCS-24033	Manganese	mg/L	E200.8	0.208	0.2000	0	104	85-115				3/15/2013 2252h



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 Salt Lake City, UT 84115

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Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-24033	Iron	mg/L	E200.8	< 0.0300				-				3/14/2013 1821h
MB-24033	Selenium	mg/L	E200.8	< 0.00500				-				3/14/2013 1821h
MB-24033	Manganese	mg/L	E200.8	< 0.0100				-				3/15/2013 2246h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303130-001AMS	Iron	mg/L	E200.8	1.04	1.000	0.005955	103	75-125				3/14/2013 1847h
1303130-001AMS	Selenium	mg/L	E200.8	0.348	0.2000	0.1374	105	75-125				3/14/2013 1847h
1303130-001AMS	Manganese	mg/L	E200.8	0.203	0.2000	0	102	75-125				3/15/2013 2302h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303130

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303130-001AMSD	Iron	mg/L	E200.8	1.02	1.000	0.005955	101	75-125	1.74	20		3/14/2013 1853h
1303130-001AMSD	Selenium	mg/L	E200.8	0.352	0.2000	0.1374	107	75-125	0.991	20		3/14/2013 1853h
1303130-001AMSD	Manganese	mg/L	E200.8	0.202	0.2000	0	101	75-125	0.845	20		3/15/2013 2308h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303130-004BDUP	Total Dissolved Solids	mg/L	SM2540C	4,420		4,500		-	1.79	5		3/8/2013 1200h



463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R51288	Chloride	mg/L	E300.0	5.14	5.000	0	103	90-110				3/7/2013 1415h
LCS-R51339	Total Dissolved Solids	mg/L	SM2540C	200	205.0	0	97.6	80-120				3/8/2013 1200h



463 West 3600 South

Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R51288	Chloride	mg/L	E300.0	< 0.100				-				3/7/2013 1109h
MB-R51339	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				3/8/2013 1200h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303130-003BMS	Chloride	mg/L	E300.0	565	500.0	110.0	90.9	90-110				3/8/2013 048h



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Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303130  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303130-003BMSD	Chloride	mg/L	E300.0	597	500.0	110.0	97.4	90-110	5.56	20		3/8/2013 111h

# American West Analytical Laboratories

UL  
Denison

## WORK ORDER Summary

Work Order: **1303130** Page 1 of 1

**Client:** Energy Fuels Resources, Inc.

Due Date: 3/18/2013

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**QC Level:** III

**WO Type:** Project

**Comments:** PA Rush. QC 3 & Summary. Project specific DL's: see COC. Run 200.8 on the Agilent. EDD-Denison and EIM-Locus. Email Group. Samples were field filtered.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303130-001A	MW-15_03052013	3/5/2013 1000h	3/7/2013 1720h	200.7-DIS	Aqueous	<input checked="" type="checkbox"/>	df - dis.metals	1
				<i>1 SEL Analytes: FE</i>				
				200.7-DIS-PR		<input type="checkbox"/>	df - dis.metals	
				200.8-DIS		<input checked="" type="checkbox"/>	df - dis.metals	
<i>1 SEL Analytes: SE</i>								
				200.8-DIS-PR		<input type="checkbox"/>	df - dis.metals	
1303130-002A	MW-12_03062013	3/6/2013 1055h	3/7/2013 1720h	200.8-DIS	Aqueous	<input checked="" type="checkbox"/>	df - dis.metals	1
				<i>1 SEL Analytes: SE</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df - dis.metals	
1303130-003A	MW-28_03052013	3/5/2013 1100h	3/7/2013 1720h	200.8-DIS	Aqueous	<input checked="" type="checkbox"/>	df - dis.metals	1
				<i>1 SEL Analytes: MN</i>				
				200.8-DIS-PR		<input type="checkbox"/>	df - dis.metals	
1303130-003B				300.0-W		<input checked="" type="checkbox"/>	df - wc	
	<i>1 SEL Analytes: CL</i>							
1303130-004A	MW-29_03062013	3/6/2013 1110h	3/7/2013 1720h	200.7-DIS	Aqueous	<input checked="" type="checkbox"/>	df - dis.metals	1
				<i>1 SEL Analytes: FE</i>				
				200.7-DIS-PR		<input type="checkbox"/>	df - dis.metals	
				200.8-DIS		<input checked="" type="checkbox"/>	df - dis.metals	
<i>1 SEL Analytes: MN</i>								
				200.8-DIS-PR		<input type="checkbox"/>	df - dis.metals	
1303130-004B				TDS-W-2540C		<input type="checkbox"/>	ww - tds/wc	

Client Energy Fuels  
 Address 6425 S Hwy 191  
Blanding UT 84511  
 City State Zip  
 Phone 435 678 2221 Fax \_\_\_\_\_



AMERICAN WEST ANALYTICAL LABORATORIES  
 463 West 3600 South Salt Lake City, Utah 84115  
 (801) 263-8686 (888) 263-8686  
 Fax (801) 263-8687  
 Email: awal@awal-labs.com

**CHAIN OF CUSTODY**

Lab Sample Set # 1303130  
 Page 1 of 1

Turn Around Time (Circle One)  
 1 day 2 day 3 day 4 day 5 day Standard

Contact Garrin Palmer  
 E-mail gpalmer@energyfuels.com  
 Project Name 1st Quarter Ground Water 2013  
 Project Number/P.O.# \_\_\_\_\_  
 Sampler Name Tanner Holliday

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED						QC LEVEL			COMMENTS
				Selenium	Iron	Chloride	Manganese	TDS	1	2	2+		
<del>MW-15-03052013</del>	<del>3/5/2013 1000</del>	<del>W1</del>	<del>1</del>										
MW-15_03052013	3/5/2013 1000	W1	1	X	X								
MW-12_03062013	3/6/2013 1055	W1	1	X									
MW-28_03052013	3/5/2013 1100	W2	2			X	X						
MW-29_03062013	3/6/2013 1110	W2	2		X		X	X					
Temp Blank	3/7/2013	W1	1										

LABORATORY USE ONLY

SAMPLES WERE:

1 Shipped or Hand delivered  
 Notes: on ice

2 Ambient or Chilled  
 Notes: \_\_\_\_\_

3 Temperature 4.8

4 Received Broken/Leaking (Improperly Sealed)  
 Y  N   
 Notes: \_\_\_\_\_

5 Properly Preserved  
 Y  N   
 Checked at Bench  
 Y  N   
 Notes: \_\_\_\_\_

6 Received Within (Holding Times)  
 Y  N   
 Notes: \_\_\_\_\_

COC Tape Was:

1 Present on Outer Package  
 Y  N  NA

2 Unbroken on Outer Package  
 Y  N  NA

3 Present on Sample  
 Y  N  NA

4 Unbroken on Sample  
 Y  N  NA

Discrepancies Between Sample Labels and COC Record?  
 Y  N   
 Notes: \_\_\_\_\_

Relinquished By: Signature <u>Garrin Palmer</u>	Date <u>3/7/13</u>	Received By: Signature <u>Amber Cluff</u>	Date <u>3/7/13</u>
PRINT NAME <u>Garrin Palmer</u>	Time <u>1720</u>	PRINT NAME <u>Amber Cluff</u>	Time <u>17:20</u>
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:

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Sample Set: 1303130

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	Except															
			-001	-002	-003	-004												
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
Cyanide	pH >12 NaOH																	
Metals	pH <2 HNO <sub>3</sub>		YES	YES	YES	YES												
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
O & G	pH <2 HCL																	
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
Sulfide	pH > 9NaOH, Zn Acetate																	
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																	
TOX	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																	
TPH	pH <2 HCL																	

copy 1/1

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC, notify client if requested
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted

Frequency: All samples requiring preservation



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: 1st Quarter Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1303550

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 2 sample(s) on 3/22/2013 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)

web: [www.awal-labs.com](http://www.awal-labs.com)

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by:

**Jose G.  
Rocha**  
Digitally signed by Jose G. Rocha  
DN: cn=Jose G. Rocha,  
o=American West Analytical  
Laboratories, ou=Quality  
Assurance Officer,  
email=jose@awal-labs.com,  
c=US  
Date: 2013.04.02 17:08:58  
-06'00'

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303550  
**Date Received:** 3/22/2013 1010h

**Contact:** Garrin Palmer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1303550-001A	MW-37_03202013	3/20/2013 0845h	Aqueous	VOA by GC/MS Method 8260C/5030C
1303550-001B	MW-37_03202013	3/20/2013 0845h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, A2320B
1303550-001B	MW-37_03202013	3/20/2013 0845h	Aqueous	Anions, E300.0
1303550-001C	MW-37_03202013	3/20/2013 0845h	Aqueous	Total Dissolved Solids, A2540C
1303550-001D	MW-37_03202013	3/20/2013 0845h	Aqueous	Ammonia, Aqueous
1303550-001D	MW-37_03202013	3/20/2013 0845h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303550-001E	MW-37_03202013	3/20/2013 0845h	Aqueous	Ion Balance
1303550-001E	MW-37_03202013	3/20/2013 0845h	Aqueous	Mercury, Drinking Water Dissolved
1303550-001E	MW-37_03202013	3/20/2013 0845h	Aqueous	ICPMS Metals, Dissolved
1303550-001E	MW-37_03202013	3/20/2013 0845h	Aqueous	ICP Metals, Dissolved
1303550-002A	Trip Blank	3/20/2013	Aqueous	VOA by GC/MS Method 8260C/5030C

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Salt Lake City, UT 84115

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Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303550

463 West 3600 South  
Salt Lake City, UT 84115

### Sample Receipt Information:

**Date of Receipt:** 3/22/2013  
**Date(s) of Collection:** 3/20/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

**Holding Time and Preservation Requirements:** The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Kyle F. Gross

Laboratory Director

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

Jose Rocha

QA Officer

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

Lab Set ID	Analyte	QC	Explanation
1303550-001E	Calcium	MS/MSD	High analyte concentrations
1303550-001E	Magnesium	MSD	High analyte concentrations
1303550-001E	Sodium	MSD	High analyte concentrations
1303550-001B	Sulfate	MS	Sample matrix interference

**Duplicate (DUP):** The parameters that required a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.



## Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** 1st Quarter Groundwater 2013  
**Lab Set ID:** 1303550

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463 West 3600 South  
Salt Lake City, UT 84115

### Sample Receipt Information:

**Date of Receipt:** 3/22/2013  
**Date(s) of Collection:** 3/20/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None  
**Method:** SW-846 8260C/5030C  
**Analysis:** Volatile Organic Compounds

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

**General Set Comments:** No target analytes were observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

Kyle F. Gross  
Laboratory Director

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Jose Rocha  
QA Officer

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-24343	Calcium	mg/L	E200.7	9.18	10.00	0	91.8	85-115				3/28/2013 1216h
LCS-24343	Magnesium	mg/L	E200.7	9.46	10.00	0	94.6	85-115				3/28/2013 1216h
LCS-24343	Potassium	mg/L	E200.7	9.54	10.00	0	95.4	85-115				3/28/2013 1216h
LCS-24343	Sodium	mg/L	E200.7	9.53	10.00	0	95.3	85-115				3/28/2013 1216h
LCS-24343	Vanadium	mg/L	E200.7	0.186	0.2000	0	93.2	85-115				3/28/2013 1216h
LCS-24344	Arsenic	mg/L	E200.8	0.189	0.2000	0	94.4	85-115				3/27/2013 0753h
LCS-24344	Cadmium	mg/L	E200.8	0.189	0.2000	0	94.4	85-115				3/27/2013 0753h
LCS-24344	Chromium	mg/L	E200.8	0.207	0.2000	0	103	85-115				3/27/2013 0753h
LCS-24344	Cobalt	mg/L	E200.8	0.204	0.2000	0	102	85-115				3/27/2013 0753h
LCS-24344	Manganese	mg/L	E200.8	0.207	0.2000	0	103	85-115				3/27/2013 0753h
LCS-24344	Molybdenum	mg/L	E200.8	0.191	0.2000	0	95.4	85-115				3/27/2013 0753h
LCS-24344	Silver	mg/L	E200.8	0.188	0.2000	0	93.8	85-115				3/27/2013 0753h
LCS-24344	Beryllium	mg/L	E200.8	0.194	0.2000	0	96.9	85-115				3/27/2013 2053h
LCS-24344	Iron	mg/L	E200.8	0.979	1.000	0	97.9	85-115				3/27/2013 2053h
LCS-24344	Lead	mg/L	E200.8	0.199	0.2000	0	99.7	85-115				3/27/2013 2053h
LCS-24344	Nickel	mg/L	E200.8	0.193	0.2000	0	96.4	85-115				3/27/2013 2053h
LCS-24344	Selenium	mg/L	E200.8	0.209	0.2000	0	104	85-115				3/27/2013 2053h
LCS-24344	Thallium	mg/L	E200.8	0.178	0.2000	0	89.2	85-115				3/27/2013 2053h
LCS-24344	Uranium	mg/L	E200.8	0.191	0.2000	0	95.6	85-115				3/27/2013 2053h
LCS-24344	Tin	mg/L	E200.8	1.02	1.000	0	102	85-115				3/28/2013 0007h
LCS-24344	Copper	mg/L	E200.8	0.198	0.2000	0	98.9	85-115				3/29/2013 1310h
LCS-24344	Zinc	mg/L	E200.8	0.980	1.000	0	98.0	85-115				3/29/2013 1310h
LCS-24319	Mercury	mg/L	E245.1	0.00344	0.003330	0	103	85-115				3/25/2013 0904h



463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-24343	Calcium	mg/L	E200.7	< 1.00				-				3/28/2013 1211h
MB-24343	Magnesium	mg/L	E200.7	< 1.00				-				3/28/2013 1211h
MB-24343	Potassium	mg/L	E200.7	< 1.00				-				3/28/2013 1211h
MB-24343	Sodium	mg/L	E200.7	< 1.00				-				3/28/2013 1211h
MB-24343	Vanadium	mg/L	E200.7	< 0.0150				-				3/28/2013 1211h
MB-24344	Arsenic	mg/L	E200.8	< 0.00500				-				3/27/2013 0747h
MB-24344	Cadmium	mg/L	E200.8	< 0.000500				-				3/27/2013 0747h
MB-24344	Chromium	mg/L	E200.8	< 0.0250				-				3/27/2013 0747h
MB-24344	Cobalt	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Manganese	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Molybdenum	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Silver	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Beryllium	mg/L	E200.8	< 0.000500				-				3/27/2013 2048h
MB-24344	Iron	mg/L	E200.8	< 0.0300				-				3/27/2013 2048h
MB-24344	Lead	mg/L	E200.8	< 0.00100				-				3/27/2013 2048h
MB-24344	Nickel	mg/L	E200.8	< 0.0200				-				3/27/2013 2048h
MB-24344	Selenium	mg/L	E200.8	< 0.00500				-				3/27/2013 2048h
MB-24344	Thallium	mg/L	E200.8	< 0.000500				-				3/27/2013 2048h
MB-24344	Uranium	mg/L	E200.8	< 0.000300				-				3/27/2013 2048h
MB-24344	Tin	mg/L	E200.8	< 0.100				-				3/28/2013 0002h
MB-24344	Copper	mg/L	E200.8	< 0.0100				-				3/29/2013 1305h
MB-24344	Zinc	mg/L	E200.8	< 0.0100				-				3/29/2013 1305h
MB-24319	Mercury	mg/L	E245.1	< 0.000150				-				3/25/2013 0902h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001EMS	Calcium	mg/L	E200.7	501	10.00	486.9	138	70-130			2	3/28/2013 1232h
1303550-001EMS	Magnesium	mg/L	E200.7	150	10.00	138.9	111	70-130				3/28/2013 1232h
1303550-001EMS	Sodium	mg/L	E200.7	557	10.00	546.1	104	70-130				3/28/2013 1232h
1303550-001EMS	Potassium	mg/L	E200.7	24.6	10.00	14.72	98.5	70-130				3/28/2013 1317h
1303550-001EMS	Vanadium	mg/L	E200.7	0.194	0.2000	0	96.8	70-130				3/28/2013 1341h
1303550-001EMS	Arsenic	mg/L	E200.8	0.201	0.2000	0.0003630	100	75-125				3/27/2013 0803h
1303550-001EMS	Cadmium	mg/L	E200.8	0.194	0.2000	0.0003000	97.1	75-125				3/27/2013 0803h
1303550-001EMS	Chromium	mg/L	E200.8	0.202	0.2000	0	101	75-125				3/27/2013 0803h
1303550-001EMS	Cobalt	mg/L	E200.8	0.204	0.2000	0	102	75-125				3/27/2013 0803h
1303550-001EMS	Manganese	mg/L	E200.8	0.215	0.2000	0.008590	103	75-125				3/27/2013 0803h
1303550-001EMS	Molybdenum	mg/L	E200.8	0.204	0.2000	0.0008840	102	75-125				3/27/2013 0803h
1303550-001EMS	Silver	mg/L	E200.8	0.185	0.2000	0.0001150	92.3	75-125				3/27/2013 0803h
1303550-001EMS	Beryllium	mg/L	E200.8	0.193	0.2000	0	96.3	75-125				3/27/2013 2115h
1303550-001EMS	Iron	mg/L	E200.8	0.957	1.000	0.002300	95.5	75-125				3/27/2013 2115h
1303550-001EMS	Lead	mg/L	E200.8	0.196	0.2000	0.00005500	98.1	75-125				3/27/2013 2115h
1303550-001EMS	Nickel	mg/L	E200.8	0.205	0.2000	0.008434	98.1	75-125				3/27/2013 2115h
1303550-001EMS	Selenium	mg/L	E200.8	0.230	0.2000	0.009071	110	75-125				3/27/2013 2115h
1303550-001EMS	Thallium	mg/L	E200.8	0.183	0.2000	0.0006260	91.0	75-125				3/27/2013 2115h
1303550-001EMS	Uranium	mg/L	E200.8	0.196	0.2000	0.01032	92.8	75-125				3/27/2013 2115h
1303550-001EMS	Tin	mg/L	E200.8	1.03	1.000	0.0002570	103	75-125				3/28/2013 0045h
1303550-001EMS	Copper	mg/L	E200.8	0.209	0.2000	0.0008250	104	75-125				3/29/2013 1321h
1303550-001EMS	Zinc	mg/L	E200.8	1.08	1.000	0.02597	105	75-125				3/29/2013 1321h
1303552-008AMS	Arsenic	mg/L	E200.8	0.201	0.2000	0.0005340	100	75-125				3/27/2013 0905h
1303552-008AMS	Cadmium	mg/L	E200.8	0.187	0.2000	0	93.7	75-125				3/27/2013 0905h
1303552-008AMS	Chromium	mg/L	E200.8	0.200	0.2000	0	100	75-125				3/27/2013 0905h
1303552-008AMS	Cobalt	mg/L	E200.8	0.206	0.2000	0.004958	100	75-125				3/27/2013 0905h
1303552-008AMS	Manganese	mg/L	E200.8	0.445	0.2000	0.2464	99.2	75-125				3/27/2013 0905h

Report Date: 4/2/2013 Page 11 of 23



463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303552-008AMS	Molybdenum	mg/L	E200.8	0.194	0.2000	0.0005970	96.6	75-125				3/27/2013 0905h
1303552-008AMS	Silver	mg/L	E200.8	0.178	0.2000	0	89.2	75-125				3/27/2013 0905h
1303552-008AMS	Beryllium	mg/L	E200.8	0.182	0.2000	0	90.9	75-125				3/27/2013 2208h
1303552-008AMS	Iron	mg/L	E200.8	1.10	1.000	0.1476	94.8	75-125				3/27/2013 2208h
1303552-008AMS	Lead	mg/L	E200.8	0.200	0.2000	0.00004500	99.8	75-125				3/27/2013 2208h
1303552-008AMS	Nickel	mg/L	E200.8	0.200	0.2000	0.004804	97.8	75-125				3/27/2013 2208h
1303552-008AMS	Selenium	mg/L	E200.8	0.237	0.2000	0.02255	107	75-125				3/27/2013 2208h
1303552-008AMS	Thallium	mg/L	E200.8	0.168	0.2000	0.0005050	83.6	75-125				3/27/2013 2208h
1303552-008AMS	Uranium	mg/L	E200.8	0.211	0.2000	0.02213	94.3	75-125				3/27/2013 2208h
1303550-001EMS	Mercury	mg/L	E245.1	0.00336	0.003330	0	101	85-115				3/25/2013 0910h

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303550

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001EMSD	Calcium	mg/L	E200.7	511	10.00	486.9	241	70-130	2.04	20	<sup>2</sup>	3/28/2013 1236h
1303550-001EMSD	Magnesium	mg/L	E200.7	152	10.00	138.9	134	70-130	1.52	20	<sup>2</sup>	3/28/2013 1236h
1303550-001EMSD	Sodium	mg/L	E200.7	567	10.00	546.1	209	70-130	1.86	20	<sup>2</sup>	3/28/2013 1236h
1303550-001EMSD	Potassium	mg/L	E200.7	25.1	10.00	14.72	104	70-130	2.03	20		3/28/2013 1321h
1303550-001EMSD	Vanadium	mg/L	E200.7	0.192	0.2000	0	96.2	70-130	0.677	20		3/28/2013 1345h
1303550-001EMSD	Arsenic	mg/L	E200.8	0.203	0.2000	0.0003630	101	75-125	0.954	20		3/27/2013 0809h
1303550-001EMSD	Cadmium	mg/L	E200.8	0.196	0.2000	0.0003000	97.9	75-125	0.881	20		3/27/2013 0809h
1303550-001EMSD	Chromium	mg/L	E200.8	0.203	0.2000	0	101	75-125	0.156	20		3/27/2013 0809h
1303550-001EMSD	Cobalt	mg/L	E200.8	0.203	0.2000	0	102	75-125	0.123	20		3/27/2013 0809h
1303550-001EMSD	Manganese	mg/L	E200.8	0.216	0.2000	0.008590	104	75-125	0.218	20		3/27/2013 0809h
1303550-001EMSD	Molybdenum	mg/L	E200.8	0.201	0.2000	0.0008840	100	75-125	1.41	20		3/27/2013 0809h
1303550-001EMSD	Silver	mg/L	E200.8	0.188	0.2000	0.0001150	93.7	75-125	1.5	20		3/27/2013 0809h
1303550-001EMSD	Beryllium	mg/L	E200.8	0.191	0.2000	0	95.7	75-125	0.558	20		3/27/2013 2120h
1303550-001EMSD	Iron	mg/L	E200.8	0.968	1.000	0.002300	96.6	75-125	1.09	20		3/27/2013 2120h
1303550-001EMSD	Lead	mg/L	E200.8	0.198	0.2000	0.00005500	98.8	75-125	0.637	20		3/27/2013 2120h
1303550-001EMSD	Nickel	mg/L	E200.8	0.203	0.2000	0.008434	97.2	75-125	0.899	20		3/27/2013 2120h
1303550-001EMSD	Selenium	mg/L	E200.8	0.227	0.2000	0.009071	109	75-125	1.31	20		3/27/2013 2120h
1303550-001EMSD	Thallium	mg/L	E200.8	0.174	0.2000	0.0006260	86.9	75-125	4.61	20		3/27/2013 2120h
1303550-001EMSD	Uranium	mg/L	E200.8	0.198	0.2000	0.01032	93.8	75-125	0.932	20		3/27/2013 2120h
1303550-001EMSD	Tin	mg/L	E200.8	1.03	1.000	0.0002570	103	75-125	0.858	20		3/28/2013 0050h
1303550-001EMSD	Copper	mg/L	E200.8	0.217	0.2000	0.0008250	108	75-125	4.06	20		3/29/2013 1326h
1303550-001EMSD	Zinc	mg/L	E200.8	1.10	1.000	0.02597	108	75-125	2.69	20		3/29/2013 1326h
1303552-008AMSD	Arsenic	mg/L	E200.8	0.202	0.2000	0.0005340	101	75-125	0.316	20		3/27/2013 0910h
1303552-008AMSD	Cadmium	mg/L	E200.8	0.188	0.2000	0	93.8	75-125	0.072	20		3/27/2013 0910h
1303552-008AMSD	Chromium	mg/L	E200.8	0.198	0.2000	0	98.8	75-125	1.33	20		3/27/2013 0910h
1303552-008AMSD	Cobalt	mg/L	E200.8	0.203	0.2000	0.004958	98.8	75-125	1.56	20		3/27/2013 0910h
1303552-008AMSD	Manganese	mg/L	E200.8	0.442	0.2000	0.2464	97.6	75-125	0.722	20		3/27/2013 0910h

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463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303550

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303552-008AMSD	Molybdenum	mg/L	E200.8	0.193	0.2000	0.0005970	96.0	75-125	0.696	20		3/27/2013 0910h
1303552-008AMSD	Silver	mg/L	E200.8	0.180	0.2000	0	90.2	75-125	1.19	20		3/27/2013 0910h
1303552-008AMSD	Beryllium	mg/L	E200.8	0.178	0.2000	0	89.2	75-125	1.88	20		3/27/2013 2213h
1303552-008AMSD	Iron	mg/L	E200.8	1.07	1.000	0.1476	92.5	75-125	2.07	20		3/27/2013 2213h
1303552-008AMSD	Lead	mg/L	E200.8	0.197	0.2000	0.00004500	98.5	75-125	1.36	20		3/27/2013 2213h
1303552-008AMSD	Nickel	mg/L	E200.8	0.196	0.2000	0.004804	95.7	75-125	2.16	20		3/27/2013 2213h
1303552-008AMSD	Selenium	mg/L	E200.8	0.232	0.2000	0.02255	105	75-125	1.86	20		3/27/2013 2213h
1303552-008AMSD	Thallium	mg/L	E200.8	0.166	0.2000	0.0005050	82.8	75-125	0.943	20		3/27/2013 2213h
1303552-008AMSD	Uranium	mg/L	E200.8	0.208	0.2000	0.02213	92.9	75-125	1.39	20		3/27/2013 2213h
1303550-001EMSD	Mercury	mg/L	E245.1	0.00333	0.003330	0	99.9	85-115	0.808	20		3/25/2013 0912h

<sup>2</sup> - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



463 West 3600 South  
 Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001CDUP	Total Dissolved Solids	mg/L	SM2540C	3,760		3,772		-	0.319	5		3/22/2013 1240h
1303553-001ADUP	Total Dissolved Solids	mg/L	SM2540C	428		436.0		-	1.85	5		3/22/2013 1240h



463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R51863	Chloride	mg/L	E300.0	4.79	5.000	0	95.9	90-110				3/22/2013 1933h
LCS-R51863	Fluoride	mg/L	E300.0	4.86	5.000	0	97.1	90-110				3/22/2013 1933h
LCS-R51863	Sulfate	mg/L	E300.0	4.96	5.000	0	99.3	90-110				3/22/2013 1933h
LCS-R51995	Alkalinity (as CaCO3)	mg/L	SM2320B	50,100	50,000	0	100	90-110				3/27/2013 0630h
LCS-R52014	Alkalinity (as CaCO3)	mg/L	SM2320B	50,100	50,000	0	100	90-110				3/27/2013 0630h
LCS-24440	Ammonia (as N)	mg/L	E350.1	0.935	1.000	0	93.5	90-110				3/28/2013 2049h
LCS-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	1.07	1.000	0	107	90-110				3/27/2013 1221h
LCS-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	1.07	1.000	0	107	90-110				3/27/2013 1221h
LCS-R51899	Total Dissolved Solids	mg/L	SM2540C	186	205.0	0	90.7	80-120				3/22/2013 1240h



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Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687  
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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R51863	Chloride	mg/L	E300.0	< 0.100				-				3/22/2013 1905h
MB-R51863	Fluoride	mg/L	E300.0	< 0.100				-				3/22/2013 1905h
MB-R51863	Sulfate	mg/L	E300.0	< 0.750				-				3/22/2013 1905h
MB-R52014	Bicarbonate (as CaCO3)	mg/L	SM2320B	< 1.00				-				3/27/2013 0630h
MB-R52014	Carbonate (as CaCO3)	mg/L	SM2320B	< 1.00				-				3/27/2013 0630h
MB-24440	Ammonia (as N)	mg/L	E350.1	< 0.0500				-				3/28/2013 2048h
MB-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.0100				-				3/27/2013 1220h
MB-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				3/27/2013 1220h
MB-R51899	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				3/22/2013 1240h



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Salt Lake City, UT 84115

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Kyle F. Gross  
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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001BMS	Chloride	mg/L	E300.0	24,100	25,000	64.98	96.3	90-110				3/23/2013 0844h
1303550-001BMS	Fluoride	mg/L	E300.0	24,400	25,000	0	97.8	90-110				3/23/2013 0844h
1303550-001BMS	Sulfate	mg/L	E300.0	31,900	25,000	2,131	119	90-110				3/23/2013 0844h
1303552-006CMS	Chloride	mg/L	E300.0	2,660	2,500	167.8	99.5	90-110				3/23/2013 1202h
1303552-006CMS	Fluoride	mg/L	E300.0	2,450	2,500	1.863	97.8	90-110				3/23/2013 1202h
1303552-006CMS	Sulfate	mg/L	E300.0	3,230	2,500	611.1	105	90-110				3/23/2013 1202h
1303550-001BMS	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	259	50.00	210.3	96.8	80-120				3/27/2013 0630h
1303550-001DMS	Ammonia (as N)	mg/L	E350.1	0.903	1.000	0	90.3	90-110				3/28/2013 2052h
1303550-001DMS	Nitrate/Nitrite (as N)	mg/L	E353.2	1.82	1.000	0.7749	104	90-110				3/27/2013 1224h
1303552-004BMS	Nitrate/Nitrite (as N)	mg/L	E353.2	3.70	2.000	1.606	105	90-110				3/27/2013 1228h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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Salt Lake City, UT 84115

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Kyle F. Gross  
Laboratory Director

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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001BMSD	Chloride	mg/L	E300.0	24,400	25,000	64.98	97.5	90-110	1.22	20		3/23/2013 0912h
1303550-001BMSD	Fluoride	mg/L	E300.0	24,500	25,000	0	98.1	90-110	0.374	20		3/23/2013 0912h
1303550-001BMSD	Sulfate	mg/L	E300.0	28,800	25,000	2,131	107	90-110	10.2	20		3/23/2013 0912h
1303552-006CMSD	Chloride	mg/L	E300.0	2,590	2,500	167.8	96.9	90-110	2.48	20		3/23/2013 1230h
1303552-006CMSD	Fluoride	mg/L	E300.0	2,430	2,500	1.863	97.0	90-110	0.836	20		3/23/2013 1230h
1303552-006CMSD	Sulfate	mg/L	E300.0	3,060	2,500	611.1	97.8	90-110	5.56	20		3/23/2013 1230h
1303550-001BMSD	Alkalinity (as CaCO <sub>3</sub> )	mg/L	SM2320B	260	50.00	210.3	100	80-120	0.655	10		3/27/2013 0630h
1303550-001DMSD	Ammonia (as N)	mg/L	E350.1	0.908	1.000	0	90.8	90-110	0.486	10		3/28/2013 2053h
1303550-001DMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	1.84	1.000	0.7749	106	90-110	1.08	10		3/27/2013 1225h
1303552-004BMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	3.70	2.000	1.606	105	90-110	0.0594	10		3/27/2013 1229h



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Salt Lake City, UT 84115

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Laboratory Director

Jose Rocha  
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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 032213A	Benzene	µg/L	SW8260C	24.6	20.00	0	123	62-127				3/22/2013 0646h
LCS VOC 032213A	Chloroform	µg/L	SW8260C	23.9	20.00	0	120	67-132				3/22/2013 0646h
LCS VOC 032213A	Methylene chloride	µg/L	SW8260C	22.8	20.00	0	114	32-185				3/22/2013 0646h
LCS VOC 032213A	Naphthalene	µg/L	SW8260C	22.3	20.00	0	111	28-136				3/22/2013 0646h
LCS VOC 032213A	Tetrahydrofuran	µg/L	SW8260C	17.6	20.00	0	88.0	43-146				3/22/2013 0646h
LCS VOC 032213A	Toluene	µg/L	SW8260C	25.7	20.00	0	128	64-129				3/22/2013 0646h
LCS VOC 032213A	Xylenes, Total	µg/L	SW8260C	78.3	60.00	0	131	52-134				3/22/2013 0646h
LCS VOC 032213A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	46.6	50.00		93.2	76-138				3/22/2013 0646h
LCS VOC 032213A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.2	50.00		104	77-121				3/22/2013 0646h
LCS VOC 032213A	Surr: Dibromofluoromethane	%REC	SW8260C	50.6	50.00		101	67-128				3/22/2013 0646h
LCS VOC 032213A	Surr: Toluene-d8	%REC	SW8260C	52.5	50.00		105	81-135				3/22/2013 0646h



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Salt Lake City, UT 84115

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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 032213A	2-Butanone	µg/L	SW8260C	< 20.0				-				3/22/2013 0724h
MB VOC 032213A	Acetone	µg/L	SW8260C	< 20.0				-				3/22/2013 0724h
MB VOC 032213A	Benzene	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Carbon tetrachloride	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Chloroform	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Chloromethane	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Methylene chloride	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Naphthalene	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Tetrahydrofuran	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Toluene	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Xylenes, Total	µg/L	SW8260C	< 1.00				-				3/22/2013 0724h
MB VOC 032213A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	48.2	50.00		96.5	76-138				3/22/2013 0724h
MB VOC 032213A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	53.4	50.00		107	77-121				3/22/2013 0724h
MB VOC 032213A	Surr: Dibromofluoromethane	%REC	SW8260C	49.4	50.00		98.8	67-128				3/22/2013 0724h
MB VOC 032213A	Surr: Toluene-d8	%REC	SW8260C	51.9	50.00		104	81-135				3/22/2013 0724h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303550  
**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001AMS	Benzene	µg/L	SW8260C	24.6	20.00	0	123	66-145				3/22/2013 1519h
1303550-001AMS	Chloroform	µg/L	SW8260C	26.0	20.00	0	130	50-146				3/22/2013 1519h
1303550-001AMS	Methylene chloride	µg/L	SW8260C	26.9	20.00	0	134	30-192				3/22/2013 1519h
1303550-001AMS	Naphthalene	µg/L	SW8260C	21.7	20.00	0	109	41-131				3/22/2013 1519h
1303550-001AMS	Tetrahydrofuran	µg/L	SW8260C	19.0	20.00	0	94.9	43-146				3/22/2013 1519h
1303550-001AMS	Toluene	µg/L	SW8260C	24.6	20.00	0	123	18-192				3/22/2013 1519h
1303550-001AMS	Xylenes, Total	µg/L	SW8260C	75.3	60.00	0	126	42-167				3/22/2013 1519h
1303550-001AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	56.2	50.00		112	72-151				3/22/2013 1519h
1303550-001AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.1	50.00		104	80-128				3/22/2013 1519h
1303550-001AMS	Surr: Dibromofluoromethane	%REC	SW8260C	55.1	50.00		110	80-124				3/22/2013 1519h
1303550-001AMS	Surr: Toluene-d8	%REC	SW8260C	51.0	50.00		102	77-129				3/22/2013 1519h



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Kyle F. Gross  
Laboratory Director

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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303550

**Project:** 1st Quarter Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** MSVOA

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001AMSD	Benzene	µg/L	SW8260C	24.7	20.00	0	123	66-145	0.284	25		3/22/2013 1538h
1303550-001AMSD	Chloroform	µg/L	SW8260C	25.6	20.00	0	128	50-146	1.28	25		3/22/2013 1538h
1303550-001AMSD	Methylene chloride	µg/L	SW8260C	26.6	20.00	0	133	30-192	1.08	25		3/22/2013 1538h
1303550-001AMSD	Naphthalene	µg/L	SW8260C	21.5	20.00	0	108	41-131	0.924	25		3/22/2013 1538h
1303550-001AMSD	Tetrahydrofuran	µg/L	SW8260C	18.4	20.00	0	92.2	43-146	2.94	25		3/22/2013 1538h
1303550-001AMSD	Toluene	µg/L	SW8260C	24.6	20.00	0	123	18-192	0.0407	25		3/22/2013 1538h
1303550-001AMSD	Xylenes, Total	µg/L	SW8260C	75.0	60.00	0	125	42-167	0.359	25		3/22/2013 1538h
1303550-001AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	55.6	50.00		111	72-151				3/22/2013 1538h
1303550-001AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	50.9	50.00		102	80-128				3/22/2013 1538h
1303550-001AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	54.9	50.00		110	80-124				3/22/2013 1538h
1303550-001AMSD	Surr: Toluene-d8	%REC	SW8260C	50.8	50.00		102	77-129				3/22/2013 1538h

**WORK ORDER Summary**

Work Order: **1303550** Page 1 of 1

**Client:** Energy Fuels Resources, Inc.

Due Date: 4/2/2013

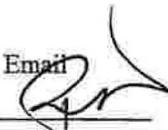
**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** 1st Quarter Groundwater 2013

**QC Level:** III

WO Type: Project

**Comments:** No Hard Copies (UL). PA Rush. QC 3 & Summary. Project specific DL's: see COC. Run 200.8 on the Agilent. EDD-Denison and EIM-Locus. Email 

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303550-001A	MW-37_03202013	3/20/2013 0845h	3/22/2013 1010h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>								
1303550-001B				300.0-W		<input checked="" type="checkbox"/>	df - wc	1
<i>3 SEL Analytes: CL F SO4</i>								
				ALK-W-2320B		<input checked="" type="checkbox"/>	df - wc	
<i>2 SEL Analytes: ALKB ALKC</i>								
1303550-001C				TDS-W-2540C		<input checked="" type="checkbox"/>	ww - tds	
<i>1 SEL Analytes: TDS</i>								
1303550-001D				NH3-W-350.1		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
<i>1 SEL Analytes: NH3N</i>								
				NH3-W-PR		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
				NO2/NO3-W-353.2		<input checked="" type="checkbox"/>	df - no2/no3 & nh3	
<i>1 SEL Analytes: NO3NO2N</i>								
1303550-001E				200.7-DIS		<input checked="" type="checkbox"/>	df-met	
<i>5 SEL Analytes: CA MG K NA V</i>								
				200.7-DIS-PR		<input checked="" type="checkbox"/>	df-met	
				200.8-DIS		<input checked="" type="checkbox"/>	df-met	
<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>								
				200.8-DIS-PR		<input checked="" type="checkbox"/>	df-met	
				HG-DW-DIS-245.1		<input checked="" type="checkbox"/>	df-met	
<i>1 SEL Analytes: HG</i>								
				HG-DW-DIS-PR		<input checked="" type="checkbox"/>	df-met	
				IONBALANCE		<input checked="" type="checkbox"/>	df-met	
<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>								
1303550-002A	Trip Blank	3/20/2013	3/22/2013 1010h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Custom; # of Analytes: 11 / # of Surr: 4</i>								

# American West Analytical Laboratories

Chain of Custody

Lab Sample Set # 1303550

Client: **Energy Fuels Resources, Inc.**  
 Address: **6425 S. Hwy. 191**  
**Blanding, UT 84511**

Contact: **Garrin Palmer**  
 Phone: **(435) 678-2221**  
 Email: **gpalmer@energyfuels.com**

Page 1 of 1

QC Level: **3**

Project Name: **1st Quarter Groundwater 2013**

PO#:

Sampler Name: Tanner Holliday

Turn Around Time  
**Standard**

Sample ID:	Date Sampled	Time	# of Containers	Sample Matrix	NO2/NO3 (353.2)	NH3 (4500G or 350.1)	VOCs (8260C)	Fl, Cl, SO4 (4500E or 300)	TDS (2540C)	Carb/Bicarb (2320B)	Heavy Metals per S.O.W *	Ion Balance as per attachment from 3/27/13	Comments
1 MW-37_03202013	3/20/2013	0845	6	W	X	X	X	X	X	X	X		* Per email from Kathy
2 Trip Blank	3/20/2013		3			X							Weigh all metals in field to head Paul
3 Temp Blank	3/21/2013												
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

**Quality Assurance**

Samples were: Fed \*

1. Shipped or hand delivered: Y

2. Ambient or chilled: Y

3. Temperature: 6.0

4. Received Broken/Leaking (Improperly Sealed): N

5. Properly Preserved: Y

6. Received Within Holding Times: Y

COC Type Was:

1. Present on Outer Package: Y N NA

2. Unbroken on Outer Package: Y N NA

3. Present on Sample: Y N NA

4. Unbroken on Sample: Y N NA

Discrepancies Between Sample Labels and COC Report: N

Special Instructions: **Email results to Tanner Holliday, Kathy Weinel, and David Turk**

Relinquished by: Signature <u>Tanner Holliday</u>	Date: <u>3/21/2013</u>	Received by: Signature <u>[Signature]</u>	Date:
Print Name <u>Tanner Holliday</u>	Time: <u>1100</u>	Print Name	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name	Time:	Print Name	Time:
Relinquished by: Signature	Date:	Received by: Signature <u>[Signature]</u>	Date: <u>3/22/13</u>
Print Name	Time:	Print Name <u>REBECCA WALKER</u>	Time: <u>1010</u>

Table 3 – GEL Groundwater, Tailings Impoundment, and Seeps and Springs Sampling

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
<b>Heavy Metals</b>					
Arsenic	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Beryllium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cadmium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Chromium	E200.7 or E200.8	25 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cobalt	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Copper	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Iron	E200.7 or E200.8	30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Lead	E200.7 or E200.8 <sup>**RW 3/27/13</sup>	1.0 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Manganese	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Mercury	E 245.1 or E200.7 or E200.8	0.50 µg/L	28 days	HNO <sub>3</sub> to pH<2	None
Molybdenum	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Nickel	E200.7 or E200.8	20 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Selenium	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Silver	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Thallium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Tin	E200.7 or E200.8	100 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Uranium	E200.7 or E200.8	0.30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Vanadium	E200.7 or E200.8	15 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Zinc	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Sodium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Potassium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Magnesium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Calcium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
<b>Radiologics</b>					
Gross Alpha	E 900.9 or E900.1	1.0 pCi/L	6 months	HNO <sub>3</sub> to pH<2	None -RW 2/27/2013

Table 4 Fee Schedule

Analyte/ Group	Cost per Sample
Full Suite Metals	
Partial Suite Metals (cost per individual metal)	
Gross alpha	

\*\* - per email from Kathy Weinel 3/27/13 -RW

Run ION BALANCE when the full metals suite has been requested, per email from Kathy Weinel 3/27/13

**Ion Balance to include:**

- Total Anions, Measured
- Total Cations, Measured
- TDS Ratio, Measured/Calculated
- TDS, Calculated

-RW 3/27/13

Preservation Check Sheet

**Sample Set Extension and pH**

Bottle Type	Preservative	All OK	Except -001	Except													
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>		Yes														
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	PH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>		Yes														
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>		Yes														
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
TOX	pH <2 H <sub>2</sub> SO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC, notify client if requested
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted

Frequency: All samples requiring preservation



March 11, 2013

Ms. Kathy Weinel  
Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228

Re: White Mesa Mill GW  
Work Order: 320825

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 22, 2013. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer  
Project Manager

Purchase Order: DW16138  
Enclosures



**Receipt Narrative**  
**for**  
**Energy Fuels Resources (USA), Inc.**  
**SDG: 320825**

**March 11, 2013**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary:**

**Sample receipt:** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 22, 2013 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

**Sample Identification:** The laboratory received the following samples:

<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
320825001	MW-32_02192013
320825002	MW-11_02202013
320825003	MW-25_02202013
320825004	MW-26_02202013
320825005	MW-31_02192013

**Case Narrative:**

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

*Heather Shaffer*

Heather Shaffer  
Project Manager



Client: <u>DNMI</u>		SDG/AR/COC/Work Order: <u>320825</u>
Received By: <u>P. A. [Signature]</u>		Date Received: <u>2/22/13</u>
Suspected Hazard Information	Yes	No
COC/Samples marked as radioactive?		<input checked="" type="checkbox"/>
Classified Radioactive II or III by RSO?		<input checked="" type="checkbox"/>
COC/Samples marked containing PCBs?		<input checked="" type="checkbox"/>
Package, COC, and/or Samples marked as beryllium or asbestos containing?		<input checked="" type="checkbox"/>
Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>
Samples identified as Foreign Soil?		<input checked="" type="checkbox"/>

\*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

Maximum Net Counts Observed\* (Observed Counts - Area Background Counts): 15 cpm

If yes, Were swipes taken of sample containers < action levels?

If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.

Hazard Class Shipped: UN#:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe) <u>19c</u>
2 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		<input checked="" type="checkbox"/>		Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius
2a Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): <u>61524646</u>
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		<input checked="" type="checkbox"/>		Sample ID's and containers affected:
7 Are Encore containers present?			<input checked="" type="checkbox"/>	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
14 Carrier and tracking number.				Circle Applicable: FedEx Air <u>    </u> FedEx Ground UPS Field Services Courier Other <u>8015 5302 3506-19c</u>

Comments (Use Continuation Form if needed):

# GEL Laboratories LLC – Login Review Report

Report Date: 11-MAR-13

Work Order: 320825

Page 1 of 2

GEL Work Order/SDG: 320825      1st Qtr GW 2013  
 Client SDG: 320825  
 Project Manager: Heather Shaffer  
 Project Name: DNMI00100 White Mesa Mill GW  
 Purchase Order: DW16138  
 Package Level: LEVEL3  
 EDD Format: EIM\_DNMI

Work Order Due Date: 15-MAR-13  
 Package Due Date: 13-MAR-13  
 EDD Due Date: 15-MAR-13  
 Due Date: 15-MAR-13  
 HXS1

Collector: C  
 Prelogin #: 20130200856  
 Project Workdef ID: 1294356  
 SDG Status: Closed  
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
320825001	MW-32_02192013		19-FEB-13 13:05	22-FEB-13 09:30	-2	1	GROUND WATER		21		1		
320825002	MW-11_02202013		20-FEB-13 10:45	22-FEB-13 09:30	-2	1	GROUND WATER		21		1		
320825003	MW-25_02202013		20-FEB-13 11:10	22-FEB-13 09:30	-2	1	GROUND WATER		21		1		
320825004	MW-26_02202013		20-FEB-13 14:00	22-FEB-13 09:30	-2	1	GROUND WATER		21		1		
320825005	MW-31_02192013		19-FEB-13 13:15	22-FEB-13 09:30	-2	1	GROUND WATER		21		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 MW-32_02192013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	Y 19
-002 MW-11_02202013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	Y 19
-003 MW-25_02202013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	Y 19
-004 MW-26_02202013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	Y 19
-005 MW-31_02192013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	Y 19

Product: GFCTORAL      Workdef ID: 1297250      In Product Group? No      Group Name:      Group Reference:  
 Method: EPA 900.1 Modified      Path: Standard  
 Product Description: GFPC, Total Alpha Radium, Liquid      Product Reference: Gross Alpha  
 Samples: 001, 002, 003, 004, 005      Moisture Correction: "As Received"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	Yes

# GEL Laboratories LLC – Login Review Report

Report Date: 11-MAR-13

Work Order: 320825

Page 2 of 2

Action	Product Name	Description	Samples
Contingent Tests			

## Login Requirements:

Requirement	Include?	Comments
-------------	----------	----------

Peer Review by: \_\_\_\_\_ Work Order (SDG#), PO# Checked? \_\_\_\_\_ C of C signed in receiver location? \_\_\_\_\_

**Radiochemistry Case Narrative  
Energy Fuels Resources (DNMI)  
SDG 320825**

**Method/Analysis Information**

**Product:** GFPC, Total Alpha Radium, Liquid  
**Analytical Method:** EPA 900.1 Modified  
**Analytical Batch Number:** 1284926

<b>Sample ID</b>	<b>Client ID</b>
320825001	MW-32_02192013
320825002	MW-11_02202013
320825003	MW-25_02202013
320825004	MW-26_02202013
320825005	MW-31_02192013
1202834198	Method Blank (MB)
1202834199	320825001(MW-32_02192013) Sample Duplicate (DUP)
1202834200	320825001(MW-32_02192013) Matrix Spike (MS)
1202834201	320825001(MW-32_02192013) Matrix Spike Duplicate (MSD)
1202834202	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 14.

**Calibration Information:**

**Calibration Information**

All initial and continuing calibration requirements have been met.

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 320825001 (MW-32\_02192013).

#### **QC Information**

All of the QC samples meet the required acceptance limits with the following exceptions: The sample and the duplicate, 1202834199 (MW-32\_02192013) and 320825001 (MW-32\_02192013), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with value of 1.8638.

#### **Technical Information:**

##### **Holding Time**

All sample procedures for this sample set were performed within the required holding time.

##### **Sample Re-prep/Re-analysis**

None of the samples in this sample set required reprep or reanalysis.

##### **Chemical Recoveries**

All chemical recoveries meet the required acceptance limits for this sample set.

#### **Miscellaneous Information:**

##### **Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

##### **Additional Comments**

The matrix spike and matrix spike duplicate, 1202834200 (MW-32\_02192013) and 1202834201 (MW-32\_02192013), aliquots were reduced to conserve sample volume.

##### **Qualifier Information**

Manual qualifiers were not required.

#### **Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

## GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

### Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 320825 GEL Work Order: 320825

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the CRDL.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Heather McCarty

Date: 02 MAR 2013

Title: Analyst II

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: March 2, 2013

Page 1 of 2

Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600

Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 320825

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	1284926										
QC1202834199	320825001	DUP									
Gross Radium Alpha		5.02		7.34	pCi/L	37.6*		(0% - 20%)	KDF1	03/01/13	09:4
	Uncertainty	+/-0.614		+/-0.757							
QC1202834202	LCS										
Gross Radium Alpha	555			550	pCi/L		98.9	(75%-125%)		03/01/13	09:4
	Uncertainty			+/-6.44							
QC1202834198	MB										
Gross Radium Alpha			U	-0.0948	pCi/L					03/01/13	09:4
	Uncertainty			+/-0.146							
QC1202834200	320825001	MS									
Gross Radium Alpha	1120	5.02		968	pCi/L		86.4	(75%-125%)		03/01/13	09:4
	Uncertainty	+/-0.614		+/-11.7							
QC1202834201	320825001	MSD									
Gross Radium Alpha	1120	5.02		1060	pCi/L	8.91	94.5	(0%-20%)		03/01/13	09:4
	Uncertainty	+/-0.614		+/-12.9							

**Notes:**

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Workorder: 320825

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.									
R	Sample results are rejected									
U	Analyte was analyzed for, but not detected above the CRDL.									
UI	Gamma Spectroscopy--Uncertain identification									
UJ	Gamma Spectroscopy--Uncertain identification									
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.									
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
Y	QC Samples were not spiked with this compound									
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.									
h	Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.



March 20, 2013

Ms. Kathy Weinel  
Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228

Re: White Mesa Mill GW  
Work Order: 321572

Dear Ms. Weinel:

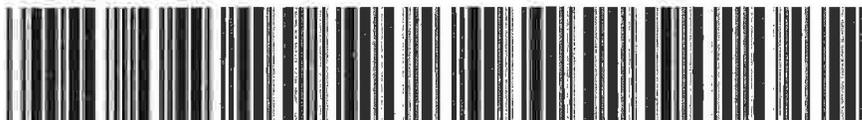
GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 08, 2013. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer  
Project Manager

Purchase Order: DW16138  
Enclosures



**Receipt Narrative  
for  
Energy Fuels Resources (USA), Inc.  
SDG: 321572**

**March 20, 2013**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary:**

**Sample receipt:** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on March 08, 2013 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

**Sample Identification:** The laboratory received the following samples:

<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
321572001	MW-27_02252013 ✓
321572002	MW-14_02262013 ✓
321572003	MW-30_02262013 ✓
321572004	MW-65_02262013
321572005	MW-35_02262013
321572006	MW-36_02262013
321572007	MW-02_03052013 ✓

**Case Narrative:**

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

*Heather Shaffer*

Heather Shaffer  
Project Manager

321572



# CHAIN OF CUSTODY

**Samples Shipped to:** GEL Laboratories **Contact:** Garrin Palmer or David Turk  
2040 Savage Rd Ph: 435 678 2221  
Charleston, South Carolina 29407 gpalmer@energyfuels.com  
nholliday@energyfuels.com  
dturk@energyfuels.com

## Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
1st Quarter Ground Water 2013	Tanner Holliday	<i>Tanner Holliday</i>

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
MW-27_02252013	2/25/2013	1240	Gross Alpha per S.O.W
MW-14_02262013	2/26/2013	950	Gross Alpha per S.O.W
MW-30_02262013	2/26/2013	1050	Gross Alpha per S.O.W
MW-65_02262013	2/26/2013	950	Gross Alpha per S.O.W
MW-35_02262013	2/26/2013	1315	Gross Alpha per S.O.W
MW-36_02262013	2/26/2013	1400	Gross Alpha per S.O.W
MW-02_03052013	3/5/2013	1250	Gross Alpha per S.O.W

Please notify Garrin Palmer or Tanner Holliday of Receipt temperature on these samples Immediately!  
 Thank you.

Relinquished By:(Signature) <i>Tanner Holliday</i>	Date/Time 3/7/2013 1100	Received By:(Signature) <i>[Signature]</i> 030813	Date/Time <del>030813</del> 0905
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time



Client: <u>DNMI</u>		SDG/AR/COC/Work Order: <u>321572</u>
Received By: <u>H. Taylor</u>		Date Received: <u>030813</u>
Suspected Hazard Information	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0cpm</u>
Classified Radioactive II or III by RSO?	<input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?	<input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?	<input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?	<input checked="" type="checkbox"/>	

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius <u>15</u>
2a	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>615241646</u> Secondary Temperature Device Serial # (If Applicable):
3	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4	Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
7	Are Encore containers present?	<input checked="" type="checkbox"/>			(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12	Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
14	Carrier and tracking number.	<input checked="" type="checkbox"/>			Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other <u>12 187 744 01 9873 9956-15</u>

Comments (Use Continuation Form if needed):

# GEL Laboratories LLC – Login Review Report

Report Date: 20-MAR-13  
 Work Order: 321572  
 Page 1 of 2

GEL Work Order/SDG: 321572      1st Qtr GW 2013  
 Client SDG: 321572  
 Project Manager: Heather Shaffer  
 Project Name: DNMI00100 White Mesa Mill GW  
 Purchase Order: DW16138  
 Package Level: LEVEL3  
 EDD Format: EIM\_DNMI

Work Order Due Date: 29-MAR-13  
 Package Due Date: 27-MAR-13  
 EDD Due Date: 29-MAR-13  
 Due Date: 29-MAR-13  
 HXS1

Collector: C  
 Prelogin #: 20130301294  
 Project Workdef ID: 1294356  
 SDG Status: Closed  
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
321572001	MW-27_02252013		25-FEB-13 12:40	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572002	MW-14_02262013		26-FEB-13 09:50	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572003	MW-30_02262013		26-FEB-13 10:50	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572004	MW-65_02262013		26-FEB-13 09:50	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572005	MW-35_02262013		26-FEB-13 13:15	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572006	MW-36_02262013		26-FEB-13 14:00	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		
321572007	MW-02_03052013		05-MAR-13 12:50	08-MAR-13 09:05	-2	1	GROUND WATER		21		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 MW-27_02252013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-002 MW-14_02262013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-003 MW-30_02262013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-004 MW-65_02262013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-005 MW-35_02262013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-006 MW-36_02262013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15
-007 MW-02_03052013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 15

# GEL Laboratories LLC – Login Review Report

Report Date: 20-MAR-13  
 Work Order: 321572  
 Page 2 of 2

Product: GFCTORAL    Workdef ID: 1297250    In Product Group? No    Group Name:    Group Reference:  
 Method: EPA 900.1 Modified    Path: Standard  
 Product Description: GFPC, Total Alpha Radium, Liquid    Product Reference: Gross Alpha  
 Samples: 001, 002, 003, 004, 005, 006, 007    Moisture Correction: "As Received"  
 Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	Yes

Action	Product Name	Description	Samples
Contingent Tests			

**Login Requirements:**

Requirement	Include?	Comments

Peer Review by: \_\_\_\_\_ Work Order (SDG#), PO# Checked? \_\_\_\_\_ C of C signed in receiver location? \_\_\_\_\_

**Radiochemistry Case Narrative  
Energy Fuels Resources (DNMI)  
SDG 321572**

**Method/Analysis Information**

**Product:** GFPC, Total Alpha Radium, Liquid  
**Analytical Method:** EPA 900.1 Modified  
**Analytical Batch Number:** 1287727

<b>Sample ID</b>	<b>Client ID</b>
321572001	MW-27_02252013
321572002	MW-14_02262013
321572003	MW-30_02262013
321572004	MW-65_02262013
321572005	MW-35_02262013
321572006	MW-36_02262013
321572007	MW-02_03052013
1202840698	Method Blank (MB)
1202840699	321572007(MW-02_03052013) Sample Duplicate (DUP)
1202840700	321572007(MW-02_03052013) Matrix Spike (MS)
1202840701	321572007(MW-02_03052013) Matrix Spike Duplicate (MSD)
1202840702	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 14.

**Calibration Information:**

**Calibration Information**

All initial and continuing calibration requirements have been met.

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 321572007 (MW-02\_03052013).

**QC Information**

All of the QC samples met the required acceptance limits.

**Technical Information:****Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

Samples 1202840699 (MW-02\_03052013) and 321572007 (MW-02\_03052013) were recounted due to high relative percent difference/relative error ratio. The recounts are reported.

**Chemical Recoveries**

All chemical recoveries meet the required acceptance limits for this sample set.

**Miscellaneous Information:****Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

The matrix spike and matrix spike duplicate, 1202840700 (MW-02\_03052013) and 1202840701 (MW-02\_03052013), aliquots were reduced to conserve sample volume.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

## GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

### Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 321572 GEL Work Order: 321572

**The Qualifiers in this report are defined as follows:**

\* A quality control analyte recovery is outside of specified acceptance criteria

\*\* Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the CRDL.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:**



**Name:** Kate Gellatly

**Date:** 21 MAR 2013

**Title:** Analyst I

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: March 21, 2013  
Page 1 of 2

Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 321572

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	1287727										
QC1202840699	321572007 DUP										
Gross Radium Alpha		1.06	U	0.691	pCi/L	41.9		(0% - 100%)	KDF1	03/17/13	10:0
	Uncertainty	+/-0.282		+/-0.251							
QC1202840702	LCS										
Gross Radium Alpha		555		497	pCi/L		89.4	(75%-125%)		03/16/13	14:3
	Uncertainty			+/-6.36							
QC1202840698	MB										
Gross Radium Alpha			U	0.100	pCi/L					03/16/13	14:3
	Uncertainty			+/-0.173							
QC1202840700	321572007 MS										
Gross Radium Alpha		1120		985	pCi/L		88.2	(75%-125%)		03/16/13	14:3
	Uncertainty	+/-0.282		+/-12.7							
QC1202840701	321572007 MSD										
Gross Radium Alpha		1120		1030	pCi/L	4.46	92.2	(0%-20%)		03/16/13	14:3
	Uncertainty	+/-0.282		+/-13.5							

**Notes:**

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Workorder: 321572

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q										
R										
U										
UI										
UJ										
UL										
X										
Y										
^										
h										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.



April 10, 2013

Ms. Kathy Weinel  
Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228

Re: White Mesa Mill GW  
Work Order: 322413

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 22, 2013. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer  
Project Manager

Purchase Order: DW16138  
Enclosures



**Receipt Narrative**  
**for**  
**Energy Fuels Resources (USA), Inc.**  
**SDG: 322413**

**April 10, 2013**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary:**

**Sample receipt:** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on March 22, 2013 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

**Sample Identification:** The laboratory received the following samples:

<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
322413001	MW-37_03202013
322413002	MW-19_03132013
322413003	MW-70_03132013

**Case Narrative:**

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

*Heather Shaffer*

Heather Shaffer  
Project Manager

322413



# CHAIN OF CUSTODY

**Samples Shipped to:** GEL Laboratories **Contact:** Garrin Palmer or David Turk  
2040 Savage Rd Ph: 435 678 2221  
Charleston, South Carolina 29407 gpalmer@energyfuels.com  
nholliday@energyfuels.com  
dturk@energyfuels.com

## Chain of Custody/Sampling Analysis Request

Project	Samplers Name		Samplers Signature
1st Quarter Ground Water 2013	Tanner Holliday		<i>Tanner Holliday</i>
Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
MW-37_03202013	3/20/2013	845	Gross Alpha per S.O.W
MW-19_03132013	3/13/2013	1540	Gross Alpha per S.O.W
MW-70_03132013	3/13/2013	1540	Gross Alpha per S.O.W

Please notify Garrin Palmer or Tanner Holliday of Receipt temperature on these samples Immediately!  
 Thank you.

Relinquished By:(Signature) <i>Tanner Holliday</i>	Date/Time 3/21/2013 1100	Received By:(Signature) <i>DAVID TURK</i>	Date/Time 032213 0910
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time



SAMPLE RECEIPT & REVIEW FORM

Client: <u>DNMI</u>		SDG/AR/COC/Work Order: <u>322413</u>	
Received By: <u>A. Taylor</u>		Date Received: <u>032213</u>	
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?		<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0cpm</u>
Classified Radioactive II or III by RSO?		<input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?		<input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?		<input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		<input checked="" type="checkbox"/>	

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		<input checked="" type="checkbox"/>		Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius <u>16</u>
2a	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>61574646</u> Secondary Temperature Device Serial # (If Applicable):
3	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4	Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
7	Are Encore containers present?	<input checked="" type="checkbox"/>			(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12	Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
14	Carrier and tracking number.				Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other <u>8015 5301 8074</u>

Comments (Use Continuation Form if needed):

# GEL Laboratories LLC – Login Review Report

Report Date: 10-APR-13

Work Order: 322413

Page 1 of 2

GEL Work Order/SDG: 322413      1st Qtr GW 2013  
 Client SDG: 322413  
 Project Manager: Heather Shaffer  
 Project Name: DNMI00100 White Mesa Mill GW  
 Purchase Order: DW16138  
 Package Level: LEVEL3  
 EDD Format: EIM\_DNMI

Work Order Due Date: 12-APR-13  
 Package Due Date: 10-APR-13  
 EDD Due Date: 12-APR-13  
 Due Date: 12-APR-13  
 HXS1

Collector: C  
 Prelogin #: 20130301746  
 Project Workdef ID: 1294356  
 SDG Status: Closed  
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
322413001	MW-37_03202013		20-MAR-13 08:45	22-MAR-13 09:10	-2	1	GROUND WATER		21		1		
322413002	MW-19_03132013		13-MAR-13 15:40	22-MAR-13 09:10	-2	1	GROUND WATER		21		1		
322413003	MW-70_03132013		13-MAR-13 15:40	22-MAR-13 09:10	-2	1	GROUND WATER		21		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 MW-37_03202013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 16
-002 MW-19_03132013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 16
-003 MW-70_03132013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 16

Product: GFCTORAL      Workdef ID: 1297250      In Product Group? No      Group Name:      Group Reference:

Method: EPA 900.1 Modified      Path: Standard

Product Description: GFPC, Total Alpha Radium, Liquid      Product Reference: Gross Alpha

Samples: 001, 002, 003      Moisture Correction: "As Received"

Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	Yes

Action	Product Name	Description	Samples
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Contingent Tests

# GEL Laboratories LLC – Login Review Report

Report Date: 10-APR-13

Work Order: 322413

Page 2 of 2

## Login Requirements:

Requirement	Include? Comments
-------------	-------------------

Peer Review by: \_\_\_\_\_ Work Order (SDG#), PO# Checked? \_\_\_\_\_ C of C signed in receiver location? \_\_\_\_\_

**Radiochemistry Case Narrative  
Energy Fuels Resources (DNMI)  
SDG 322413**

**Method/Analysis Information**

**Product:** GFPC, Total Alpha Radium, Liquid  
**Analytical Method:** EPA 900.1 Modified  
**Analytical Batch Number:** 1290657

<b>Sample ID</b>	<b>Client ID</b>
322413001	MW-37_03202013
322413002	MW-19_03132013
322413003	MW-70_03132013
1202847823	Method Blank (MB)
1202847824	322413002(MW-19_03132013) Sample Duplicate (DUP)
1202847825	322413002(MW-19_03132013) Matrix Spike (MS)
1202847826	322413002(MW-19_03132013) Matrix Spike Duplicate (MSD)
1202847827	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 15.

**Calibration Information:**

**Calibration Information**

All initial and continuing calibration requirements have been met.

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 322413002 (MW-19\_03132013).

**QC Information**

All of the QC samples met the required acceptance limits.

**Technical Information:****Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

Samples 1202847824 (MW-19\_03132013) and 322413002 (MW-19\_03132013) were recounted to decrease uncertainty. The recounts are reported.

**Chemical Recoveries**

All chemical recoveries meet the required acceptance limits for this sample set.

**Miscellaneous Information:****Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

The matrix spike and matrix spike duplicate, 1202847825 (MW-19\_03132013) and 1202847826 (MW-19\_03132013), aliquots were reduced to conserve sample volume.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

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### Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 322413 GEL Work Order: 322413

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the CRDL.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:**



**Name: Kate Gellatly**

**Date: 28 MAR 2013**

**Title: Analyst I**

# GEL LABORATORIES LLC

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## QC Summary

Report Date: March 28, 2013

Page 1 of 2

Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 322413

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>										
Batch	1290657									
QC1202847824	322413002	DUP								
Gross Radium Alpha		1.11	1.59	pCi/L	35.4		(0% - 100%)	KDF1	03/27/13	10:3'
	Uncertainty	+/-0.261	+/-0.294							
QC1202847827	LCS									
Gross Radium Alpha	555		482	pCi/L		86.9	(75%-125%)		03/27/13	07:5
	Uncertainty		+/-6.57							
QC1202847823	MB									
Gross Radium Alpha		U	0.164	pCi/L					03/27/13	07:5
	Uncertainty		+/-0.232							
QC1202847825	322413002	MS								
Gross Radium Alpha	1120	1.11	1050	pCi/L		93.6	(75%-125%)		03/27/13	07:5
	Uncertainty	+/-0.261	+/-14.3							
QC1202847826	322413002	MSD								
Gross Radium Alpha	1120	1.11	948	pCi/L	9.99	84.7	(0%-20%)		03/27/13	07:5
	Uncertainty	+/-0.261	+/-12.7							

**Notes:**

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 322413

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q										
Q										
R										
U										
UI										
UJ										
UL										
X										
Y										
^										
h										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Tab F

Laboratory Analytical Reports – Accelerated Monitoring

Tab F1

Laboratory Analytical Reports – Accelerated Monitoring

January 2013

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-11 01232013  
Lab Sample ID: 319074001  
Matrix: Ground Water  
Collect Date: 23-JAN-13 11:50  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP</b>											
<i>200.2/200.7 Manganese "As Received"</i>											
Manganese		115	10.0	10.0	ug/L	1	LS	01/29/13	14:49	1278875	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-TRACE 200.2 Liquid Prep	BXA1	01/28/13	2112	1278874

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.7	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-14 01232013  
Lab Sample ID: 319074002  
Matrix: Ground Water  
Collect Date: 23-JAN-13 10:00  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP</b>											
<i>200.2/200.7 Manganese "As Received"</i>											
Manganese		1930	10.0	10.0	ug/L	1	LS	01/29/13	15:01	1278875	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-TRACE 200.2 Liquid Prep	BXA1	01/28/13	2112	1278874

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.7	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

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## Certificate of Analysis

Company: Energy Fuels Resources (USA), Inc.  
Address: 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Report Date: February 8, 2013

Client Sample ID: MW-25 01222013  
Lab Sample ID: 319074003  
Matrix: Ground Water  
Collect Date: 22-JAN-13 12:05  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP-MS</b>											
<i>200.2/200.8 Uranium "As Received"</i>											
Uranium		5.97	0.300	0.300	ug/L	1	BAJ	02/01/13	04:56	1278873	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	BXA1	01/28/13	2106	1278872

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.8	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

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## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-26 01242013  
Lab Sample ID: 319074004  
Matrix: Ground Water  
Collect Date: 24-JAN-13 08:45  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
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### Metals Analysis-ICP-MS

200.2/200.8 Uranium "As Received"

Uranium		65.7	0.300	0.300	ug/L	1	BAJ	02/01/13	14:08	1278873	1
---------	--	------	-------	-------	------	---	-----	----------	-------	---------	---

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	BXA1	01/28/13	2106	1278872

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.8	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Sample ID:** 1301517-001  
**Client Sample ID:** MW-26\_01242013  
**Collection Date:** 1/24/2013 0845h  
**Received Date:** 1/25/2013 0955h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		1/30/2013 1417h	E300.0	10.0	<b>63.5</b>	
Nitrate/Nitrite (as N)	mg/L		1/25/2013 1827h	E353.2	1.00	<b>1.66</b>	

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Sample ID:** 1301517-001C  
**Client Sample ID:** MW-26\_01242013  
**Collection Date:** 1/24/2013 0845h  
**Received Date:** 1/25/2013 0955h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 1/29/2013 1217h

**Units:** µg/L

**Dilution Factor:** 20

**Method:** SW8260C

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Chloroform	67-66-3	20.0	1,270	~

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	1,060	1,000	106	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	1,010	1,000	101	80-128	
Surr: Dibromofluoromethane	1868-53-7	1,050	1,000	105	80-124	
Surr: Toluene-d8	2037-26-5	989	1,000	98.9	77-129	

~ - The reporting limits were raised due to high analyte concentrations.

**Analyzed:** 1/29/2013 0831h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Methylene chloride	75-09-2	1.00	6.49	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	52.1	50.00	104	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	51.7	50.00	103	80-128	
Surr: Dibromofluoromethane	1868-53-7	53.8	50.00	108	80-124	
Surr: Toluene-d8	2037-26-5	49.1	50.00	98.2	77-129	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-30 01232013  
Lab Sample ID: 319074005  
Matrix: Ground Water  
Collect Date: 23-JAN-13 13:50  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP-MS</b>											
<i>200.2/200.8 Selenium "As Received"</i>											
Selenium		37.2	5.00	5.00	ug/L	1	BAJ	02/01/13	05:41	1278873	1
Strontium		8.36	0.300	0.300	ug/L	1	BAJ	02/01/13	14:12	1278873	2

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	BXA1	01/28/13	2106	1278872

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Sample ID:** 1301517-002  
**Client Sample ID:** MW-30\_01232013  
**Collection Date:** 1/23/2013 1350h  
**Received Date:** 1/25/2013 0955h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		1/30/2013 1440h	E300.0	100	<b>128</b>	
Nitrate/Nitrite (as N)	mg/L		1/25/2013 1829h	E353.2	1.00	<b>19.2</b>	

*Reissue of a previously generated report. The Client Sample ID has been revised. Information herein supersedes that of the previously issued reports.*

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Sample ID:** 1301517-003  
**Client Sample ID:** MW-31\_01222013  
**Collection Date:** 1/22/2013 1400h  
**Received Date:** 1/25/2013 0955h

**Contact:** Garrin Palmer

## Analytical Results

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Chloride	mg/L		1/30/2013 1311h	E300.0	100	<b>176</b>	
Nitrate/Nitrite (as N)	mg/L		1/25/2013 1842h	E353.2	10.0	<b>22.8</b>	
Sulfate	mg/L		1/25/2013 2023h	E300.0	100	<b>611</b>	
Total Dissolved Solids	mg/L		1/25/2013 1200h	SM2540C	500	<b>1,270</b>	

463 West 3600 South

Salt Lake City, UT 84115

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web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-35 01232013  
Lab Sample ID: 319074006  
Matrix: Ground Water  
Collect Date: 23-JAN-13 13:30  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP</b>											
<i>200.2/200.7 Manganese "As Received"</i>											
Manganese		247	10.0	10.0	ug/L	1	LS	01/29/13	15:04	1278875	1
<b>Metals Analysis-ICP-MS</b>											
<i>200.2/200.8 Thallium "As Received"</i>											
Selenium		11.0	5.00	5.00	ug/L	1	BAJ	02/01/13	05:48	1278873	2
Thallium	U	ND	0.500	0.500	ug/L	1	BAJ	02/01/13	14:15	1278873	3
Iranium		23.6	0.300	0.300	ug/L	1					

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	BXA1	01/28/13	2106	1278872
EPA 200.2	ICP-TRACE 200.2 Liquid Prep	BXA1	01/28/13	2112	1278874

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.7	
2	EPA 200.8	
3	EPA 200.8	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: February 6, 2013

Company : Energy Fuels Resources (USA), Inc.  
 Address : 225 Union Boulevard  
 Suite 600  
 Lakewood, Colorado 80228  
 Contact: Ms. Kathy Weinel  
 Project: White Mesa Mill GW

Client Sample ID: MW-35_01232013	Project: DNMI00100
Sample ID: 319074006	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 23-JAN-13 13:30	
Receive Date: 25-JAN-13	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		6.62	+/-0.844	0.927	1.00	pCi/L		KDF1	02/02/13	1611	1279413	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			101	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: **White Mesa Mill GW**

Report Date: February 8, 2013

Client Sample ID: MW-65 01232013  
Lab Sample ID: 319074007  
Matrix: Ground Water  
Collect Date: 23-JAN-13 13:30  
Receive Date: 25-JAN-13  
Collector: Client

Project: DNMI00100  
Client ID: DNMI001  
Client SDG: 319074

Parameter	Qualifier	Result	SRL	CRDL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Metals Analysis-ICP</b>											
<i>200.2/200.7 Manganese "As Received"</i>											
Manganese		246	10.0	10.0	ug/L	1	LS	01/29/13	15:07	1278875	1
<b>Metals Analysis-ICP-MS</b>											
<i>200.2/200.8 Thallium "As Received"</i>											
Selenium		10.2	5.00	5.00	ug/L	1	BAJ	02/01/13	05:54	1278873	2
Thallium	U	ND	0.500	0.500	ug/L	1	BAJ	02/01/13	14:19	1278873	3
Tritium		22.5	0.300	0.300	ug/L	1					

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	BXA1	01/28/13	2106	1278872
EPA 200.2	ICP-TRACE 200.2 Liquid Prep	BXA1	01/28/13	2112	1278874

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 200.7	
2	EPA 200.8	
3	EPA 200.8	

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: February 6, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

Client Sample ID: MW-65\_01232013 Project: DNMI00100  
Sample ID: 319074007 Client ID: DNMI001  
Matrix: Ground Water  
Collect Date: 23-JAN-13 13:30  
Receive Date: 25-JAN-13  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		7.79	+/-0.904	0.880	1.00	pCi/L		KDF1	02/02/13	1611	1279413	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			98.8	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Sample ID:** 1301517-004A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 1/24/2013  
**Received Date:** 1/25/2013 0955h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 1/29/2013 0812h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

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Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Chloroform	67-66-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	

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Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	51.8	50.00	104	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	52.2	50.00	104	80-128	
Surr: Dibromofluoromethane	1868-53-7	50.4	50.00	101	80-124	
Surr: Toluene-d8	2037-26-5	50.2	50.00	100	77-129	

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: January Monthly Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1301517

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 4 sample(s) on 1/25/2013 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)  
web: [www.awal-labs.com](http://www.awal-labs.com)

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

This is a revision to a report originally issued 2/1/2013. Pages 1, 2, and 6 have been revised.

Thank You,

Approved by:

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** January Monthly Groundwater 2013  
**Lab Set ID:** 1301517  
**Date Received:** 1/25/2013 0955h

**Contact:** Garrin Palmer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1301517-001A	MW-26_01242013	1/24/2013 0845h	Aqueous	Anions, E300.0
1301517-001B	MW-26_01242013	1/24/2013 0845h	Aqueous	Nitrite/Nitrate (as N), E353.2
1301517-001C	MW-26_01242013	1/24/2013 0845h	Aqueous	VOA by GC/MS Method 8260C/5030C
1301517-002A	MW-30_01232013	1/23/2013 1350h	Aqueous	Anions, E300.0
1301517-002B	MW-30_01232013	1/23/2013 1350h	Aqueous	Nitrite/Nitrate (as N), E353.2
1301517-003A	MW-31_01222013	1/22/2013 1400h	Aqueous	Anions, E300.0
1301517-003B	MW-31_01222013	1/22/2013 1400h	Aqueous	Nitrite/Nitrate (as N), E353.2
1301517-003C	MW-31_01222013	1/22/2013 1400h	Aqueous	Total Dissolved Solids, A2540C
1301517-004A	Trip Blank	1/24/2013	Aqueous	VOA by GC/MS Method 8260C/5030C

*Reissue of a previously generated report. A Client Sample ID has been revised. Information herein supersedes that of the previously issued reports.*

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** January Monthly Groundwater 2013  
**Lab Set ID:** 1301517

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Salt Lake City, UT 84115

### **Sample Receipt Information:**

**Date of Receipt:** 1/25/2013  
**Date(s) of Collection:** 1/22, 1/23, & 1/24/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

**Holding Time and Preservation Requirements:** The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions: The MS and MSD percent recoveries were outside of control limits on nitrate/nitrite for sample 1301517-001B due to sample matrix interference.

**Duplicate (DUP):** The parameters that required a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



## Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** January Monthly Groundwater 2013  
**Lab Set ID:** 1301517

---

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Salt Lake City, UT 84115

### Sample Receipt Information:

**Date of Receipt:** 1/25/2013  
**Date(s) of Collection:** 1/22, 1/23, & 1/24/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None  
**Method:** SW-846 8260C/5030C  
**Analysis:** Volatile Organic Compounds

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Fax: (801) 263-8687

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web: www.awal-labs.com

**General Set Comments:** Multiple target analytes were observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

Kyle F. Gross  
Laboratory Director

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Jose Rocha  
QA Officer

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



463 West 3600 South

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1301517-003CDUP	Total Dissolved Solids	mg/L	SM2540C	1,310		1,268		-	3.41	5		1/25/2013 1200h



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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R49894	Sulfate	mg/L	E300.0	5.14	5.000	0	103	90-110				1/25/2013 2001h
LCS-R50019	Chloride	mg/L	E300.0	5.21	5.000	0	104	90-110				1/30/2013 1248h
LCS-R49878	Nitrate/Nitrite (as N)	mg/L	E353.2	1.10	1.000	0	110	90-110				1/25/2013 1820h
LCS-R49904	Total Dissolved Solids	mg/L	SM2540C	204	205.0	0	99.5	80-120				1/25/2013 1200h



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Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R49894	Sulfate	mg/L	E300.0	< 1.00				-				1/25/2013 1939h
MB-R50019	Chloride	mg/L	E300.0	< 1.00				-				1/30/2013 1226h
MB-R49878	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				1/25/2013 1819h
MB-R49904	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				1/25/2013 1200h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1301517-003AMS	Sulfate	mg/L	E300.0	5,610	5,000	610.7	100	90-110				1/25/2013 2046h
1301517-003AMS	Chloride	mg/L	E300.0	5,590	5,000	176.2	108	90-110				1/30/2013 1333h
1301517-001BMS	Nitrate/Nitrite (as N)	mg/L	E353.2	13.1	10.00	1.657	114	90-110				1/25/2013 1847h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1301517-003AMSD	Sulfate	mg/L	E300.0	5,640	5,000	610.7	100	90-110	0.379	20		1/25/2013 2108h
1301517-003AMSD	Chloride	mg/L	E300.0	5,580	5,000	176.2	108	90-110	0.193	20		1/30/2013 1355h
1301517-001BMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	13.5	10.00	1.657	119	90-110	3.42	10		1/25/2013 1848h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 012913A	Chloroform	µg/L	SW8260C	20.5	20.00	0	103	67-132				1/29/2013 0715h
LCS VOC 012913A	Methylene chloride	µg/L	SW8260C	20.0	20.00	0	100	32-185				1/29/2013 0715h
LCS VOC 012913A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	47.1	50.00		94.2	76-138				1/29/2013 0715h
LCS VOC 012913A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	50.4	50.00		101	77-121				1/29/2013 0715h
LCS VOC 012913A	Surr: Dibromofluoromethane	%REC	SW8260C	49.8	50.00		99.7	67-128				1/29/2013 0715h
LCS VOC 012913A	Surr: Toluene-d8	%REC	SW8260C	50.9	50.00		102	81-135				1/29/2013 0715h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 012913A	Chloroform	µg/L	SW8260C	< 1.00				-				1/29/2013 0753h
MB VOC 012913A	Methylene chloride	µg/L	SW8260C	< 1.00				-				1/29/2013 0753h
MB VOC 012913A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	51.3	50.00		103	76-138				1/29/2013 0753h
MB VOC 012913A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.0	50.00		104	77-121				1/29/2013 0753h
MB VOC 012913A	Surr: Dibromofluoromethane	%REC	SW8260C	50.8	50.00		102	67-128				1/29/2013 0753h
MB VOC 012913A	Surr: Toluene-d8	%REC	SW8260C	51.0	50.00		102	81-135				1/29/2013 0753h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1301517-001CMS	Chloroform	µg/L	SW8260C	1,610	400.0	1,269	85.2	50-146				1/29/2013 1139h
1301517-001CMS	Methylene chloride	µg/L	SW8260C	418	400.0	0	105	30-192				1/29/2013 1139h
1301517-001CMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	1,020	1,000		102	72-151				1/29/2013 1139h
1301517-001CMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	969	1,000		96.9	80-128				1/29/2013 1139h
1301517-001CMS	Surr: Dibromofluoromethane	%REC	SW8260C	1,040	1,000		104	80-124				1/29/2013 1139h
1301517-001CMS	Surr: Toluene-d8	%REC	SW8260C	981	1,000		98.1	77-129				1/29/2013 1139h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1301517  
**Project:** January Monthly Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1301517-001CMSD	Chloroform	µg/L	SW8260C	1,610	400.0	1,269	85.5	50-146	0.0497	25		1/29/2013 1158h
1301517-001CMSD	Methylene chloride	µg/L	SW8260C	420	400.0	0	105	30-192	0.429	25		1/29/2013 1158h
1301517-001CMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	1,040	1,000		104	72-151				1/29/2013 1158h
1301517-001CMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	981	1,000		98.1	80-128				1/29/2013 1158h
1301517-001CMSD	Surr: Dibromofluoromethane	%REC	SW8260C	1,040	1,000		104	80-124				1/29/2013 1158h
1301517-001CMSD	Surr: Toluene-d8	%REC	SW8260C	976	1,000		97.6	77-129				1/29/2013 1158h

**REVISED**  
2-5-13  
Sample ID for #2 updated -RW

**WORK ORDER Summary**

Work Order: **1301517** Page 1 of 1

**Client:** Energy Fuels Resources, Inc.

Due Date: 2/5/2013

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** January Monthly Groundwater 2013

**QC Level:** III

WO Type: Project

**Comments:** PA Rush. QC 3 & Summary. EDD-Denison. Email Group. RL of 1 ppm for Chloride and VOC and 0.1 ppm for NO2/NO3. Expected levels provided by client - see Jenn. J-flag what we can't meet.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1301517-001A	MW-26_01242013	1/24/2013 0845h	1/25/2013 0955h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df - wc	1
				<i>1 SEL Analytes: CL</i>				
1301517-001B				NO2/NO3-W-353.2		<input type="checkbox"/>	df - no2/no3	
1301517-001C				8260-W		<input checked="" type="checkbox"/>	VOCFridge	3
				<i>Test Group: 8260-W-Custom; # of Analytes: 2 / # of Surr: 4</i>				
1301517-002A	MW-30_01232013	1/23/2013 1350h	1/25/2013 0955h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df - wc	1
				<i>1 SEL Analytes: CL</i>				
1301517-002B				NO2/NO3-W-353.2		<input type="checkbox"/>	df - no2/no3	
1301517-003A	MW-31_01222013	1/22/2013 1400h	1/25/2013 0955h	300.0-W	Aqueous	<input checked="" type="checkbox"/>	df - wc	1
				<i>2 SEL Analytes: CL SO4</i>				
1301517-003B				NO2/NO3-W-353.2		<input type="checkbox"/>	df - no2/no3	
1301517-003C				TDS-W-2540C		<input type="checkbox"/>	ww - tds	
1301517-004A	Trip Blank	1/24/2013	1/25/2013 0955h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	2
				<i>Test Group: 8260-W-Custom; # of Analytes: 2 / # of Surr: 4</i>				



Lab Set ID: 1301517

<b>Samples Were:</b>		<b>COC Tape Was:</b>		<b>Container Type:</b>		<b>No. Rec.</b>	
<input checked="" type="checkbox"/> Shipped By: <u>Fed-X</u>		<b>Present on Outer Package</b>		<input type="checkbox"/> AWAL Supplied Plastic			
<input type="checkbox"/> Hand Delivered		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> AWAL Supplied Clear Glass			
<input type="checkbox"/> Ambient		<b>Unbroken on Outer package</b>		<input type="checkbox"/> AWAL Supplied Amber Glass			
<input checked="" type="checkbox"/> Chilled		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> AWAL Supplied VOA/TOC/TOX Vials			
Temperature <u>2.4</u> °C		<b>Present on Sample</b>		<input type="checkbox"/> Amber <input type="checkbox"/> Clear <input type="checkbox"/> Headspace <input type="checkbox"/> No Headspace			
Rec. Broken/Leaking <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		<input type="checkbox"/> Non AWAL Supplied Container			
<b>Notes:</b>		<b>Unbroken on Sample</b>		<b>Notes:</b>			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A					
Properly Preserved <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<b>Notes:</b>					
<b>Notes:</b>							
Rec. Within Hold <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<b>Discrepancies Between Labels and COC</b>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Notes:</b>				<b>Notes:</b>			

Bottle Type	Preservative	All pHs OK	1	2	3												
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>																
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	pH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>																
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>		Yes	Yes	Yes												
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, ZnAC																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

- Procedure:**
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC and notify client for further instructions
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted at client request



February 11, 2013

Ms. Kathy Weinel  
Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228

Re: White Mesa Mill GW  
Work Order: 319074

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 25, 2013. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer  
Project Manager

Purchase Order: DW16138  
Enclosures



**Receipt Narrative  
for  
Energy Fuels Resources (USA), Inc.  
SDG: 319074**

**February 11, 2013**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary:**

**Sample receipt:** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on January 25, 2013 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

**Sample Identification:** The laboratory received the following samples:

<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
319074001	MW-11_01232013
319074002	MW-14_01232013
319074003	MW-25_01222013
319074004	MW-26_01242013
319074005	MW-30_01232013
319074006	MW-35_01232013
319074007	MW-65_01232013

**Case Narrative:**

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Metals and Radiochemistry.

*Heather Shaffer*

Heather Shaffer  
Project Manager

Page: 1 of 1  
 Project #: \_\_\_\_\_  
 GEL Quote #: \_\_\_\_\_  
 COC Number <sup>(1)</sup>: \_\_\_\_\_  
 PO Number: \_\_\_\_\_

# GEL Chain of Custody and Analytical Request

GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

GEL Work Order Number: 319074

Client Name: Energy Fuels Phone #: 435 678 2221

Sample Analysis Requested <sup>(5)</sup> (Fill in the number of containers for each test)

Project/Site Name: January Monthly Groundwater 2013 Fax #: \_\_\_\_\_

Address: 6425 S Hwy 191 Blanding UT 84511

Collected by: Tanner Holliday Send Results To: Garrin Palmer

Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive	TSCA Regulated	Total number of containers	Sample Analysis Requested (5)					Preservative Type (6)	Comments Note: extra sample is required for sample specific QC
									NI	NI	NI	NI	NI		
									Manganese	Uranium	Selenium	Thallium	Gross Alpha		
MW-11_01232013	1/23/13	1150	N	Y	GW	N		1	X						
MW-14_01232013	1/23/13	1000	N	Y	GW	N		1	X						
MW-25_01222013	1/22/13	1205	N	Y	GW	N		1		X					
MW-26_01242013	1/24/13	0845	N	Y	GW	N		1		X					
MW-30_01232013	1/23/13	1350	N	Y	GW	N		1		X	X				
MW-35_01232013	1/23/13	1330	N	Y	GW	N		2	X	X	X	X	X		
MW-65_01232013	1/23/13	1330	FD	Y	GW	N		2	X	X	X	X	X		

TAT Requested: Normal:  Rush: \_\_\_\_\_ Specify: \_\_\_\_\_ (Subject to Surcharge) Fax Results: Yes  / No  Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards \_\_\_\_\_

Sample Collection Time Zone  
 Eastern Pacific  
 Central Other \_\_\_\_\_  
 Mountain

Chain of Custody Signatures						Sample Shipping and Delivery Details	
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	GEL PM:	
<u>Tanner Holliday</u>	<u>1/24/13</u>	<u>1100</u>	<u>P. Went</u>	<u>1-25-13</u>	<u>09:00</u>		
						Method of Shipment:	Date Shipped:
						Airbill #:	
						Airbill #:	

1.) Chain of Custody Number = Client Determined  
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite  
 3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.  
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).  
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid; AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact?  
 YES NO

Cooler Temp:  
21 C

WHITE = LABORATORY      YELLOW = FILE      PINK = CLIENT

Client: <u>P.N.M.I.</u>		SDG/AR/COC/Work Order: <u>319074</u>
Received By: <u>P. Dent</u>		Date Received: <u>1-25-13</u>
<b>Suspected Hazard Information</b>	Yes No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?	<input type="checkbox"/> <input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0cpm</u>
Classified Radioactive II or III by RSO?	<input type="checkbox"/> <input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?	<input type="checkbox"/> <input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?	<input type="checkbox"/> <input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?	<input type="checkbox"/> <input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?	<input type="checkbox"/> <input checked="" type="checkbox"/>	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container <u>2</u> Other (describe)
2 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*			<input checked="" type="checkbox"/>	Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius
2a Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): <u>61524646</u>
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?			<input checked="" type="checkbox"/>	Sample ID's and containers affected:
7 Are Encore containers present?			<input checked="" type="checkbox"/>	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
14 Carrier and tracking number.	<input checked="" type="checkbox"/>			Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other <u>8015 5302 3452</u>

Comments (Use Continuation Form if needed):

# GEL Laboratories LLC – Login Review Report

Report Date: 11-FEB-13

Work Order: 319074

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GEL Work Order/SDG: 319074      January GW 2013  
 Client SDG: 319074  
 Project Manager: Heather Shaffer  
 Project Name: DNMI00100 White Mesa Mill GW  
 Purchase Order: DW16138  
 Package Level: LEVEL3  
 EDD Format: EIM\_DNMI

Work Order Due Date: 15-FEB-13  
 Package Due Date: 13-FEB-13  
 EDD Due Date: 15-FEB-13  
 Due Date: 15-FEB-13  
 HXS1

Collector: C  
 Prelogin #: 20130199891  
 Project Workdef ID: 1294356  
 SDG Status: Closed  
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
319074001	MW-11_01232013		23-JAN-13 11:50	25-JAN-13 09:00	-2	1	GROUND WATER		21		1		
319074002	MW-14_01232013		23-JAN-13 10:00	25-JAN-13 09:00	-2	1	GROUND WATER		21		1		
319074003	MW-25_01222013		22-JAN-13 12:05	25-JAN-13 09:00	-2	1	GROUND WATER		21		2		
319074004	MW-26_01242013		24-JAN-13 08:45	25-JAN-13 09:00	-2	1	GROUND WATER		21		2		
319074005	MW-30_01232013		23-JAN-13 13:50	25-JAN-13 09:00	-2	1	GROUND WATER		21		3		
319074006	MW-35_01232013		23-JAN-13 13:30	25-JAN-13 09:00	-2	2	GROUND WATER		21		4		
319074007	MW-65_01232013		23-JAN-13 13:30	25-JAN-13 09:00	-2	2	GROUND WATER		21		4		Y

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 MW-11_01232013	REVV	200.2/200.7 Manganese				Cooler Seal Undisturbed Temperature (C)	y 21
-002 MW-14_01232013	REVV	200.2/200.7 Manganese				Cooler Seal Undisturbed Temperature (C)	y 21
-003 MW-25_01222013	REVV	200.2/200.8 Uranium				Cooler Seal Undisturbed Temperature (C)	y 21
-004 MW-26_01242013	REVV	200.2/200.8 Uranium				Cooler Seal Undisturbed Temperature (C)	y 21
-005 MW-30_01232013	REVV	200.2/200.8 Selenium				Cooler Seal Undisturbed	y
	REVV	200.2/200.8 Uranium				Temperature (C)	21
-006 MW-35_01232013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed	y
	REVV	200.2/200.7 Manganese				Temperature (C)	21
	REVV	200.2/200.8 Selenium					
	REVV	200.2/200.8 Thallium					
	REVV	200.2/200.8 Uranium					
-007 MW-65_01232013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed	y
	REVV	200.2/200.7 Manganese				Temperature (C)	21
	REVV	200.2/200.8 Selenium					

# GEL Laboratories LLC – Login Review Report

Report Date: 11-FEB-13

Work Order: 319074

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REVW 200.2/200.8 Thallium

REVW 200.2/200.8 Uranium

<b>Product:</b> MIM2TL_L		<b>Workdef ID:</b> 1295585	<b>In Product Group?</b> No	<b>Group Name:</b>	<b>Group Reference:</b>				
<b>Method:</b> EPA 200.8					<b>Path:</b> Standard				
<b>Product Description:</b> 200.2/200.8 Thallium					<b>Product Reference:</b>				
<b>Samples:</b> 006, 007					<b>Moisture Correction:</b> "As Received"				
<b>Parmname Check:</b> All parmnames scheduled properly									
<b>CAS #</b>	<b>Parmname</b>	<b>Client RDL or PQL &amp; Unit</b>	<b>Reporting Units</b>	<b>Parm Function</b>	<b>Included in Sample?</b>	<b>Included in QC?</b>	<b>Custom List?</b>		
7440-28-0	Thallium	.5	ug/L	REG	Y	Y	Yes		
<b>Product:</b> GFCTORAL		<b>Workdef ID:</b> 1297250	<b>In Product Group?</b> No	<b>Group Name:</b>	<b>Group Reference:</b>				
<b>Method:</b> EPA 900.1 Modified					<b>Path:</b> Standard				
<b>Product Description:</b> GFPC, Total Alpha Radium, Liquid					<b>Product Reference:</b> Gross Alpha				
<b>Samples:</b> 006, 007					<b>Moisture Correction:</b> "As Received"				
<b>Parmname Check:</b> All parmnames scheduled properly									
<b>CAS #</b>	<b>Parmname</b>	<b>Client RDL or PQL &amp; Unit</b>	<b>Reporting Units</b>	<b>Parm Function</b>	<b>Included in Sample?</b>	<b>Included in QC?</b>	<b>Custom List?</b>		
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	Yes		
<b>Product:</b> ICP2MN_L		<b>Workdef ID:</b> 1308791	<b>In Product Group?</b> No	<b>Group Name:</b>	<b>Group Reference:</b>				
<b>Method:</b> EPA 200.7					<b>Path:</b> Standard				
<b>Product Description:</b> 200.2/200.7 Manganese					<b>Product Reference:</b>				
<b>Samples:</b> 001, 002, 006, 007					<b>Moisture Correction:</b> "As Received"				
<b>Parmname Check:</b> All parmnames scheduled properly									
<b>CAS #</b>	<b>Parmname</b>	<b>Client RDL or PQL &amp; Unit</b>	<b>Reporting Units</b>	<b>Parm Function</b>	<b>Included in Sample?</b>	<b>Included in QC?</b>	<b>Custom List?</b>		
7439-96-5	Manganese	10	ug/L	REG	Y	Y	Yes		
<b>Product:</b> MIM2SE_L		<b>Workdef ID:</b> 1308792	<b>In Product Group?</b> No	<b>Group Name:</b>	<b>Group Reference:</b>				
<b>Method:</b> EPA 200.8					<b>Path:</b> Standard				
<b>Product Description:</b> 200.2/200.8 Selenium					<b>Product Reference:</b>				
<b>Samples:</b> 005, 006, 007					<b>Moisture Correction:</b> "As Received"				
<b>Parmname Check:</b> All parmnames scheduled properly									
<b>CAS #</b>	<b>Parmname</b>	<b>Client RDL or PQL &amp; Unit</b>	<b>Reporting Units</b>	<b>Parm Function</b>	<b>Included in Sample?</b>	<b>Included in QC?</b>	<b>Custom List?</b>		
7782-49-2	Selenium	5	ug/L	REG	Y	Y	Yes		

# GEL Laboratories LLC – Login Review Report

Report Date: 11-FEB-13  
 Work Order: 319074  
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Product: MIM2U\_L      Workdef ID: 1308794      In Product Group? No      Group Name:      Group Reference:  
 Method: EPA 200.8      Path: Standard  
 Product Description: 200.2/200.8 Uranium      Product Reference:  
 Samples: 003, 004, 005, 006, 007      Moisture Correction: "As Received"

Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
7440-61-1	Uranium	.3	ug/L	REG	Y	Y	Yes

Action	Product Name	Description	Samples
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Contingent Tests

**Login Requirements:**

Requirement	Include?	Comments
-------------	----------	----------

Peer Review by: \_\_\_\_\_ Work Order (SDG#), PO# Checked? \_\_\_\_\_ C of C signed in receiver location? \_\_\_\_\_

**Metals Fractional Narrative  
Energy Fuels Resources (DNMI)  
SDG 319074**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
319074001	MW-11_01232013
319074002	MW-14_01232013
319074003	MW-25_01222013
319074004	MW-26_01242013
319074005	MW-30_01232013
319074006	MW-35_01232013
319074007	MW-65_01232013
1202819033	Method Blank (MB) <b>ICP</b>
1202819034	Laboratory Control Sample (LCS)
1202819037	319074001(MW-11_01232013L) Serial Dilution (SD)
1202819035	319074001(MW-11_01232013D) Sample Duplicate (DUP)
1202819036	319074001(MW-11_01232013S) Matrix Spike (MS)
1202819028	Method Blank (MB) <b>ICP-MS</b>
1202819029	Laboratory Control Sample (LCS)
1202819032	319074003(MW-25_01222013L) Serial Dilution (SD)
1202819030	319074003(MW-25_01222013D) Sample Duplicate (DUP)
1202819031	319074003(MW-25_01222013S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

<b>Analytical Batch:</b>	1278875 and 1278873
<b>Prep Batch :</b>	1278874 and 1278872
<b>Standard Operating Procedures:</b>	GL-MA-E-013 REV# 21, GL-MA-E-016 REV# 9 and GL-MA-E-014 REV# 24
<b>Analytical Method:</b>	EPA 200.7 and EPA 200.8
<b>Prep Method :</b>	EPA 200.2

## **Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

### **System Configuration**

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

### **Calibration Information**

#### **Instrument Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

#### **ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

#### **Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

#### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

## **Quality Control (QC) Information**

### **Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

### **Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 319074001 (MW-11\_01232013)-ICP and 319074003 (MW-25\_01222013)-ICP-MS.

### **Matrix Spike (MS) Recovery Statement**

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

### **Duplicate Relative Percent Difference (RPD) Statement**

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

### **Serial Dilution % Difference Statement**

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

## **Technical Information**

### **Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

### **Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this

SDG did not require dilutions.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

Reviewer:   Date: 02/08/13

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 319074 GEL Work Order: 319074

### The Qualifiers in this report are defined as follows:

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the CRDL.
- U Metals--Analyte was analyzed for, but not detected above the greater of either the MDL or the CRDL.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Heather Shaffer.

Reviewed by

  02/08/13

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: February 8, 2013

Page 1 of 2

Energy Fuels Resources (USA), Inc.

225 Union Boulevard

Suite 600

Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 319074

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	1278873										
QC1202819030	319074003	DUP									
Selenium		U	5.00	U	5.00	ug/L	N/A		BAJ	02/01/13	05:0
Thallium			0.898		0.873	ug/L	2.82 ^	(+/-0.500)			
Uranium			5.97		5.99	ug/L	0.368	(0%-20%)			
QC1202819029	LCS										
Selenium	50.0				46.6	ug/L		93.2 (85%-115%)		02/01/13	04:3
Thallium	50.0				46.9	ug/L		93.8 (85%-115%)			
Uranium	50.0				48.0	ug/L		96 (85%-115%)			
QC1202819028	MB										
Selenium				U	5.00	ug/L				02/01/13	04:3
Thallium				U	0.500	ug/L					
Uranium				U	0.300	ug/L					
QC1202819031	319074003	MS									
Selenium	50.0	U	5.00		56.1	ug/L		112 (75%-125%)		02/01/13	05:0
Thallium	50.0		0.898		43.2	ug/L		84.6 (75%-125%)			
Uranium	50.0		5.97		50.7	ug/L		89.4 (75%-125%)			
QC1202819032	319074003	SDILT									
Selenium		U	7.50	U	7.50	ug/L	N/A	(0%-10%)		02/01/13	05:1
Thallium			0.898	U	2.25	ug/L	N/A	(0%-10%)			
Uranium			5.97		1.20	ug/L	.0502	(0%-10%)			
<b>Metals Analysis-ICP</b>											
Batch	1278875										
QC1202819035	319074001	DUP									
Manganese			115		115	ug/L	0.122	(0%-20%)	LS	01/29/13	14:5
QC1202819034	LCS										
Manganese	500				497	ug/L		99.3 (85%-115%)		01/29/13	14:4
QC1202819033	MB										
Manganese				U	10.0	ug/L				01/29/13	14:4
QC1202819036	319074001	MS									
Manganese	500		115		583	ug/L		93.7 (75%-125%)		01/29/13	14:5
QC1202819037	319074001	SDILT									
Manganese			115		22.4	ug/L	2.2	(0%-10%)		01/29/13	14:5

**Notes:**

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Workorder: 319074

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
B											
BD											
C											
D											
E											
F											
FB											
H											
K											
L											
M											
M											
N											
N/A											
N1											
ND											
NJ											
Q											
R											
U											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Radiochemistry Case Narrative  
Energy Fuels Resources (DNMI)  
SDG 319074**

**Method/Analysis Information**

**Product:** GFPC, Total Alpha Radium, Liquid  
**Analytical Method:** EPA 900.1 Modified  
**Analytical Batch Number:** 1279413

<b>Sample ID</b>	<b>Client ID</b>
319074006	MW-35_01232013
319074007	MW-65_01232013
1202820314	Method Blank (MB)
1202820315	319074006(MW-35_01232013) Sample Duplicate (DUP)
1202820316	319074006(MW-35_01232013) Matrix Spike (MS)
1202820317	319074006(MW-35_01232013) Matrix Spike Duplicate (MSD)
1202820318	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 14.

**Calibration Information:**

**Calibration Information**

All initial and continuing calibration requirements have been met.

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 319074006 (MW-35\_01232013).

**QC Information**

All of the QC samples meet the required acceptance limits with the following exceptions: The sample and the duplicate, 1202820315 (MW-35\_01232013) and 319074006 (MW-35\_01232013), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with value of 1.9668.

**Technical Information:**

**Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

Sample 1202820316 (MW-35\_01232013) was recounted due to low recovery. The recount is reported.

**Chemical Recoveries**

All chemical recoveries meet the required acceptance limits for this sample set.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

The matrix spike and matrix spike duplicate, 1202820316 (MW-35\_01232013) and 1202820317 (MW-35\_01232013), aliquots were reduced to conserve sample volume.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

## GEL LABORATORIES LLC

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### Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 319074 GEL Work Order: 319074

**The Qualifiers in this report are defined as follows:**

\* A quality control analyte recovery is outside of specified acceptance criteria.

\*\* Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the CRDL.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Kate Gellatly

Date: 06 FEB 2013

Title: Analyst I

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: February 6, 2013

Page 1 of 2

Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 319074

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	1279413										
QC1202820315	319074006 DUP										
Gross Radium Alpha		6.62		8.21	pCi/L	21.5*		(0% - 20%)	KDF1	02/02/13	16:1
	Uncertainty	+/-0.844		+/-0.931							
QC1202820318	LCS										
Gross Radium Alpha	555			439	pCi/L		79	(75%-125%)		02/02/13	16:1
	Uncertainty			+/-6.89							
QC1202820314	MB										
Gross Radium Alpha			U	-0.137	pCi/L					02/02/13	16:1
	Uncertainty			+/-0.158							
QC1202820316	319074006 MS										
Gross Radium Alpha	1120	6.62		897	pCi/L		79.8	(75%-125%)		02/03/13	12:4
	Uncertainty	+/-0.844		+/-11.8							
QC1202820317	319074006 MSD										
Gross Radium Alpha	1120	6.62		910	pCi/L	1.44	80.9	(0%-20%)		02/02/13	16:1
	Uncertainty	+/-0.844		+/-13.6							

Notes:

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- F Estimated Value
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Metals--The Matrix spike sample recovery is not within specified control limits

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 319074

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N/A	RPD or %Recovery limits do not apply.										
N1	See case narrative										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the CRDL.										
U	Metals--Analyte was analyzed for, but not detected above the greater of either the MDL or the CRDL.										
UI	Gamma Spectroscopy--Uncertain identification										
UJ	Gamma Spectroscopy--Uncertain identification										
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Page: \_\_\_\_\_ of \_\_\_\_\_  
 Project #: \_\_\_\_\_  
 GEL Quote #: \_\_\_\_\_  
 COC Number <sup>(1)</sup>: \_\_\_\_\_  
 PO Number: \_\_\_\_\_

# GEL Chain of Custody and Analytical Request

GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

GEL Work Order Number: \_\_\_\_\_

Client Name: E. H. H. Co. Inc. Phone #: 843-766-2201

Sample Analysis Requested <sup>(5)</sup> (Fill in the number of containers for each test)

Project/Site Name: Building #141 - 2013 Fax #: \_\_\_\_\_

Should this sample be considered:

Address: 2025 S. Hampton Blvd. #141H

Collected by: Tanya Holliday Send Results To: Tanya Holliday

Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code <sup>(2)</sup>	Field Filtered <sup>(3)</sup>	Sample Matrix <sup>(4)</sup>	Radioactive	TSCA Regulated	Total number of containers	Sample Analysis Requested					Preservative Type (6)	Comments Note: extra sample is required for sample specific QC	
									M	SE	ST	U	HA			
MW-11_01232013 ✓	1/23/13	1150	N	Y	GW	N		1	X							
MW-14_01232013 ✓	1/23/13	1000	N	Y	GW	N		1	X							
MW-25_01232013 ✓	1/23/13	1205	N	Y	GW	N		1		X						
MW-26_01232013 ✓	1/23/13	0845	N	Y	GW	N		1		X						
MW-32_01232013 ✓	1/23/13	1350	N	Y	GW	N		1		X	X					
MW-35_01232013	1/23/13	1330	N	Y	GW	N		2	X	X	X	X	X			
MW-35_01232013	1/23/13	1330	FD	Y	GW	N		2	X	X	X	X	X			

Requested: Normal / Rush: \_\_\_\_\_ Specify: \_\_\_\_\_ (Subject to Surchage) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Hazards: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone  
 Eastern Pacific  
 Central Other \_\_\_\_\_  
 Mountain

Chain of Custody Signatures					
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<u>Tanya Holliday</u>	<u>1/23/13</u>	<u>1150</u>			

Sample Shipping and Delivery Details	
GEL PM:	
Method of Shipment:	Date Shipped:
Airbill #:	
Airbill #:	

1.) Chain of Custody Number = Client Determined  
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite  
 3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.  
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).  
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only  
 Custody Seal Intact?  
 YES NO  
 Cooler Temp:  
 C

Tab F2

Laboratory Analytical Reports – Accelerated Monitoring

March 2013

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# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-001  
**Client Sample ID:** MW-11\_03202013  
**Collection Date:** 3/20/2013 1200h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/25/2013 1505h	3/27/2013 0814h	E200.8	0.0100	<b>0.164</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-002  
**Client Sample ID:** MW-14\_03202013  
**Collection Date:** 3/20/2013 1505h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/25/2013	1505h	3/27/2013	0924h	E200.8	0.0100	<b>2.11</b>	

463 West 3600 South  
Salt Lake City, UT 84115

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web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-003  
**Client Sample ID:** MW-25-03192013  
**Collection Date:** 3/19/2013 1235h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Cadmium	mg/L	3/25/2013	1505h	3/27/2013	0825h	E200.8	0.000500	<b>0.00140</b>	
Uranium	mg/L	3/25/2013	1505h	3/27/2013	2141h	E200.8	0.000300	<b>0.00568</b>	

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



## INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-004  
**Client Sample ID:** MW-26\_03202013  
**Collection Date:** 3/20/2013 0940h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

### Analytical Results

### DISSOLVED METALS

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Uranium	mg/L	3/25/2013	1505h	3/27/2013	2146h	E200.8	0.000300	<b>0.0690</b>	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-004  
**Client Sample ID:** MW-26\_03202013  
**Collection Date:** 3/20/2013 0940h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## **Analytical Results**

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Chloride	mg/L		3/23/2013 2020h	E300.0	10.0	<b>73.6</b>	
Nitrate/Nitrite (as N)	mg/L		3/27/2013 1227h	E353.2	0.100	<b>1.61</b>	

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Salt Lake City, UT 84115

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Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-004D  
**Client Sample ID:** MW-26\_03202013  
**Collection Date:** 3/20/2013 0940h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/22/2013 2226h

**Units:** µg/L

**Dilution Factor:** 10

**Method:** SW8260C

463 West 3600 South  
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Chloroform	67-66-3	10.0	1,340	~

Phone: (801) 263-8686

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	516	500.0	103	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	537	500.0	107	80-128	
Surr: Dibromofluoromethane	1868-53-7	520	500.0	104	80-124	
Surr: Toluene-d8	2037-26-5	518	500.0	104	77-129	

~ - The reporting limits were raised due to high analyte concentrations.

**Analyzed:** 3/22/2013 1441h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Methylene chloride	75-09-2	1.00	8.31	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	55.7	50.00	111	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	54.5	50.00	109	80-128	
Surr: Dibromofluoromethane	1868-53-7	55.8	50.00	112	80-124	
Surr: Toluene-d8	2037-26-5	52.0	50.00	104	77-129	

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

web: www.awal-labs.com

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-005  
**Client Sample ID:** MW-30\_03202013  
**Collection Date:** 3/20/2013 1100h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Selenium	mg/L	3/25/2013	1505h	3/27/2013	2152h	E200.8	0.00500	<b>0.0390</b>	
Uranium	mg/L	3/25/2013	1505h	3/27/2013	2152h	E200.8	0.000300	<b>0.00685</b>	

463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.

**Contact:** Garrin Palmer

**Project:** March Groundwater 2013

**Lab Sample ID:** 1303552-005

**Client Sample ID:** MW-30\_03202013

**Collection Date:** 3/20/2013 1100h

**Received Date:** 3/22/2013 1010h

## **Analytical Results**

<b>Compound</b>	<b>Units</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Method Used</b>	<b>Reporting Limit</b>	<b>Analytical Result</b>	<b>Qual</b>
Chloride	mg/L		3/23/2013 1009h	E300.0	50.0	<b>126</b>	
Nitrate/Nitrite (as N)	mg/L		3/27/2013 1231h	E353.2	2.00	<b>14.3</b>	

463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-006  
**Client Sample ID:** MW-31\_03192013  
**Collection Date:** 3/19/2013 1410h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

**Analytical Results**

**DISSOLVED METALS**

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Selenium	mg/L	3/25/2013 1505h	3/27/2013 2157h	E200.8	0.00500	<b>0.0818</b>	

463 West 3600 South  
Salt Lake City, UT 84115

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 Toll Free: (888) 263-8686  
 Fax: (801) 263-8687  
 e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-006  
**Client Sample ID:** MW-31\_03192013  
**Collection Date:** 3/19/2013 1410h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		3/23/2013 1133h	E300.0	50.0	<b>168</b>	
Nitrate/Nitrite (as N)	mg/L		3/27/2013 1232h	E353.2	2.00	<b>19.1</b>	
Sulfate	mg/L		3/23/2013 1133h	E300.0	50.0	<b>611</b>	
Total Dissolved Solids	mg/L		3/22/2013 1240h	SM2540C	20.0	<b>1,420</b>	

463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-008  
**Client Sample ID:** MW-35\_03192013  
**Collection Date:** 3/19/2013 1440h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

**Analytical Results**

**DISSOLVED METALS**

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/25/2013	1505h	3/27/2013	0900h	E200.8	0.0100	<b>0.246</b>	
Molybdenum	mg/L	3/25/2013	1505h	3/27/2013	0900h	E200.8	0.0100	< 0.0100	
Selenium	mg/L	3/25/2013	1505h	3/27/2013	2202h	E200.8	0.00500	<b>0.0226</b>	
Thallium	mg/L	3/25/2013	1505h	3/27/2013	2202h	E200.8	0.000500	<b>0.000505</b>	
Uranium	mg/L	3/25/2013	1505h	3/27/2013	2202h	E200.8	0.000300	<b>0.0221</b>	

463 West 3600 South  
Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: March 28, 2013

Company : Energy Fuels Resources (USA), Inc.  
Address : 225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228  
Contact: Ms. Kathy Weinel  
Project: White Mesa Mill GW

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Client Sample ID:	MW-35_03192013	Project:	DNMI00100
Sample ID:	322416001	Client ID:	DNMI001
Matrix:	Ground Water		
Collect Date:	19-MAR-13 14:40		
Receive Date:	22-MAR-13		
Collector:	Client		

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Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Total Alpha Radium, Liquid "As Received"												
Gross Radium Alpha		9.51	+/-0.940	0.892	1.00	pCi/L		KDF1	03/27/13	0751	1290657	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			96.0	(25%-125%)

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.



# INORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-007  
**Client Sample ID:** MW-65\_03202013  
**Collection Date:** 3/20/2013 1505h  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

## DISSOLVED METALS

Compound	Units	Date Prepared		Date Analyzed		Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	3/25/2013	1505h	3/27/2013	0929h	E200.8	0.0100	<b>2.10</b>	

463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



# ORGANIC ANALYTICAL REPORT

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Sample ID:** 1303552-009A  
**Client Sample ID:** Trip Blank  
**Collection Date:** 3/20/2013  
**Received Date:** 3/22/2013 1010h

**Contact:** Garrin Palmer

## Analytical Results

VOAs by GC/MS Method 8260C/5030C

**Analyzed:** 3/22/2013 1500h

**Units:** µg/L

**Dilution Factor:** 1

**Method:** SW8260C

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Chloroform	67-66-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	

Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4	17060-07-0	55.5	50.00	111	72-151	
Surr: 4-Bromofluorobenzene	460-00-4	53.9	50.00	108	80-128	
Surr: Dibromofluoromethane	1868-53-7	53.1	50.00	106	80-124	
Surr: Toluene-d8	2037-26-5	51.0	50.00	102	77-129	

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Fax: (801) 263-8687

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web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer



Garrin Palmer  
Energy Fuels Resources, Inc.  
6425 S. Hwy 191  
Blanding, UT 84511  
TEL: (435) 678-2221

RE: March Groundwater 2013

Dear Garrin Palmer:

Lab Set ID: 1303552

463 West 3600 South  
Salt Lake City, UT 84115

American West Analytical Laboratories received 9 sample(s) on 3/22/2013 for the analyses presented in the following report.

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

e-mail: [awal@awal-labs.com](mailto:awal@awal-labs.com)

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

web: [www.awal-labs.com](http://www.awal-labs.com)

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

**Jose G.  
Rocha**

Digitally signed by Jose G. Rocha  
DN: cn=Jose G. Rocha,  
o=American West Analytical  
Laboratories, ou=Quality  
Assurance Officer,  
email=jose@awal-labs.com,  
c=US  
Date: 2013.04.02 17:08:18  
-06'00'

Approved by:

Laboratory Director or designee



## SAMPLE SUMMARY

**Client:** Energy Fuels Resources, Inc.  
**Project:** March Groundwater 2013  
**Lab Set ID:** 1303552  
**Date Received:** 3/22/2013 1010h

**Contact:** Garrin Palmer

463 West 3600 South  
 Salt Lake City, UT 84115

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
 Laboratory Director

Jose Rocha  
 QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1303552-001A	MW-11_03202013	3/20/2013 1200h	Aqueous	ICPMS Metals, Dissolved
1303552-002A	MW-14_03202013	3/20/2013 1505h	Aqueous	ICPMS Metals, Dissolved
1303552-003A	MW-25-03192013	3/19/2013 1235h	Aqueous	ICPMS Metals, Dissolved
1303552-004A	MW-26_03202013	3/20/2013 0940h	Aqueous	ICPMS Metals, Dissolved
1303552-004B	MW-26_03202013	3/20/2013 0940h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303552-004C	MW-26_03202013	3/20/2013 0940h	Aqueous	Anions, E300.0
1303552-004D	MW-26_03202013	3/20/2013 0940h	Aqueous	VOA by GC/MS Method 8260C/5030C
1303552-005A	MW-30_03202013	3/20/2013 1100h	Aqueous	ICPMS Metals, Dissolved
1303552-005B	MW-30_03202013	3/20/2013 1100h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303552-005C	MW-30_03202013	3/20/2013 1100h	Aqueous	Anions, E300.0
1303552-006A	MW-31_03192013	3/19/2013 1410h	Aqueous	ICPMS Metals, Dissolved
1303552-006B	MW-31_03192013	3/19/2013 1410h	Aqueous	Nitrite/Nitrate (as N), E353.2
1303552-006C	MW-31_03192013	3/19/2013 1410h	Aqueous	Anions, E300.0
1303552-006D	MW-31_03192013	3/19/2013 1410h	Aqueous	Total Dissolved Solids, A2540C
1303552-007A	MW-65_03202013	3/20/2013 1505h	Aqueous	ICPMS Metals, Dissolved
1303552-008A	MW-35_03192013	3/19/2013 1440h	Aqueous	ICPMS Metals, Dissolved
1303552-009A	Trip Blank	3/20/2013	Aqueous	VOA by GC/MS Method 8260C/5030C



## Inorganic Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** March Groundwater 2013  
**Lab Set ID:** 1303552

---

463 West 3600 South  
Salt Lake City, UT 84115

### **Sample Receipt Information:**

**Date of Receipt:** 3/22/2013  
**Date(s) of Collection:** 3/19 & 3/20/2013  
**Sample Condition:** Intact  
**C-O-C Discrepancies:** None

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

**Holding Time and Preservation Requirements:** The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

web: www.awal-labs.com

**Preparation and Analysis Requirements:** The samples were analyzed following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Kyle F. Gross  
Laboratory Director

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, DUP:

Jose Rocha  
QA Officer

**Method Blanks (MB):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Samples (LCS):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicates (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exception: The MS percent recovery was outside of control limits on sulfate for sample 1303550-001B due to sample matrix interference.

**Duplicate (DUP):** The parameters that required a duplicate analysis had RPDs within the control limits.

**Corrective Action:** None required.



# Volatile Case Narrative

**Client:** Energy Fuels Resources, Inc.  
**Contact:** Garrin Palmer  
**Project:** March Groundwater 2013  
**Lab Set ID:** 1303552

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463 West 3600 South  
Salt Lake City, UT 84115

Phone: (801) 263-8686  
Toll Free: (888) 263-8686  
Fax: (801) 263-8687  
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## **Sample Receipt Information:**

<b>Date of Receipt:</b>	3/22/2013
<b>Date(s) of Collection:</b>	3/19 & 3/20/2013
<b>Sample Condition:</b>	Intact
<b>C-O-C Discrepancies:</b>	None
<b>Method:</b>	SW-846 8260C/5030C
<b>Analysis:</b>	Volatile Organic Compounds

**General Set Comments:** Multiple target analytes were observed above reporting limits.

**Holding Time and Preservation Requirements:** All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

**Analytical QC Requirements:** All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

**Batch QC Requirements:** MB, LCS, MS, MSD, RPD, and Surrogates:

**Method Blanks (MBs):** No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

**Laboratory Control Sample (LCSs):** All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

**Matrix Spike / Matrix Spike Duplicate (MS/MSD):** All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

**Surrogates:** All surrogate recoveries were within established limits.

**Corrective Action:** None required.



463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** ME

**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-24344	Cadmium	mg/L	E200.8	0.189	0.2000	0	94.4	85-115				3/27/2013 0753h
LCS-24344	Manganese	mg/L	E200.8	0.207	0.2000	0	103	85-115				3/27/2013 0753h
LCS-24344	Molybdenum	mg/L	E200.8	0.191	0.2000	0	95.4	85-115				3/27/2013 0753h
LCS-24344	Selenium	mg/L	E200.8	0.209	0.2000	0	104	85-115				3/27/2013 2053h
LCS-24344	Thallium	mg/L	E200.8	0.178	0.2000	0	89.2	85-115				3/27/2013 2053h
LCS-24344	Uranium	mg/L	E200.8	0.191	0.2000	0	95.6	85-115				3/27/2013 2053h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-24344	Cadmium	mg/L	E200.8	< 0.000500				-				3/27/2013 0747h
MB-24344	Manganese	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Molybdenum	mg/L	E200.8	< 0.0100				-				3/27/2013 0747h
MB-24344	Selenium	mg/L	E200.8	< 0.00500				-				3/27/2013 2048h
MB-24344	Thallium	mg/L	E200.8	< 0.000500				-				3/27/2013 2048h
MB-24344	Uranium	mg/L	E200.8	< 0.000300				-				3/27/2013 2048h



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001EMS	Cadmium	mg/L	E200.8	0.194	0.2000	0.0003000	97.1	75-125				3/27/2013 0803h
1303550-001EMS	Manganese	mg/L	E200.8	0.215	0.2000	0.008590	103	75-125				3/27/2013 0803h
1303550-001EMS	Molybdenum	mg/L	E200.8	0.204	0.2000	0.0008840	102	75-125				3/27/2013 0803h
1303550-001EMS	Selenium	mg/L	E200.8	0.230	0.2000	0.009071	110	75-125				3/27/2013 2115h
1303550-001EMS	Thallium	mg/L	E200.8	0.183	0.2000	0.0006260	91.0	75-125				3/27/2013 2115h
1303550-001EMS	Uranium	mg/L	E200.8	0.196	0.2000	0.01032	92.8	75-125				3/27/2013 2115h
1303552-008AMS	Cadmium	mg/L	E200.8	0.187	0.2000	0	93.7	75-125				3/27/2013 0905h
1303552-008AMS	Manganese	mg/L	E200.8	0.445	0.2000	0.2464	99.2	75-125				3/27/2013 0905h
1303552-008AMS	Molybdenum	mg/L	E200.8	0.194	0.2000	0.0005970	96.6	75-125				3/27/2013 0905h
1303552-008AMS	Selenium	mg/L	E200.8	0.237	0.2000	0.02255	107	75-125				3/27/2013 2208h
1303552-008AMS	Thallium	mg/L	E200.8	0.168	0.2000	0.0005050	83.6	75-125				3/27/2013 2208h
1303552-008AMS	Uranium	mg/L	E200.8	0.211	0.2000	0.02213	94.3	75-125				3/27/2013 2208h



463 West 3600 South

Salt Lake City, UT 84115

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** ME  
**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001EMSD	Cadmium	mg/L	E200.8	0.196	0.2000	0.0003000	97.9	75-125	0.881	20		3/27/2013 0809h
1303550-001EMSD	Manganese	mg/L	E200.8	0.216	0.2000	0.008590	104	75-125	0.218	20		3/27/2013 0809h
1303550-001EMSD	Molybdenum	mg/L	E200.8	0.201	0.2000	0.0008840	100	75-125	1.41	20		3/27/2013 0809h
1303550-001EMSD	Selenium	mg/L	E200.8	0.227	0.2000	0.009071	109	75-125	1.31	20		3/27/2013 2120h
1303550-001EMSD	Thallium	mg/L	E200.8	0.174	0.2000	0.0006260	86.9	75-125	4.61	20		3/27/2013 2120h
1303550-001EMSD	Uranium	mg/L	E200.8	0.198	0.2000	0.01032	93.8	75-125	0.932	20		3/27/2013 2120h
1303552-008AMSD	Cadmium	mg/L	E200.8	0.188	0.2000	0	93.8	75-125	0.072	20		3/27/2013 0910h
1303552-008AMSD	Manganese	mg/L	E200.8	0.442	0.2000	0.2464	97.6	75-125	0.722	20		3/27/2013 0910h
1303552-008AMSD	Molybdenum	mg/L	E200.8	0.193	0.2000	0.0005970	96.0	75-125	0.696	20		3/27/2013 0910h
1303552-008AMSD	Selenium	mg/L	E200.8	0.232	0.2000	0.02255	105	75-125	1.86	20		3/27/2013 2213h
1303552-008AMSD	Thallium	mg/L	E200.8	0.166	0.2000	0.0005050	82.8	75-125	0.943	20		3/27/2013 2213h
1303552-008AMSD	Uranium	mg/L	E200.8	0.208	0.2000	0.02213	92.9	75-125	1.39	20		3/27/2013 2213h



463 West 3600 South

Salt Lake City, UT 84115

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross  
Laboratory Director

Jose Rocha  
QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** DUP

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001CDUP	Total Dissolved Solids	mg/L	SM2540C	3,760		3,772		-	0.319	5		3/22/2013 1240h
1303553-001ADUP	Total Dissolved Solids	mg/L	SM2540C	428		436.0		-	1.85	5		3/22/2013 1240h



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QA Officer

## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** WC

**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS-R51863	Chloride	mg/L	E300.0	4.79	5.000	0	95.9	90-110				3/22/2013 1933h
LCS-R51863	Sulfate	mg/L	E300.0	4.96	5.000	0	99.3	90-110				3/22/2013 1933h
LCS-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	1.07	1.000	0	107	90-110				3/27/2013 1221h
LCS-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	1.07	1.000	0	107	90-110				3/27/2013 1221h
LCS-R51899	Total Dissolved Solids	mg/L	SM2540C	186	205.0	0	90.7	80-120				3/22/2013 1240h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** WC

**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB-R51863	Chloride	mg/L	E300.0	< 0.100				-				3/22/2013 1905h
MB-R51863	Sulfate	mg/L	E300.0	< 0.750				-				3/22/2013 1905h
MB-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.0100				-				3/27/2013 1220h
MB-R52019	Nitrate/Nitrite (as N)	mg/L	E353.2	< 0.100				-				3/27/2013 1220h
MB-R51899	Total Dissolved Solids	mg/L	SM2540C	< 10.0				-				3/22/2013 1240h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** WC  
**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001BMS	Chloride	mg/L	E300.0	24,100	25,000	64.98	96.3	90-110				3/23/2013 0844h
1303550-001BMS	Sulfate	mg/L	E300.0	31,900	25,000	2,131	119	90-110				3/23/2013 0844h
1303552-006CMS	Chloride	mg/L	E300.0	2,660	2,500	167.8	99.5	90-110				3/23/2013 1202h
1303552-006CMS	Sulfate	mg/L	E300.0	3,230	2,500	611.1	105	90-110				3/23/2013 1202h
1303550-001DMS	Nitrate/Nitrite (as N)	mg/L	E353.2	1.82	1.000	0.7749	104	90-110				3/27/2013 1224h
1303552-004BMS	Nitrate/Nitrite (as N)	mg/L	E353.2	3.70	2.000	1.606	105	90-110				3/27/2013 1228h

<sup>1</sup> - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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Salt Lake City, UT 84115

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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** WC

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001BMSD	Chloride	mg/L	E300.0	24,400	25,000	64.98	97.5	90-110	1.22	20		3/23/2013 0912h
1303550-001BMSD	Sulfate	mg/L	E300.0	28,800	25,000	2,131	107	90-110	10.2	20		3/23/2013 0912h
1303552-006CMSD	Chloride	mg/L	E300.0	2,590	2,500	167.8	96.9	90-110	2.48	20		3/23/2013 1230h
1303552-006CMSD	Sulfate	mg/L	E300.0	3,060	2,500	611.1	97.8	90-110	5.56	20		3/23/2013 1230h
1303550-001DMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	1.84	1.000	0.7749	106	90-110	1.08	10		3/27/2013 1225h
1303552-004BMSD	Nitrate/Nitrite (as N)	mg/L	E353.2	3.70	2.000	1.606	105	90-110	0.0594	10		3/27/2013 1229h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.  
**Lab Set ID:** 1303552  
**Project:** March Groundwater 2013

**Contact:** Garrin Palmer  
**Dept:** MSVOA  
**QC Type:** LCS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
LCS VOC 032213A	Chloroform	µg/L	SW8260C	23.9	20.00	0	120	67-132				3/22/2013 0646h
LCS VOC 032213A	Methylene chloride	µg/L	SW8260C	22.8	20.00	0	114	32-185				3/22/2013 0646h
LCS VOC 032213A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	46.6	50.00		93.2	76-138				3/22/2013 0646h
LCS VOC 032213A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.2	50.00		104	77-121				3/22/2013 0646h
LCS VOC 032213A	Surr: Dibromofluoromethane	%REC	SW8260C	50.6	50.00		101	67-128				3/22/2013 0646h
LCS VOC 032213A	Surr: Toluene-d8	%REC	SW8260C	52.5	50.00		105	81-135				3/22/2013 0646h
LCS VOC 032213B	Chloroform	µg/L	SW8260C	24.8	20.00	0	124	67-132				3/22/2013 1819h
LCS VOC 032213B	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	52.1	50.00		104	76-138				3/22/2013 1819h
LCS VOC 032213B	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.3	50.00		105	77-121				3/22/2013 1819h
LCS VOC 032213B	Surr: Dibromofluoromethane	%REC	SW8260C	53.6	50.00		107	67-128				3/22/2013 1819h
LCS VOC 032213B	Surr: Toluene-d8	%REC	SW8260C	51.8	50.00		104	81-135				3/22/2013 1819h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** MSVOA

**QC Type:** MBLK

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
MB VOC 032213A	Chloroform	µg/L	SW8260C	< 1.00								3/22/2013 0724h
MB VOC 032213A	Methylene chloride	µg/L	SW8260C	< 1.00								3/22/2013 0724h
MB VOC 032213A	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	48.2	50.00		96.5	76-138				3/22/2013 0724h
MB VOC 032213A	Surr: 4-Bromofluorobenzene	%REC	SW8260C	53.4	50.00		107	77-121				3/22/2013 0724h
MB VOC 032213A	Surr: Dibromofluoromethane	%REC	SW8260C	49.4	50.00		98.8	67-128				3/22/2013 0724h
MB VOC 032213A	Surr: Toluene-d8	%REC	SW8260C	51.9	50.00		104	81-135				3/22/2013 0724h
MB VOC 032213B	Chloroform	µg/L	SW8260C	< 2.00								3/22/2013 1857h
MB VOC 032213B	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	54.3	50.00		109	76-138				3/22/2013 1857h
MB VOC 032213B	Surr: 4-Bromofluorobenzene	%REC	SW8260C	54.8	50.00		110	77-121				3/22/2013 1857h
MB VOC 032213B	Surr: Dibromofluoromethane	%REC	SW8260C	52.9	50.00		106	67-128				3/22/2013 1857h
MB VOC 032213B	Surr: Toluene-d8	%REC	SW8260C	51.6	50.00		103	81-135				3/22/2013 1857h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** MSVOA

**QC Type:** MS

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001AMS	Chloroform	µg/L	SW8260C	26.0	20.00	0	130	50-146				3/22/2013 1519h
1303550-001AMS	Methylene chloride	µg/L	SW8260C	26.9	20.00	0	134	30-192				3/22/2013 1519h
1303550-001AMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	56.2	50.00		112	72-151				3/22/2013 1519h
1303550-001AMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	52.1	50.00		104	80-128				3/22/2013 1519h
1303550-001AMS	Surr: Dibromofluoromethane	%REC	SW8260C	55.1	50.00		110	80-124				3/22/2013 1519h
1303550-001AMS	Surr: Toluene-d8	%REC	SW8260C	51.0	50.00		102	77-129				3/22/2013 1519h
1303552-004DMS	Chloroform	µg/L	SW8260C	1,620	200.0	1,461	81.8	50-146				3/22/2013 2245h
1303552-004DMS	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	515	500.0		103	72-151				3/22/2013 2245h
1303552-004DMS	Surr: 4-Bromofluorobenzene	%REC	SW8260C	519	500.0		104	80-128				3/22/2013 2245h
1303552-004DMS	Surr: Dibromofluoromethane	%REC	SW8260C	530	500.0		106	80-124				3/22/2013 2245h
1303552-004DMS	Surr: Toluene-d8	%REC	SW8260C	516	500.0		103	77-129				3/22/2013 2245h



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## QC SUMMARY REPORT

**Client:** Energy Fuels Resources, Inc.

**Lab Set ID:** 1303552

**Project:** March Groundwater 2013

**Contact:** Garrin Palmer

**Dept:** MSVOA

**QC Type:** MSD

Sample ID	Analyte	Units	Method	Result	Amount Spiked	Original Amount	%REC	Limits	%RPD	RPD Limit	Qual	Date Analyzed
1303550-001AMSD	Chloroform	µg/L	SW8260C	25.6	20.00	0	128	50-146	1.28	25		3/22/2013 1538h
1303550-001AMSD	Methylene chloride	µg/L	SW8260C	26.6	20.00	0	133	30-192	1.08	25		3/22/2013 1538h
1303550-001AMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	55.6	50.00		111	72-151				3/22/2013 1538h
1303550-001AMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	50.9	50.00		102	80-128				3/22/2013 1538h
1303550-001AMSD	Surr: Dibromofluoromethane	%REC	SW8260C	54.9	50.00		110	80-124				3/22/2013 1538h
1303550-001AMSD	Surr: Toluene-d8	%REC	SW8260C	50.8	50.00		102	77-129				3/22/2013 1538h
1303552-004DMSD	Chloroform	µg/L	SW8260C	1,570	200.0	1,461	55.9	50-146	3.24	25		3/22/2013 2304h
1303552-004DMSD	Surr: 1,2-Dichloroethane-d4	%REC	SW8260C	522	500.0		104	72-151				3/22/2013 2304h
1303552-004DMSD	Surr: 4-Bromofluorobenzene	%REC	SW8260C	521	500.0		104	80-128				3/22/2013 2304h
1303552-004DMSD	Surr: Dibromofluoromethane	%REC	SW8260C	534	500.0		107	80-124				3/22/2013 2304h
1303552-004DMSD	Surr: Toluene-d8	%REC	SW8260C	510	500.0		102	77-129				3/22/2013 2304h

# American West Analytical Laboratories

UL  
Denison

## WORK ORDER Summary

Work Order: **1303552** Page 1 of 2

Due Date: 4/2/2013

**Client:** Energy Fuels Resources, Inc.

**Client ID:** DEN100

**Contact:** Garrin Palmer

**Project:** March Groundwater 2013

**QC Level:** III

WO Type: Project

**Comments:** No Hard Copies (UL). PA Rush. QC 3 & Summary. Project specific DL's: see COC. Run 200.8 on the Agilent. EDD-Denison and EIM-Locus. Email 

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303552-001A	MW-11_03202013	3/20/2013 1200h	3/22/2013 1010h	200.8-DIS <i>1 SEL Analytes: MN</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-002A	MW-14_03202013	3/20/2013 1505h	3/22/2013 1010h	200.8-DIS <i>1 SEL Analytes: MN</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-003A	MW-25-03192013	3/19/2013 1235h	3/22/2013 1010h	200.8-DIS <i>2 SEL Analytes: CD U</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-004A	MW-26_03202013	3/20/2013 0940h	3/22/2013 1010h	200.8-DIS <i>1 SEL Analytes: U</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-004B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	DF - no2/no3	
1303552-004C				300.0-W <i>1 SEL Analytes: CL</i>		<input checked="" type="checkbox"/>	DF - cl	
1303552-004D				8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 2 / # of Surr: 4</i>		<input checked="" type="checkbox"/>	VOCFridge	3
1303552-005A	MW-30_03202013	3/20/2013 1100h	3/22/2013 1010h	200.8-DIS <i>2 SEL Analytes: SE U</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-005B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	DF - no2/no3	
1303552-005C				300.0-W <i>1 SEL Analytes: CL</i>		<input checked="" type="checkbox"/>	DF - cl	
1303552-006A	MW-31_03192013	3/19/2013 1410h	3/22/2013 1010h	200.8-DIS <i>1 SEL Analytes: SE</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-006B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	DF - no2/no3	
1303552-006C				300.0-W <i>2 SEL Analytes: CL SO4</i>		<input checked="" type="checkbox"/>	DF - cl/so4	

# WORK ORDER Summary

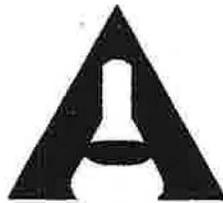
Work Order: **1303552** Page 2 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 4/2/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1303552-006D	MW-31_03192013	3/19/2013 1410h	3/22/2013 1010h	TDS-W-2540C <i>1 SEL Analytes: TDS</i>	Aqueous	<input checked="" type="checkbox"/>	ww - tds	1
1303552-007A	MW-65_03202013	3/20/2013 1505h	3/22/2013 1010h	200.8-DIS <i>1 SEL Analytes: MN</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-008A	MW-35_03192013	3/19/2013 1440h	3/22/2013 1010h	200.8-DIS <i>5 SEL Analytes: MN MO SE TL U</i>	Aqueous	<input checked="" type="checkbox"/>	DIS MET	1
				200.8-DIS-PR		<input type="checkbox"/>	DIS MET	
1303552-009A	Trip Blank	3/20/2013	3/22/2013 1010h	8260-W <i>Test Group: 8260-W-Custom; # of Analytes: 2 / # of Surr: 4</i>	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3

Client Energy Fuels  
 Address 6425 S Hwy 191  
Blanding UT 84511  
City State Zip  
 Phone 435 678 2221 Fax \_\_\_\_\_  
 Contact Garrin Palmer  
 E-mail gpalmer@energyfuels.com  
 Project Name March Groundwater 2013  
 Project Number/P.O.# \_\_\_\_\_  
 Sampler Name Tanner Holliday



AMERICAN WEST  
 ANALYTICAL LABORATORIES  
 463 West 3600 South  
 Salt Lake City, Utah 84115  
 (801) 263-8686  
 (888) 263-8686  
 Fax (801) 263-8687  
 Email: awal@awal-labs.com

CHAIN OF CUSTODY

Lab Sample Set # 1303552  
 Page \_\_\_\_\_ of \_\_\_\_\_

Turn Around Time (Circle One)

1 day 2 day 3 day 4 day 5 day Standard

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED											QC LEVEL			COMMENTS							
				Manganese	Uranium	Cadmium	Nitrate + Nitrite	TDS	Sulfate	chloroform + Dichloromethane	Chloride	Selenium	Thallium	Molybdenum	1	2	2+								
MW-11_03202013	3/20/13 1200	W	1	X																					
MW-14_03202013	3/20/13 1505	W	1	X																					
MW-25_03192013	3/19/13 1235	W	1		X	X																			
MW-26_03202013	3/20/13 0940	W	6		X	X				X	X														
MW-30_03202013	3/20/13 1100	W	3		X	X						X	X												
MW-31_03192013	3/19/13 1410	W	3				X	X	X			X	X												
MW-65_03202013	3/20/13 1505	W	1	X																					
MW-35_03192013	3/19/13 1440	W	1	X	X									X	X										
Trip Blank	3/20/13	U									X														
Temp Blank	3/21/13	U																							

LABORATORY USE ONLY	
SAMPLES WERE:	
1 Shipped for hand delivered	Notes: Fed - X
2 Ambient or Chilled	Notes: Chilled
3 Temperature	1.0
4 Received Broken/Leaking (Improperly Sealed)	Y N
5 Properly Preserved	Y N
Checked at Bench	Y N
6 Received Within Holding Times	Y N

Relinquished By: Signature <u>Tanner Holliday</u>	Date <u>3/21/13</u>	Received By: Signature	Date
PRINT NAME <u>Tanner Holliday</u>	Time <u>1100</u>	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature <u>[Signature]</u>	Date <u>3/21/13</u>
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:  
All ~~the~~ Heavy Metals were Field Filtered

COC Tape Was:	
1 Present on Outer Package	Y N NA
2 Unbroken on Outer Package	Y N NA
3 Present on Sample	Y N NA
4 Unbroken on Sample	Y N NA
Discrepancies Between Sample Labels and COC Record?	
Y N	N

Table 3 – GEL Groundwater, Tailings Impoundment, and Seeps and Springs Sampling

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
<b>Heavy Metals</b>					
Arsenic	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Beryllium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cadmium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Chromium	E200.7 or E200.8	25 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Cobalt	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Copper	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Iron	E200.7 or E200.8	30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Lead	E200.7 or E200.8	1.0 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Manganese	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Mercury	E 245.1 or E200.7 or E200.8	0.50 µg/L	28 days	HNO <sub>3</sub> to pH<2	None
Molybdenum	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Nickel	E200.7 or E200.8	20 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Selenium	E200.7 or E200.8	5 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Silver	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Thallium	E200.7 or E200.8	0.50 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Tin	E200.7 or E200.8	100 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Uranium	E200.7 or E200.8	0.30 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Vanadium	E200.7 or E200.8	15 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Zinc	E200.7 or E200.8	10 µg/L	6 months	HNO <sub>3</sub> to pH<2	None
Sodium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Potassium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Magnesium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
Calcium	E200.7	0.5 mg/L	6 months	HNO <sub>3</sub> to pH<2	None
<b>Radiologics</b>					
Gross Alpha	E 900.0 or E900.1	1.0 pCi/L	6 months	HNO <sub>3</sub> to pH<2	None

-RW 2/27/2013

Table 4 Fee Schedule

Analyte/ Group	Cost per Sample
Full Suite Metals	
Partial Suite Metals (cost per individual metal)	
Gross alpha	

\*\* - per email from Kathy Weinel 3/27/13 -RW

Run ION BALANCE when the full metals suite has been requested, per email from Kathy Weinel 3/27/13

**Ion Balance to include:**

- Total Anions, Measured
- Total Cations, Measured
- TDS Ratio, Measured/Calculated
- TDS, Calculated

-RW 3/27/13

Preservation Check Sheet

**Sample Set Extension and pH**

Bottle Type	Preservative	All OK	Except -001	Except -002	Except -003	Except -004	Except -005	Except -006	Except -007	Except -008	Except						
Ammonia	pH <2 H <sub>2</sub> SO <sub>4</sub>																
COD	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Cyanide	PH >12 NaOH																
Metals	pH <2 HNO <sub>3</sub>		Yes														
NO <sub>2</sub> & NO <sub>3</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>					Yes	Yes	Yes									
Nutrients	pH <2 H <sub>2</sub> SO <sub>4</sub>																
O & G	pH <2 HCL																
Phenols	pH <2 H <sub>2</sub> SO <sub>4</sub>																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TOC	pH <2 H <sub>3</sub> PO <sub>4</sub>																
TOX	pH <2 H <sub>2</sub> SO <sub>4</sub>																
T PO <sub>4</sub>	pH <2 H <sub>2</sub> SO <sub>4</sub>																
TPH	pH <2 HCL																

- Procedure:
- 1) Pour a small amount of sample in the sample lid
  - 2) Pour sample from Lid gently over wide range pH paper
  - 3) **Do Not** dip the pH paper in the sample bottle or lid
  - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
  - 5) Flag COC, notify client if requested
  - 6) Place client conversation on COC
  - 7) Samples may be adjusted

Frequency: All samples requiring preservation



April 10, 2013

Ms. Kathy Weinel  
Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado 80228

Re: White Mesa Mill GW  
Work Order: 322416

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 22, 2013. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer  
Project Manager

Purchase Order: DW16138  
Enclosures



**Receipt Narrative  
for  
Energy Fuels Resources (USA), Inc.  
SDG: 322416**

**April 10, 2013**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary:**

**Sample receipt:** The sample arrived at GEL Laboratories LLC, Charleston, South Carolina on March 22, 2013 for analysis. The sample was delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

**Sample Identification:** The laboratory received the following sample:

<u>Laboratory ID</u>	<u>Client ID</u>
322416001	MW-35_03192013

**Case Narrative:**

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

*Heather Shaffer*

Heather Shaffer  
Project Manager





SAMPLE RECEIPT & REVIEW FORM

Client: <u>DMM</u>		SDG/AR/COC/Work Order: <u>32246</u>
Received By: <u>A. Taylor</u>		Date Received: <u>032213</u>
Suspected Hazard Information	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0cpm</u>
Classified Radioactive II or III by RSO?	<input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?	<input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?	<input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?	<input checked="" type="checkbox"/>	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Ice bags Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius <u>16</u>
2a Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>0152446</u> Secondary Temperature Device Serial # (If Applicable):
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and containers affected:
7 Are Encore containers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's affected:
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14 Carrier and tracking number.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other <u>8015 5301 8074</u>

Comments (Use Continuation Form if needed):

11      032213      1

# GEL Laboratories LLC – Login Review Report

Report Date: 10-APR-13  
 Work Order: 322416  
 Page 1 of 2

GEL Work Order/SDG: 322416      March GW 2013  
 Client SDG:                    322416  
 Project Manager:            Heather Shaffer  
 Project Name:                DNMI00100 White Mesa Mill GW  
 Purchase Order:            DW16138  
 Package Level:              LEVEL3  
 EDD Format:                  EIM\_DNMI

Work Order Due Date: 12-APR-13  
 Package Due Date:    10-APR-13  
 EDD Due Date:        12-APR-13  
 Due Date:              12-APR-13  
 HXS1

Collector: C  
 Prelogin #: 20130301747  
 Project Workdef ID: 1294356  
 SDG Status: Closed  
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
322416001	MW-35_03192013		19-MAR-13 14:40	22-MAR-13 09:10	-2	1	GROUND WATER		21		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 MW-35_03192013	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha			Cooler Seal Undisturbed Temperature (C)	y 16

Product: GFCTORAL      Workdef ID: 1297250      In Product Group? No      Group Name:      Group Reference:  
 Method: EPA 900.1 Modified      Path: Standard  
 Product Description: GFPC, Total Alpha Radium, Liquid      Product Reference: Gross Alpha  
 Samples: 001      Moisture Correction: "As Received"  
 Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	Yes

Action	Product Name	Description	Samples
--------	--------------	-------------	---------

Contingent Tests

**Login Requirements:**

Requirement	Include?	Comments
-------------	----------	----------

# GEL Laboratories LLC – Login Review Report

Report Date: 10-APR-13

Work Order: 322416

Page 2 of 2

Peer Review by: \_\_\_\_\_ Work Order (SDG#), PO# Checked? \_\_\_\_\_ C of C signed in receiver location? \_\_\_\_\_

**Radiochemistry Case Narrative  
Energy Fuels Resources (DNMI)  
SDG 322416**

**Method/Analysis Information**

**Product:** GFPC, Total Alpha Radium, Liquid  
Analytical Method: EPA 900.1 Modified  
Analytical Batch Number: 1290657

<b>Sample ID</b>	<b>Client ID</b>
322416001	MW-35_03192013
1202847823	Method Blank (MB)
1202847824	322413002(MW-19_03132013) Sample Duplicate (DUP)
1202847825	322413002(MW-19_03132013) Matrix Spike (MS)
1202847826	322413002(MW-19_03132013) Matrix Spike Duplicate (MSD)
1202847827	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 15.

**Calibration Information:**

**Calibration Information**

All initial and continuing calibration requirements have been met.

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 322413002 (MW-19\_03132013).

**QC Information**

All of the QC samples met the required acceptance limits.

**Technical Information:**

**Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

Sample 1202847824 (MW-19\_03132013) was recounted to decrease uncertainty. The recount is reported.

**Chemical Recoveries**

All chemical recoveries meet the required acceptance limits for this sample set.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

The matrix spike and matrix spike duplicate, 1202847825 (MW-19\_03132013) and 1202847826 (MW-19\_03132013), aliquots were reduced to conserve sample volume.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

## GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

### Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 322416 GEL Work Order: 322416

**The Qualifiers in this report are defined as follows:**

\* A quality control analyte recovery is outside of specified acceptance criteria

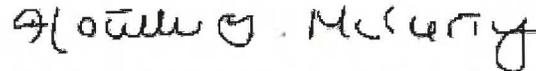
\*\* Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the CRDL.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** 

**Name:** Heather McCarty

**Date:** 28 MAR 2013

**Title:** Analyst II

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: March 28, 2013

Page 1 of 2

Energy Fuels Resources (USA), Inc.  
225 Union Boulevard  
Suite 600  
Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 322416

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	1290657										
QC1202847824	322413002	DUP									
Gross Radium Alpha		1.11		1.59	pCi/L	35.4		(0% - 100%)	KDF1	03/27/13	10:3
	Uncertainty	+/-0.261		+/-0.294							
QC1202847827	LCS										
Gross Radium Alpha	555			482	pCi/L		86.9	(75%-125%)		03/27/13	07:5
	Uncertainty			+/-6.57							
QC1202847823	MB										
Gross Radium Alpha			U	0.164	pCi/L					03/27/13	07:5
	Uncertainty			+/-0.232							
QC1202847825	322413002	MS									
Gross Radium Alpha	1120	1.11		1050	pCi/L		93.6	(75%-125%)		03/27/13	07:5
	Uncertainty	+/-0.261		+/-14.3							
QC1202847826	322413002	MSD									
Gross Radium Alpha	1120	1.11		948	pCi/L	9.99	84.7	(0%-20%)		03/27/13	07:5
	Uncertainty	+/-0.261		+/-12.7							

Notes:

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- NI See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier



Tab G

Quality Assurance and Data Validation Tables

G-1A: Routine Field Data QA/QC Evaluation

Well	Sample Date	Time Req'd for 2 Casings	Time Pumped (min)	Amount Sufficient?	Conductance		RPD(%)	pH		RPD(%)	Temp (°C)		RPD(%)	Redox Potential (Eh)		RPD(%)	Turbidity (NTU)		>5 NTU	RPD(%)
MW-1	3/12/2013	181.93	250	Y	1791	1797	0.33	6.76	6.77	0.15	14.35	14.36	0.07	285	284	0.35	5.20	5.1	Y	1.94
MW-2	3/5/2013	114.04	120	Y	3652	3658	0.16	6.98	6.99	0.14	14.34	14.33	0.07	497	497	0.00	0	0	N	0.00
MW-3	3/12/2013	48.65	70	Y	5535	5537	0.04	6.19	6.20	0.16	14.37	14.34	0.21	530	528	0.38	1.0	1.0	N	0.00
MW-3A	3/12/2013	62.21	55	Pumped dry	6233	6216	0.27	6.86	6.84	0.29	15.01	15.06	0.33	NM	NM	NC	NM	NM	NM	NC
MW-5	3/11/2013	192.89	210	Y	2915	2919	0.14	7.39	7.39	0.00	14.39	14.38	0.07	326	326	0.00	1.8	1.7	N	5.71
MW-11	2/20/2013	259.09	260	Y	2823	2831	0.28	7.47	7.46	0.13	13.86	13.93	0.50	242	235	2.94	19	19	Y	0.00
MW-12	3/6/2013	132.10	135	Y	4128	4120	0.19	6.56	6.56	0.00	14.85	14.86	0.07	450	459	1.98	1.8	1.8	N	0.00
MW-14	2/26/2013	152.26	160	Y	3823	3818	0.13	6.53	6.52	0.15	13.96	13.94	0.14	459	459	0.00	1.4	1.4	N	0.00
MW-15	3/5/2013	183.32	195	Y	4194	4195	0.02	6.74	6.75	0.15	14.51	14.43	0.55	485	485	0.00	1.6	1.7	N	6.06
MW-18	2/25/2013	383.55	390	Y	3097	3125	0.90	6.35	6.35	0.00	14.12	14.10	0.14	399	399	0.00	0	0	N	0.00
MW-19	3/13/2013	559.71	575	Y	1727	1727	0.00	6.50	6.50	0.00	14.44	14.42	0.14	397	399	0.50	1.5	1.6	N	6.45
MW-23	3/11/2013	114.85	130	Y	3779	3775	0.11	6.37	6.37	0.00	16.23	16.22	0.06	514	514	0.00	9.2	9.4	Y	2.15
MW-24	3/13/2013	39.89	39	Pumped dry	4405	4481	1.71	6.26	6.29	0.48	13.01	12.94	0.54	NM	NM	NC	NM	NM	NM	NC
MW-25	2/20/2013	254.88	270	Y	3171	3179	0.25	6.62	6.62	0.00	13.88	13.91	0.22	380	380	0.00	3.5	3.7	N	5.56
MW-26	2/20/2013	Continuously pumped well			3312		NC	6.71		NC	13.35		NC	381		NC	1.0		N	NC
MW-27	2/25/2013	260.59	300	Y	1556	1557	0.06	7.03	7.03	0.00	14.43	14.45	0.14	444	444	0.00	0	0	N	0.00
MW-28	3/5/2013	202.52	245	Y	3878	3883	0.13	5.98	6.00	0.33	14.22	14.24	0.14	469	468	0.21	9.7	9.6	Y	1.04
MW-29	3/5/2013	151.78	160	Y	4568	4567	0.02	6.37	6.36	0.16	14.30	14.31	0.07	306	304	0.66	23.9	23.3	Y	2.54
MW-30	2/26/2013	209.38	240	Y	2003	2004	0.05	6.93	6.93	0.00	13.87	13.88	0.07	374	372	0.54	0	0	N	0.00
MW-31	2/19/2013	377.35	380	Y	1931	1932	0.05	7.31	7.32	0.14	13.96	13.97	0.07	356	357	0.28	48	49	Y	2.06
MW-32	2/19/2013	353.28	360	Y	3748	3745	0.08	6.52	6.52	0.00	13.96	13.95	0.07	289	289	0.00	55	55.8	Y	1.44
MW-35	2/26/2013	73.42	75	Y	4073	4071	0.05	6.68	6.68	0.00	13.52	13.55	0.22	348	346	0.58	0	0	N	0.00
MW-36	2/26/2013	67.10	70	Y	4841	4840	0.02	6.85	6.85	0.00	13.59	13.60	0.07	454	456	0.44	3.3	3.3	N	0.00
MW-37	3/20/2013	NA	NA		4393	4389	0.09	6.88	6.86	0.29	13.03	13.10	0.54	NM	NM	NC	NM	NM	NM	NC

The QAP states that turbidity should be less than 5 Nephelometric Turbidity Units ("NTU") prior to sampling unless the well is characterized by water that has a higher turbidity. The QAP does not require that turbidity measurements be less than 5 NTU prior to sampling. As such, the noted observations regarding turbidity measurements less than 5 NTU are included for information purposes only.

MW-26 is a continuously pumped well. Per the QAP, only one set of parameters are required to be collected from continuously pumped wells.

Well was purged dry.

N/A = The amount of water in the well was insufficient to pump. The pump was not able to operate due to the minimal amount of water. The well was purged and sampled with a bailer.

NC = Not calculated.

NM = Not Measured. The QAP does not require the measurement of redox potential or turbidity in wells that were purged to dryness.

G-1B: Accelerated Field Data QA/QC Evaluation

Well	Sample Date	Time Req'd for 2 Casings	Time Pumped (min)	Amount Sufficient?	Conductance		RPD(%)	pH		RPD(%)	Temp (°C)		RPD(%)	Redox Potential (Eh)		RPD(%)	Turbidity (NTU)		<5 (NTU)	RPD(%)
<b>Accelerated January Monthly</b>																				
MW-11	1/23/2013	254.0	265	Y	2914	2912	0.07	7.45	7.45	0.00	13.92	13.73	1.37	153	147	4.00	0	0	Y	0.00
MW-14	1/23/2013	149.3	150	Y	4007	4011	0.10	6.48	6.48	0.00	14.10	14.10	0.00	449	446	0.67	0	0	Y	0.00
MW-25	1/22/2013	250.4	255	Y	3310	3308	0.06	6.63	6.65	0.30	14.30	14.32	0.14	404	399	1.25	0	0	Y	0.00
MW-26	1/24/2013	Continuously pumped well			3530		NC	6.51		NC	14.97		NC	207		NC	0		Y	NC
MW-30	1/23/2013	205.8	210	Y	2104	2103	0.05	6.86	6.88	0.29	14.05	14.05	0.00	229	227	0.88	0	0	Y	0.00
MW-31	1/22/2013	374.9	380	Y	2032	2030	0.10	6.9	6.94	0.58	14.16	14.16	0.00	382	380	0.52	28	29	Y	3.51
MW-35	1/23/2013	72.4	80	Y	4281	4280	0.02	6.54	6.54	0.00	13.91	13.91	0.00	241	239	0.83	0	0	Y	0.00
<b>Accelerated March Monthly</b>																				
MW-11	3/20/2013	256.0	265	Y	2874	2875	0.03	7.34	7.33	0.14	14.32	14.31	0.07	191	187	2.12	0	0	Y	0.00
MW-14	3/20/2013	151.1	155	Y	3837	3838	0.03	6.45	6.48	0.46	14.21	14.21	0.00	283	285	0.70	0	0	Y	0.00
MW-25	3/19/2013	252.3	275	Y	3168	3174	0.19	6.41	6.41	0.00	14.29	14.31	0.14	461	453	0.00	19.1	19.6	N	2.58
MW-26	3/20/2013	Continuously pumped well			3379		NC	6.70		NC	13.91		NC	287		NC	3.4		Y	NC
MW-30	3/20/2013	207.8	220	Y	2016	2016	0.00	6.87	6.91	0.58	14.07	14.07	0.00	286	288	0.70	0	0	Y	0.00
MW-31	3/20/2013	377.2	385	Y	1981	1977	0.20	7.26	7.28	0.28	14.44	14.54	0.69	443	443	0.00	31	32	N	3.17
MW-35	3/19/2013	72.3	115	Y	4078	4085	0.17	6.42	6.43	0.16	14.25	14.29	0.28	363	359	1.11	0.5	0.5	Y	0.00

The QAP states that turbidity should be less than 5 Nephelometric Turbidity Units ("NTU") prior to sampling unless the well is characterized by water that has a higher turbidity. The QAP does not require that turbidity measurements be less than 5 NTU prior to sampling. As such, the noted observations regarding turbidity measurements less than 5 NTU are included for information purposes only.

MW-26 is a continuously pumped well.

G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-1	MW-2	MW-3	MW-3A
2-Butanone (MEK)	14 days	--	--	--	--
Acetone	14 days	--	--	--	--
Ammonia (as N)	28 days	--	--	--	--
Arsenic	6 months	--	--	--	--
Benzene	14 days	--	--	--	--
Beryllium	6 months	--	--	--	--
Cadmium	6 months	--	--	--	--
Carbon Tetrachloride	14 days	--	--	--	--
Chloride (mg/L)	28 days	--	--	--	--
Chloroform	14 days	--	--	--	--
Chloromethane	14 days	--	--	--	--
Chromium	6 months	--	--	--	--
Cobalt	6 months	--	--	--	--
Copper	6 months	--	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	--	--
Fluoride (Mg/L)	28 days	--	--	3 days	--
Gross Alpha minus Rn & U	6 months	--	12 days	--	--
Iron	6 months	--	--	--	--
Lead	6 months	--	--	--	--
Manganese	6 months	3 days	--	--	--
Mercury	28 days	--	--	--	--
Molybdenum	6 months	--	--	--	--
Naphthalene	14 days	--	--	--	--
Nickel	6 months	--	--	--	--
Nitrate + Nitrite (as N)	28 days	--	--	--	2 days
Selenium	6 months	--	--	3 days	2 days
Silver	6 months	--	--	--	--
Sulfate (mg/L)	28 days	3 days	--	--	2 days
TDS (mg/L)	7 days	--	--	--	2 days
Tetrahydrofuran	14 days	3 days	--	--	--
Thallium	6 months	--	--	--	--
Tin	6 months	--	--	--	--
Toluene	14 days	--	--	--	--
Uranium	6 months	--	--	--	--
Vanadium	6 months	--	--	--	--
Xylenes (total)	14 days	--	--	--	--
Zinc	6 months	--	--	--	--
Bicarbonate as HCO3	14 days	--	--	--	--
Calcium	6 months	--	--	--	--
Carbonate as CO3	14 days	--	--	--	--
Magnesium	6 months	--	--	--	--
Potassium	6 months	--	--	--	--
Sodium	6 months	--	--	--	--

G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-5	MW-11	MW-12	MW-14
2-Butanone (MEK)	14 days	--	2 days	--	1 days
Acetone	14 days	--	2 days	--	1 days
Ammonia (as N)	28 days	--	2 days	--	1 days
Arsenic	6 months	--	2 days	--	1 days
Benzene	14 days	--	2 days	--	1 days
Beryllium	6 months	--	2 days	--	1 days
Cadmium	6 months	--	2 days	--	1 days
Carbon Tetrachloride	14 days	--	2 days	--	1 days
Chloride (mg/L)	28 days	--	2 days	--	1 days
Chloroform	14 days	--	2 days	--	1 days
Chloromethane	14 days	--	2 days	--	1 days
Chromium	6 months	--	2 days	--	1 days
Cobalt	6 months	--	2 days	--	1 days
Copper	6 months	--	2 days	--	1 days
Dichloromethane (Methylene Chloride)	14 days	--	2 days	--	1 days
Fluoride (Mg/L)	28 days	--	2 days	--	1 days
Gross Alpha minus Rn & U	6 months	--	9 days	--	18 days
Iron	6 months	--	2 days	--	1 days
Lead	6 months	--	2 days	--	1 days
Manganese	6 months	--	2 days	--	1 days
Mercury	28 days	--	2 days	--	1 days
Molybdenum	6 months	--	2 days	--	1 days
Naphthalene	14 days	--	2 days	--	1 days
Nickel	6 months	--	2 days	--	1 days
Nitrate + Nitrite (as N)	28 days	--	2 days	--	1 days
Selenium	6 months	--	2 days	1 days	1 days
Silver	6 months	--	2 days	--	1 days
Sulfate (mg/L)	28 days	--	2 days	--	1 days
TDS (mg/L)	7 days	--	2 days	--	1 days
Tetrahydrofuran	14 days	--	3 days	--	1 days
Thallium	6 months	--	2 days	--	1 days
Tin	6 months	--	2 days	--	1 days
Toluene	14 days	--	2 days	--	1 days
Uranium	6 months	4 days	2 days	--	1 days
Vanadium	6 months	--	2 days	--	1 days
Xylenes (total)	14 days	--	2 days	--	1 days
Zinc	6 months	--	2 days	--	1 days
Bicarbonate as HCO3	14 days	--	2 days	--	1 days
Calcium	6 months	--	2 days	--	1 days
Carbonate as CO3	14 days	--	2 days	--	1 days
Magnesium	6 months	--	2 days	--	1 days
Potassium	6 months	--	2 days	--	1 days
Sodium	6 months	--	2 days	--	1 days

G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-15	MW-18	MW-19	MW-23
2-Butanone (MEK)	14 days	--	--	--	--
Acetone	14 days	--	--	--	--
Ammonia (as N)	28 days	--	--	--	--
Arsenic	6 months	--	--	--	--
Benzene	14 days	--	--	--	--
Beryllium	6 months	--	--	--	--
Cadmium	6 months	--	--	--	--
Carbon Tetrachloride	14 days	--	--	--	--
Chloride (mg/L)	28 days	--	--	--	--
Chloroform	14 days	--	--	--	--
Chloromethane	14 days	--	--	--	--
Chromium	6 months	--	--	--	--
Cobalt	6 months	--	--	--	--
Copper	6 months	--	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	--	--
Fluoride (Mg/L)	28 days	--	--	--	--
Gross Alpha minus Rn & U	6 months	--	--	14 days	--
Iron	6 months	2 days	--	--	--
Lead	6 months	--	--	--	--
Manganese	6 months	--	--	--	4 days
Mercury	28 days	--	--	--	--
Molybdenum	6 months	--	--	--	--
Naphthalene	14 days	--	--	--	--
Nickel	6 months	--	--	--	--
Nitrate + Nitrite (as N)	28 days	--	--	2 days	--
Selenium	6 months	2 days	--	--	--
Silver	6 months	--	--	--	--
Sulfate (mg/L)	28 days	--	2 days	--	--
TDS (mg/L)	7 days	--	2 days	--	--
Tetrahydrofuran	14 days	--	--	--	--
Thallium	6 months	--	2 days	--	--
Tin	6 months	--	--	--	--
Toluene	14 days	--	--	--	--
Uranium	6 months	--	--	--	--
Vanadium	6 months	--	--	--	--
Xylenes (total)	14 days	--	--	--	--
Zinc	6 months	--	--	--	--
Bicarbonate as HCO3	14 days	--	--	--	--
Calcium	6 months	--	--	--	--
Carbonate as CO3	14 days	--	--	--	--
Magnesium	6 months	--	--	--	--
Potassium	6 months	--	--	--	--
Sodium	6 months	--	--	--	--

## G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-24	MW-25	MW-26	MW-27
2-Butanone (MEK)	14 days	--	2 days	2 days	--
Acetone	14 days	--	2 days	2 days	--
Ammonia (as N)	28 days	--	2 days	2 days	--
Arsenic	6 months	--	2 days	2 days	--
Benzene	14 days	--	2 days	2 days	--
Beryllium	6 months	--	2 days	2 days	--
Cadmium	6 months	1 days	2 days	2 days	--
Carbon Tetrachloride	14 days	--	2 days	2 days	--
Chloride (mg/L)	28 days	--	2 days	2 days	2 days
Chloroform	14 days	--	2 days	2 days	--
Chloromethane	14 days	--	2 days	2 days	--
Chromium	6 months	--	2 days	2 days	--
Cobalt	6 months	--	2 days	2 days	--
Copper	6 months	--	2 days	2 days	--
Dichloromethane (Methylene Chloride)	14 days	--	2 days	2 days	--
Fluoride (Mg/L)	28 days	1 days	2 days	2 days	--
Gross Alpha minus Rn & U	6 months	--	9 days	9 days	19 days
Iron	6 months	--	2 days	2 days	--
Lead	6 months	--	2 days	2 days	--
Manganese	6 months	--	2 days	2 days	--
Mercury	28 days	--	2 days	2 days	--
Molybdenum	6 months	--	2 days	2 days	--
Naphthalene	14 days	--	2 days	2 days	--
Nickel	6 months	--	2 days	2 days	--
Nitrate + Nitrite (as N)	28 days	--	2 days	2 days	2 days
Selenium	6 months	--	2 days	2 days	--
Silver	6 months	--	2 days	2 days	--
Sulfate (mg/L)	28 days	--	2 days	2 days	2 days
TDS (mg/L)	7 days	--	2 days	2 days	2 days
Tetrahydrofuran	14 days	--	3 days	3 days	--
Thallium	6 months	1 days	2 days	2 days	--
Tin	6 months	--	2 days	2 days	--
Toluene	14 days	--	2 days	2 days	--
Uranium	6 months	--	2 days	2 days	--
Vanadium	6 months	--	2 days	2 days	--
Xylenes (total)	14 days	--	2 days	2 days	--
Zinc	6 months	--	2 days	2 days	--
Bicarbonate as HCO3	14 days	--	2 days	2 days	--
Calcium	6 months	--	2 days	2 days	--
Carbonate as CO3	14 days	--	2 days	2 days	--
Magnesium	6 months	--	2 days	2 days	--
Potassium	6 months	--	2 days	2 days	--
Sodium	6 months	--	2 days	2 days	--

## G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-28	MW-29	MW-30	MW-31
2-Butanone (MEK)	14 days	--	--	1 days	3 days
Acetone	14 days	--	--	1 days	3 days
Ammonia (as N)	28 days	--	--	1 days	3 days
Arsenic	6 months	--	--	1 days	3 days
Benzene	14 days	--	--	1 days	3 days
Beryllium	6 months	--	--	1 days	3 days
Cadmium	6 months	--	--	1 days	3 days
Carbon Tetrachloride	14 days	--	--	1 days	3 days
Chloride (mg/L)	28 days	2 days	--	1 days	3 days
Chloroform	14 days	--	--	1 days	3 days
Chloromethane	14 days	--	--	1 days	3 days
Chromium	6 months	--	--	1 days	3 days
Cobalt	6 months	--	--	1 days	3 days
Copper	6 months	--	--	1 days	3 days
Dichloromethane (Methylene Chloride)	14 days	--	--	1 days	3 days
Fluoride (Mg/L)	28 days	--	--	1 days	3 days
Gross Alpha minus Rn & U	6 months	--	--	18 days	10 days
Iron	6 months	--	1 days	1 days	3 days
Lead	6 months	--	--	1 days	3 days
Manganese	6 months	2 days	1 days	1 days	3 days
Mercury	28 days	--	--	1 days	3 days
Molybdenum	6 months	--	--	1 days	3 days
Naphthalene	14 days	--	--	1 days	3 days
Nickel	6 months	--	--	1 days	3 days
Nitrate + Nitrite (as N)	28 days	--	--	1 days	3 days
Selenium	6 months	--	--	1 days	3 days
Silver	6 months	--	--	1 days	3 days
Sulfate (mg/L)	28 days	--	--	1 days	3 days
TDS (mg/L)	7 days	--	1 days	1 days	3 days
Tetrahydrofuran	14 days	--	--	1 days	4 days
Thallium	6 months	--	--	1 days	3 days
Tin	6 months	--	--	1 days	3 days
Toluene	14 days	--	--	1 days	3 days
Uranium	6 months	--	--	1 days	3 days
Vanadium	6 months	--	--	1 days	3 days
Xylenes (total)	14 days	--	--	1 days	3 days
Zinc	6 months	--	--	1 days	3 days
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	1 days	3 days
Calcium	6 months	--	--	1 days	3 days
Carbonate as CO <sub>3</sub>	14 days	--	--	1 days	3 days
Magnesium	6 months	--	--	1 days	3 days
Potassium	6 months	--	--	1 days	3 days
Sodium	6 months	--	--	1 days	3 days

## G-2A: Holding Time Evaluation

Constituent	QAP Holding Time	MW-32	MW-35	MW-65	MW-70
2-Butanone (MEK)	14 days	--	1 days	1 days	--
Acetone	14 days	--	1 days	1 days	--
Ammonia (as N)	28 days	--	1 days	1 days	--
Arsenic	6 months	--	1 days	1 days	--
Benzene	14 days	--	1 days	1 days	--
Beryllium	6 months	--	1 days	1 days	--
Cadmium	6 months	--	1 days	1 days	--
Carbon Tetrachloride	14 days	--	1 days	1 days	--
Chloride (mg/L)	28 days	--	1 days	1 days	--
Chloroform	14 days	--	1 days	1 days	--
Chloromethane	14 days	--	1 days	1 days	--
Chromium	6 months	--	1 days	1 days	--
Cobalt	6 months	--	1 days	1 days	--
Copper	6 months	--	1 days	1 days	--
Dichloromethane (Methylene Chloride)	14 days	--	1 days	1 days	--
Fluoride (Mg/L)	28 days	--	1 days	1 days	--
Gross Alpha minus Rn & U	6 months	10 days	18 days	18 days	14 days
Iron	6 months	--	1 days	1 days	--
Lead	6 months	--	1 days	1 days	--
Manganese	6 months	--	1 days	1 days	--
Mercury	28 days	--	1 days	1 days	--
Molybdenum	6 months	--	1 days	1 days	--
Naphthalene	14 days	--	1 days	1 days	--
Nickel	6 months	--	1 days	1 days	--
Nitrate + Nitrite (as N)	28 days	--	1 days	1 days	2 days
Selenium	6 months	--	1 days	1 days	--
Silver	6 months	--	1 days	1 days	--
Sulfate (mg/L)	28 days	--	1 days	1 days	--
TDS (mg/L)	7 days	--	1 days	1 days	--
Tetrahydrofuran	14 days	--	1 days	1 days	--
Thallium	6 months	--	1 days	1 days	--
Tin	6 months	--	1 days	1 days	--
Toluene	14 days	--	1 days	1 days	--
Uranium	6 months	--	1 days	1 days	--
Vanadium	6 months	--	1 days	1 days	--
Xylenes (total)	14 days	--	1 days	1 days	--
Zinc	6 months	--	1 days	1 days	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	1 days	1 days	--
Calcium	6 months	--	1 days	1 days	--
Carbonate as CO <sub>3</sub>	14 days	--	1 days	1 days	--
Magnesium	6 months	--	1 days	1 days	--
Potassium	6 months	--	1 days	1 days	--
Sodium	6 months	--	1 days	1 days	--

Constituent	QAP Holding Time	MW-11 January	MW-14 January	MW-25 January
2-Butanone (MEK)	14 days	--	--	--
Acetone	14 days	--	--	--
Ammonia (as N)	28 days	--	--	--
Arsenic	6 months	--	--	--
Benzene	14 days	--	--	--
Beryllium	6 months	--	--	--
Cadmium	6 months	--	--	--
Carbon Tetrachloride	14 days	--	--	--
Chloride (mg/L)	28 days	--	--	--
Chloroform	14 days	--	--	--
Chloromethane	14 days	--	--	--
Chromium	6 months	--	--	--
Cobalt	6 months	--	--	--
Copper	6 months	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	--
Fluoride (Mg/L)	28 days	--	--	--
Gross Alpha minus Rn & U MDC	6 months	--	--	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--	--	--
Gross Alpha minus Rn & U	6 months	--	--	--
Iron	6 months	--	--	--
Lab pH (S.U.)	--	--	--	--
Lead	6 months	--	--	--
Manganese	6 months	6 days	6 days	--
Mercury	28 days	--	--	--
Molybdenum	6 months	--	--	--
Naphthalene	14 days	--	--	--
Nickel	6 months	--	--	--
Nitrate + Nitrite (as N)	28 days	--	--	--
Selenium	6 months	--	--	--
Silver	6 months	--	--	--
Sulfate (mg/L)	28 days	--	--	--
TDS (mg/L)	7 days	--	--	--
Tetrahydrofuran	14 days	--	--	--
Thallium	6 months	--	--	--
Tin	6 months	--	--	--
Toluene	14 days	--	--	--
Uranium	6 months	--	--	10 days
Vanadium	6 months	--	--	--
Xylenes (total)	14 days	--	--	--
Zinc	6 months	--	--	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--	--	--
Anions BALANCE-W	--	--	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	--
Calcium	6 months	--	--	--
Carbonate as CO <sub>3</sub>	14 days	--	--	--
Cations BALANCE-W	--	--	--	--
Magnesium	6 months	--	--	--
Potassium	6 months	--	--	--
Sodium	6 months	--	--	--

Constituent	QAP Holding Time	MW-26 January	MW-30 January	MW-31 January
2-Butanone (MEK)	14 days	--	--	--
Acetone	14 days	--	--	--
Ammonia (as N)	28 days	--	--	--
Arsenic	6 months	--	--	--
Benzene	14 days	--	--	--
Beryllium	6 months	--	--	--
Cadmium	6 months	--	--	--
Carbon Tetrachloride	14 days	--	--	--
Chloride (mg/L)	28 days	1 days	2 days	3 days
Chloroform	14 days	1 days	--	--
Chloromethane	14 days	--	--	--
Chromium	6 months	--	--	--
Cobalt	6 months	--	--	--
Copper	6 months	--	--	--
Dichloromethane (Methylene Chloride)	14 days	1 days	--	--
Fluoride (Mg/L)	28 days	--	--	--
Gross Alpha minus Rn & U MDC	6 months	--	--	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--	--	--
Gross Alpha minus Rn & U	6 months	--	--	--
Iron	6 months	--	--	--
Lab pH (S.U.)	--	--	--	--
Lead	6 months	--	--	--
Manganese	6 months	--	--	--
Mercury	28 days	--	--	--
Molybdenum	6 months	--	--	--
Naphthalene	14 days	--	--	--
Nickel	6 months	--	--	--
Nitrate + Nitrite (as N)	28 days	1 days	2 days	3 days
Selenium	6 months	--	9 days	--
Silver	6 months	--	--	--
Sulfate (mg/L)	28 days	--	--	3 days
TDS (mg/L)	7 days	--	--	3 days
Tetrahydrofuran	14 days	--	--	--
Thallium	6 months	--	--	--
Tin	6 months	--	--	--
Toluene	14 days	--	--	--
Uranium	6 months	8 days	9 days	--
Vanadium	6 months	--	--	--
Xylenes (total)	14 days	--	--	--
Zinc	6 months	--	--	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--	--	--
Anions BALANCE-W	--	--	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	--
Calcium	6 months	--	--	--
Carbonate as CO <sub>3</sub>	14 days	--	--	--
Cations BALANCE-W	--	--	--	--
Magnesium	6 months	--	--	--
Potassium	6 months	--	--	--
Sodium	6 months	--	--	--

Constituent	QAP Holding Time	MW-35 January	MW-65 January	MW-11 March
2-Butanone (MEK)	14 days	--	--	--
Acetone	14 days	--	--	--
Ammonia (as N)	28 days	--	--	--
Arsenic	6 months	--	--	--
Benzene	14 days	--	--	--
Beryllium	6 months	--	--	--
Cadmium	6 months	--	--	--
Carbon Tetrachloride	14 days	--	--	--
Chloride (mg/L)	28 days	--	--	--
Chloroform	14 days	--	--	--
Chloromethane	14 days	--	--	--
Chromium	6 months	--	--	--
Cobalt	6 months	--	--	--
Copper	6 months	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	--
Fluoride (Mg/L)	28 days	--	--	--
Gross Alpha minus Rn & U MDC	6 months	--	--	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--	--	--
Gross Alpha minus Rn & U	6 months	10 days	10 days	--
Iron	6 months	--	--	--
Lab pH (S.U.)	--	--	--	--
Lead	6 months	--	--	--
Manganese	6 months	6 days	6 days	2 days
Mercury	28 days	--	--	--
Molybdenum	6 months	--	--	--
Naphthalene	14 days	--	--	--
Nickel	6 months	--	--	--
Nitrate + Nitrite (as N)	28 days	--	--	--
Selenium	6 months	9 days	9 days	--
Silver	6 months	--	--	--
Sulfate (mg/L)	28 days	--	--	--
TDS (mg/L)	7 days	--	--	--
Tetrahydrofuran	14 days	--	--	--
Thallium	6 months	9 days	9 days	--
Tin	6 months	--	--	--
Toluene	14 days	--	--	--
Uranium	6 months	9 days	9 days	--
Vanadium	6 months	--	--	--
Xylenes (total)	14 days	--	--	--
Zinc	6 months	--	--	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--	--	--
Anions BALANCE-W	--	--	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	--
Calcium	6 months	--	--	--
Carbonate as CO <sub>3</sub>	14 days	--	--	--
Cations BALANCE-W	--	--	--	--
Magnesium	6 months	--	--	--
Potassium	6 months	--	--	--
Sodium	6 months	--	--	--

Constituent	QAP Holding Time	MW-14 March	MW-25 March	MW-26 March
2-Butanone (MEK)	14 days	--	--	--
Acetone	14 days	--	--	--
Ammonia (as N)	28 days	--	--	--
Arsenic	6 months	--	--	--
Benzene	14 days	--	--	--
Beryllium	6 months	--	--	--
Cadmium	6 months	--	3 days	--
Carbon Tetrachloride	14 days	--	--	--
Chloride (mg/L)	28 days	--	--	2 days
Chloroform	14 days	--	--	2 days
Chloromethane	14 days	--	--	--
Chromium	6 months	--	--	--
Cobalt	6 months	--	--	--
Copper	6 months	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	2 days
Fluoride (Mg/L)	28 days	--	--	--
Gross Alpha minus Rn & U MDC	6 months	--	--	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--	--	--
Gross Alpha minus Rn & U	6 months	--	--	--
Iron	6 months	--	--	--
Lab pH (S.U.)	--	--	--	--
Lead	6 months	--	--	--
Manganese	6 months	2 days	--	--
Mercury	28 days	--	--	--
Molybdenum	6 months	--	--	--
Naphthalene	14 days	--	--	--
Nickel	6 months	--	--	--
Nitrate + Nitrite (as N)	28 days	--	--	2 days
Selenium	6 months	--	--	--
Silver	6 months	--	--	--
Sulfate (mg/L)	28 days	--	--	--
TDS (mg/L)	7 days	--	--	--
Tetrahydrofuran	14 days	--	--	--
Thallium	6 months	--	--	--
Tin	6 months	--	--	--
Toluene	14 days	--	--	--
Uranium	6 months	--	3 days	2 days
Vanadium	6 months	--	--	--
Xylenes (total)	14 days	--	--	--
Zinc	6 months	--	--	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--	--	--
Anions BALANCE-W	--	--	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	--
Calcium	6 months	--	--	--
Carbonate as CO <sub>3</sub>	14 days	--	--	--
Cations BALANCE-W	--	--	--	--
Magnesium	6 months	--	--	--
Potassium	6 months	--	--	--
Sodium	6 months	--	--	--

Constituent	QAP Holding Time	MW-30 March	MW-31 March	MW-35 March
2-Butanone (MEK)	14 days	--	--	--
Acetone	14 days	--	--	--
Ammonia (as N)	28 days	--	--	--
Arsenic	6 months	--	--	--
Benzene	14 days	--	--	--
Beryllium	6 months	--	--	--
Cadmium	6 months	--	--	--
Carbon Tetrachloride	14 days	--	--	--
Chloride (mg/L)	28 days	2 days	3 days	--
Chloroform	14 days	--	--	--
Chloromethane	14 days	--	--	--
Chromium	6 months	--	--	--
Cobalt	6 months	--	--	--
Copper	6 months	--	--	--
Dichloromethane (Methylene Chloride)	14 days	--	--	--
Fluoride (Mg/L)	28 days	--	--	--
Gross Alpha minus Rn & U MDC	6 months	--	--	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--	--	--
Gross Alpha minus Rn & U	6 months	--	--	8 days
Iron	6 months	--	--	--
Lab pH (S.U.)	--	--	--	--
Lead	6 months	--	--	--
Manganese	6 months	--	--	3 days
Mercury	28 days	--	--	--
Molybdenum	6 months	--	--	3 days
Naphthalene	14 days	--	--	--
Nickel	6 months	--	--	--
Nitrate + Nitrite (as N)	28 days	2 days	3 days	--
Selenium	6 months	2 days	3 days	3 days
Silver	6 months	--	--	--
Sulfate (mg/L)	28 days	--	3 days	--
TDS (mg/L)	7 days	--	3 days	--
Tetrahydrofuran	14 days	--	--	--
Thallium	6 months	--	--	3 days
Tin	6 months	--	--	--
Toluene	14 days	--	--	--
Uranium	6 months	2 days	--	3 days
Vanadium	6 months	--	--	--
Xylenes (total)	14 days	--	--	--
Zinc	6 months	--	--	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--	--	--
Anions BALANCE-W	--	--	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--	--	--
Calcium	6 months	--	--	--
Carbonate as CO <sub>3</sub>	14 days	--	--	--
Cations BALANCE-W	--	--	--	--
Magnesium	6 months	--	--	--
Potassium	6 months	--	--	--
Sodium	6 months	--	--	--

Constituent	QAP Holding Time	MW-65 March
2-Butanone (MEK)	14 days	--
Acetone	14 days	--
Ammonia (as N)	28 days	--
Arsenic	6 months	--
Benzene	14 days	--
Beryllium	6 months	--
Cadmium	6 months	--
Carbon Tetrachloride	14 days	--
Chloride (mg/L)	28 days	--
Chloroform	14 days	--
Chloromethane	14 days	--
Chromium	6 months	--
Cobalt	6 months	--
Copper	6 months	--
Dichloromethane (Methylene Chloride)	14 days	--
Fluoride (Mg/L)	28 days	--
Gross Alpha minus Rn & U MDC	6 months	--
Gross Alpha minus Rn & U Precision ( $\pm$ )	6 months	--
Gross Alpha minus Rn & U	6 months	--
Iron	6 months	--
Lab pH (S.U.)	--	--
Lead	6 months	--
Manganese	6 months	2 days
Mercury	28 days	--
Molybdenum	6 months	--
Naphthalene	14 days	--
Nickel	6 months	--
Nitrate + Nitrite (as N)	28 days	--
Selenium	6 months	--
Silver	6 months	--
Sulfate (mg/L)	28 days	--
TDS (mg/L)	7 days	--
Tetrahydrofuran	14 days	--
Thallium	6 months	--
Tin	6 months	--
Toluene	14 days	--
Uranium	6 months	--
Vanadium	6 months	--
Xylenes (total)	14 days	--
Zinc	6 months	--
A/C Balance ( $\pm$ 5) BALANCE-W	--	--
Anions BALANCE-W	--	--
Bicarbonate as HCO <sub>3</sub>	14 days	--
Calcium	6 months	--
Carbonate as CO <sub>3</sub>	14 days	--
Cations BALANCE-W	--	--
Magnesium	6 months	--
Potassium	6 months	--
Sodium	6 months	--

G-3A: Laboratory Receipt Temperature Check

Sample Batch	Wells in Batch	Temperature
AWAL 1302409	MW-14, MW-18, MW-27, MW-30, MW-35, MW-36, MW-65, Trip Blank	3.2 °C
AWAL 1302339	MW-11, MW-25, MW-26, MW-31, Trip Blank	2.8 °C
AWAL 1303130	MW-12, MW-15, MW-28, MW-29	4.8° C
AWAL 1303335	MW-1, MW-3, MW-3A, MW-5, MW-19, MW-23, MW-24, MW-70, Trip	2.8 °C
AWAL 1303550	MW-37, Trip Blank	1.0 °C
GEL 321572	MW-2, MW-14, MW-27, MW-30, MW-35, MW-36, MW-65	N/A
GEL 322413	MW-19, MW-37, MW-70	N/A
GEL 320825	MW-11, MW-25, MW-26, MW-31, MW-32	N/A

N/A = These shipments contained samples for the analysis of gross alpha only. Per Table 1 in the approved QAP, samples submitted for gross alpha analyses do not have a sample temperature requirement.

G-3B: Laboratory Receipt Temperature Check - Accelerated Samples

Sample Batch	Wells in Batch	Temperature
AWAL 1301517	MW-26, MW-30, MW-31, Trip Blank	2.4 °C
GEL 319074	MW-11, MW-25, MW-26, MW-30, MW-35, MW-65	N/A
AWAL 1303552	MW-11, MW-25, MW-26, MW-30, MW-31, MW-35, MW-65, Trip Blank	1.4 °C
GEL 322416	MW-35	N/A

N/A = These shipments contained samples for the analysis of gross alpha only. Per Table 1 in the approved QAP, samples submitted for gross alpha analyses do not have a sample temperature requirement.

G-4A: Analytical Method Check

Parameter	QAP Method*	Method Used by Lab
Ammonia (as N)	A4500-NH3 G or E350.1	E350.1
Nitrate + Nitrite (as N)	E353.1 or E353.2	E353.2
Metals Except Mercury	E200.7 or E200.8	E200.7 or E200.8
Mercury	E245.1 or E200.7 or E200.8	E245.1
Gross Alpha	E900.0 or E900.1	E900.1
VOCs	SW8260B or SW8260C	SW8260C
Chloride	A4500-Cl B or A4500-Cl E or E300.0	E300.0
Fluoride	A4500-F C or E300.0	E300.0
Sulfate	A4500-SO4 E or E300.0	E300.0
TDS	A2540 C	A2540 C
Carbonate as CaO3, Bicarbonate as CaCO3	A2320 B	A2320 B

G-4B: Analytical Method Check - Accelerated Samples

Parameter	QAP Method	Method Used by Lab
Nitrate + Nitrite (as N)	E353.1 or E353.2	E353.2
Metals Except Mercury	E200.7 or E200.8	E200.7 or E200.8
Gross Alpha	E900.0 or E900.1	E900.1
VOCs	SW8260B or SW8260C	SW8260C
Chloride	A4500-C1 B or A4500-C1 E or E300.0	E300.0
Fluoride	A4500-F C or E300.0	E300.0
Sulfate	A4500-SO4 E or E300.0	E300.0
TDS	A2540 C	A2540 C

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
Trip Blank	2-Butanone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Acetone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Benzene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloroform	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloromethane	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Naphthalene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Toluene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
Trip Blank	2-Butanone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Acetone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Benzene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloroform	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloromethane	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Naphthalene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Toluene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
Trip Blank	2-Butanone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Acetone	20	ug/L	U	20	ug/L	OK	1
Trip Blank	Benzene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloroform	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Chloromethane	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Naphthalene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Toluene	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-01	Manganese	10	ug/L		10	ug/L	OK	20
MW-01	Sulfate	100	mg/l		1	mg/l	OK	100
MW-01	Tetrahydrofuran	1	ug/L		1	ug/L	OK	1
MW-02	Gross Radium Alpha	0.489	pCi/L		1	pCi/L	OK	1
MW-03	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-03	Selenium	5	ug/L		5	ug/L	OK	20
MW-03a	Nitrate/Nitrite (as N)	0.1	ug/L		0.1	ug/L	OK	1
MW-03a	Selenium	5	ug/L		5	ug/L	OK	20
MW-03a	Sulfate	500	mg/l		1	mg/l	OK	500
MW-03a	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-05	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-11	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-11	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-11	Ammonia (as N)	0.05	ug/L		0.05	ug/L	OK	1
MW-11	Arsenic	5	ug/L	U	5	ug/L	OK	2

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-11	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-11	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-11	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-11	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	20
MW-11	Calcium	10	mg/l		0.5	mg/l	OK	10
MW-11	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-11	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-11	Chloride	10	mg/l		1	mg/l	OK	10
MW-11	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-11	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-11	Chromium	25	ug/L	U	25	ug/L	OK	2
MW-11	Cobalt	10	ug/L	U	10	ug/L	OK	20
MW-11	Copper	10	ug/L		10	ug/L	OK	20
MW-11	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-11	Gross Radium Alpha	0.478	pCi/L		1	pCi/L	OK	1
MW-11	Iron	30	ug/L		30	ug/L	OK	5
MW-11	Lead	1	ug/L	U	1	ug/L	OK	2
MW-11	Magnesium	10	mg/l		0.5	mg/l	OK	10
MW-11	Manganese	10	ug/L		10	ug/L	OK	5
MW-11	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-11	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-11	Molybdenum	10	ug/L	U	10	ug/L	OK	2
MW-11	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-11	Nickel	20	ug/L	U	20	ug/L	OK	20
MW-11	Nitrate/Nitrite (as N)	0.1	ug/L	U	0.1	ug/L	OK	1
MW-11	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-11	Selenium	5	ug/L	U	5	ug/L	OK	2
MW-11	Silver	10	ug/L	U	10	ug/L	OK	20
MW-11	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-11	Sulfate	100	mg/l		1	mg/l	OK	100
MW-11	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-11	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-11	Tin	100	ug/L	U	100	ug/L	OK	20
MW-11	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-11	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-11	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-11	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-11	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-11	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-12	Selenium	5	ug/L		5	ug/L	OK	20
MW-14	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-14	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-14	Ammonia (as N)	0.05	ug/L	U	0.05	ug/L	OK	1
MW-14	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-14	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-14	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-14	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-14	Cadmium	0.5	ug/L		0.5	ug/L	OK	2
MW-14	Calcium	100	mg/l		0.5	mg/l	OK	100

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-14	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-14	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-14	Chloride	10	mg/l		1	mg/l	OK	10
MW-14	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-14	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-14	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-14	Cobalt	10	ug/L	U	10	ug/L	OK	2
MW-14	Copper	10	ug/L	U	10	ug/L	OK	20
MW-14	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-14	Gross Radium Alpha	0.625	pCi/L	U	1	pCi/L	OK	1
MW-14	Iron	30	ug/L	U	30	ug/L	OK	2
MW-14	Lead	1	ug/L	U	1	ug/L	OK	2
MW-14	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-14	Manganese	10	ug/L		10	ug/L	OK	50
MW-14	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-14	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-14	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-14	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-14	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-14	Nitrate/Nitrite (as N)	0.1	ug/L	U	0.1	ug/L	OK	1
MW-14	Potassium	10	mg/l		0.5	mg/l	OK	10
MW-14	Selenium	5	ug/L	U	5	ug/L	OK	5
MW-14	Silver	10	ug/L	U	10	ug/L	OK	2
MW-14	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-14	Sulfate	1000	mg/l		1	mg/l	OK	1000
MW-14	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-14	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-14	Tin	100	ug/L	U	100	ug/L	OK	5
MW-14	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-14	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-14	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-14	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-14	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-14	Zinc	10	ug/L		10	ug/L	OK	20
MW-15	Iron	30	ug/L	U	30	ug/L	OK	5
MW-15	Selenium	5	ug/L		5	ug/L	OK	5
MW-18	Sulfate	1000	mg/l		1	mg/l	OK	1000
MW-18	Thallium	0.5	ug/L		0.5	ug/L	OK	5
MW-18	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-19	Gross Radium Alpha	0.645	pCi/L		1	pCi/L	OK	1
MW-19	Nitrate/Nitrite (as N)	0.5	ug/L		0.1	ug/L	OK	5
MW-23	Manganese	10	ug/L		10	ug/L	OK	20
MW-24	Cadmium	0.5	ug/L		0.5	ug/L	OK	5
MW-24	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-24	Thallium	0.5	ug/L		0.5	ug/L	OK	5
MW-25	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-25	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-25	Ammonia (as N)	0.05	ug/L		0.05	ug/L	OK	1
MW-25	Arsenic	5	ug/L	U	5	ug/L	OK	2

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-25	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-25	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-25	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-25	Cadmium	0.5	ug/L		0.5	ug/L	OK	20
MW-25	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-25	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-25	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-25	Chloride	10	mg/l		1	mg/l	OK	10
MW-25	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-25	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-25	Chromium	25	ug/L	U	25	ug/L	OK	2
MW-25	Cobalt	10	ug/L		10	ug/L	OK	20
MW-25	Copper	10	ug/L	U	10	ug/L	OK	20
MW-25	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-25	Gross Radium Alpha	0.495	pCi/L		1	pCi/L	OK	1
MW-25	Iron	30	ug/L	U	30	ug/L	OK	5
MW-25	Lead	1	ug/L	U	1	ug/L	OK	2
MW-25	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-25	Manganese	10	ug/L		10	ug/L	OK	20
MW-25	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-25	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-25	Molybdenum	10	ug/L		10	ug/L	OK	2
MW-25	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-25	Nickel	20	ug/L	U	20	ug/L	OK	20
MW-25	Nitrate/Nitrite (as N)	0.1	ug/L	U	0.1	ug/L	OK	1
MW-25	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-25	Selenium	5	ug/L	U	5	ug/L	OK	2
MW-25	Silver	10	ug/L	U	10	ug/L	OK	20
MW-25	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-25	Sulfate	100	mg/l		1	mg/l	OK	100
MW-25	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-25	Thallium	0.5	ug/L		0.5	ug/L	OK	5
MW-25	Tin	100	ug/L	U	100	ug/L	OK	20
MW-25	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-25	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-25	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-25	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-25	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-25	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-26	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-26	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-26	Ammonia (as N)	0.05	ug/L		0.05	ug/L	OK	1
MW-26	Arsenic	5	ug/L	U	5	ug/L	OK	2
MW-26	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-26	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-26	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-26	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	20
MW-26	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-26	Carbon tetrachloride	1	ug/L		1	ug/L	OK	1

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-26	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-26	Chloride	10	mg/l		1	mg/l	OK	10
MW-26	Chloroform	20	ug/L		1	ug/L	OK	20
MW-26	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-26	Chromium	25	ug/L	U	25	ug/L	OK	2
MW-26	Cobalt	10	ug/L	U	10	ug/L	OK	20
MW-26	Copper	10	ug/L	U	10	ug/L	OK	20
MW-26	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-26	Gross Radium Alpha	0.463	pCi/L		1	pCi/L	OK	1
MW-26	Iron	50	ug/L		30	ug/L	OK	10
MW-26	Lead	1	ug/L	U	1	ug/L	OK	2
MW-26	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-26	Manganese	10	ug/L		10	ug/L	OK	20
MW-26	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-26	Methylene chloride	1	ug/L		1	ug/L	OK	1
MW-26	Molybdenum	10	ug/L	U	10	ug/L	OK	2
MW-26	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-26	Nickel	20	ug/L	U	20	ug/L	OK	20
MW-26	Nitrate/Nitrite (as N)	0.1	ug/L		0.1	ug/L	OK	1
MW-26	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-26	Selenium	5	ug/L		5	ug/L	OK	2
MW-26	Silver	10	ug/L	U	10	ug/L	OK	20
MW-26	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-26	Sulfate	100	mg/l		1	mg/l	OK	100
MW-26	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-26	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-26	Tin	100	ug/L	U	100	ug/L	OK	20
MW-26	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-26	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-26	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-26	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-26	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-26	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-27	Chloride	10	mg/l		1	mg/l	OK	10
MW-27	Gross Radium Alpha	0.787	pCi/L	U	1	pCi/L	OK	1
MW-27	Nitrate/Nitrite (as N)	1	ug/L		0.1	ug/L	OK	10
MW-27	Sulfate	100	mg/l		1	mg/l	OK	100
MW-27	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-28	Chloride	1	mg/l		1	mg/l	OK	10
MW-28	Manganese	10	ug/L		10	ug/L	OK	20
MW-29	Iron	100	ug/L		30	ug/L	OK	20
MW-29	Manganese	10	ug/L		10	ug/L	OK	100
MW-29	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-30	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-30	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-30	Ammonia (as N)	0.05	ug/L	U	0.05	ug/L	OK	1
MW-30	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-30	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-30	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-30	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-30	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-30	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-30	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-30	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-30	Chloride	100	mg/l		1	mg/l	OK	100
MW-30	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-30	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-30	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-30	Cobalt	10	ug/L	U	10	ug/L	OK	2
MW-30	Copper	10	ug/L	U	10	ug/L	OK	20
MW-30	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-30	Gross Radium Alpha	0.63	pCi/L	U	1	pCi/L	OK	1
MW-30	Iron	30	ug/L		30	ug/L	OK	2
MW-30	Lead	1	ug/L	U	1	ug/L	OK	2
MW-30	Magnesium	10	mg/l		0.5	mg/l	OK	10
MW-30	Manganese	10	ug/L		10	ug/L	OK	20
MW-30	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-30	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-30	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-30	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-30	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-30	Nitrate/Nitrite (as N)	2	ug/L		0.1	ug/L	OK	20
MW-30	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-30	Selenium	5	ug/L		5	ug/L	OK	5
MW-30	Silver	10	ug/L	U	10	ug/L	OK	2
MW-30	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-30	Sulfate	100	mg/l		1	mg/l	OK	100
MW-30	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-30	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-30	Tin	100	ug/L	U	100	ug/L	OK	5
MW-30	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-30	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-30	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-30	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-30	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-30	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-31	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-31	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-31	Ammonia (as N)	0.05	ug/L	U	0.05	ug/L	OK	1
MW-31	Arsenic	5	ug/L	U	5	ug/L	OK	2
MW-31	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-31	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-31	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-31	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	20
MW-31	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-31	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-31	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-31	Chloride	100	mg/l		1	mg/l	OK	100

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-31	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-31	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-31	Chromium	25	ug/L	U	25	ug/L	OK	2
MW-31	Cobalt	10	ug/L	U	10	ug/L	OK	20
MW-31	Copper	10	ug/L	U	10	ug/L	OK	20
MW-31	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-31	Gross Radium Alpha	0.468	pCi/L		1	pCi/L	OK	1
MW-31	Iron	30	ug/L	U	30	ug/L	OK	5
MW-31	Lead	1	ug/L	U	1	ug/L	OK	2
MW-31	Magnesium	10	mg/l		0.5	mg/l	OK	10
MW-31	Manganese	10	ug/L	U	10	ug/L	OK	5
MW-31	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-31	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-31	Molybdenum	10	ug/L	U	10	ug/L	OK	2
MW-31	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-31	Nickel	20	ug/L	U	20	ug/L	OK	20
MW-31	Nitrate/Nitrite (as N)	10	ug/L		0.1	ug/L	OK	100
MW-31	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-31	Selenium	5	ug/L		5	ug/L	OK	2
MW-31	Silver	10	ug/L	U	10	ug/L	OK	20
MW-31	Sodium	10	mg/l		0.5	mg/l	OK	10
MW-31	Sulfate	100	mg/l		1	mg/l	OK	100
MW-31	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-31	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-31	Tin	100	ug/L	U	100	ug/L	OK	20
MW-31	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-31	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-31	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-31	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-31	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-31	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-32	Gross Radium Alpha	0.939	pCi/L		1	pCi/L	OK	1
MW-35	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-35	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-35	Ammonia (as N)	0.05	ug/L		0.05	ug/L	OK	1
MW-35	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-35	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-35	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-35	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-35	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-35	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-35	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-35	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-35	Chloride	10	mg/l		1	mg/l	OK	10
MW-35	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-35	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-35	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-35	Cobalt	10	ug/L	U	10	ug/L	OK	2
MW-35	Copper	10	ug/L	U	10	ug/L	OK	20

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-35	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-35	Gross Radium Alpha	0.755	pCi/L		1	pCi/L	OK	1
MW-35	Iron	30	ug/L		30	ug/L	OK	2
MW-35	Lead	1	ug/L	U	1	ug/L	OK	2
MW-35	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-35	Manganese	10	ug/L		10	ug/L	OK	20
MW-35	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-35	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-35	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-35	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-35	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-35	Nitrate/Nitrite (as N)	0.1	ug/L	U	0.1	ug/L	OK	1
MW-35	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-35	Selenium	5	ug/L		5	ug/L	OK	5
MW-35	Silver	10	ug/L	U	10	ug/L	OK	2
MW-35	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-35	Sulfate	1000	mg/l		1	mg/l	OK	1000
MW-35	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-35	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-35	Tin	100	ug/L	U	100	ug/L	OK	5
MW-35	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-35	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-35	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-35	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-35	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-35	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-36	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-36	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-36	Ammonia (as N)	0.05	ug/L	U	0.05	ug/L	OK	1
MW-36	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-36	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-36	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-36	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-36	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-36	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-36	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-36	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-36	Chloride	10	mg/l		1	mg/l	OK	10
MW-36	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-36	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-36	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-36	Cobalt	10	ug/L	U	10	ug/L	OK	2
MW-36	Copper	10	ug/L	U	10	ug/L	OK	20
MW-36	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-36	Gross Radium Alpha	0.606	pCi/L		1	pCi/L	OK	1
MW-36	Iron	30	ug/L	U	30	ug/L	OK	2
MW-36	Lead	1	ug/L	U	1	ug/L	OK	2
MW-36	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-36	Manganese	10	ug/L	U	10	ug/L	OK	20

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-36	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-36	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-36	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-36	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-36	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-36	Nitrate/Nitrite (as N)	0.1	ug/L		0.1	ug/L	OK	1
MW-36	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-36	Selenium	5	ug/L		5	ug/L	OK	5
MW-36	Silver	10	ug/L	U	10	ug/L	OK	2
MW-36	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-36	Sulfate	1000	mg/l		1	mg/l	OK	1000
MW-36	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-36	Thallium	0.5	ug/L		0.5	ug/L	OK	5
MW-36	Tin	100	ug/L	U	100	ug/L	OK	5
MW-36	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-36	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-36	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-36	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-36	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-36	Zinc	10	ug/L	U	10	ug/L	OK	20
MW-37	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-37	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-37	Ammonia (as N)	0.05	ug/L	U	0.05	ug/L	OK	1
MW-37	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-37	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-37	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-37	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-37	Cadmium	0.5	ug/L	U	0.5	ug/L	OK	20
MW-37	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-37	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-37	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-37	Chloride	10	mg/l		1	mg/l	OK	10
MW-37	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-37	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-37	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-37	Cobalt	10	ug/L	U	10	ug/L	OK	20
MW-37	Copper	10	ug/L	U	10	ug/L	OK	20
MW-37	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-37	Gross Radium Alpha	0.789	pCi/L		1	pCi/L	OK	1
MW-37	Iron	30	ug/L	U	30	ug/L	OK	2
MW-37	Lead	1	ug/L	U	1	ug/L	OK	2
MW-37	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-37	Manganese	10	ug/L	U	10	ug/L	OK	20
MW-37	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-37	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-37	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-37	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-37	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-37	Nitrate/Nitrite (as N)	0.1	ug/L		0.1	ug/L	OK	1

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-37	Potassium	10	mg/l		0.5	mg/l	OK	10
MW-37	Selenium	5	ug/L		5	ug/L	OK	2
MW-37	Silver	10	ug/L	U	10	ug/L	OK	20
MW-37	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-37	Sulfate	500	mg/l		1	mg/l	OK	500
MW-37	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1
MW-37	Thallium	0.5	ug/L		0.5	ug/L	OK	2
MW-37	Tin	100	ug/L	U	100	ug/L	OK	20
MW-37	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-37	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-37	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-37	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-37	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-37	Zinc	10	ug/L		10	ug/L	OK	20
MW-65	2-Butanone	20	ug/L	U	20	ug/L	OK	1
MW-65	Acetone	20	ug/L	U	20	ug/L	OK	1
MW-65	Ammonia (as N)	0.05	ug/L		0.05	ug/L	OK	1
MW-65	Arsenic	5	ug/L	U	5	ug/L	OK	20
MW-65	Benzene	1	ug/L	U	1	ug/L	OK	1
MW-65	Beryllium	0.5	ug/L	U	0.5	ug/L	OK	2
MW-65	Bicarbonate (as CaCO3)	1	mg/l		1	mg/l	OK	1
MW-65	Cadmium	0.5	ug/L		0.5	ug/L	OK	2
MW-65	Calcium	100	mg/l		0.5	mg/l	OK	100
MW-65	Carbon tetrachloride	1	ug/L	U	1	ug/L	OK	1
MW-65	Carbonate (as CaCO3)	1	mg/l	U	1	mg/l	OK	1
MW-65	Chloride	10	mg/l		1	mg/l	OK	10
MW-65	Chloroform	1	ug/L	U	1	ug/L	OK	1
MW-65	Chloromethane	1	ug/L	U	1	ug/L	OK	1
MW-65	Chromium	25	ug/L	U	25	ug/L	OK	20
MW-65	Cobalt	10	ug/L	U	10	ug/L	OK	2
MW-65	Copper	10	ug/L	U	10	ug/L	OK	20
MW-65	Fluoride	0.1	mg/l		0.1	mg/l	OK	1
MW-65	Gross Radium Alpha	0.74	pCi/L	U	1	pCi/L	OK	1
MW-65	Iron	30	ug/L	U	30	ug/L	OK	2
MW-65	Lead	1	ug/L	U	1	ug/L	OK	2
MW-65	Magnesium	100	mg/l		0.5	mg/l	OK	100
MW-65	Manganese	10	ug/L		10	ug/L	OK	50
MW-65	Mercury	0.5	ug/L	U	0.5	ug/L	OK	1
MW-65	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-65	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-65	Naphthalene	1	ug/L	U	1	ug/L	OK	1
MW-65	Nickel	20	ug/L	U	20	ug/L	OK	2
MW-65	Nitrate/Nitrite (as N)	0.1	ug/L	U	0.1	ug/L	OK	1
MW-65	Potassium	1	mg/l		0.5	mg/l	OK	1
MW-65	Selenium	5	ug/L	U	5	ug/L	OK	5
MW-65	Silver	10	ug/L	U	10	ug/L	OK	2
MW-65	Sodium	100	mg/l		0.5	mg/l	OK	100
MW-65	Sulfate	1000	mg/l		1	mg/l	OK	1000
MW-65	Tetrahydrofuran	1	ug/L	U	1	ug/L	OK	1

## G-5A Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check	Dilution Factor
MW-65	Thallium	0.5	ug/L	U	0.5	ug/L	OK	5
MW-65	Tin	100	ug/L	U	100	ug/L	OK	5
MW-65	Toluene	1	ug/L	U	1	ug/L	OK	1
MW-65	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-65	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-65	Vanadium	15	ug/L	U	15	ug/L	OK	1
MW-65	Xylenes, Total	1	ug/L	U	1	ug/L	OK	1
MW-65	Zinc	10	ug/L		10	ug/L	OK	20
MW-70	Gross Radium Alpha	0.675	pCi/L		1	pCi/L	OK	1
MW-70	Nitrate/Nitrite (as N)	0.5	ug/L		0.1	ug/L	OK	5

## G-5B Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RI Check	DILUTION FACTOR
Trip Blank	Chloroform	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-11	Manganese	10	ug/L		10	ug/L	OK	1
MW-14	Manganese	10	ug/L		10	ug/L	OK	1
MW-25	Uranium	0.3	ug/L		0.3	ug/L	OK	1
MW-26	Chloride	10	mg/l		1	mg/l	OK	10
MW-26	Chloroform	20	ug/L		1	ug/L	OK	20
MW-26	Methylene chloride	1	ug/L		1	ug/L	OK	1
MW-26	Nitrate/Nitrite (as N)	1	ug/L		0.1	ug/L	OK	10
MW-26	Uranium	0.3	ug/L		0.3	ug/L	OK	1
MW-30	Chloride	100	mg/l		1	mg/l	OK	100
MW-30	Nitrate/Nitrite (as N)	1	ug/L		0.1	ug/L	OK	10
MW-30	Selenium	5	ug/L		5	ug/L	OK	1
MW-30	Uranium	0.3	ug/L		0.3	ug/L	OK	1
MW-31	Chloride	100	mg/l		1	mg/l	OK	100
MW-31	Nitrate/Nitrite (as N)	10	ug/L		0.1	ug/L	OK	100
MW-31	Sulfate	100	mg/l		1	mg/l	OK	100
MW-31	Total Dissolved Solids	500	mg/l		10	mg/l	OK	50
MW-35	Gross Radium Alpha	0.927	pCi/L		1	pCi/L	OK	1
MW-35	Manganese	10	ug/L		10	ug/L	OK	1
MW-35	Selenium	5	ug/L		5	ug/L	OK	1
MW-35	Thallium	0.5	ug/L	U	0.5	ug/L	OK	1
MW-35	Uranium	0.3	ug/L		0.3	ug/L	OK	1
MW-65	Gross Radium Alpha	0.88	pCi/L		1	pCi/L	OK	1
MW-65	Manganese	10	ug/L		10	ug/L	OK	1
MW-65	Selenium	5	ug/L		5	ug/L	OK	1
MW-65	Thallium	0.5	ug/L	U	0.5	ug/L	OK	1
MW-65	Uranium	0.3	ug/L		0.3	ug/L	OK	1
Trip Blank	Chloroform	1	ug/L	U	1	ug/L	OK	1
Trip Blank	Methylene chloride	1	ug/L	U	1	ug/L	OK	1
MW-11	Manganese	10	ug/L		10	ug/L	OK	20
MW-14	Manganese	10	ug/L		10	ug/L	OK	50
MW-25	Cadmium	0.5	ug/L		0.5	ug/L	OK	20
MW-25	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-26	Chloride	10	mg/l		1	mg/l	OK	10
MW-26	Chloroform	10	ug/L		1	ug/L	OK	10
MW-26	Methylene chloride	1	ug/L		1	ug/L	OK	1
MW-26	Nitrate/Nitrite (as N)	0.1	ug/L		0.1	ug/L	OK	1
MW-26	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-30	Chloride	50	mg/l		1	mg/l	OK	50
MW-30	Nitrate/Nitrite (as N)	2	ug/L		0.1	ug/L	OK	20
MW-30	Selenium	5	ug/L		5	ug/L	OK	2
MW-30	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-31	Chloride	50	mg/l		1	mg/l	OK	50
MW-31	Nitrate/Nitrite (as N)	2	ug/L		0.1	ug/L	OK	20
MW-31	Selenium	5	ug/L		5	ug/L	OK	20
MW-31	Sulfate	50	mg/l		1	mg/l	OK	50
MW-31	Total Dissolved Solids	20	mg/l		10	mg/l	OK	2
MW-35	Gross Radium Alpha	0.892	pCi/L		1	pCi/L	OK	1
MW-35	Manganese	10	ug/L		10	ug/L	OK	20
MW-35	Molybdenum	10	ug/L	U	10	ug/L	OK	20
MW-35	Selenium	5	ug/L		5	ug/L	OK	2
MW-35	Thallium	0.5	ug/L		0.5	ug/L	OK	2
MW-35	Uranium	0.3	ug/L		0.3	ug/L	OK	2
MW-65	Manganese	10	ug/L		10	ug/L	OK	50

G-6A: Trip Blank Evaluation

All trip blanks for this Quarter were nondetect.

<b>Blank</b>	<b>Sample Date</b>	<b>Laboratory</b>
AWAL 1302409	2/25/2013	American West Analytical Laboratories
AWAL 1302339	2/19/2013	American West Analytical Laboratories
AWAL 1303130	N/A	American West Analytical Laboratories
AWAL 1303335	3/12/2013	American West Analytical Laboratories
AWAL 1303550	3/20/2013	American West Analytical Laboratories

N/A - No trip blank was required because there were no samples in this group that were analyzed for VOCs

G-6B: Trip Blank Evaluation

All trip blanks for this Quarter were nondetect.

<b>Blank</b>	<b>Sample Date</b>	<b>Laboratory</b>
AWAL 1301517	1/24/2013	American West Analytical Laboratories
AWAL 1303552	3/20/2013	American West Analytical Laboratories

G-7A: QA/QC Evaluation for Routine Sample Duplicates

Constituent	MW-14	MW-65	%RPD
Ammonia (as N)	0.05	0.0799	46.04
Cadmium	1.48	1.44	2.74
Manganese	2250	2250	0.00
Uranium	58.4	62.3	6.46
Vanadium	15	15	0.00
Zinc	14	12.5	11.32
Chloride (mg/L)	20.9	18.8	10.58
Fluoride (Mg/L)	0.172	0.165	4.15
Sulfate (mg/L)	1630	1590	2.48
TDS (mg/L)	3500	3570	1.98
Bicarbonate as HCO <sub>3</sub>	386	393	1.80
Calcium	488	509	4.21
Magnesium	159	165	3.70
Potassium	12.1	13.3	9.45
Sodium	353	372	5.24

Constituent	MW-19	MW-70	%RPD
Nitrate + Nitrite (as N)	3.61	3.93	8.49
<b>Radiologic Duplicate Tests</b>			
Gross Alpha minus Rn & U*	1.11	1.6	1.02
Gross Alpha minus Rn & U Precision (±)	0.261	0.402	0.00

\* Duplicate checks reported for gross alpha minus RN and U are not %RPD. Calculated values are based on the formula in the approved QAP.

Per the approved QAP, an RPD greater than 20% is acceptable if the reported results are less than 5 times the RL. These results are provided for information only.

G-7B: QA/QC Evaluation for Accelerated Sample Duplicates

Constituent	MW-35 January	MW-65 January	%RPD
Manganese	247	246	0.41
Selenium	11	10.2	7.55
Thallium	ND	ND	NC
Uranium	23.6	22.5	0.707
Radiologic RPD Tests			
Gross Alpha minus Rn & U*	6.62	7.79	0.95
Gross Alpha minus Rn & U Precision ( $\pm$ )	0.844	0.904	

\* Duplicate checks reported for gross alpha minus RN and U are not %RPD. Calculated values are based on the formula in the approved QAP.

Constituent	MW-14 March	MW-65 March	%RPD
Manganese	2110	2100	0.48

G-8A: Radiologics Counting Error

Well		Sample Date	Gross Alpha minus Rn & U	Gross Alpha minus Rn & U Precision ( $\pm$ )	Counting Error $\leq$ 20%	GWCL	Within GWCL?
MW-02	MW 2	3/5/2013	1.06	0.282	N	3.2	Y
MW-11	MW 11	2/20/2013	1.04	0.268	N	3.75	Y
MW-14	MW 14	2/26/2013	1.0 U	NC	NC	7.5	NC
MW-19	MW 19	3/13/2013	1.11	0.261	N	2.36	Y
MW-25	MW 25	2/20/2013	1.14	0.285	N	7.5	Y
MW-26	MW 26	2/20/2013	3.81	0.497	Y	4.69	Y
MW-27	MW 27	2/25/2013	1.0 U	NC	NC	2	NC
MW-30	MW 30	2/26/2013	1.0 U	NC	NC	3.75	NC
MW-31	MW 31	2/19/2013	1.54	0.327	N	7.5	Y
MW-32	MW 32	2/19/2013	5.02	0.614	Y	3.33	NA
MW-35	MW 35	2/26/2013	5.09	0.685	Y	3.75	NA
MW-36	MW 36	2/26/2013	1.85	0.407	N	No GWCLs have been set	
MW-37	MW 37	3/20/2013	3.89	0.628	Y		
MW-65	MW 65	2/26/2013	1.0 U	NC	NC	4.69	NC
MW-70	MW 70	3/13/2013	1.6	0.402	N	2.42	Y

N/A - the counting error is less than 20% of the activity as required by the GWDP. The value is above the GWCL and this check column is not applicable.

NC - Sample results were nondetect and as such the check is not applicable

**G-8B: Radiologics Counting Error for Accelerated Samples**

Well	Sample Date	Gross Alpha minus Rn & U	Gross Alpha minus Rn & U Precision ( $\pm$ )	Counting Error $\leq$ 20%	GWCL
MW-35	1/23/2013	6.62	0.844	Y	NA
MW-65	1/23/2013	7.79	0.904	Y	NA
MW-35	3/19/2013	9.51	0.94	Y	NA

N/A - the counting error is less than 20% of the activity as required by the GWDP. The value is above the GWCL and this check column is not applicable.

G-9A: Laboratory Matrix QC

**Matrix Spike % Recovery Comparison**

Lab Report	Well	Analyte	MS %REC	MSD %REC	REC Range	RPD
1302409	MW-14	Calcium*	NC	NC	90 - 110	NC
1302409	MW-14	Sodium*	NC	NC	90 - 110	NC
1302409	MW-14	Ammonia	89.3	89.1	90 - 110	0.299
1302409	MW-14	Fluoride	118	120	90 - 110	1.85
1302409	MW-14	Sulfate	124	107	90 - 110	11.3
1302409	MW-65	Nitrate + Nitrite (as N)	112	106	90 - 110	5.14
1302339	MW-11	Sodium*	NC	NC	90 - 110	NC
1302339	MW-11	Ammonia	86.7	88.3	90 - 110	1.06
1303335	MW-19	Nitrate + Nitrite (as N)	108	117	90 - 110	5.1
1303550	MW-37	Calcium*	NC	NC	90 - 110	NC
1303550	MW-37	Sodium*	NC	NC	90 - 110	NC
1303550	MW-37	Magnesium*	NC	NC	90 - 110	NC
1303550	MW-37	Sulfate	119	97.8	90 - 110	5.56

\*= Recovery was not calculated as the analyte level in the sample was greater than 4 times the spike level.

**Surrogate % Recovery**

All surrogate recoveries were within the laboratory established recovery ranges.

**LCS % Recovery**

All LCS spike compound recoveries were within the laboratory established recovery ranges.

**Method Blank Detections**

No analytes were detected above the RL in the Method Blanks.

G-9B: Accelerated Laboratory Matrix QC

**Matrix Spike % Recovery Comparison**

Lab Report	Well	Analyte	MS % REC	MSD % REC	REC Range	RPD %
1301517 - January Accelerated	MW-26	Nitrate+Nitrite as N	114	119	90 - 110	3.42

\*= Recovery was not calculated as the analyte level in the sample was greater than 4 times the spike level.  
NA = MS samples were not Denison samples.

**Laboratory Control Sample**

All LCS spike compound recoveries were within the laboratory established recovery ranges.

**Surrogate % Recovery**

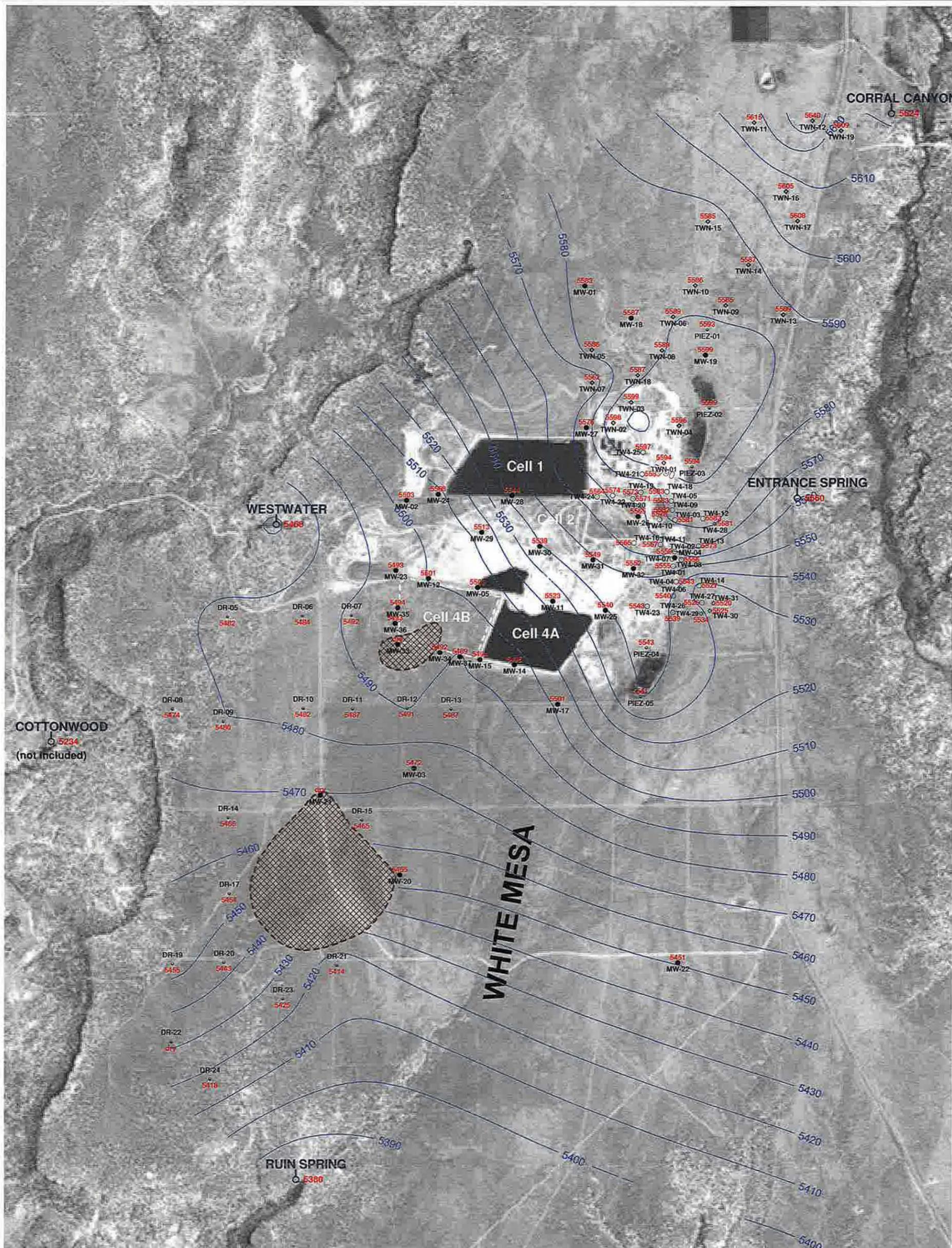
All surrogate recoveries were within the laboratory established recovery ranges.

**Method Blank Detections**

No analytes were detected above the RL in the Method Blanks.

Tab H

Kriged Current Quarterly Groundwater Contour Map



**EXPLANATION**

-  estimated dry area
-  MW-5 perched monitoring well showing elevation in feet amsl
-  5503
-  TW4-12 temporary perched monitoring well showing elevation in feet amsl
-  5583
-  TWN-10 temporary perched nitrate monitoring well showing elevation in feet amsl
-  5586
-  PIEZ-1 perched piezometer showing elevation in feet amsl
-  5593
-  TW4-28 temporary perched monitoring well installed March, 2013 showing elevation in feet amsl
-  5581
-  RUIN SPRING seep or spring showing elevation in feet amsl
-  5380

NOTE: MW-4, MW-26, TW4-4, TW4-19, and TW4-20 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells



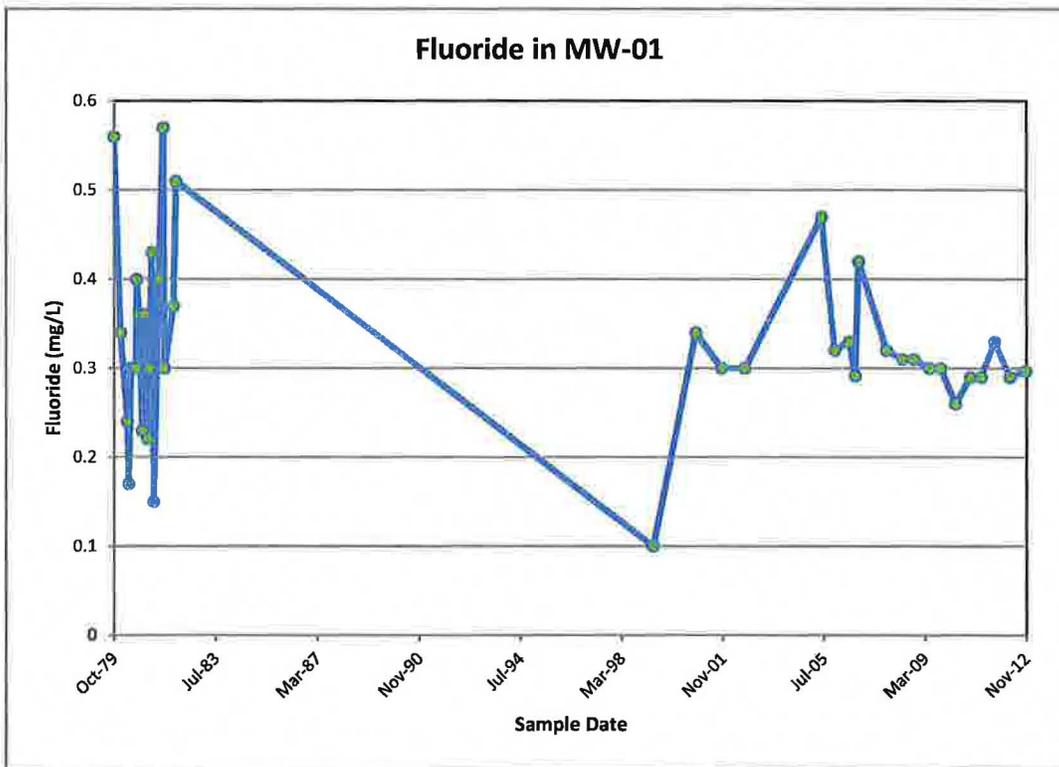
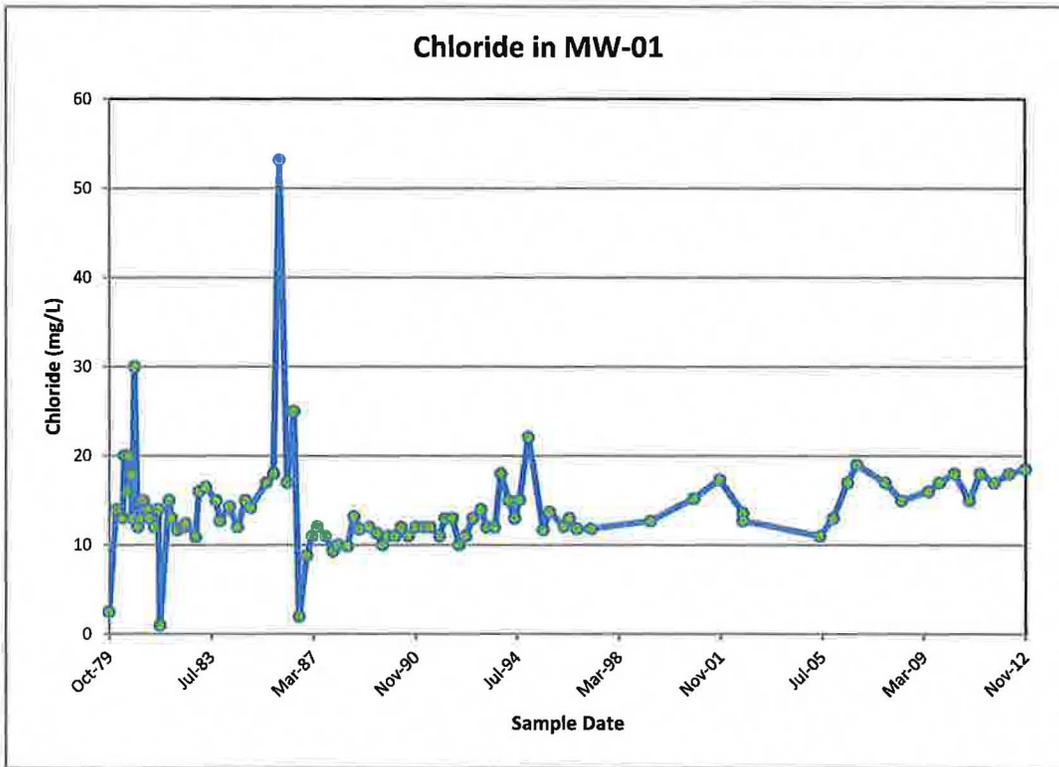
**HYDRO  
GEO  
CHEM, INC.**

<b>KRIGED 1st QUARTER, 2013 WATER LEVELS WHITE MESA SITE</b>			
APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/may13/Uw0313.srf	H - 1

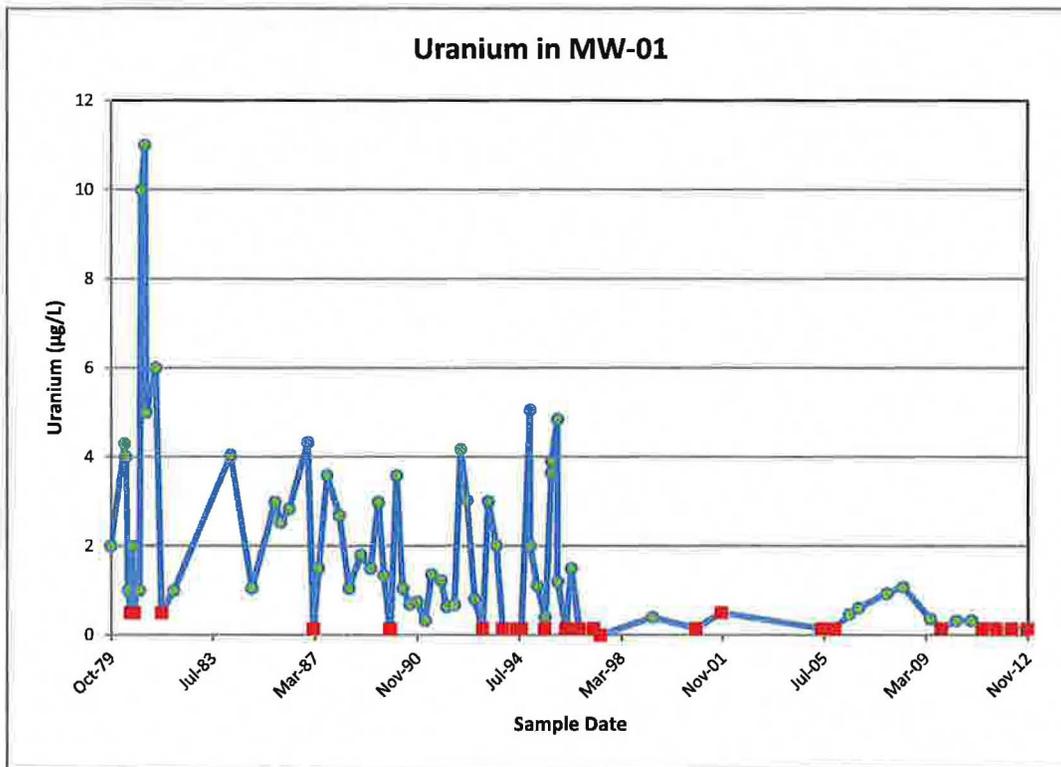
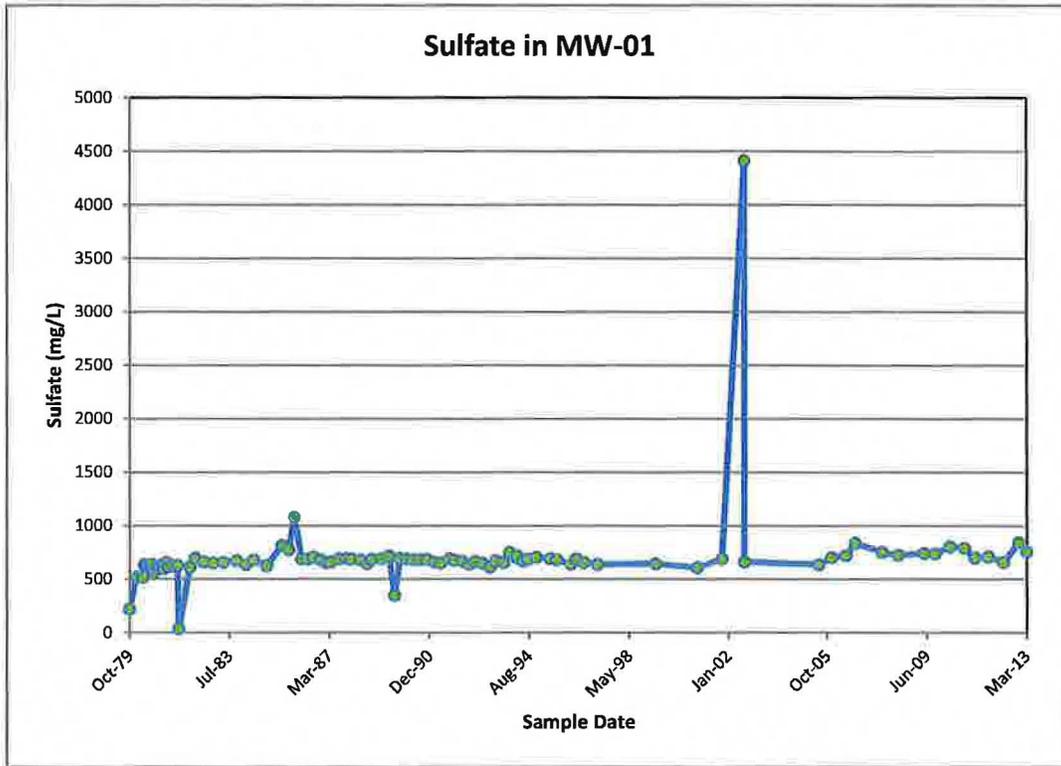
Tab I

Groundwater Time Concentration Plots

## Time concentration plots for MW-01

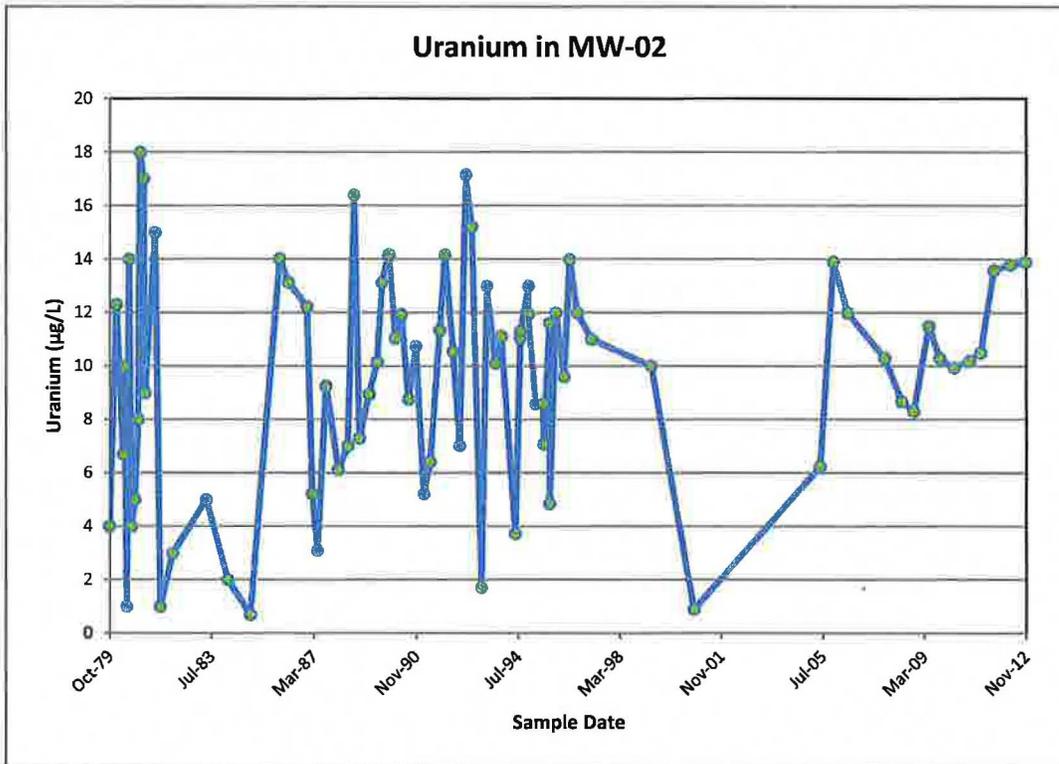
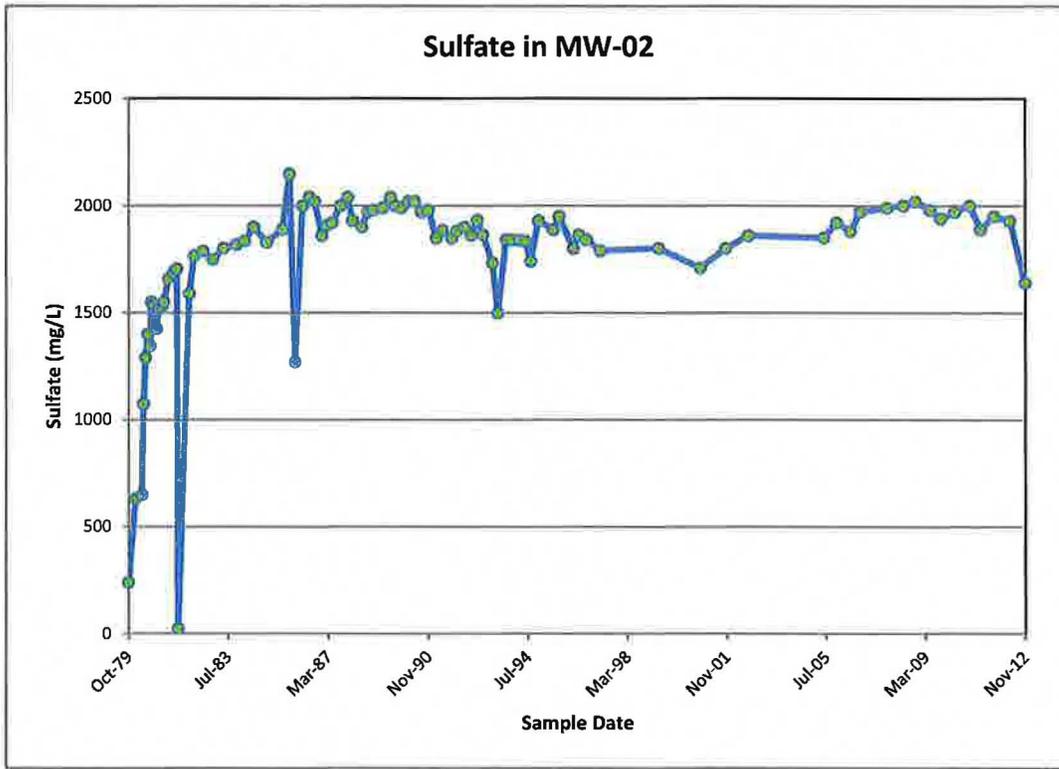


## Time concentration plots for MW-01

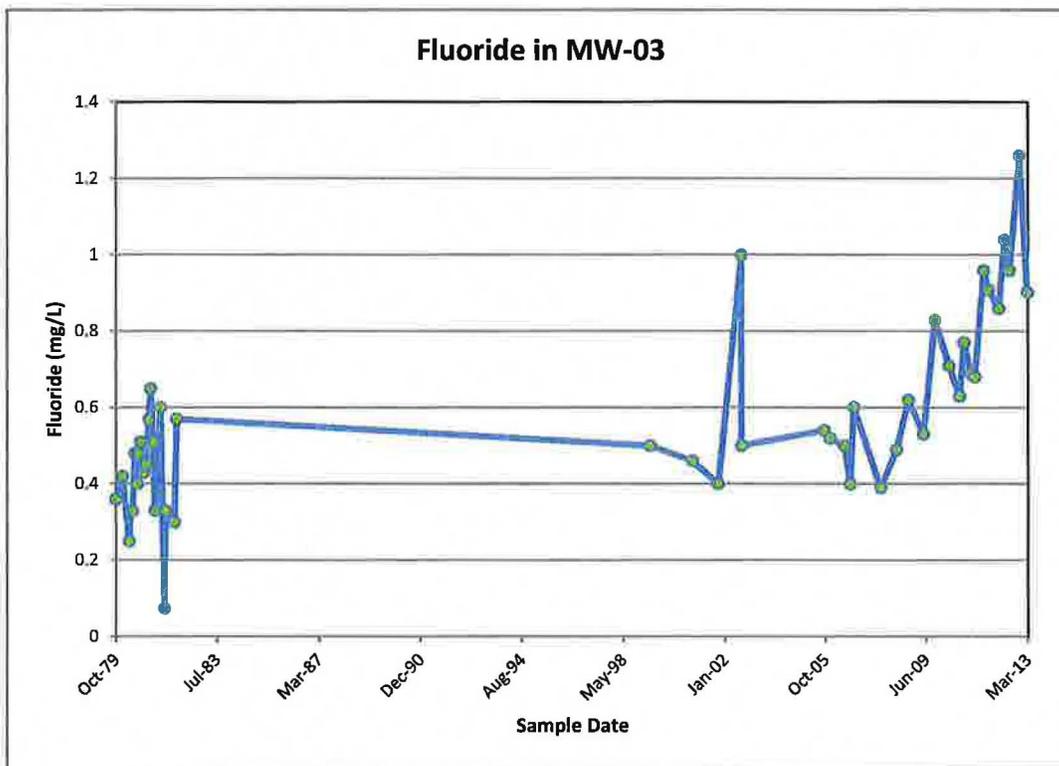
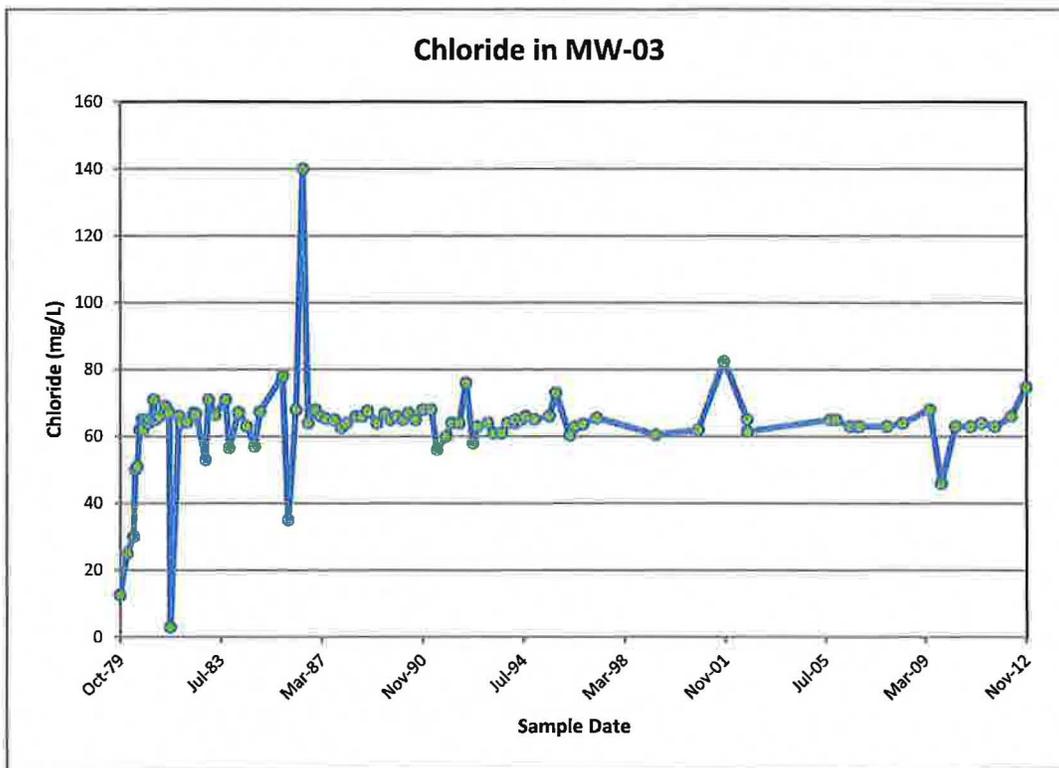




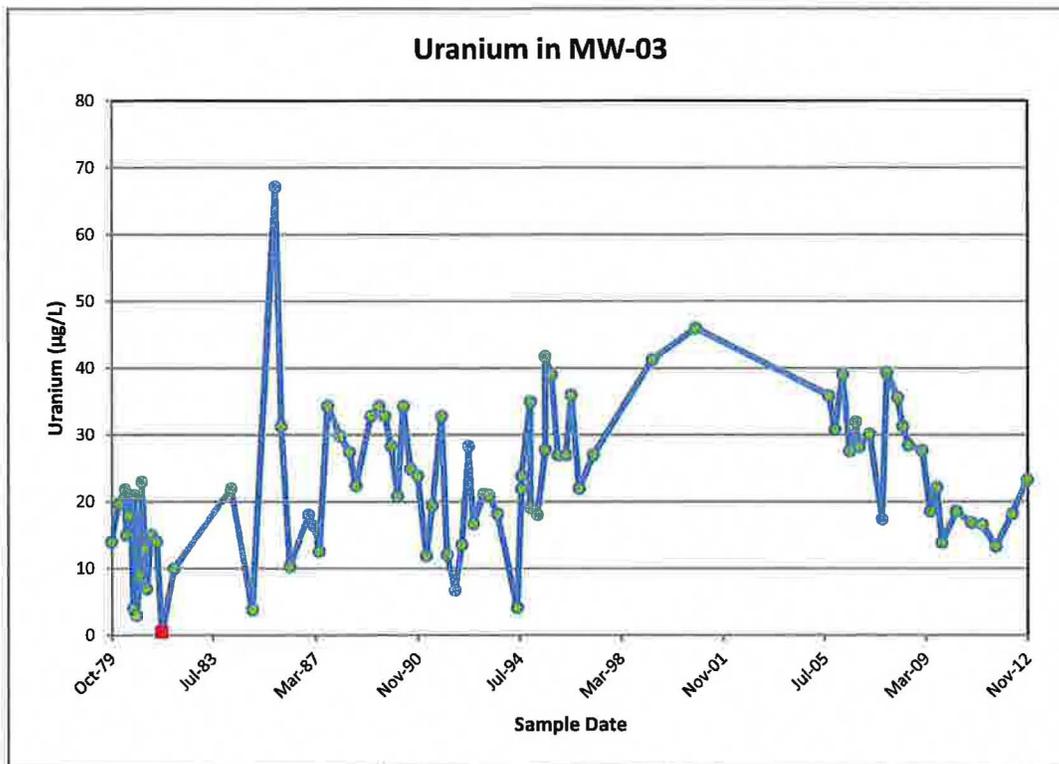
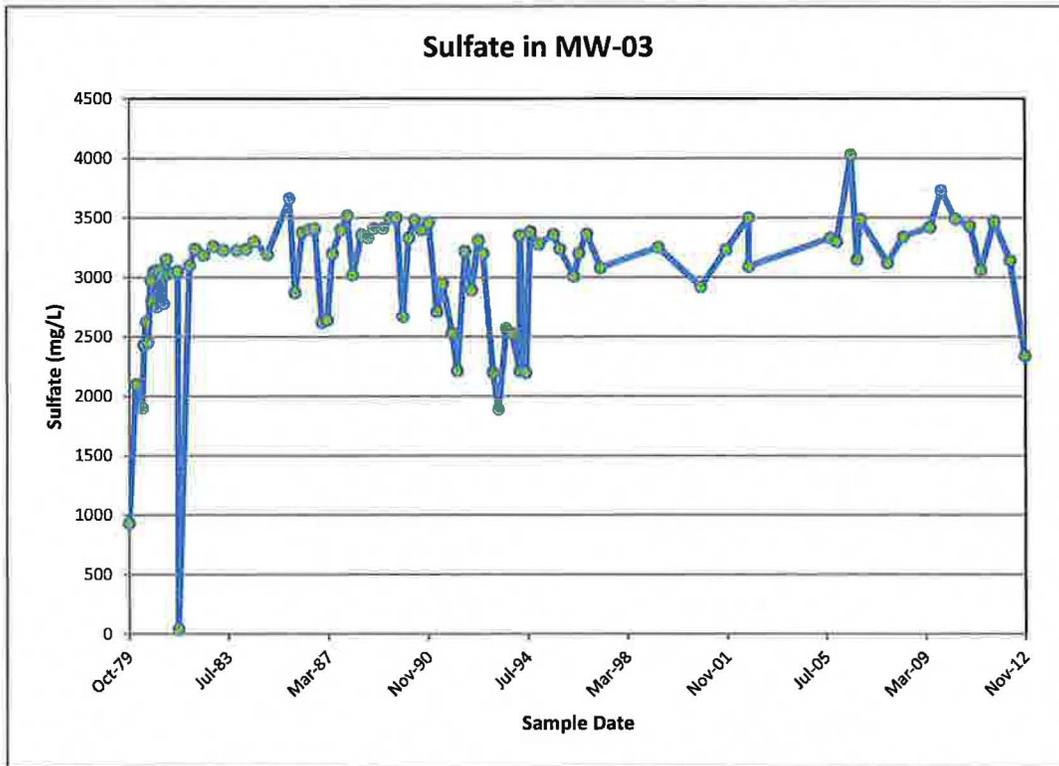
## Time concentration plots for MW-02



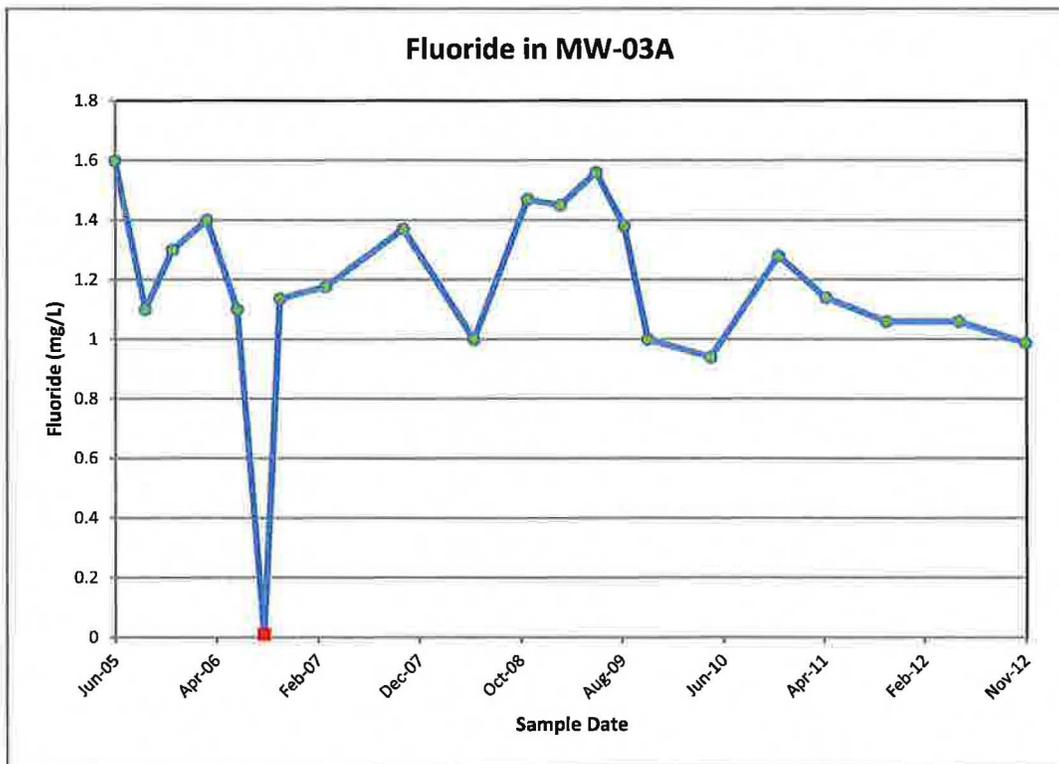
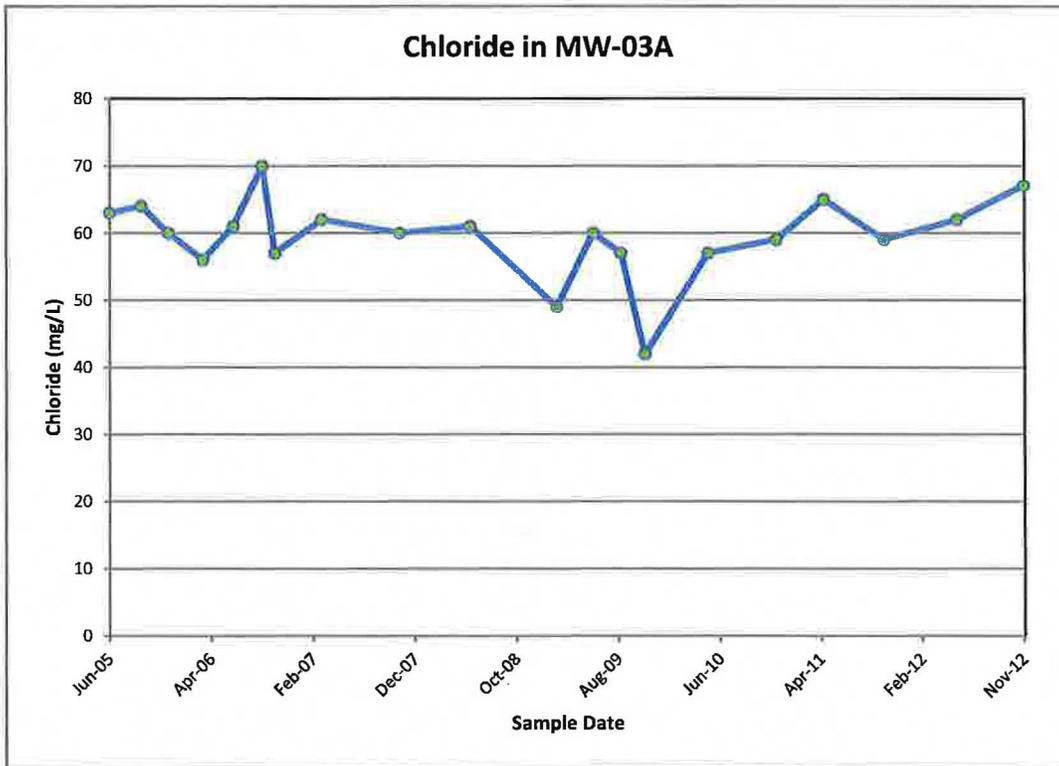
### Time concentration plots for MW-03



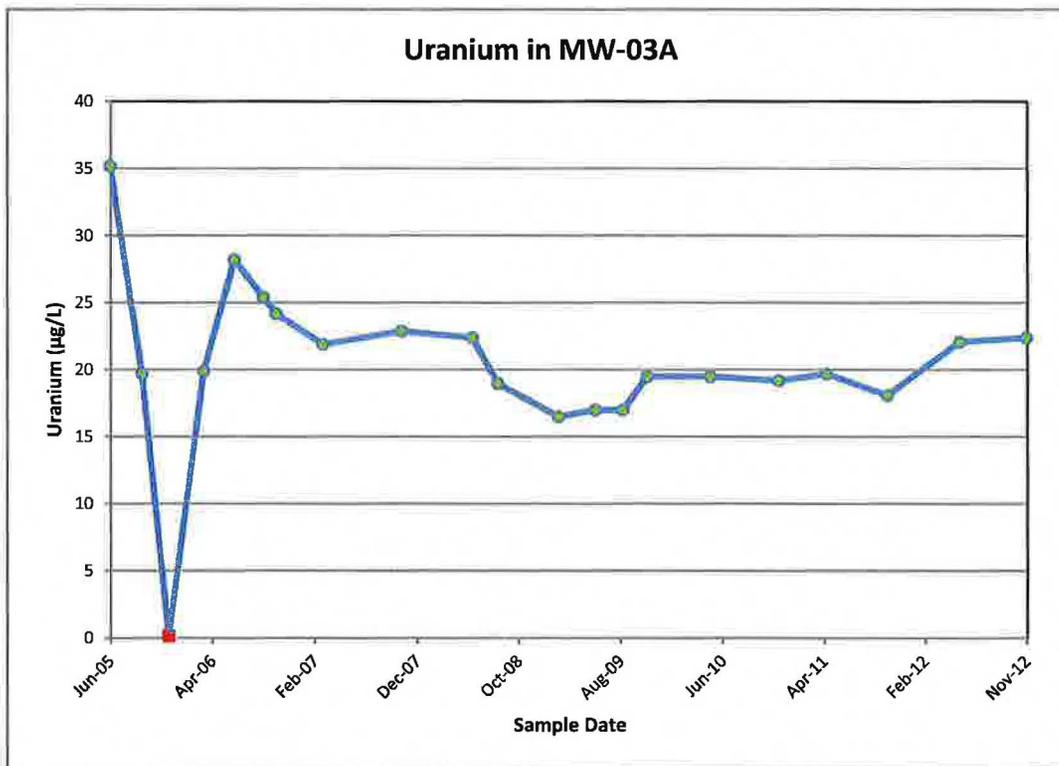
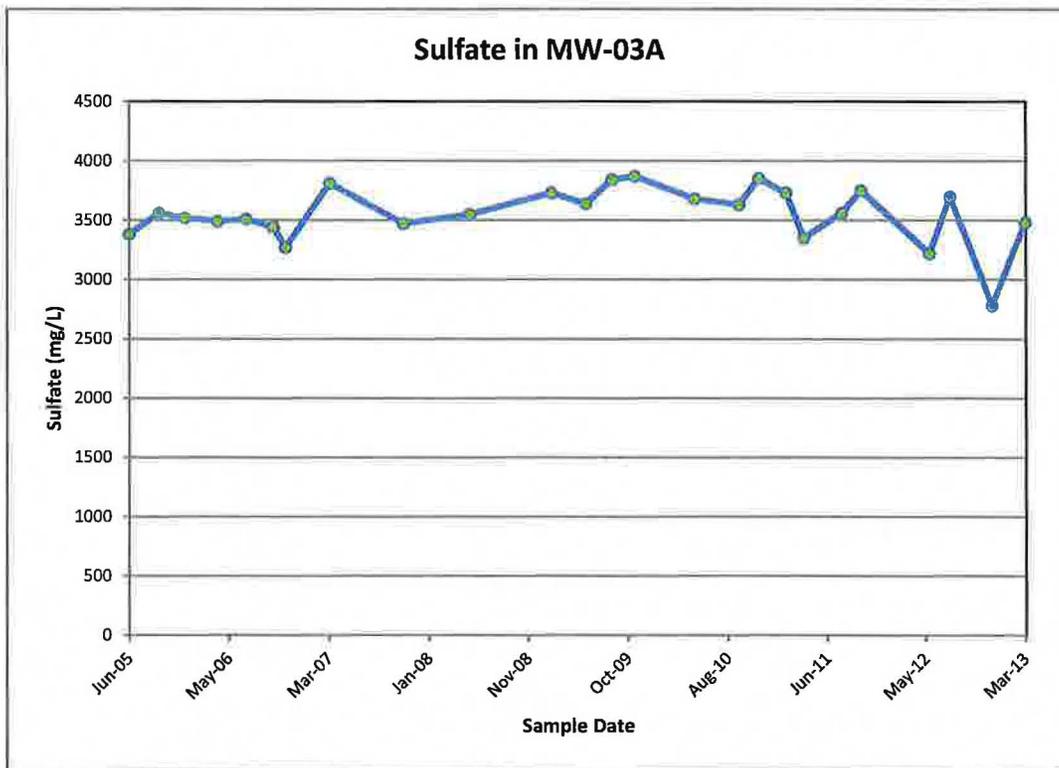
## Time concentration plots for MW-03



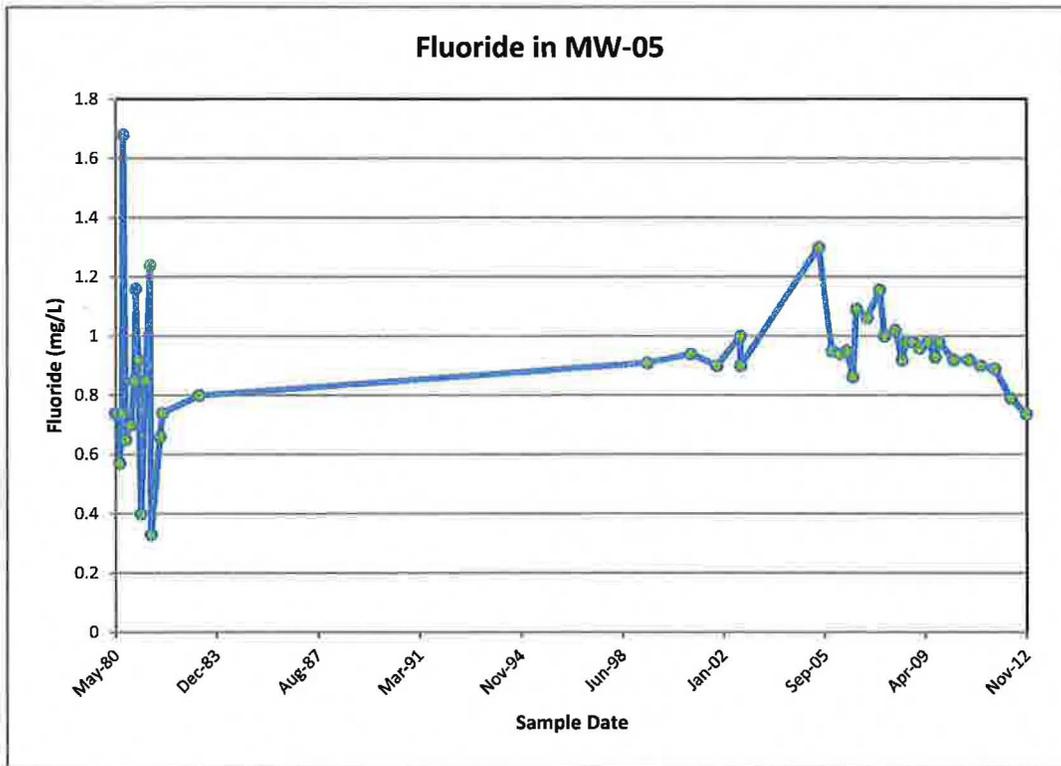
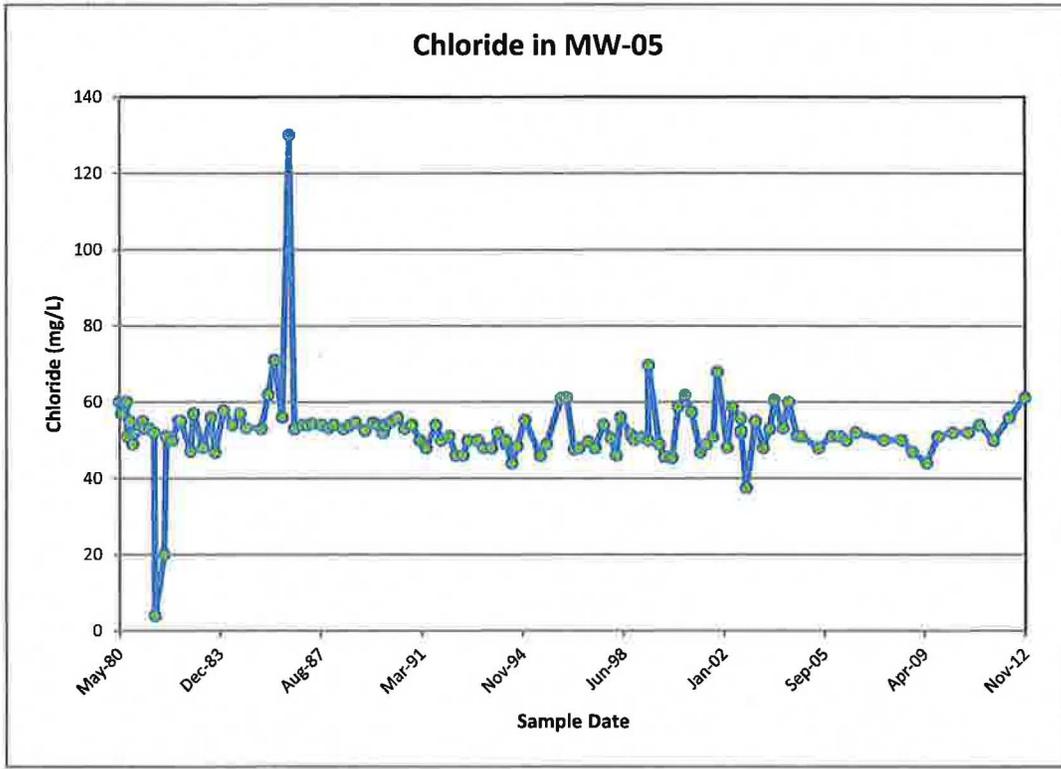
## Time concentration plots for MW-03A



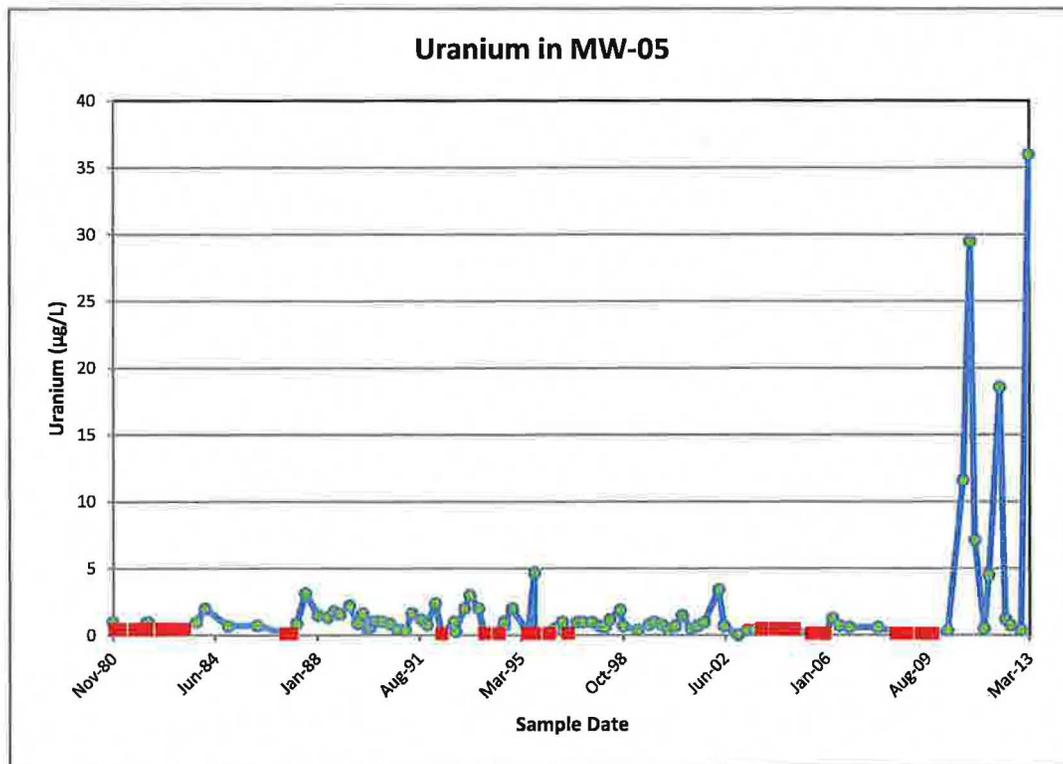
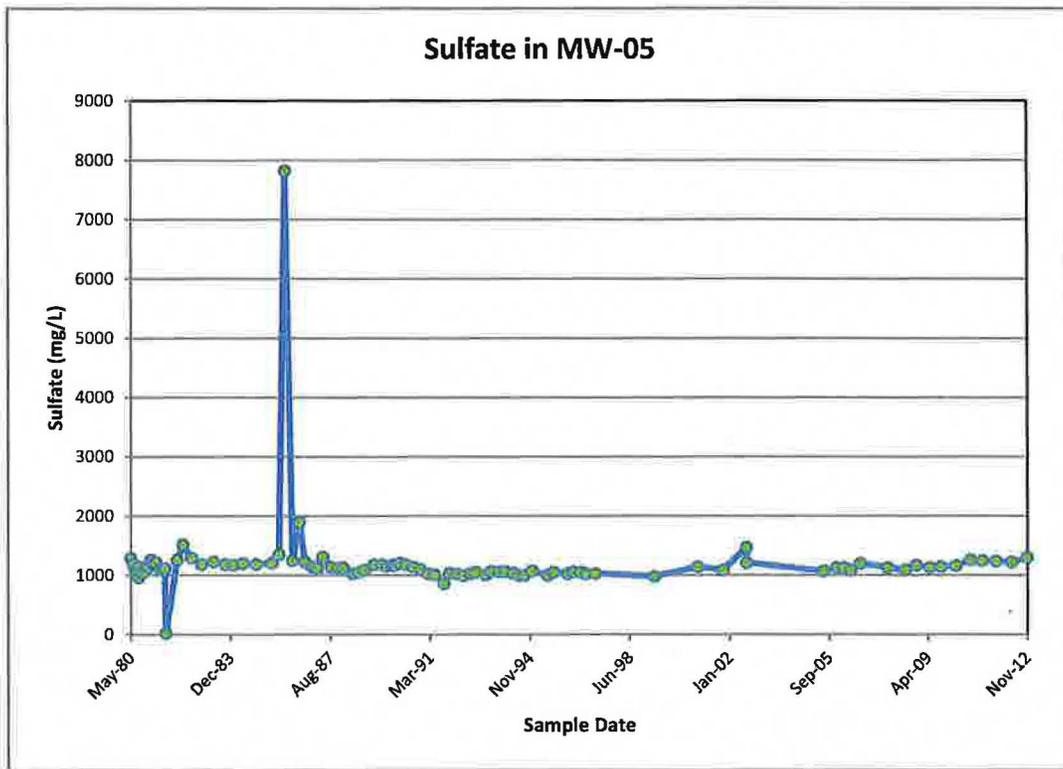
## Time concentration plots for MW-03A



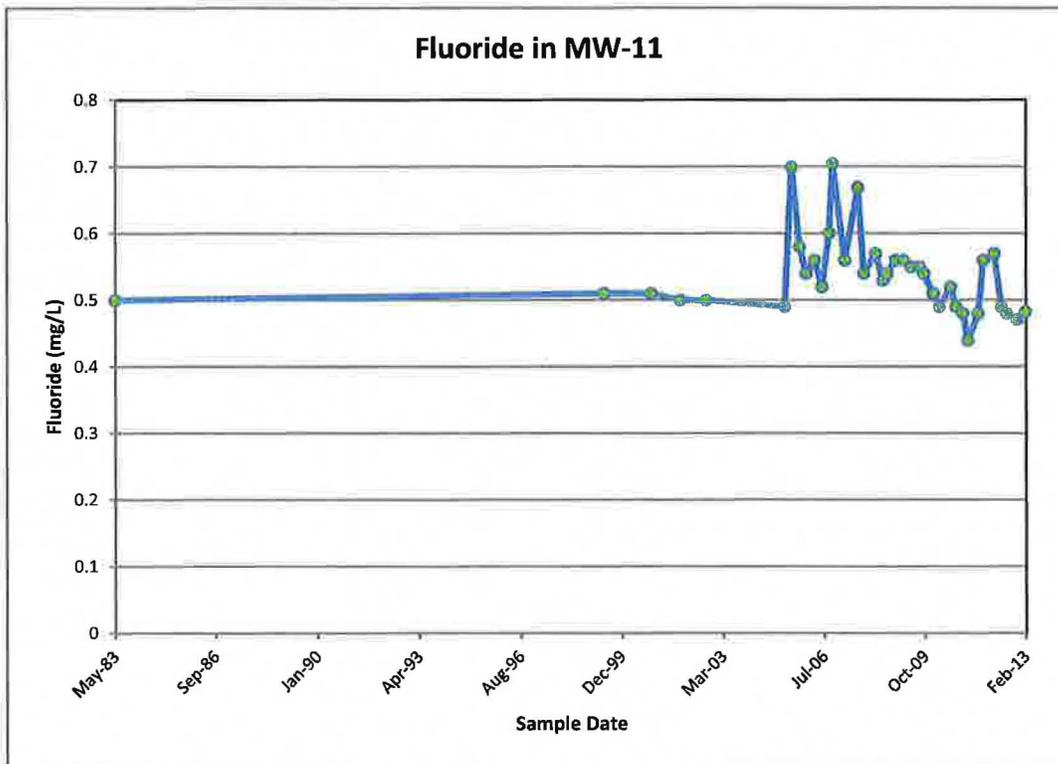
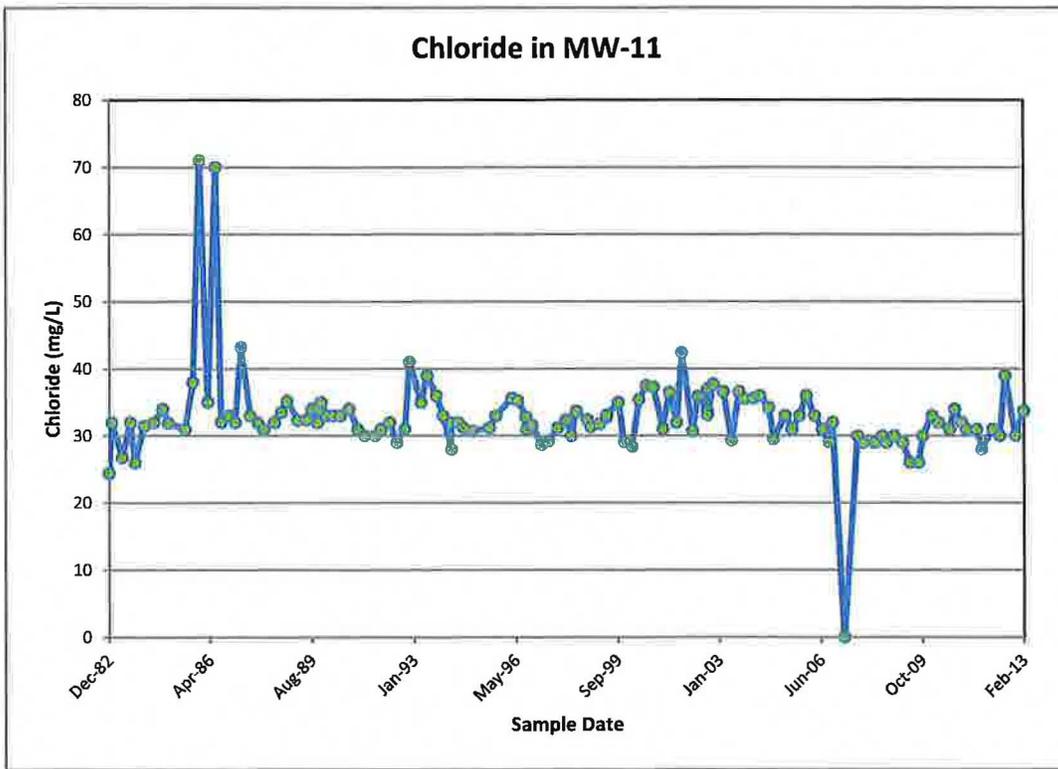
### Time concentration plots for MW-05



## Time concentration plots for MW-05

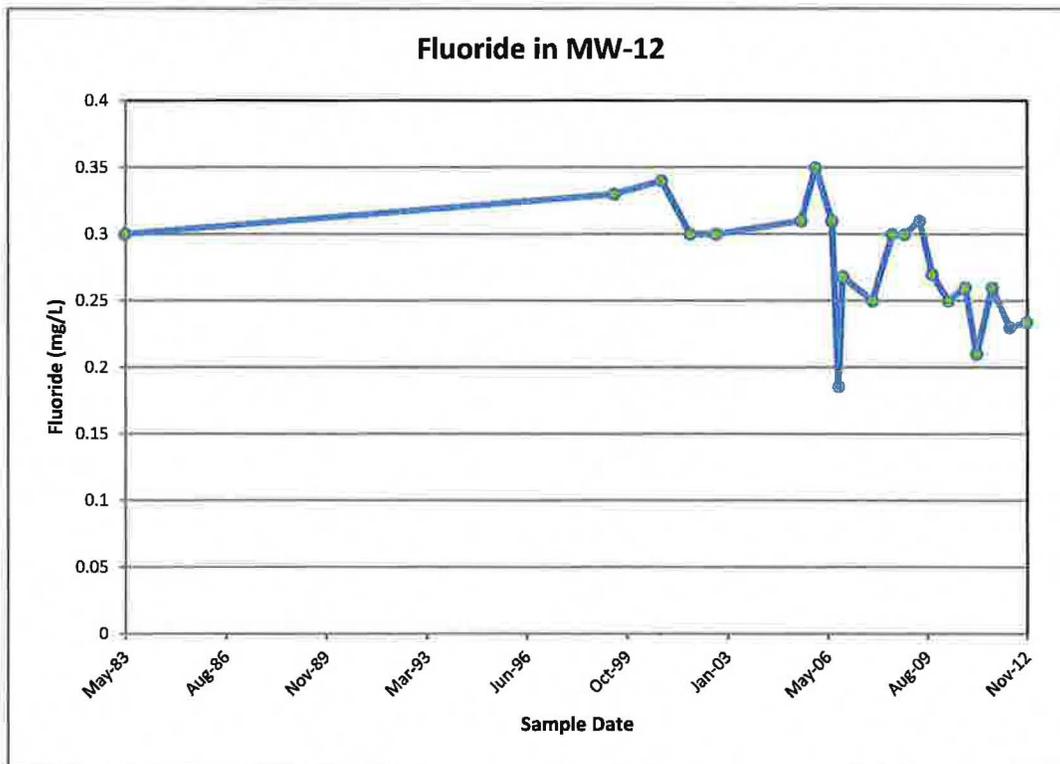
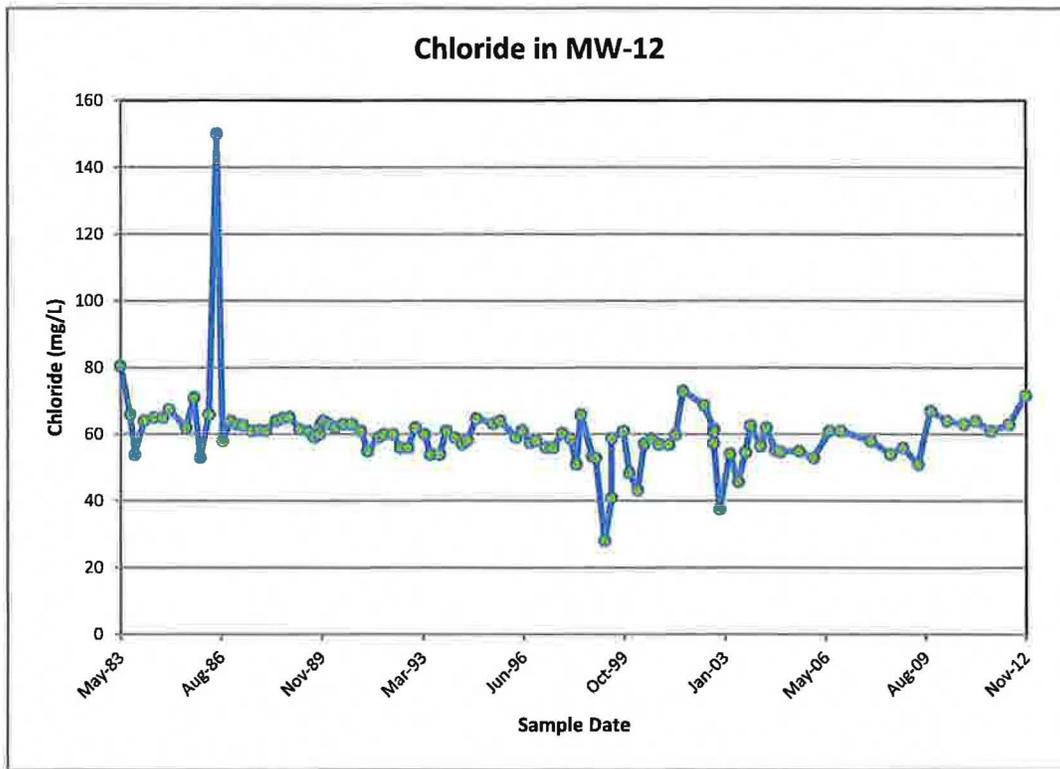


## Time concentration plots for MW-11

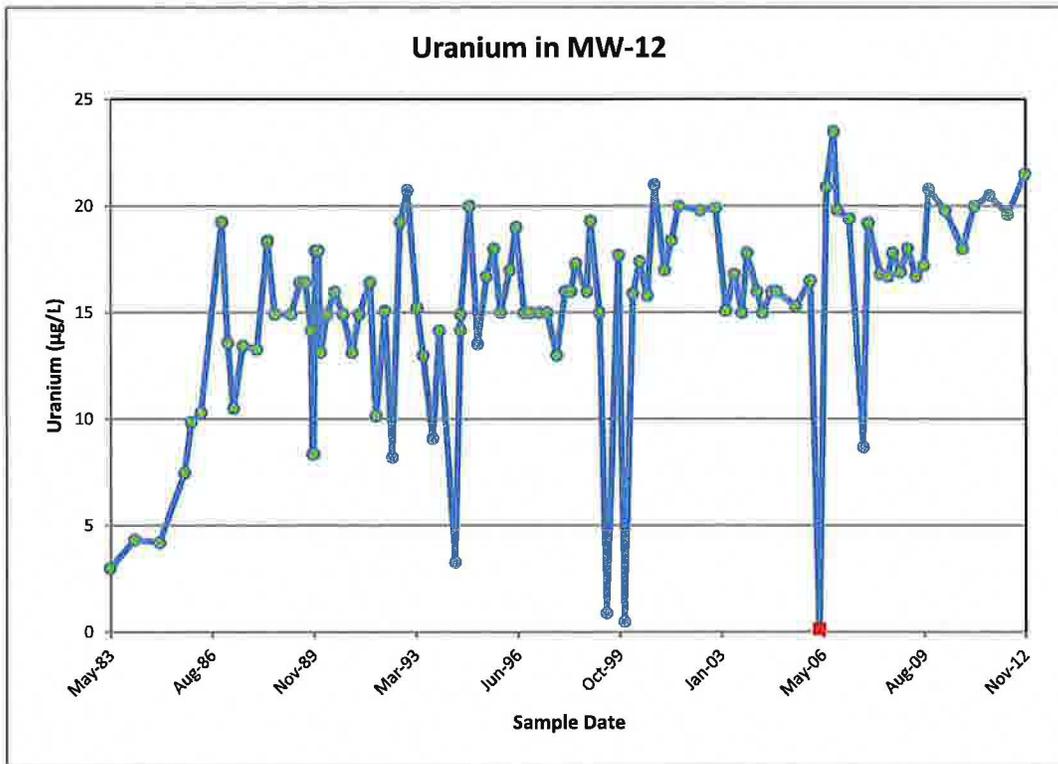
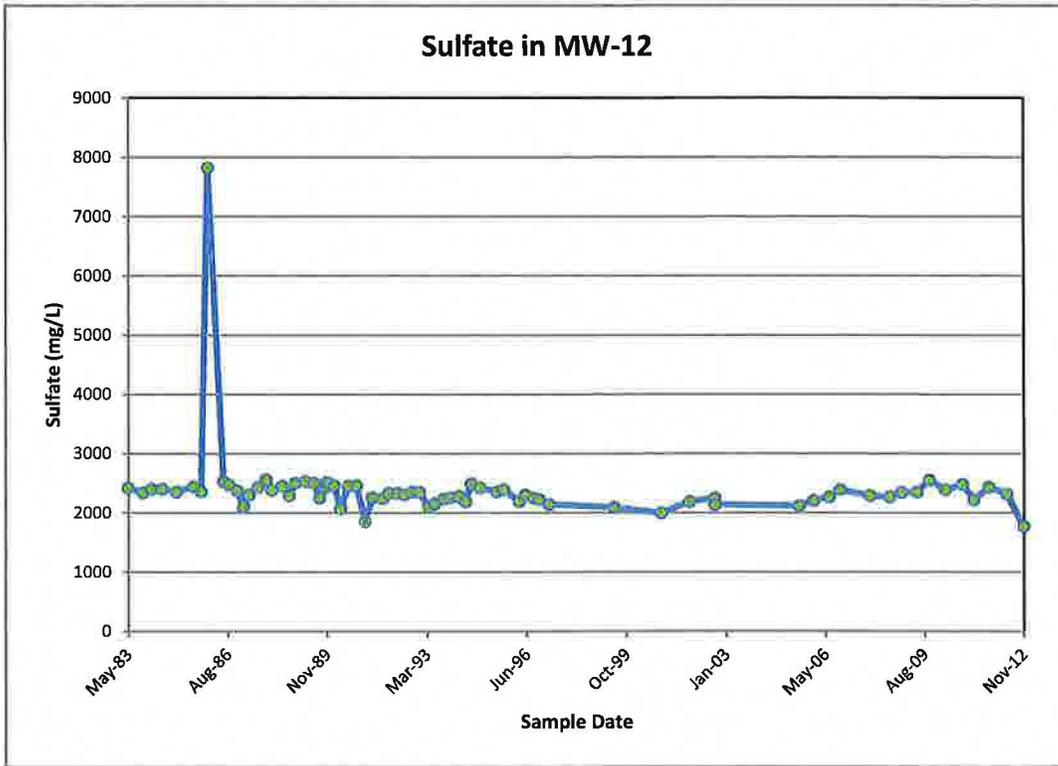




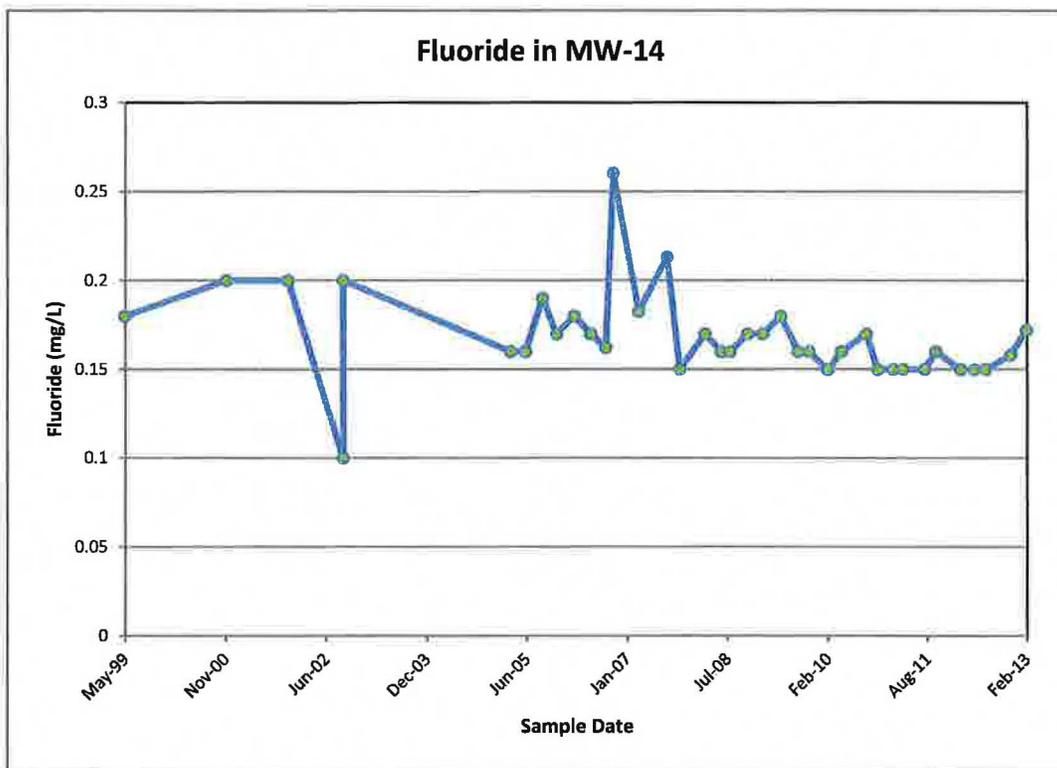
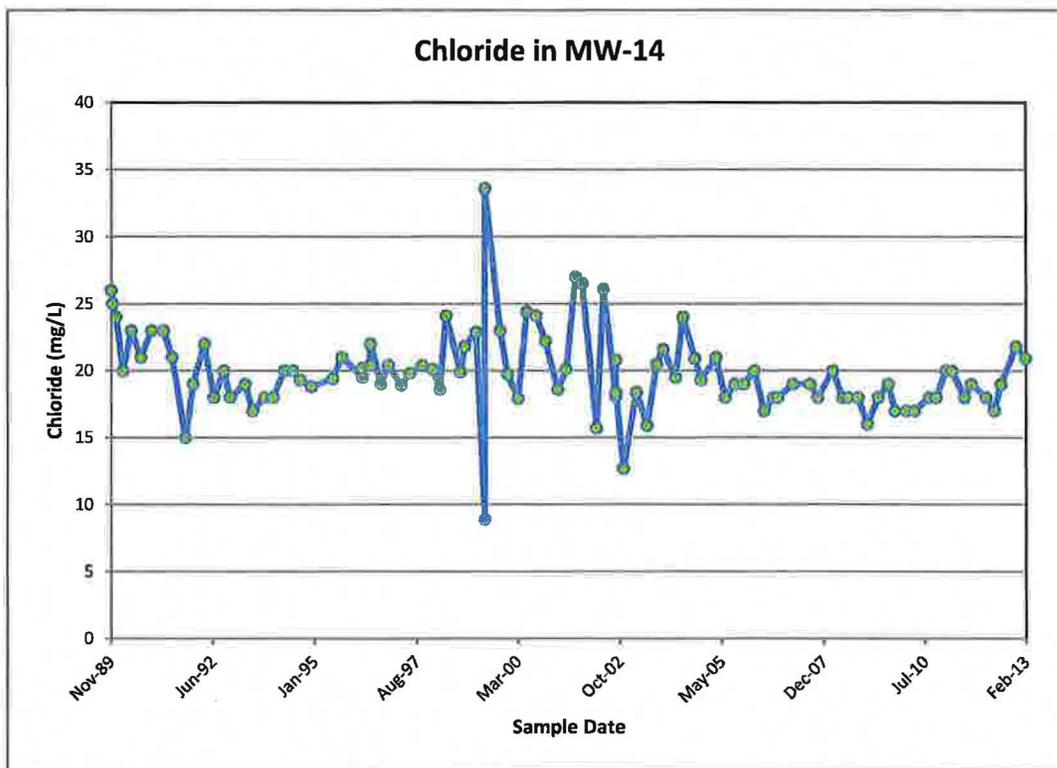
## Time concentration plots for MW-12



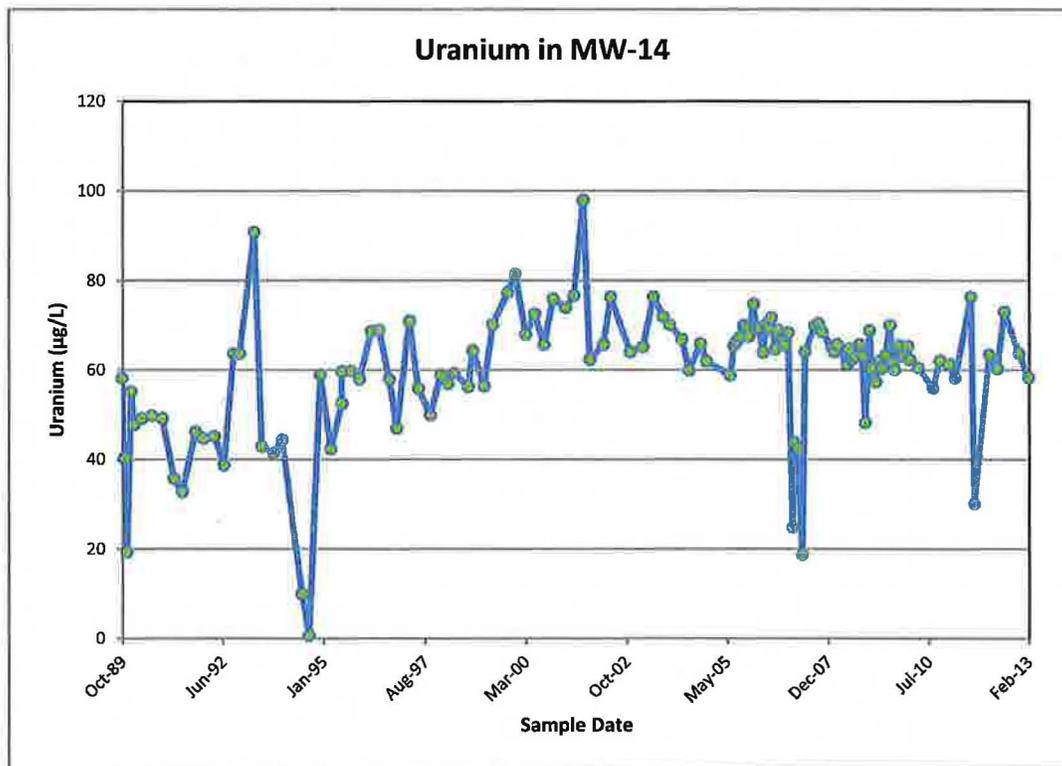
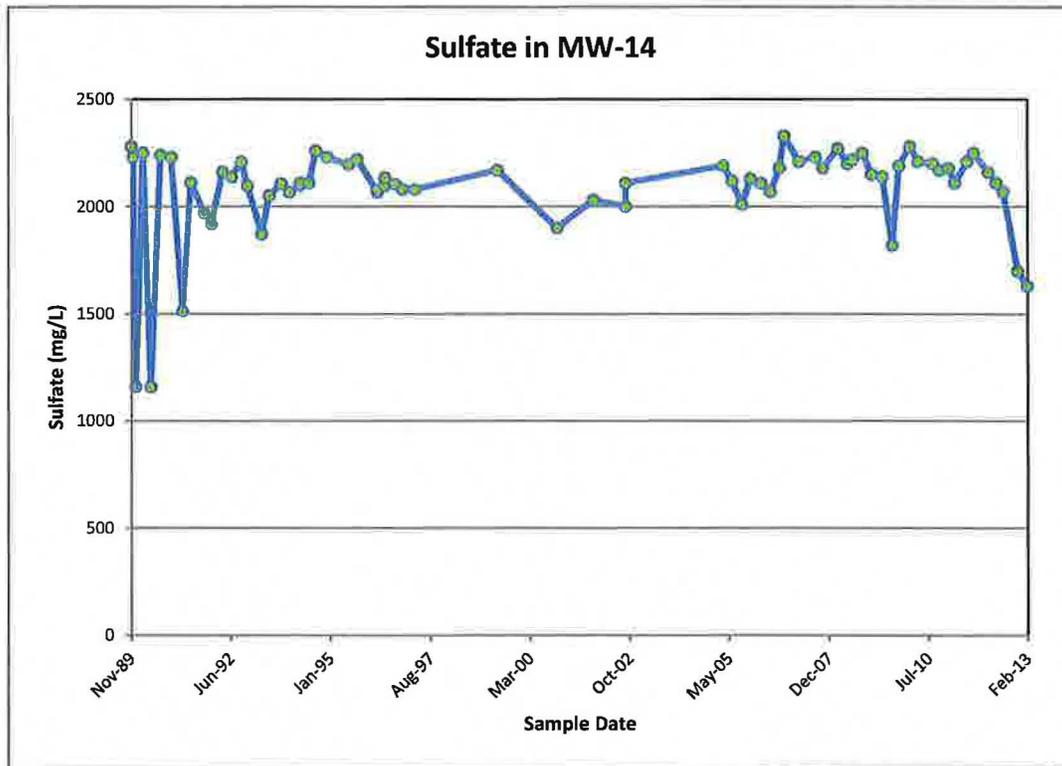
## Time concentration plots for MW-12



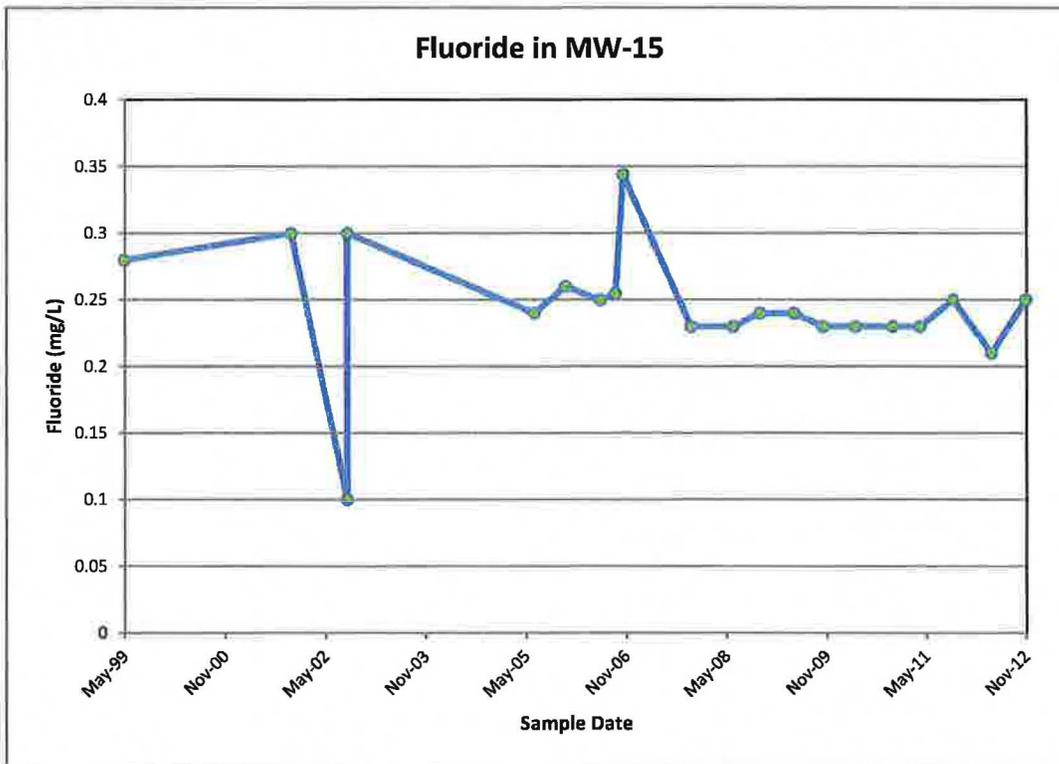
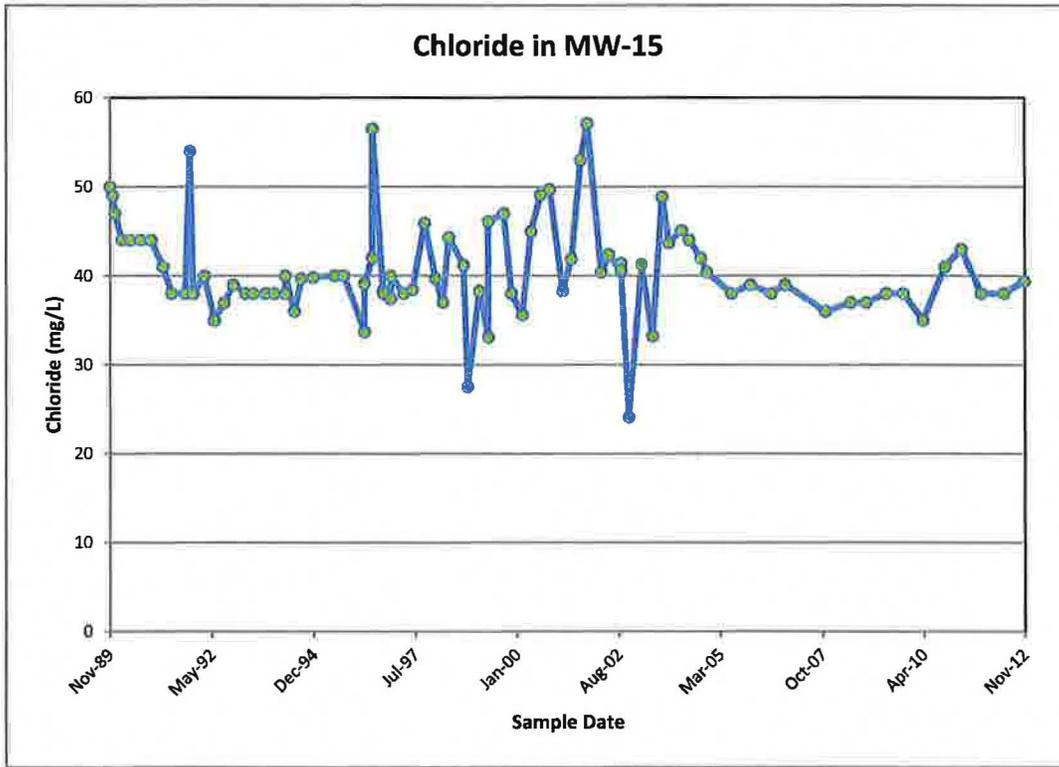
## Time concentration plots for MW-14



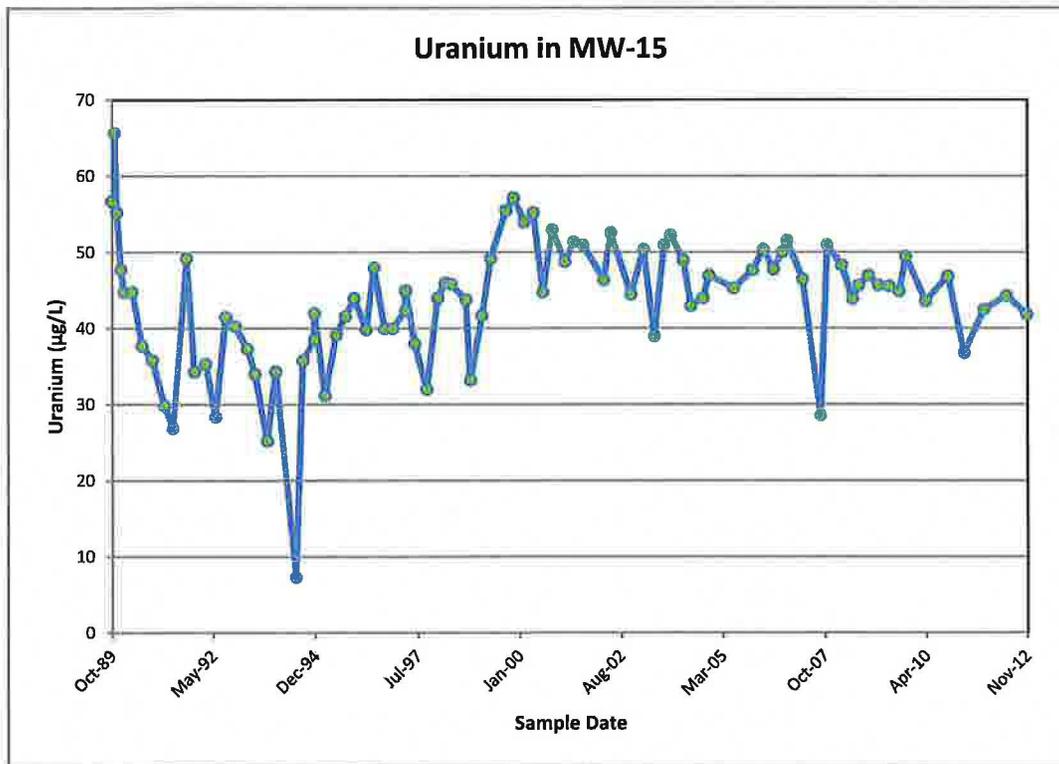
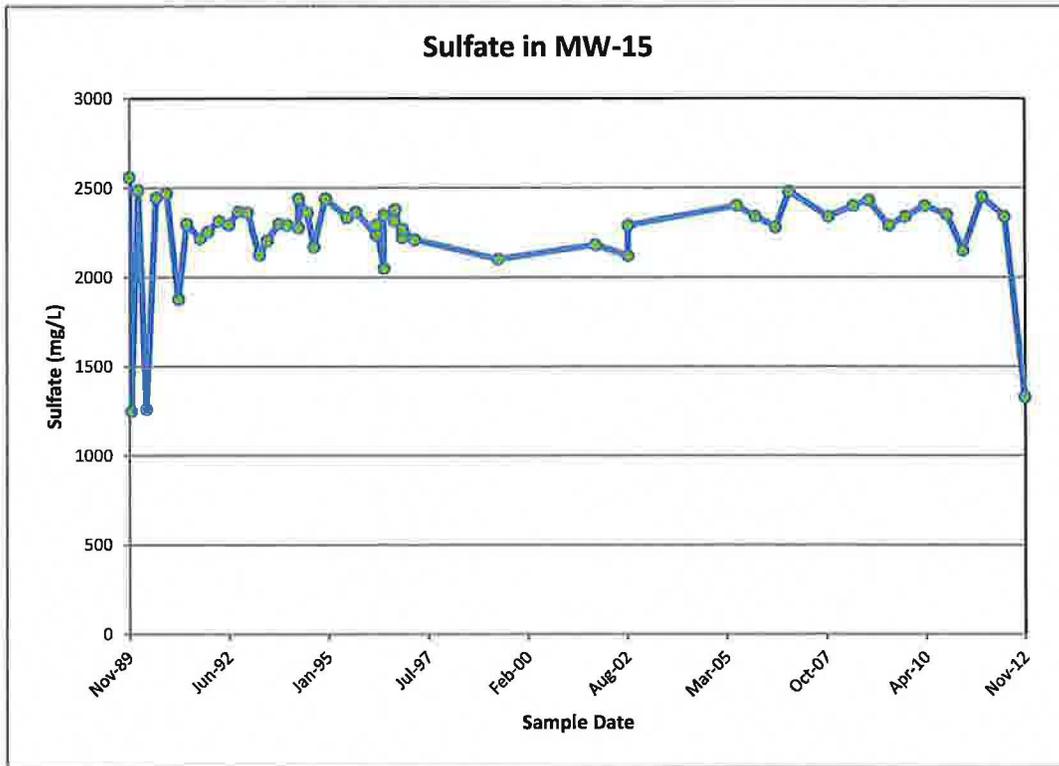
## Time concentration plots for MW-14



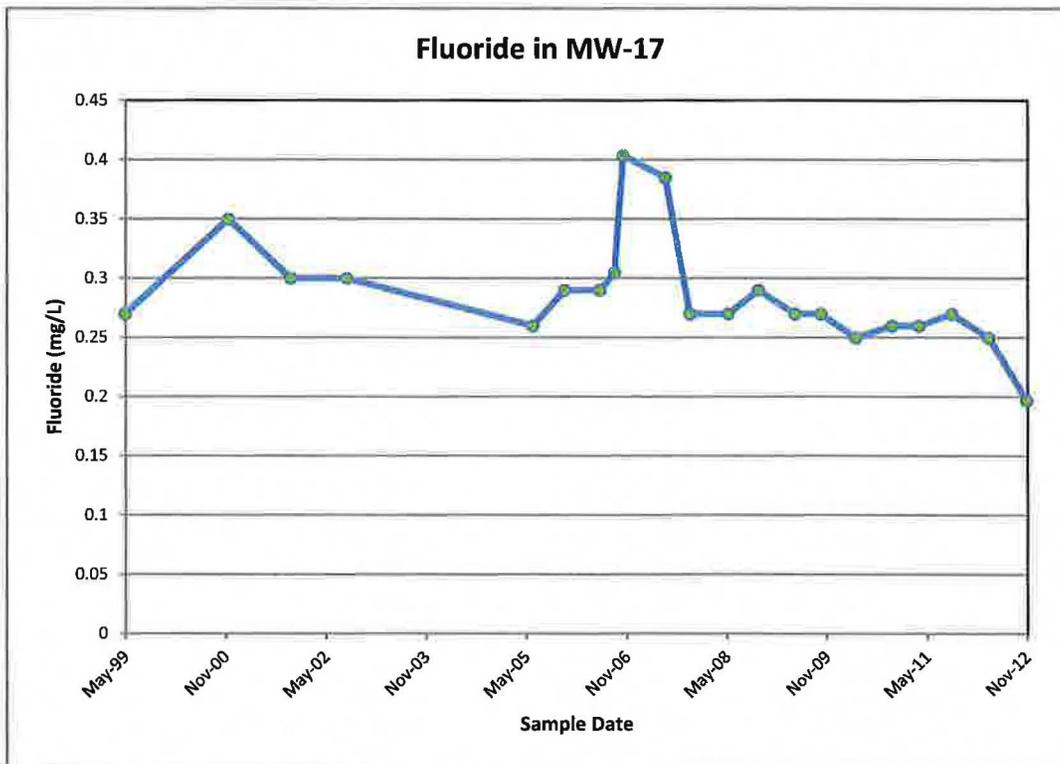
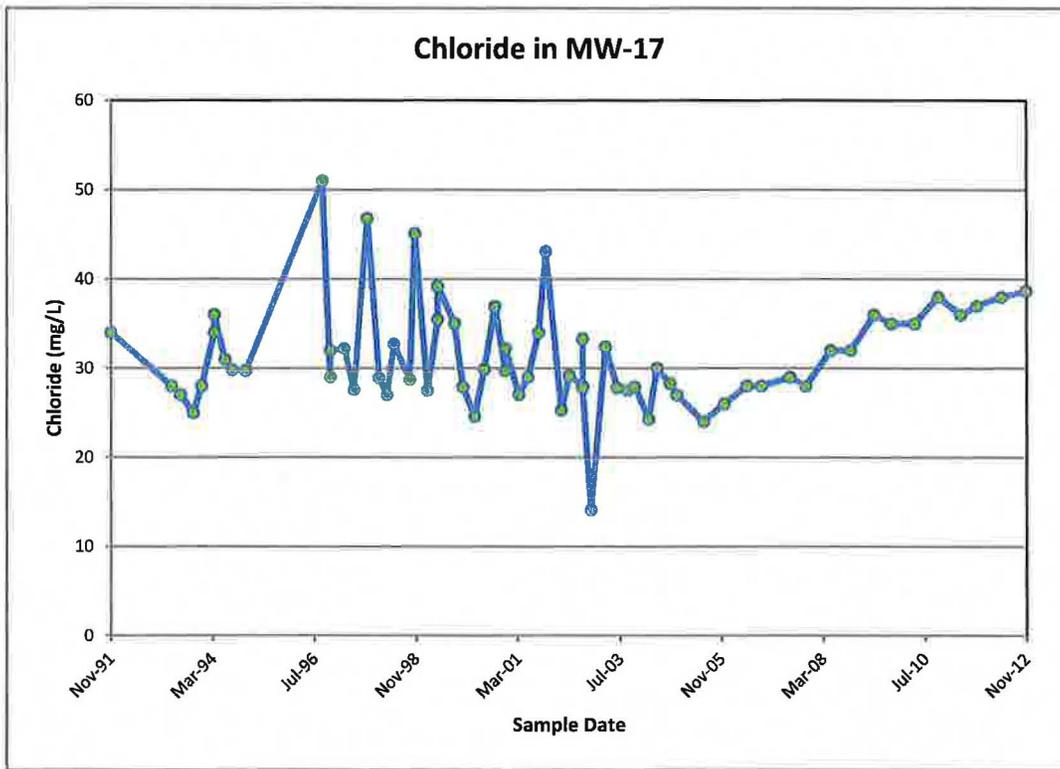
## Time concentration plots for MW-15



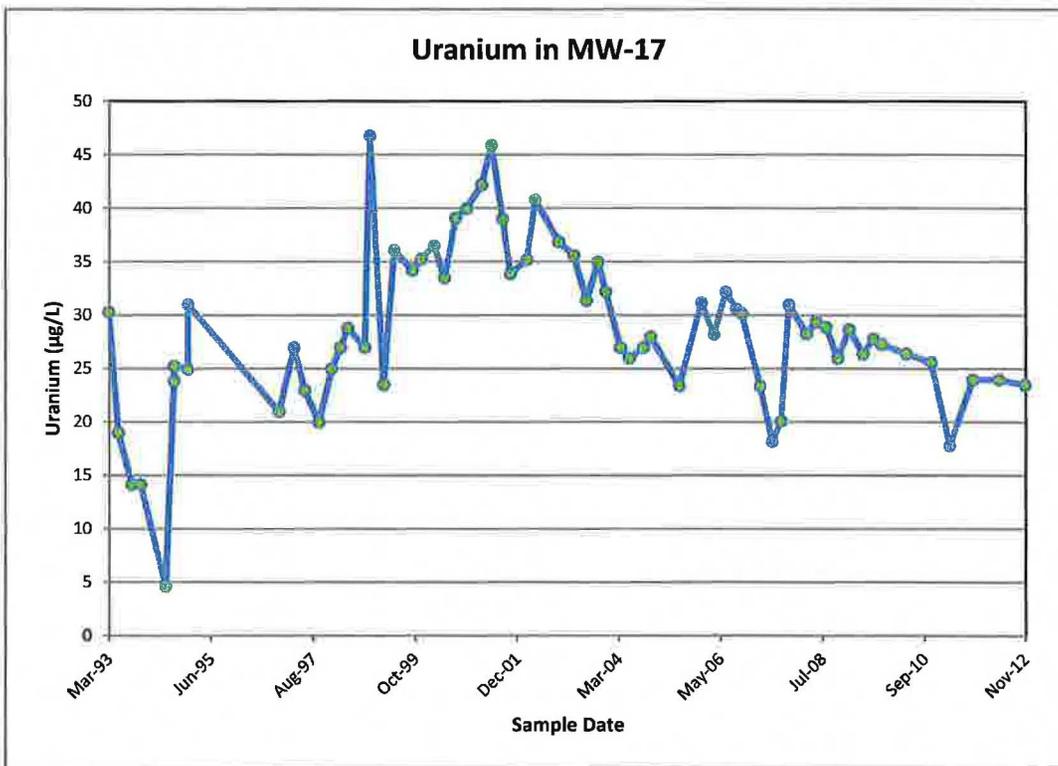
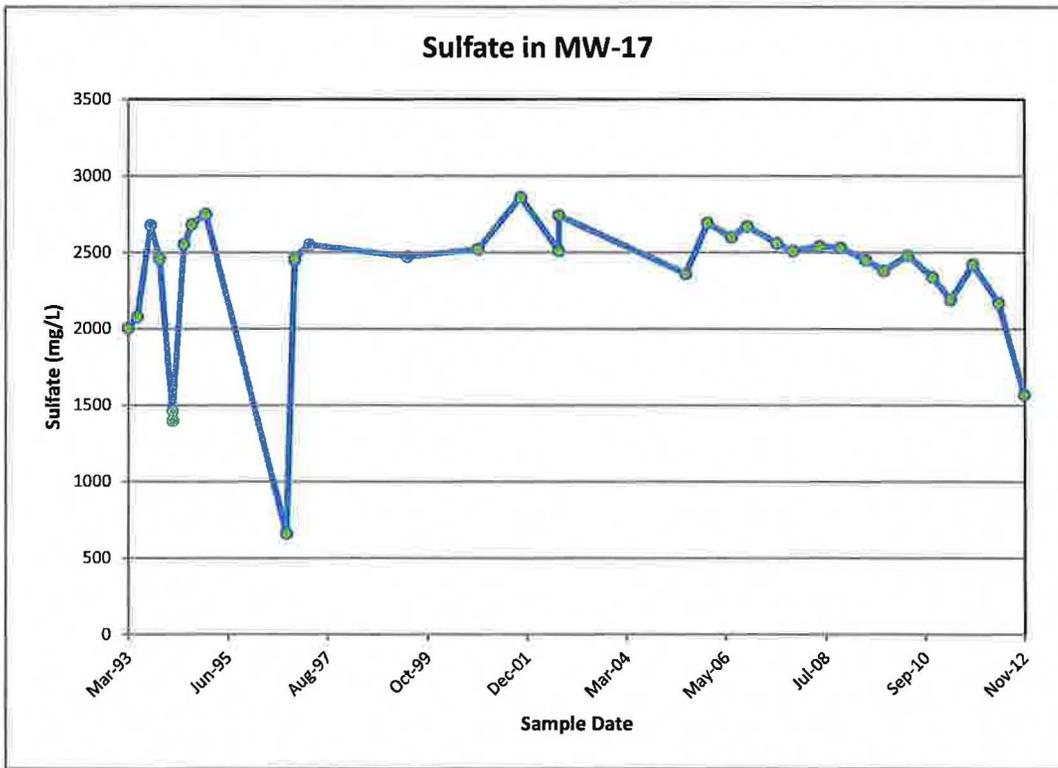
## Time concentration plots for MW-15



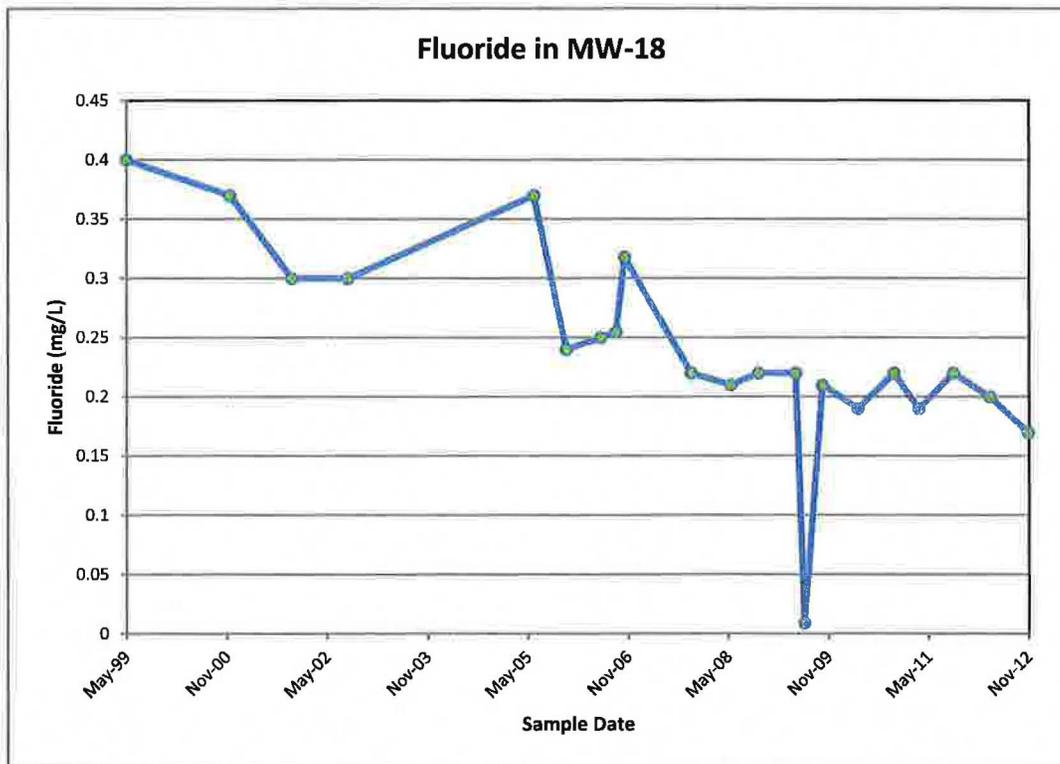
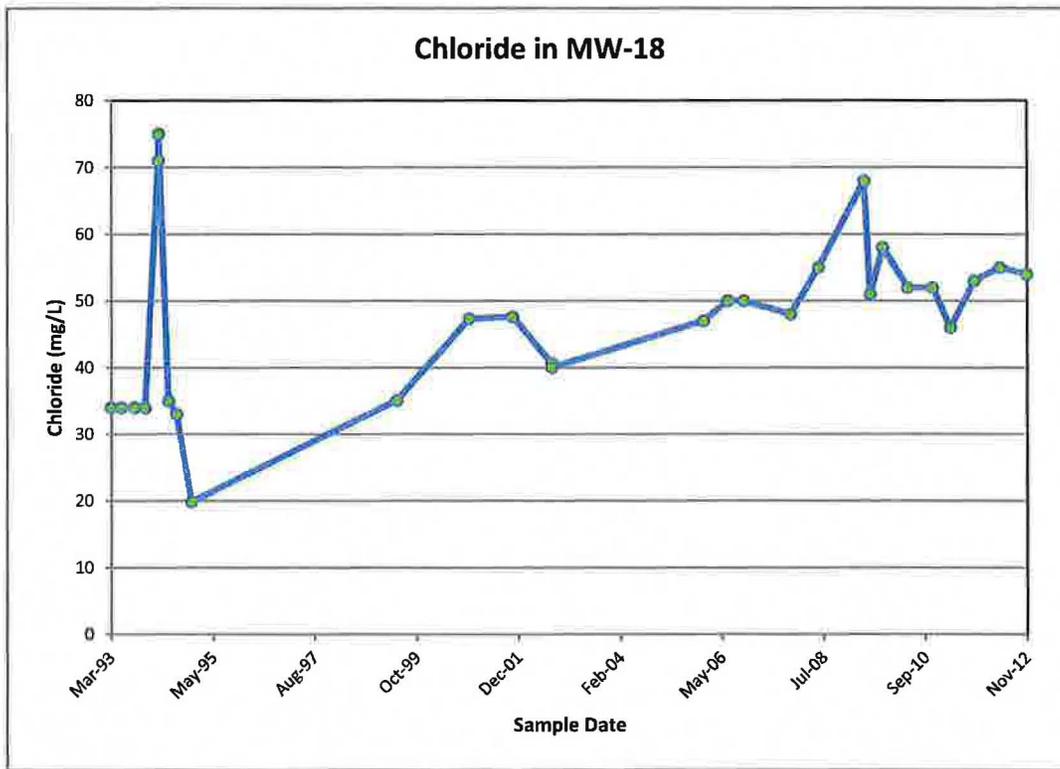
## Time concentration plots for MW-17



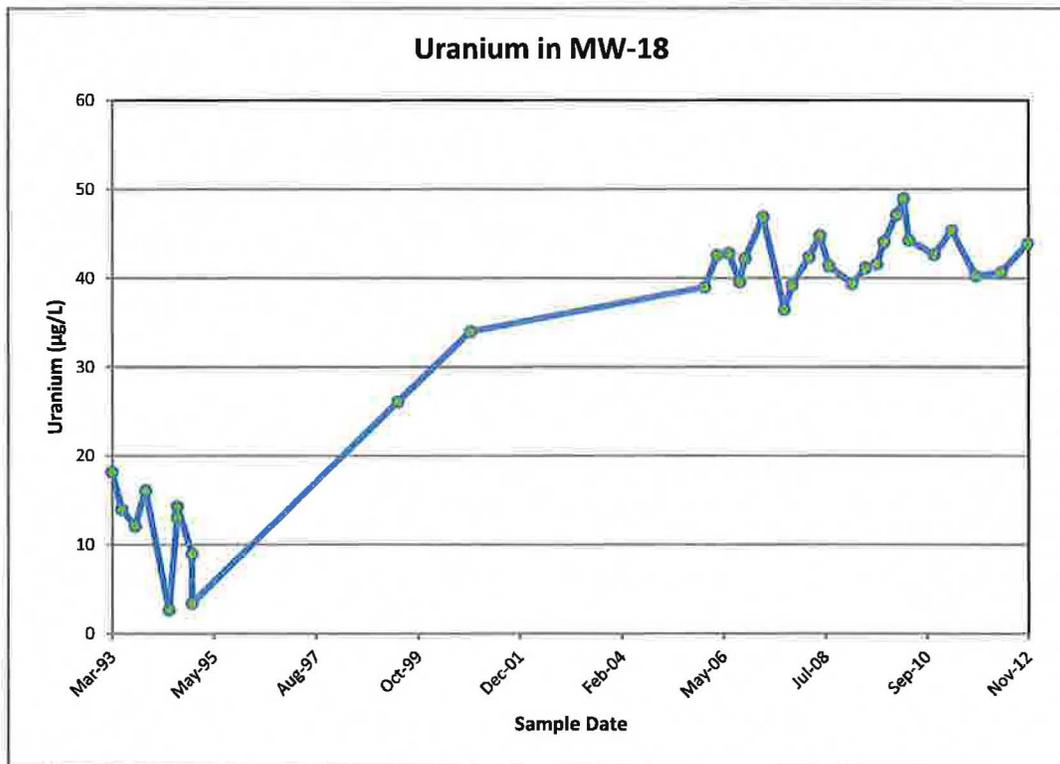
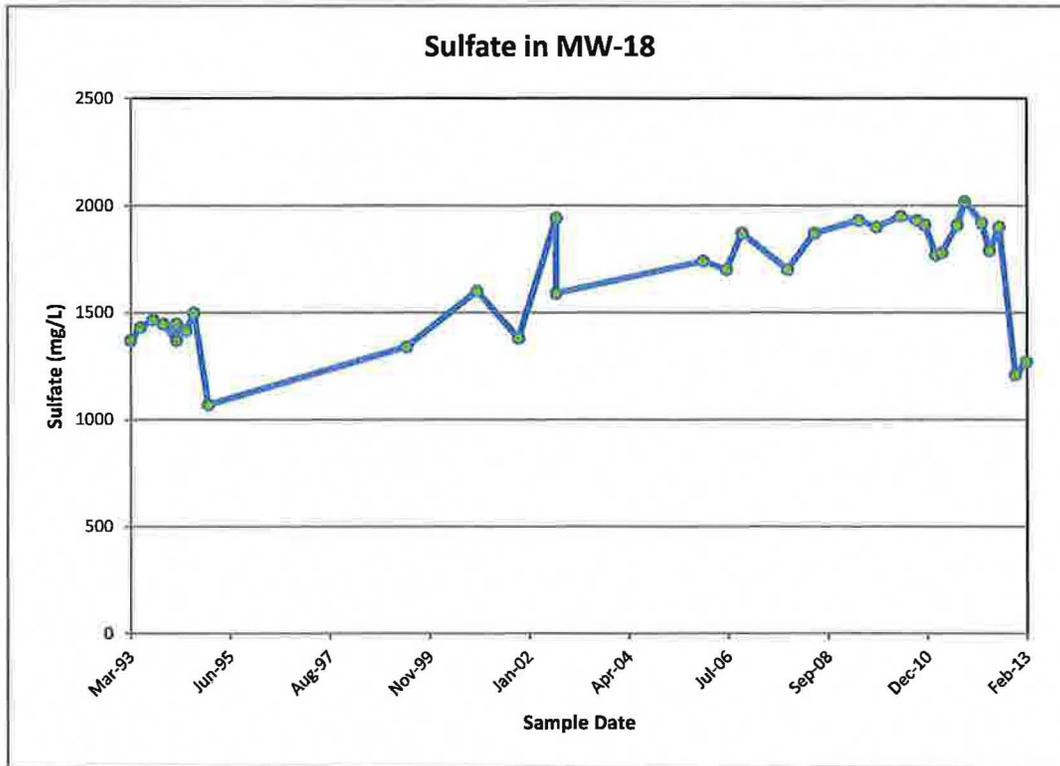
## Time concentration plots for MW-17



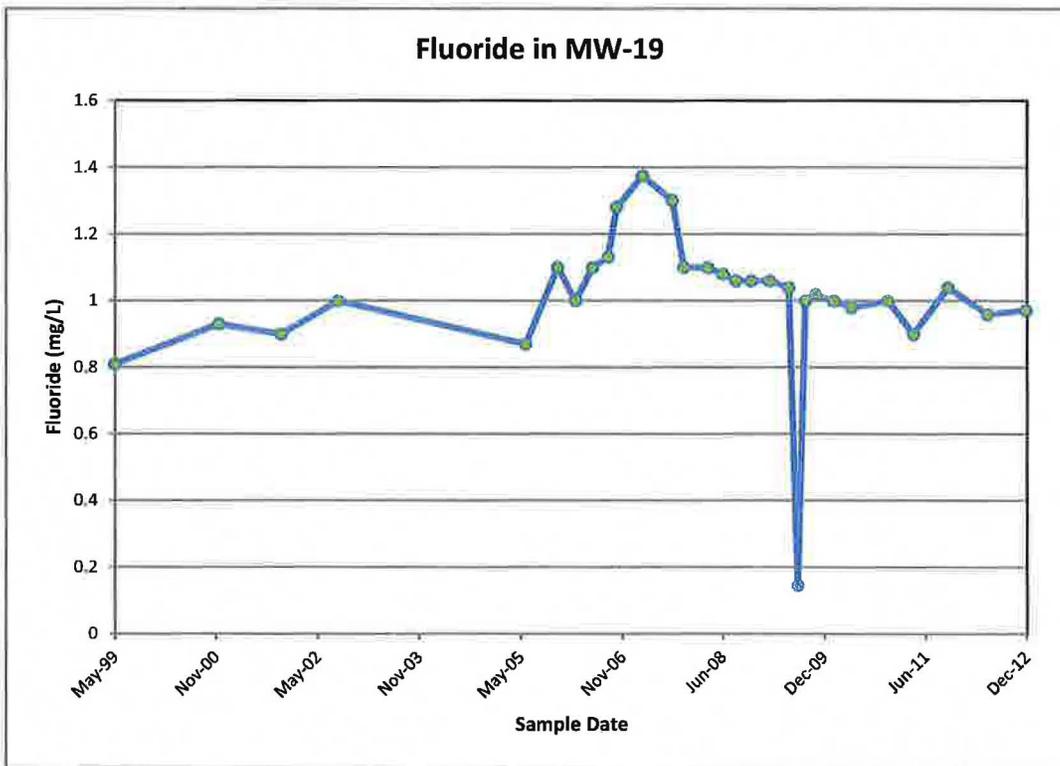
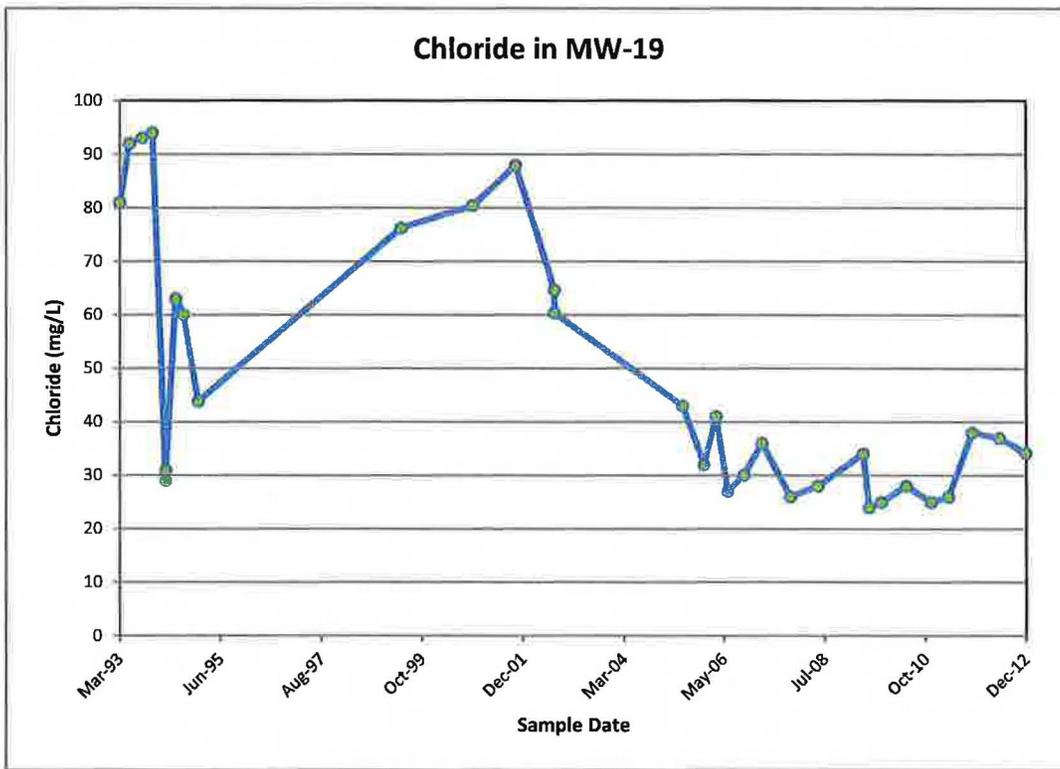
## Time concentration plots for MW-18



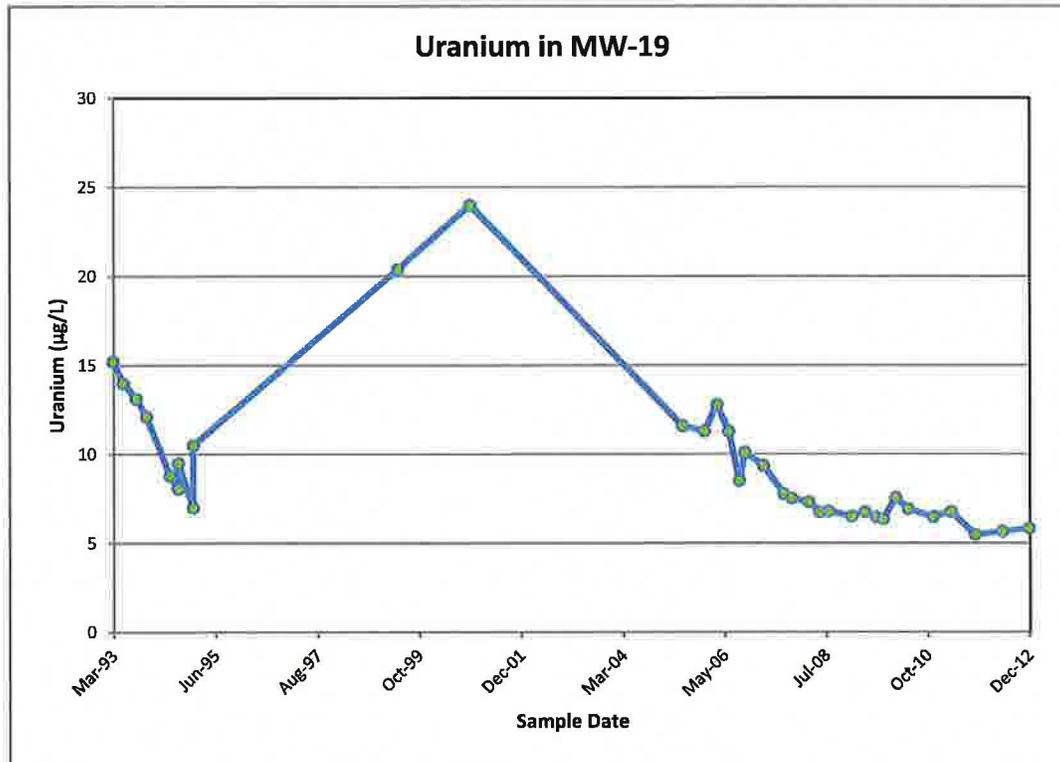
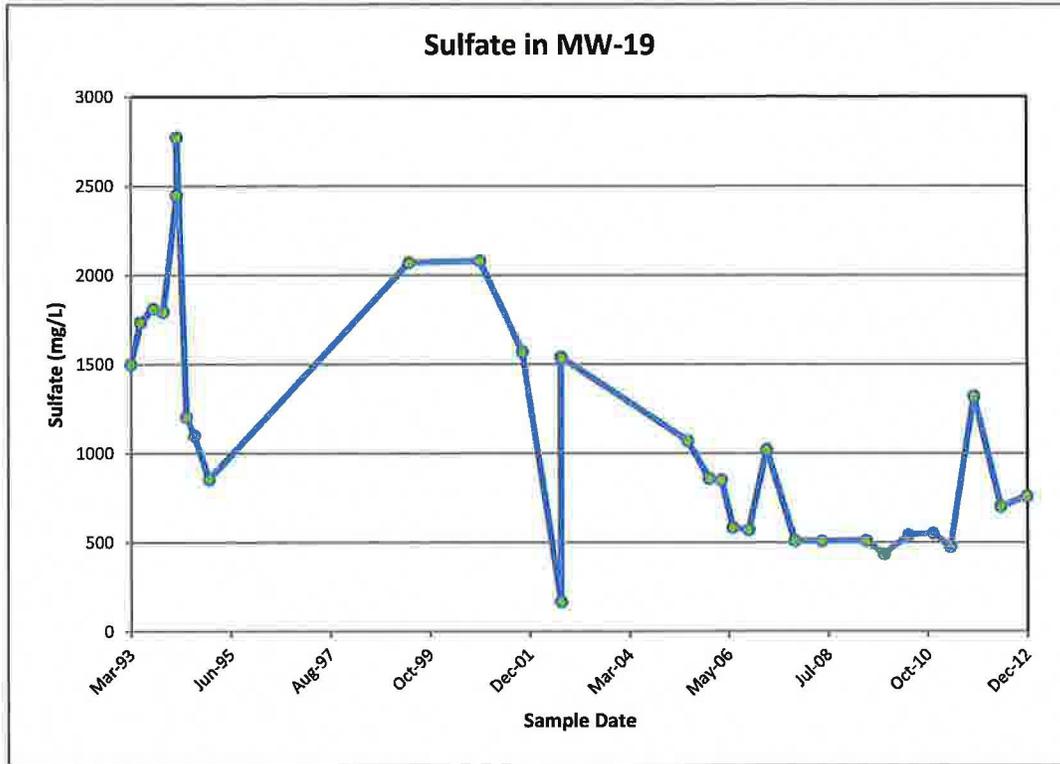
## Time concentration plots for MW-18



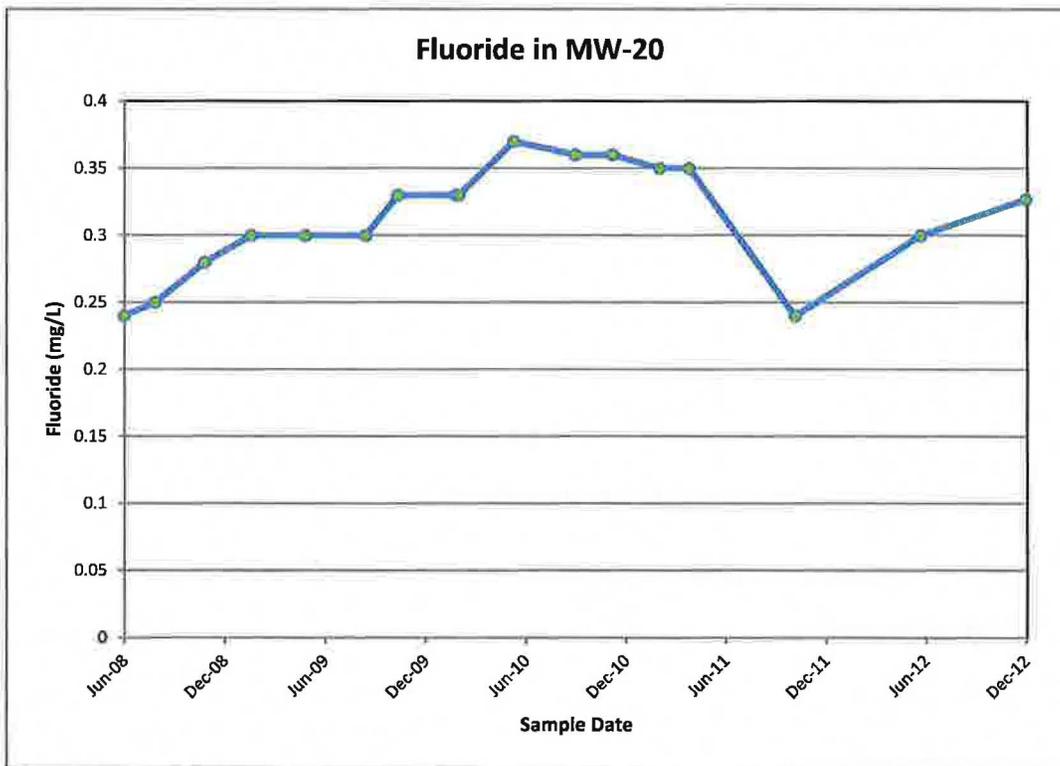
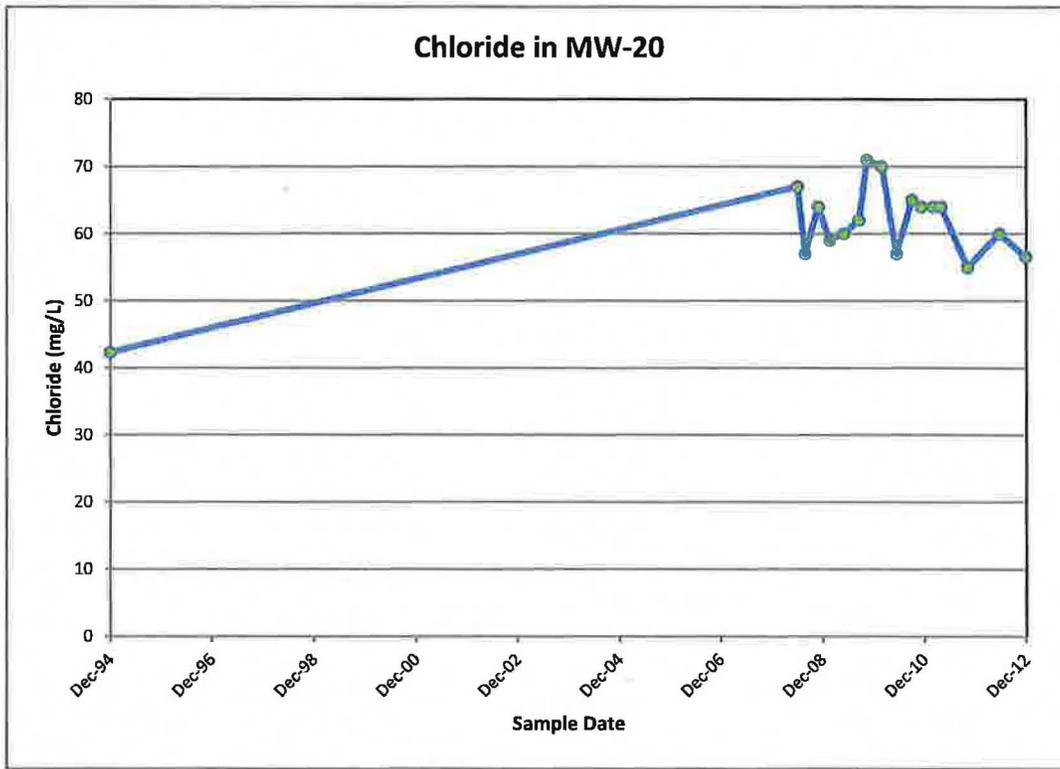
## Time concentration plots for MW-19



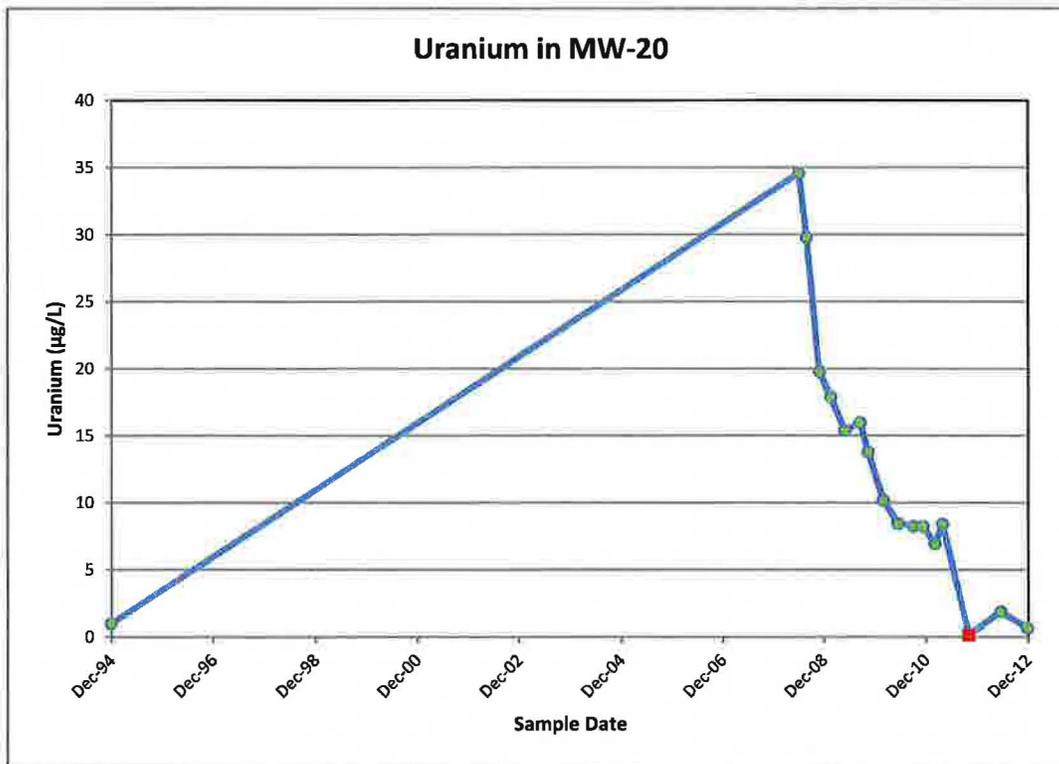
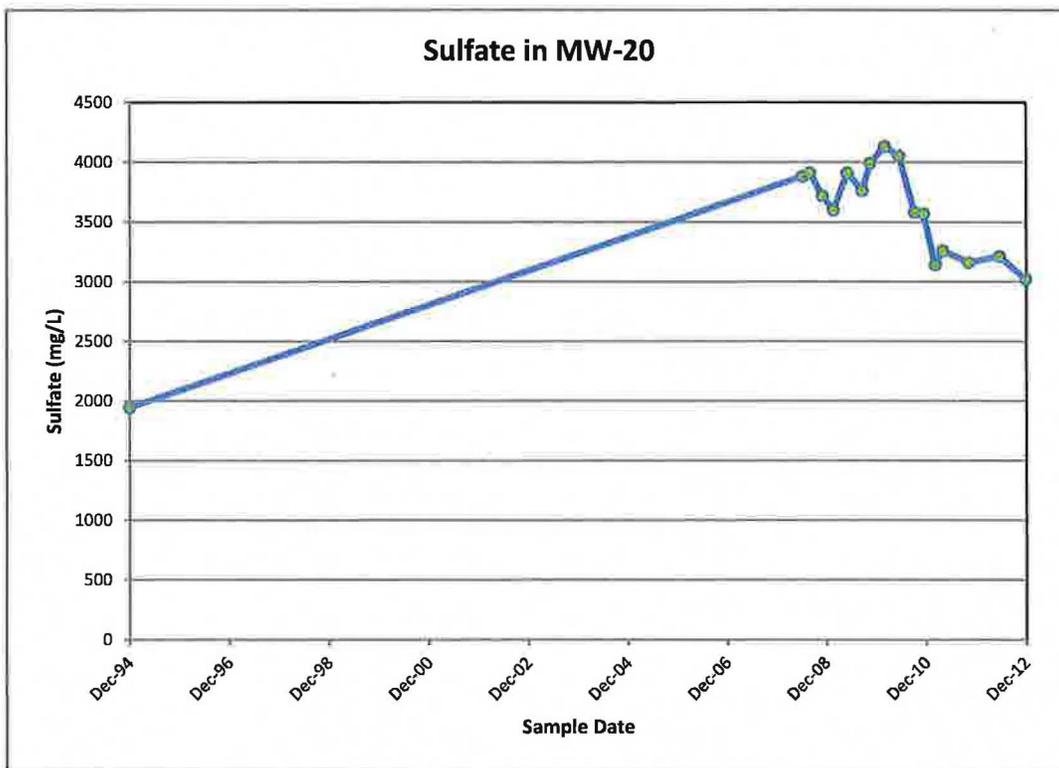
## Time concentration plots for MW-19



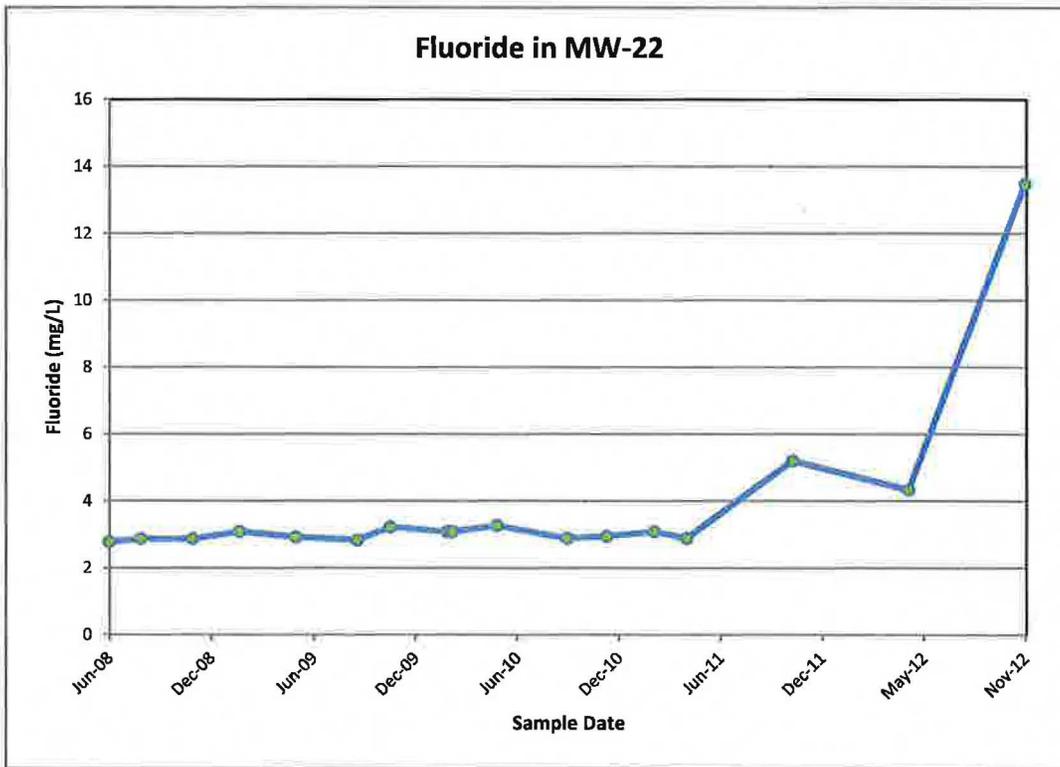
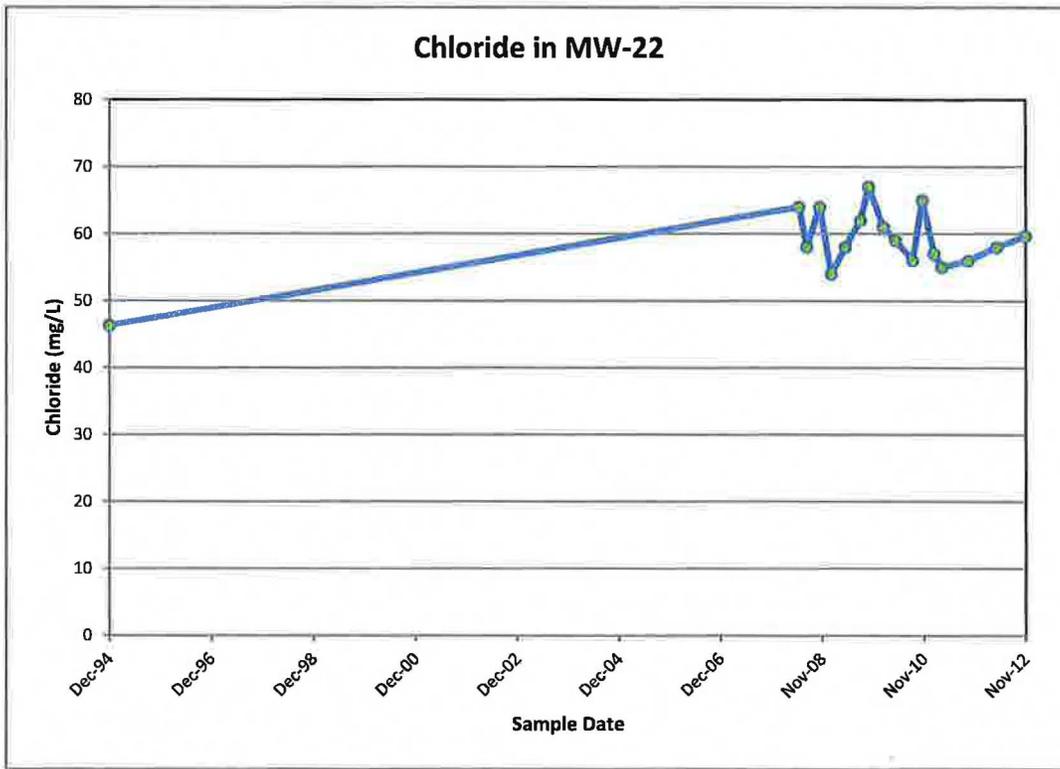
### Time concentration plots for MW-20



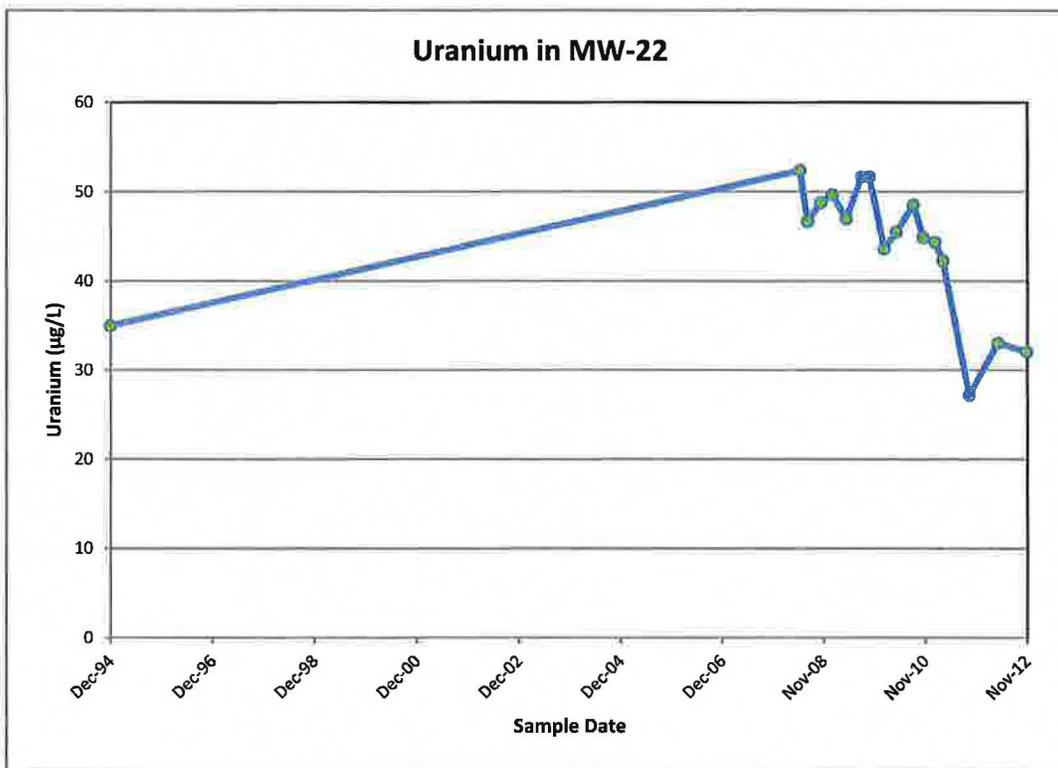
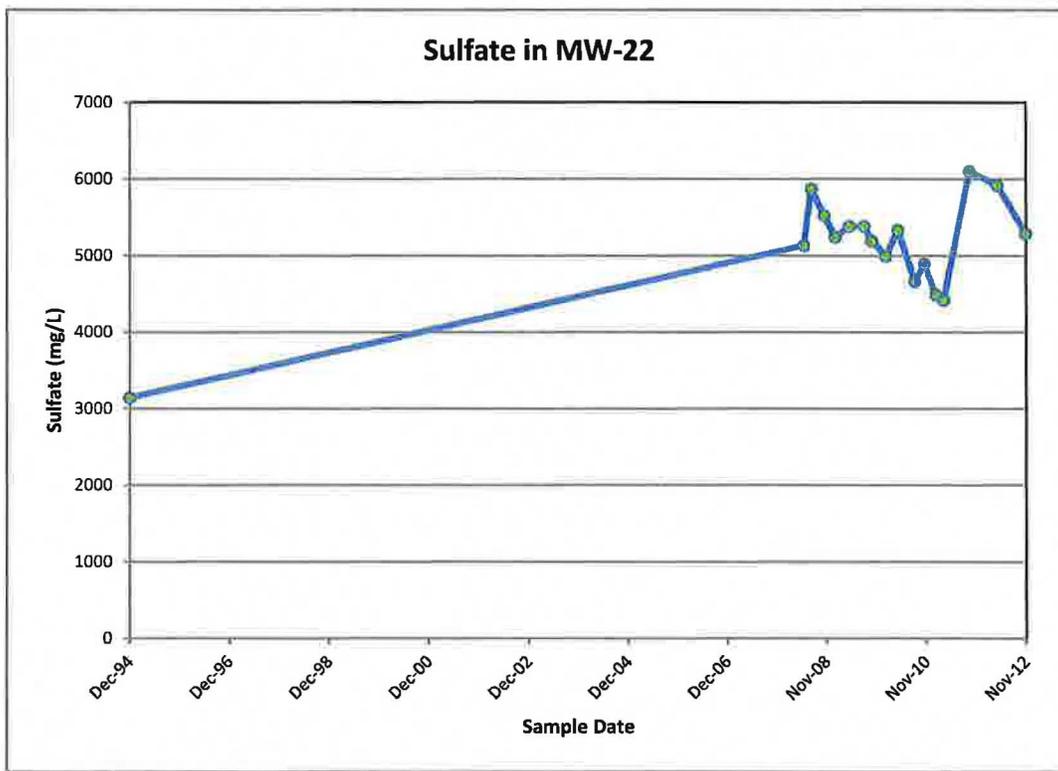
### Time concentration plots for MW-20



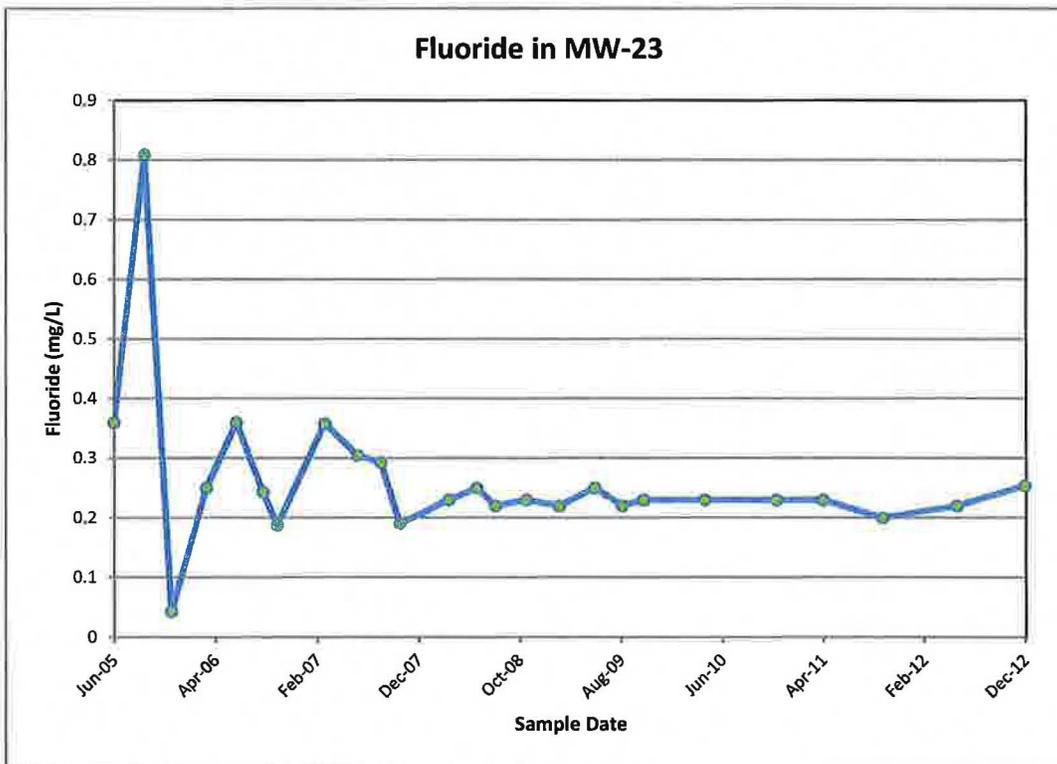
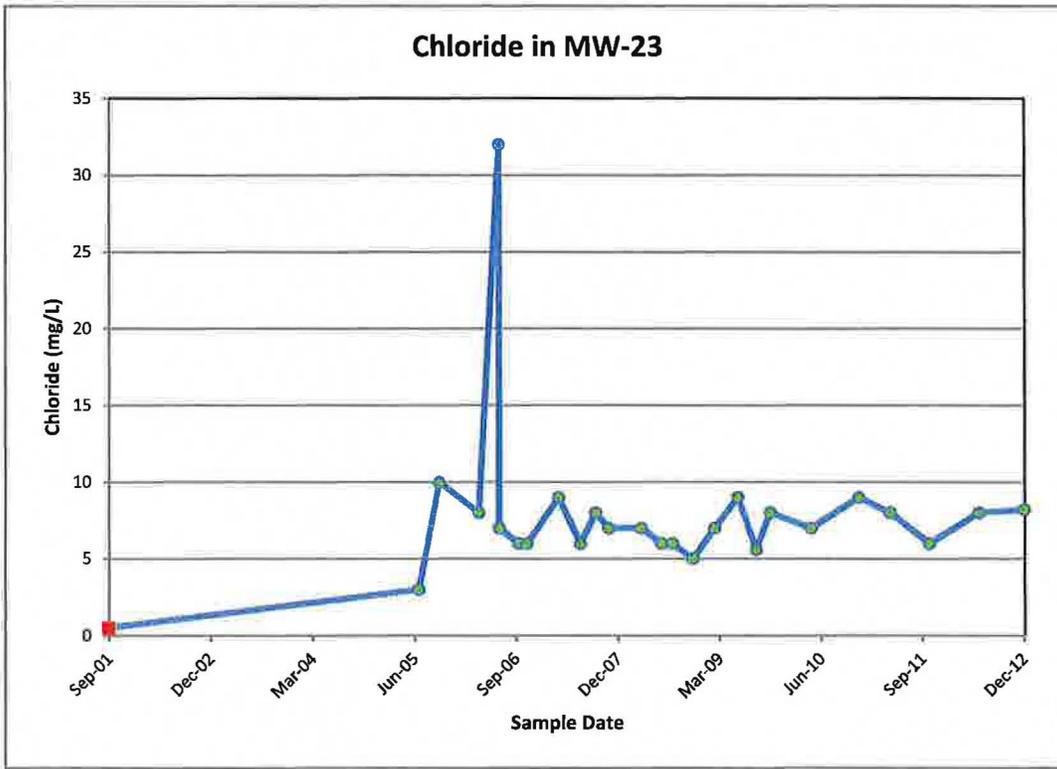
## Time concentration plots for MW-22



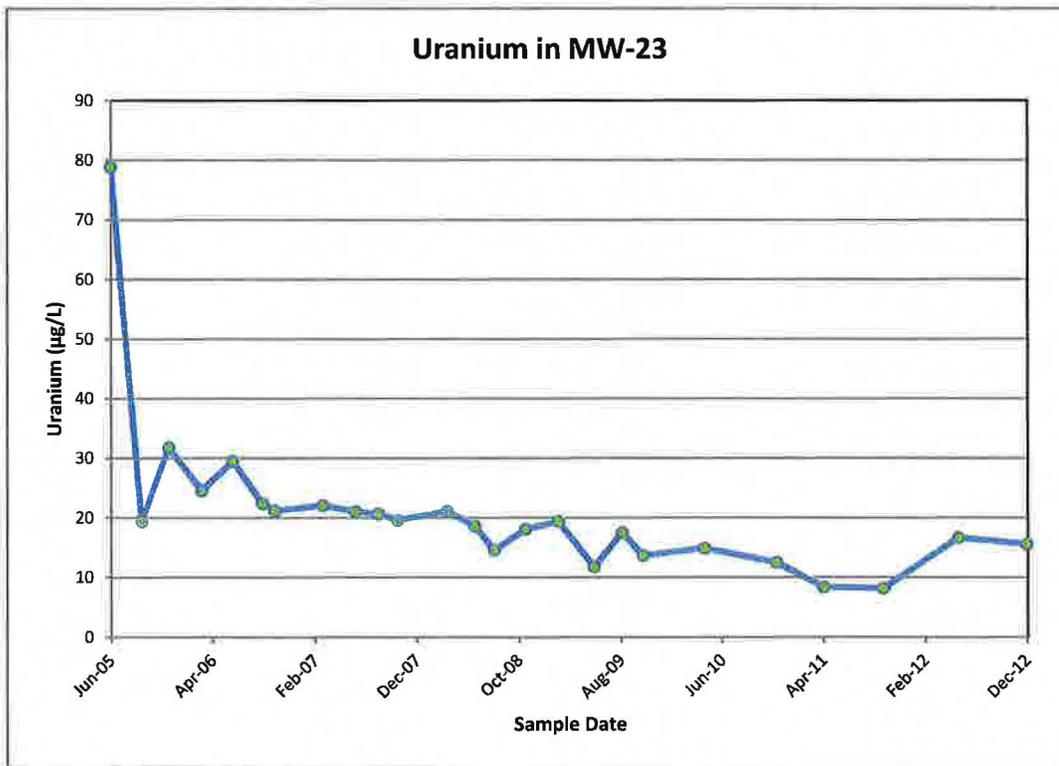
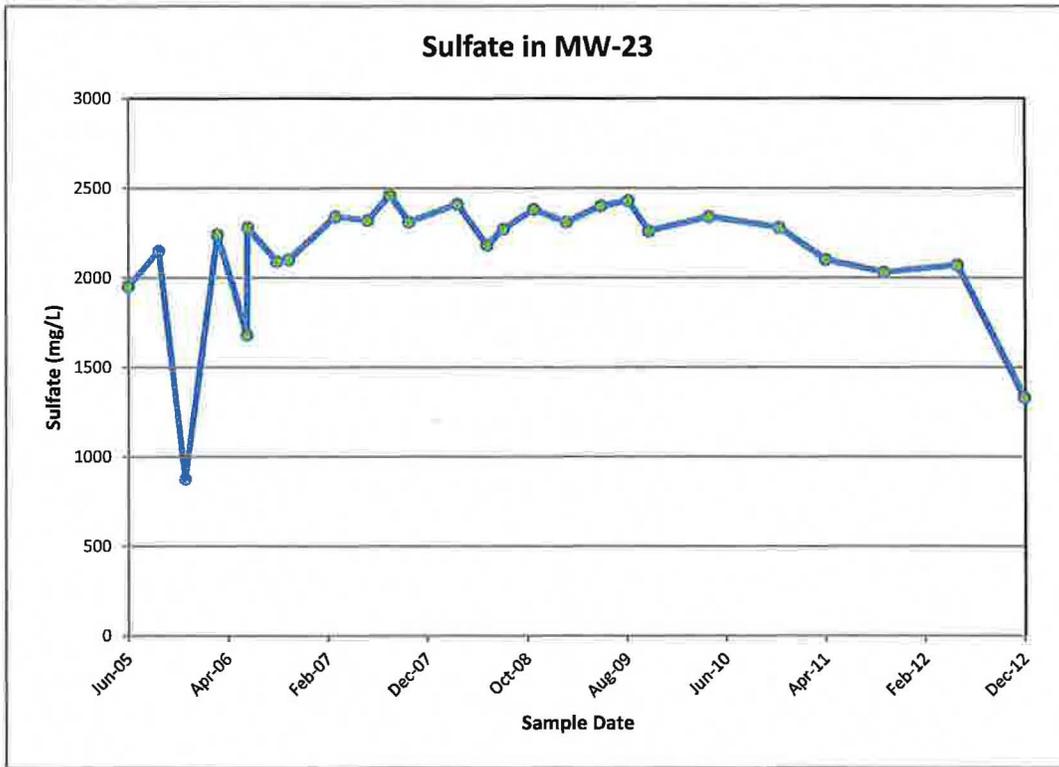
### Time concentration plots for MW-22



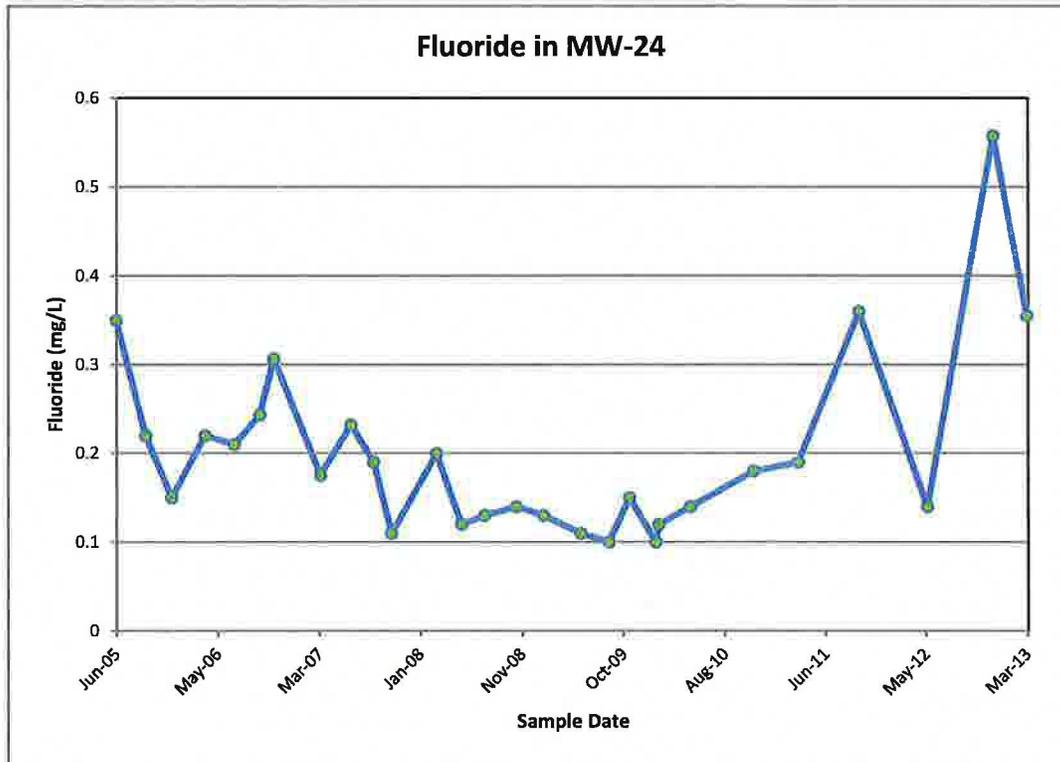
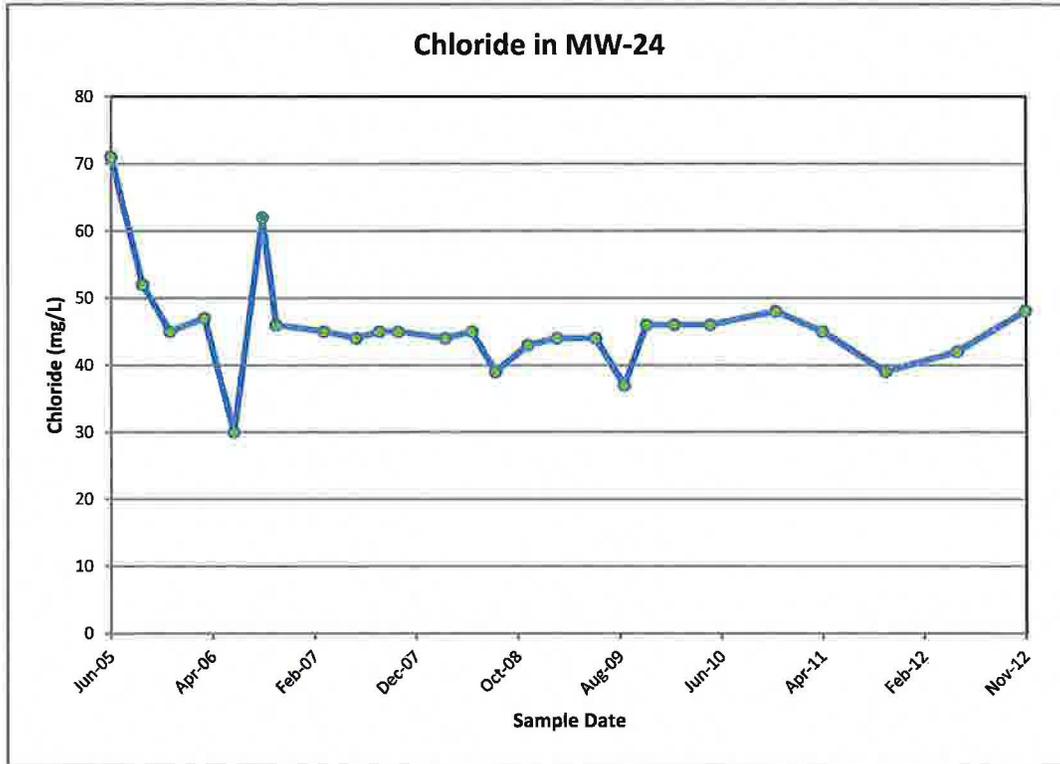
### Time concentration plots for MW-23



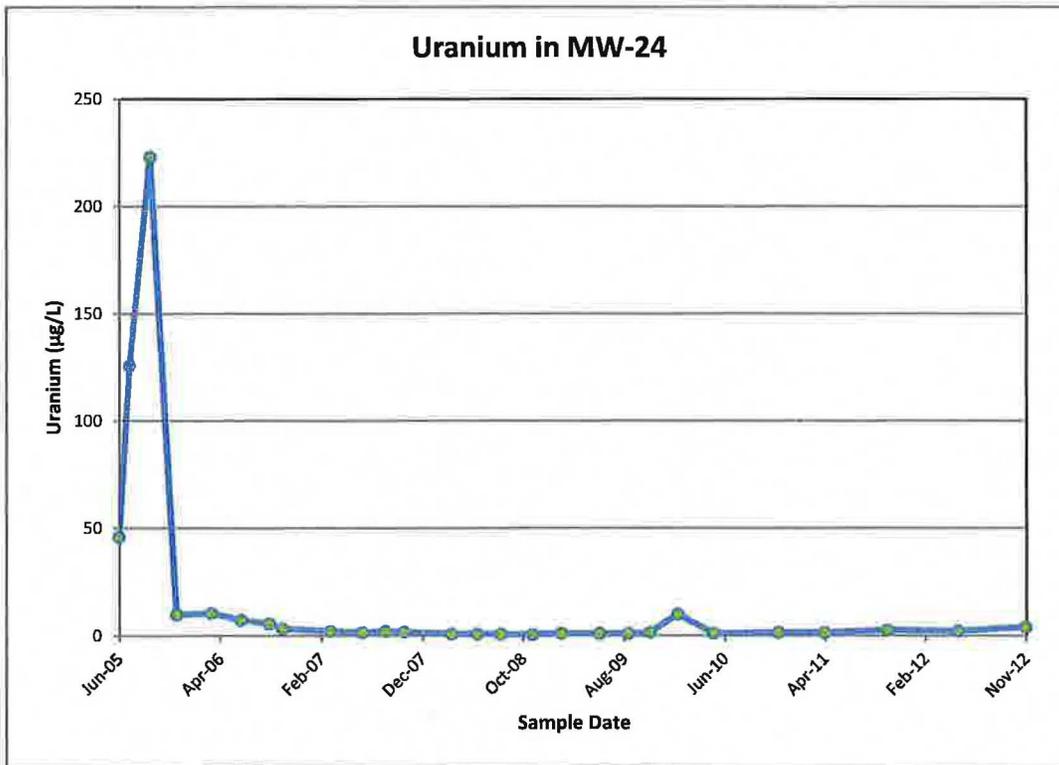
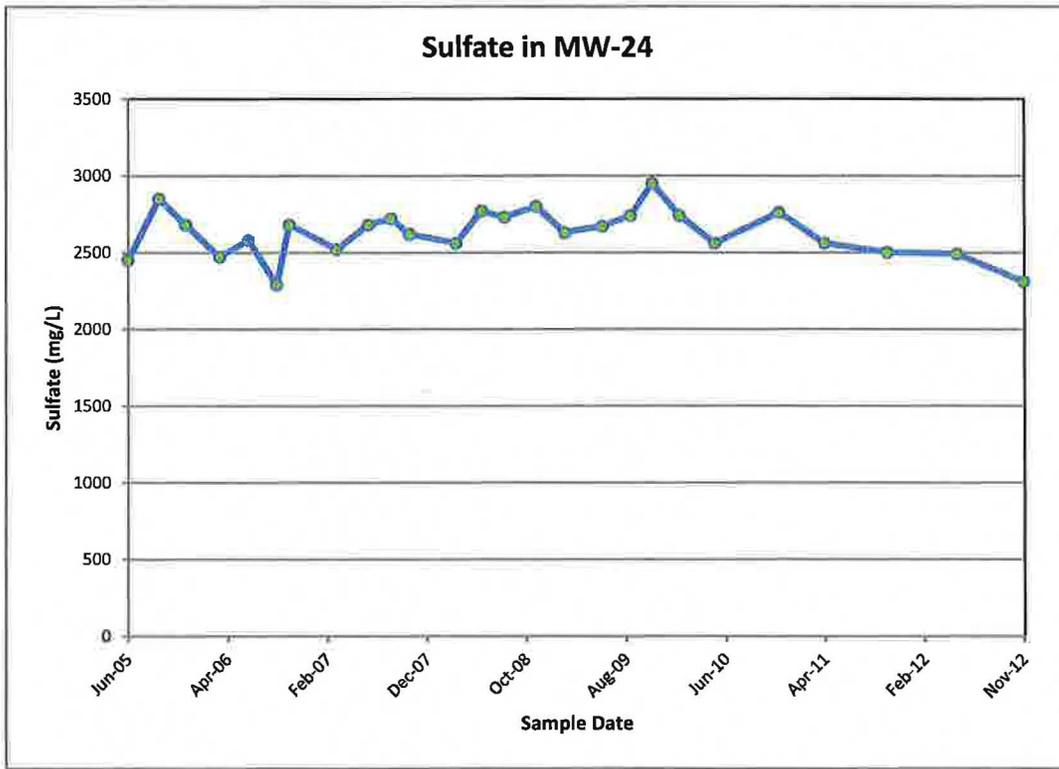
### Time concentration plots for MW-23



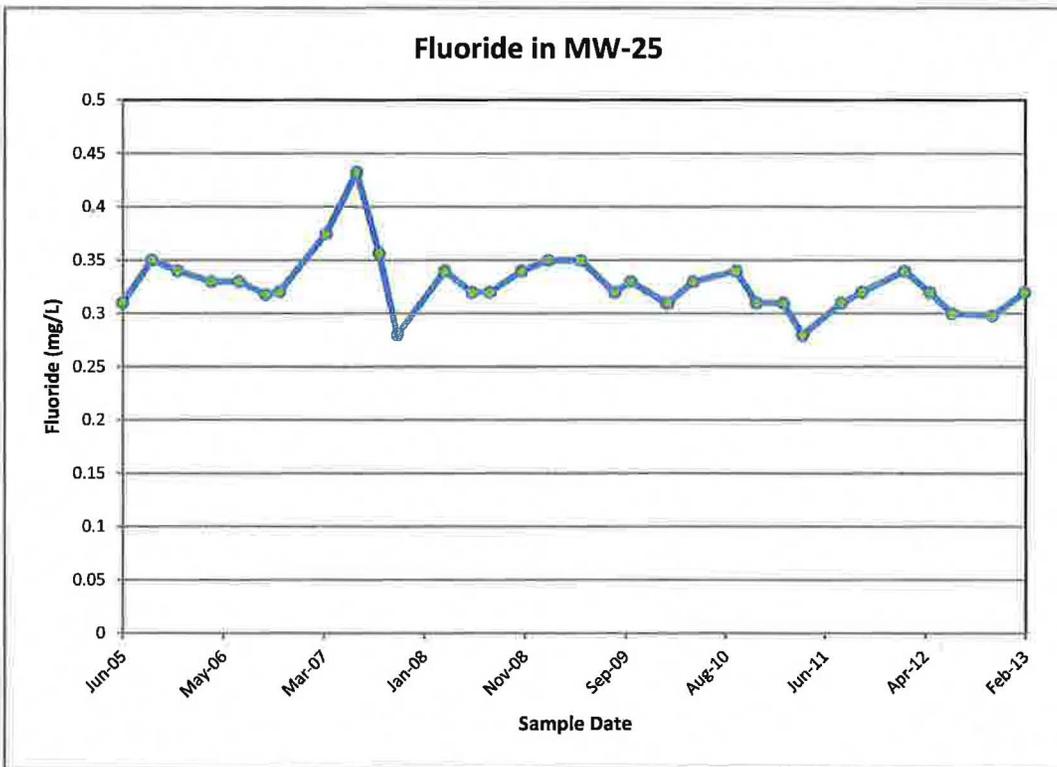
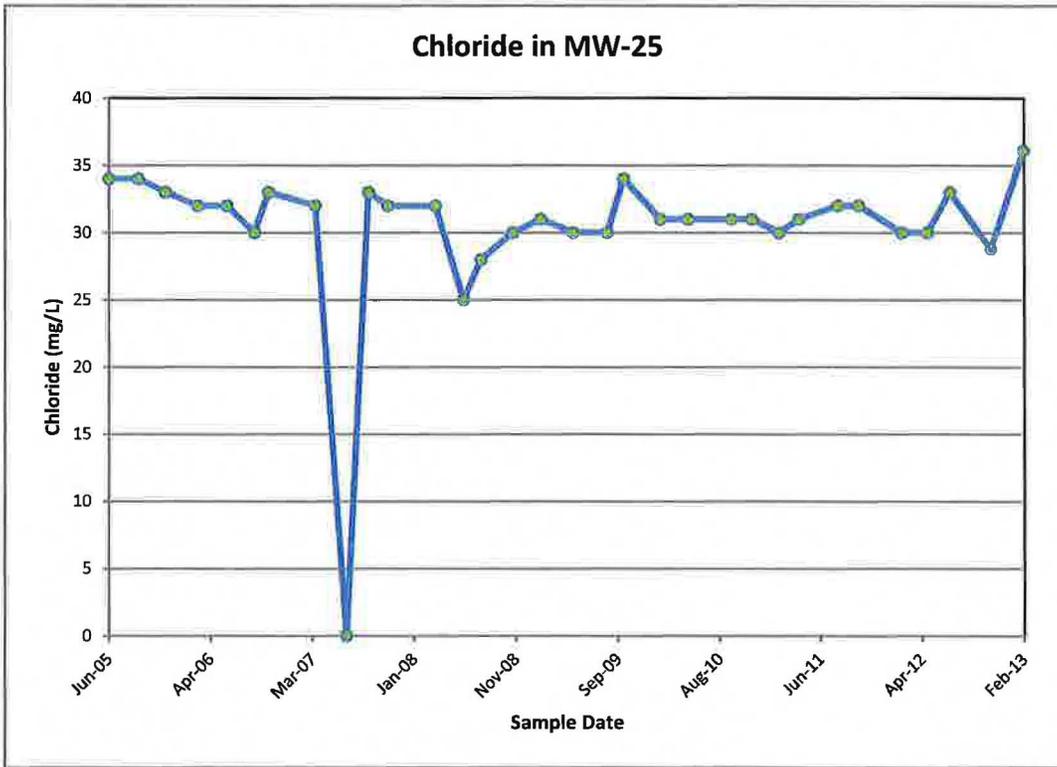
## Time concentration plots for MW-24



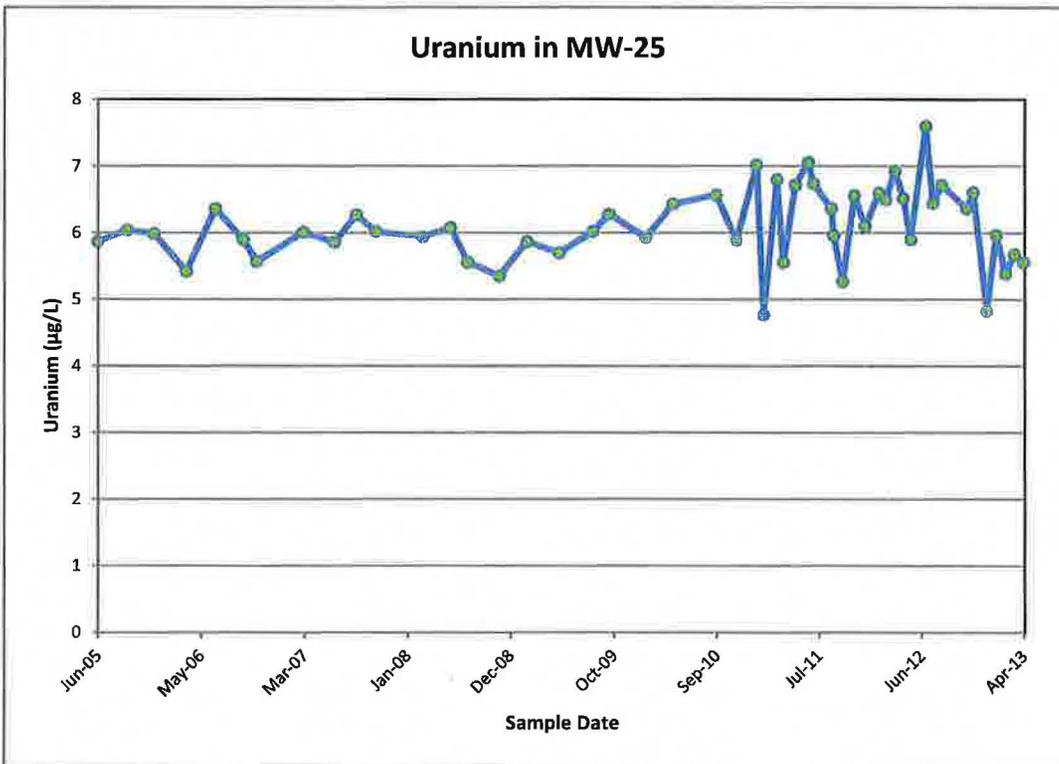
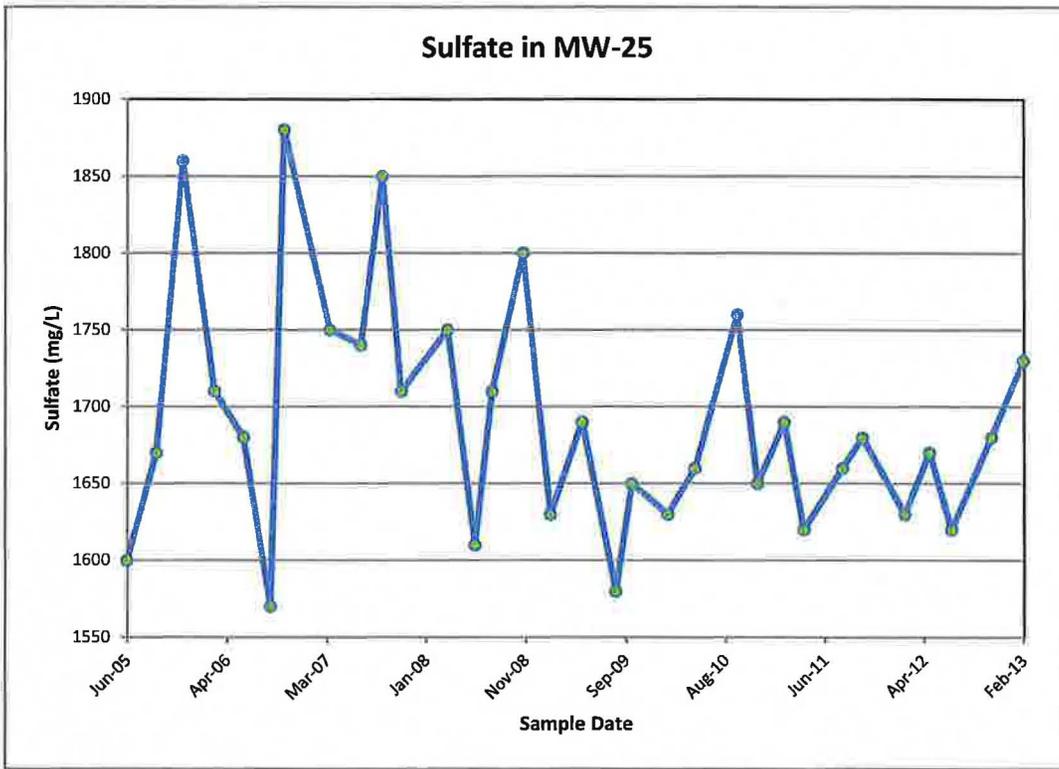
## Time concentration plots for MW-24



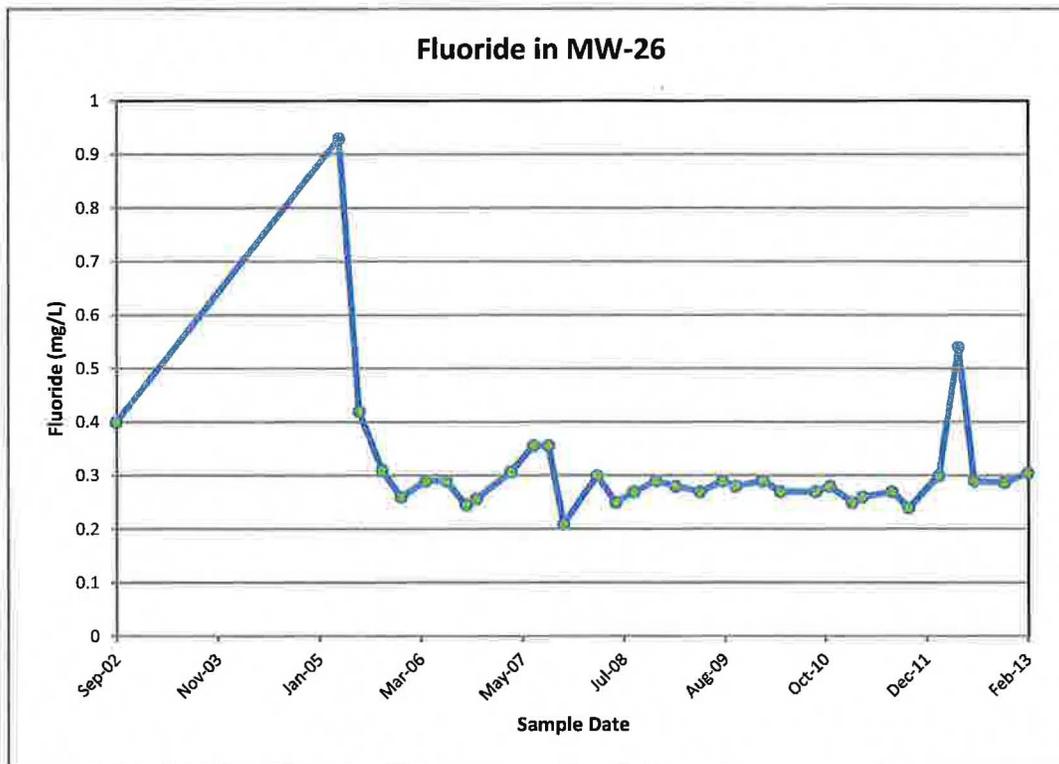
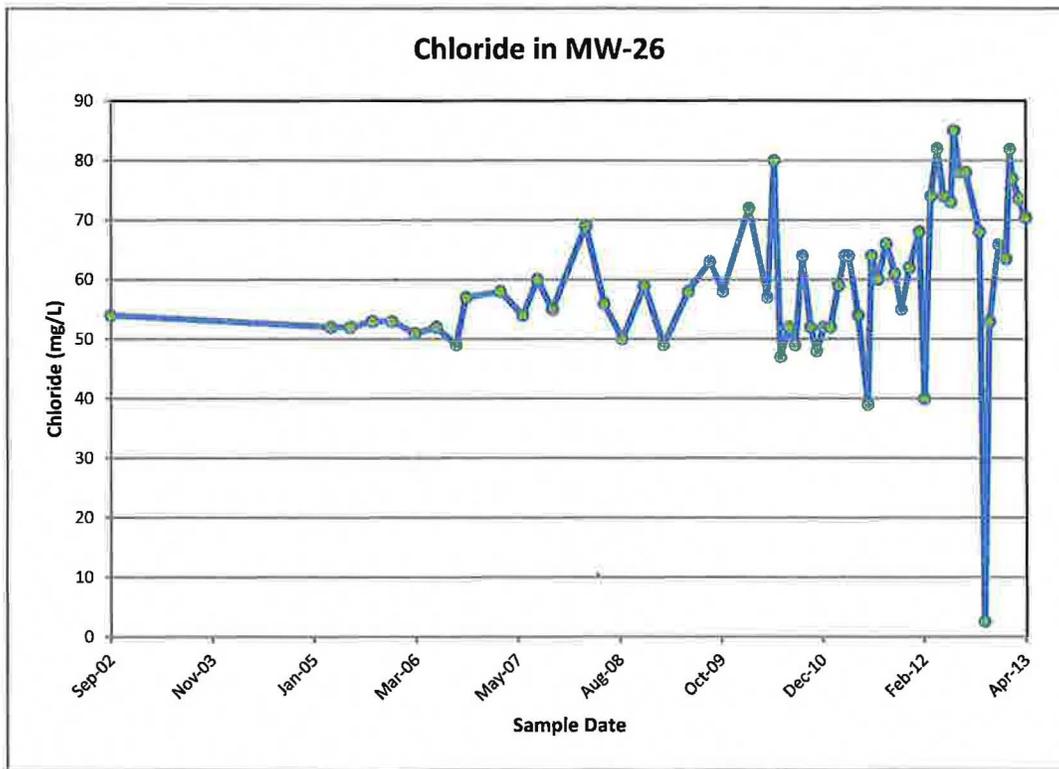
## Time concentration plots for MW-25



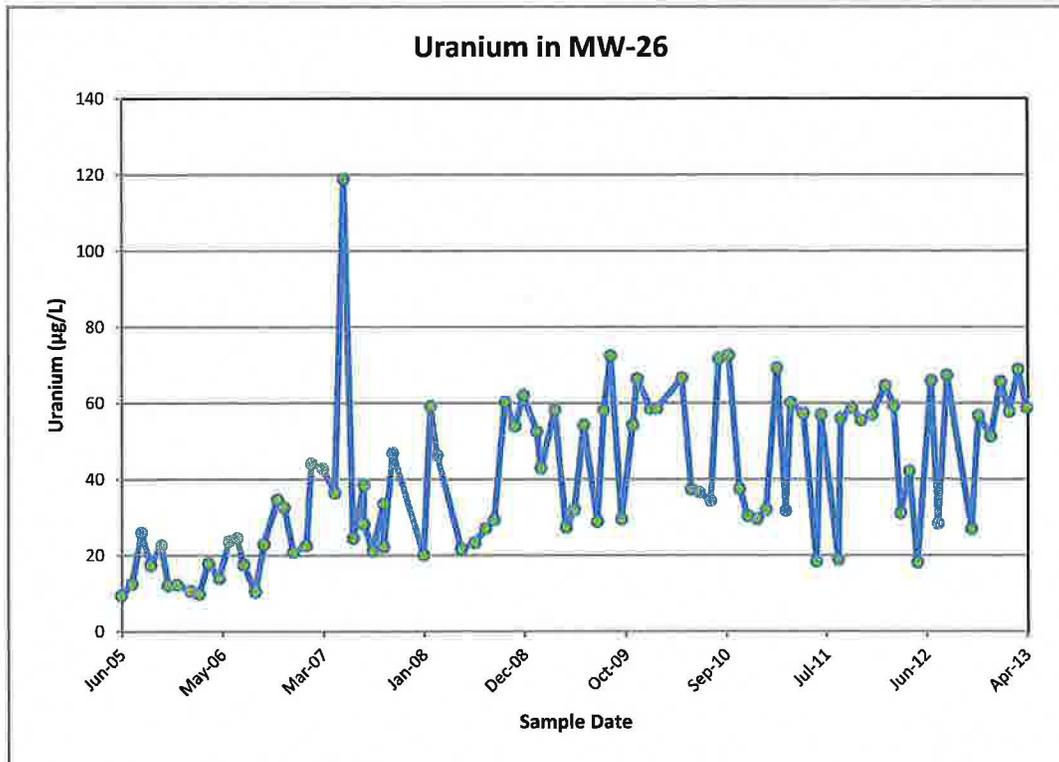
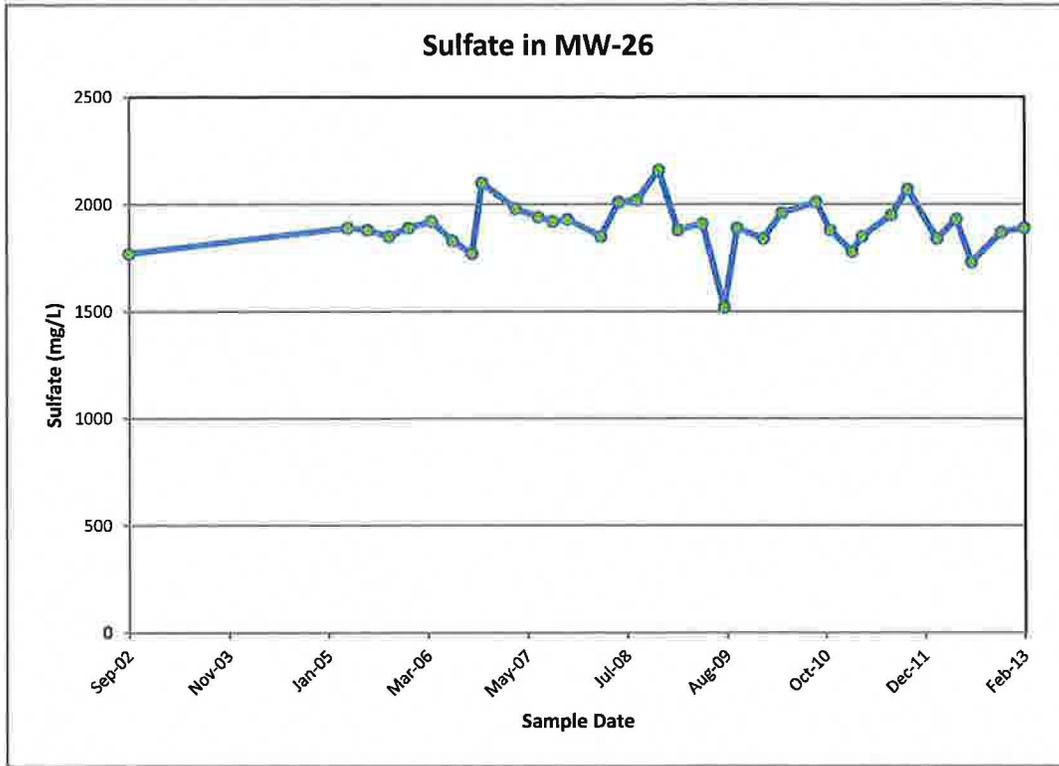
## Time concentration plots for MW-25



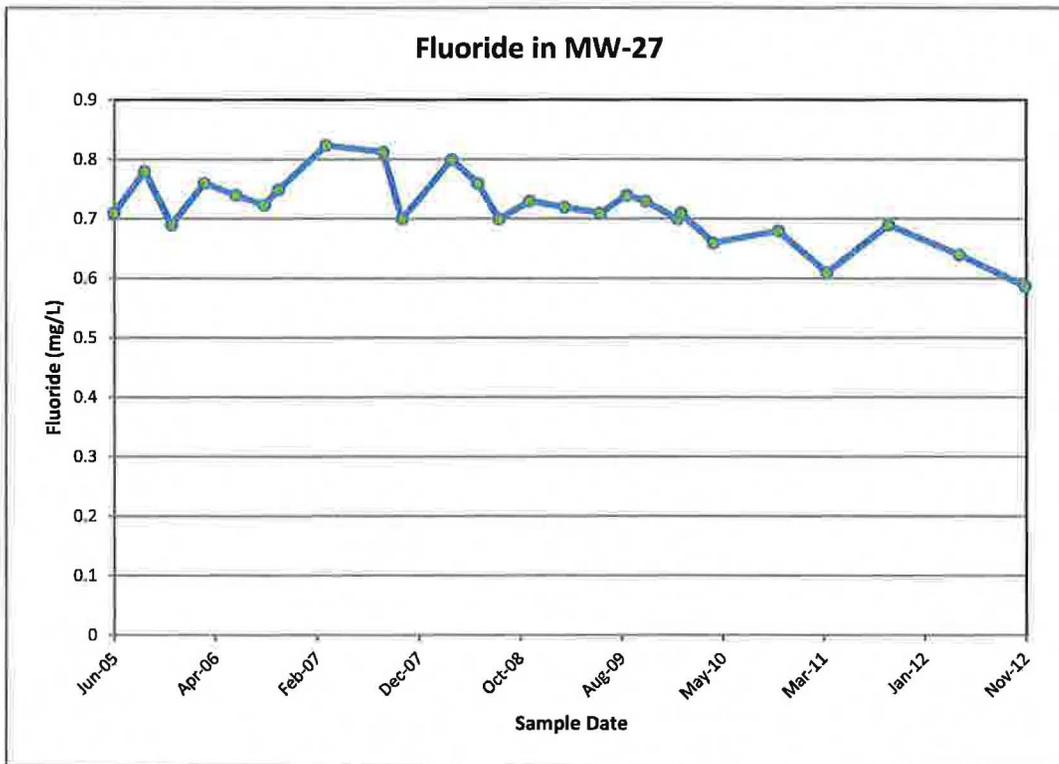
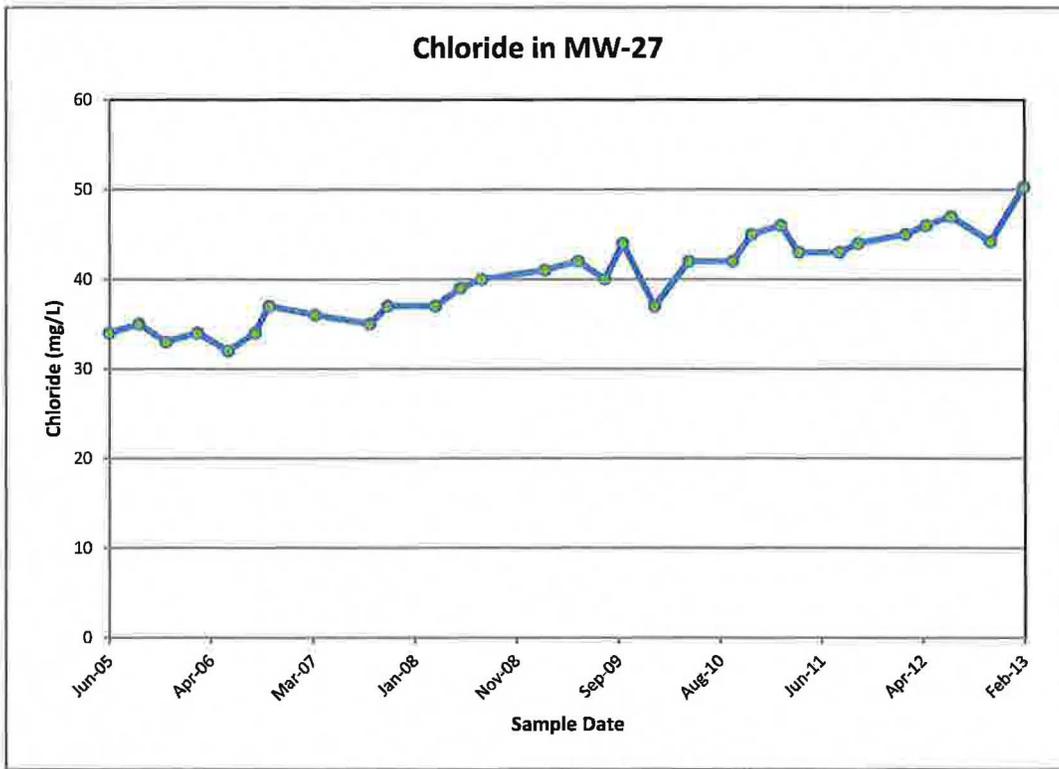
## Time concentration plots for MW-26



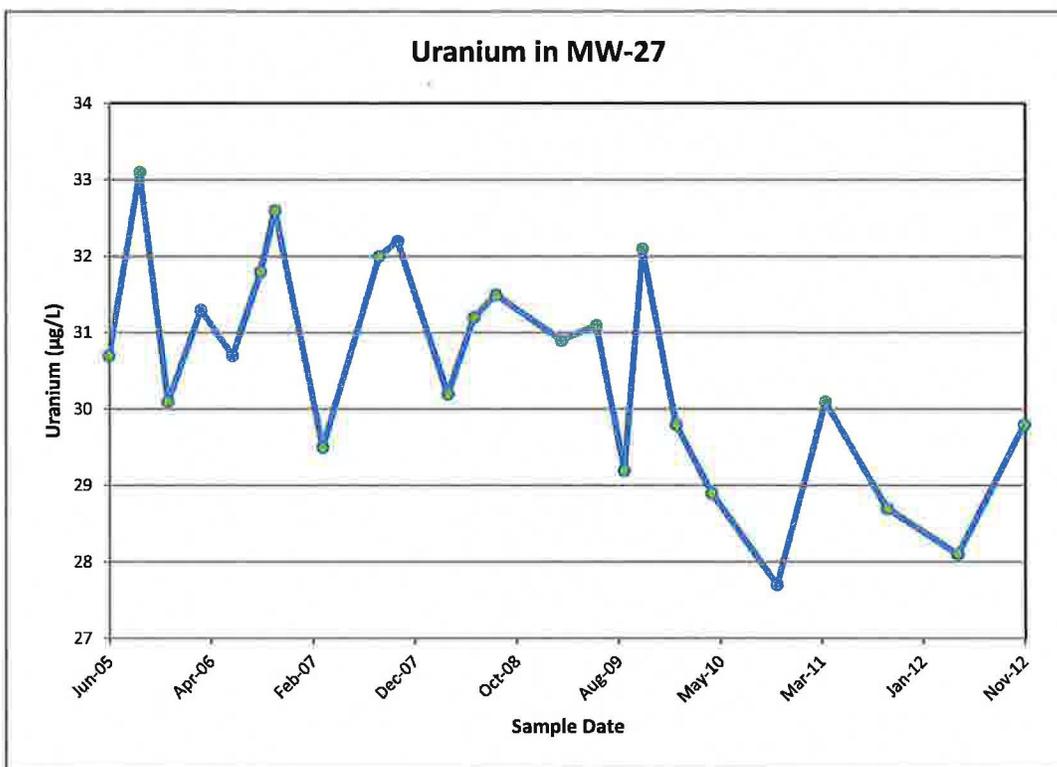
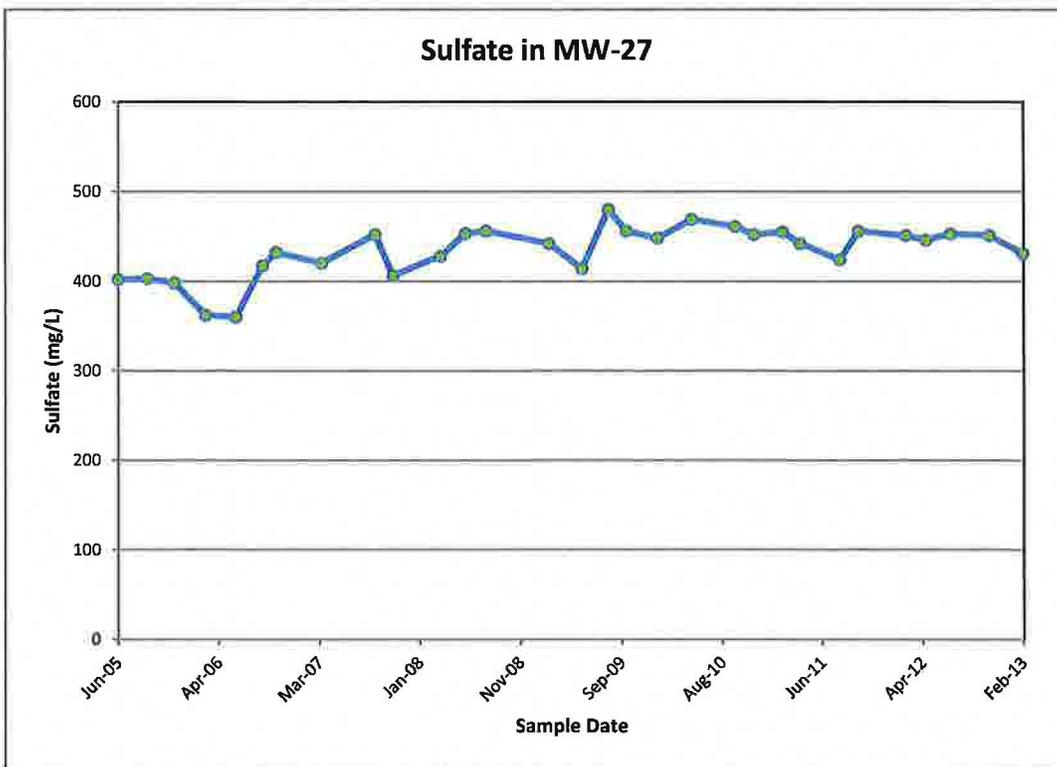
## Time concentration plots for MW-26



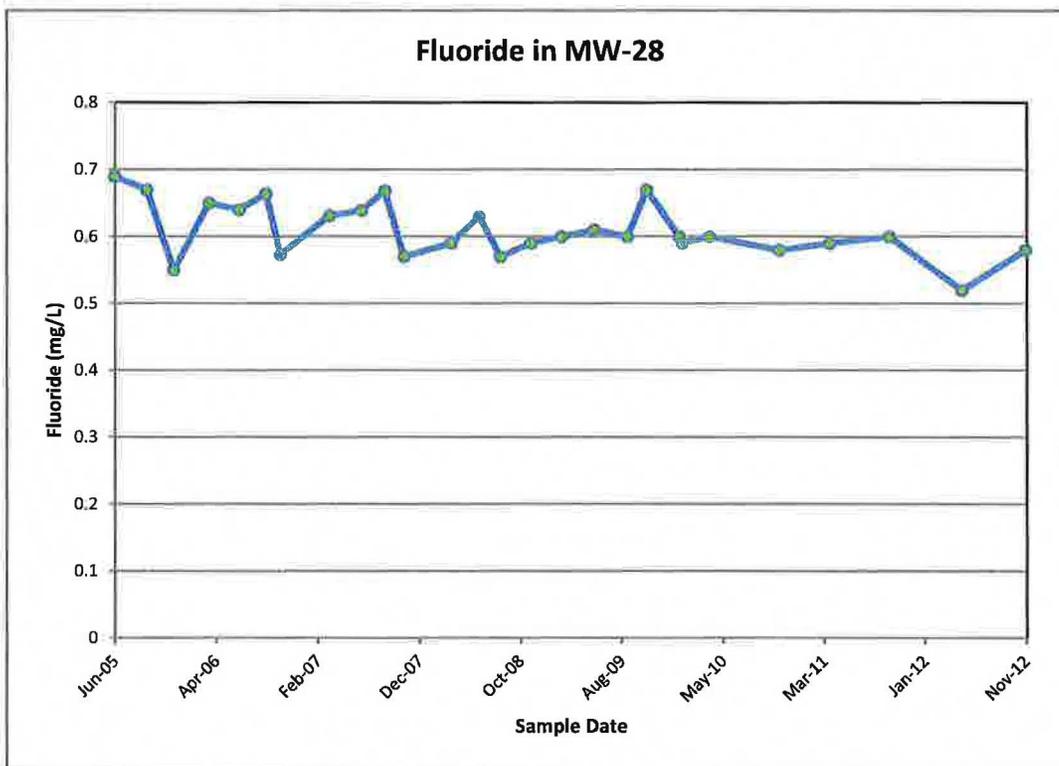
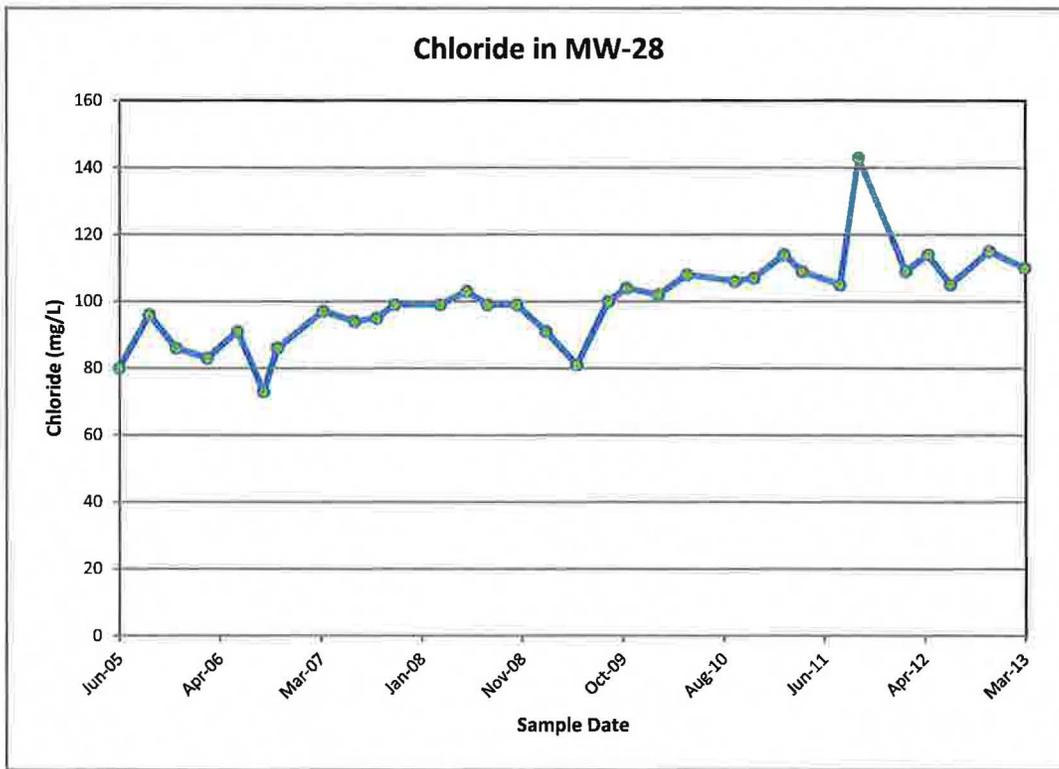
## Time concentration plots for MW-27



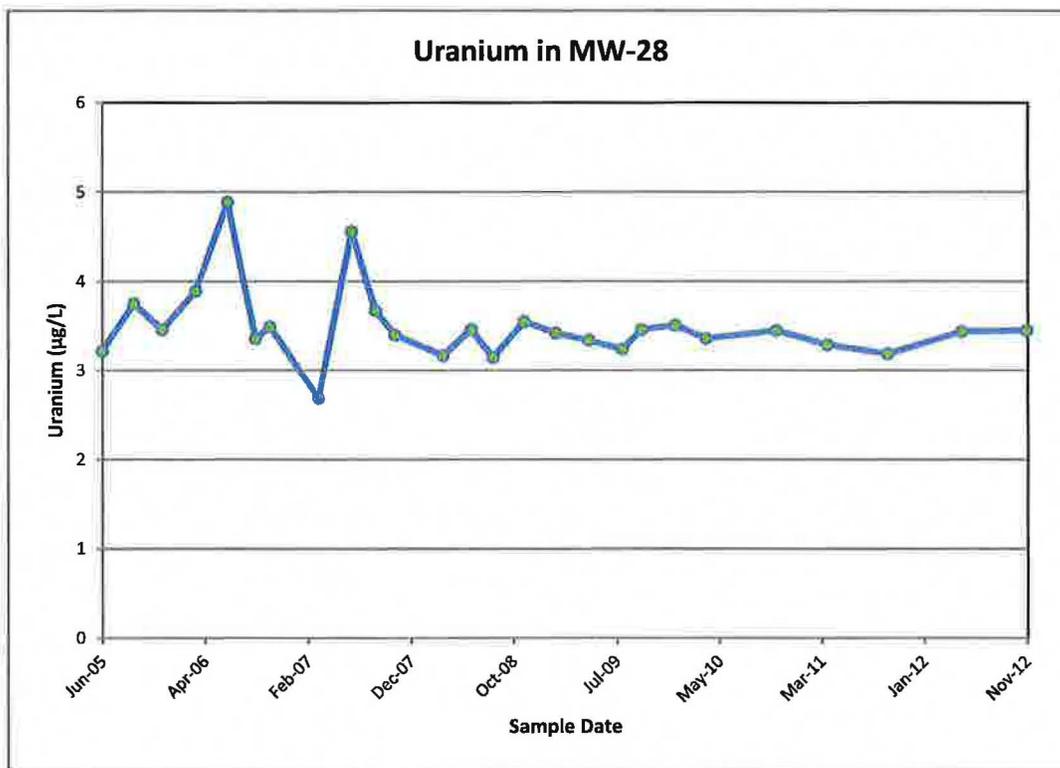
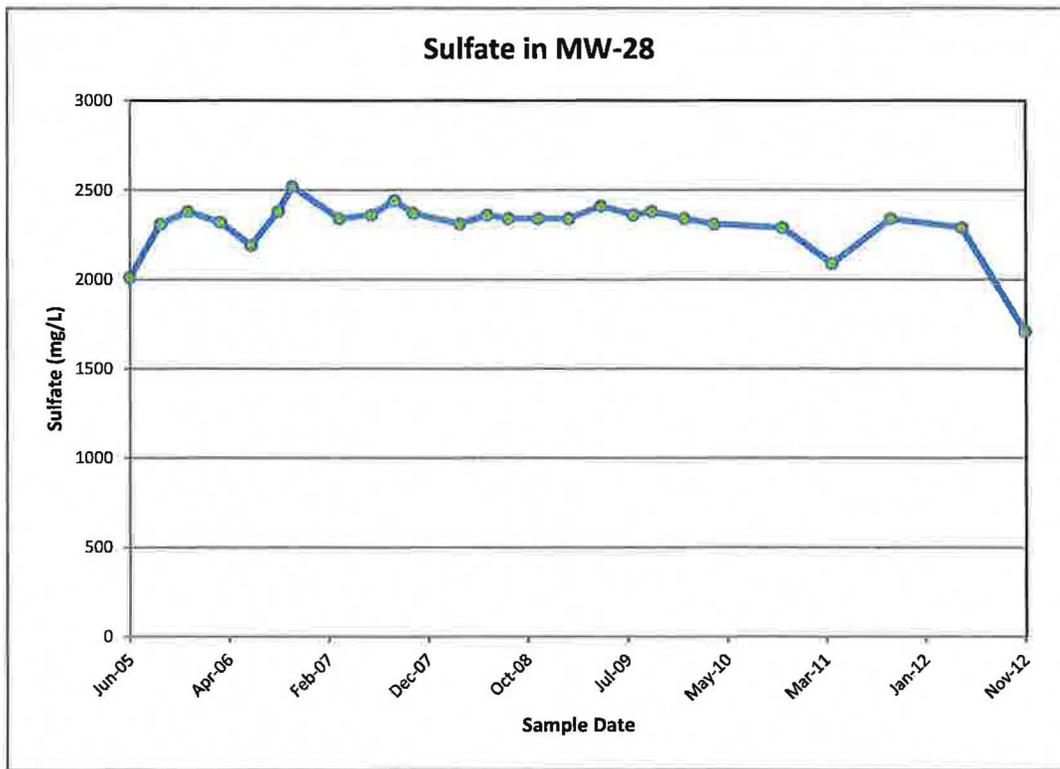
### Time concentration plots for MW-27



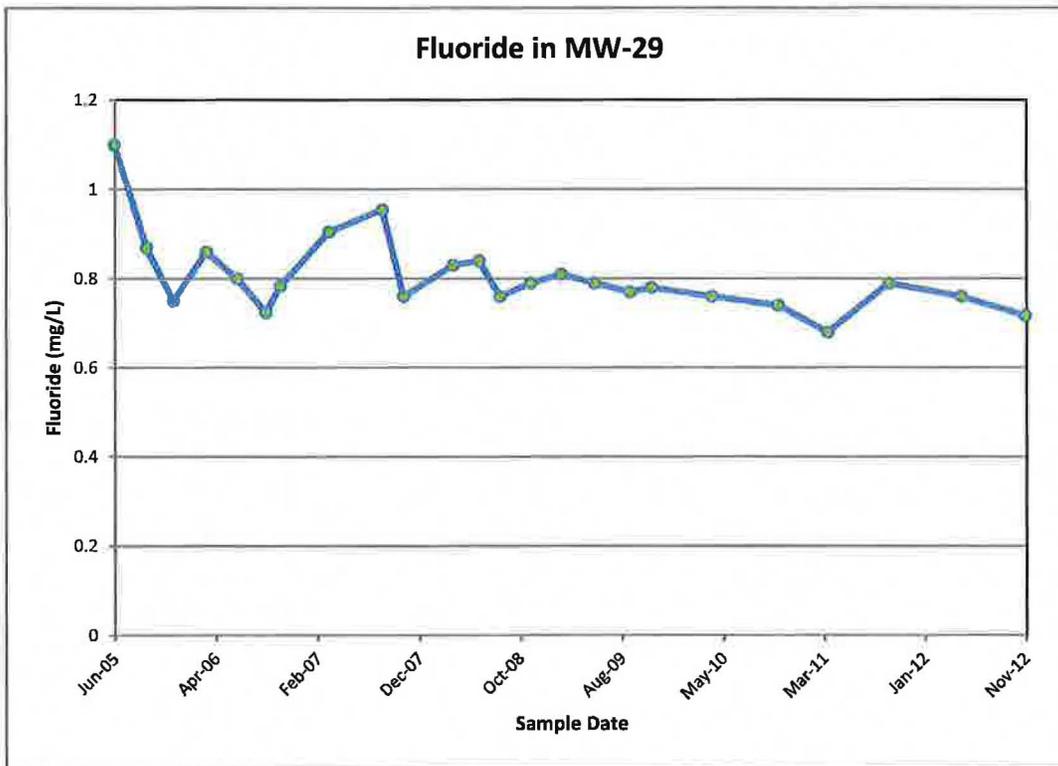
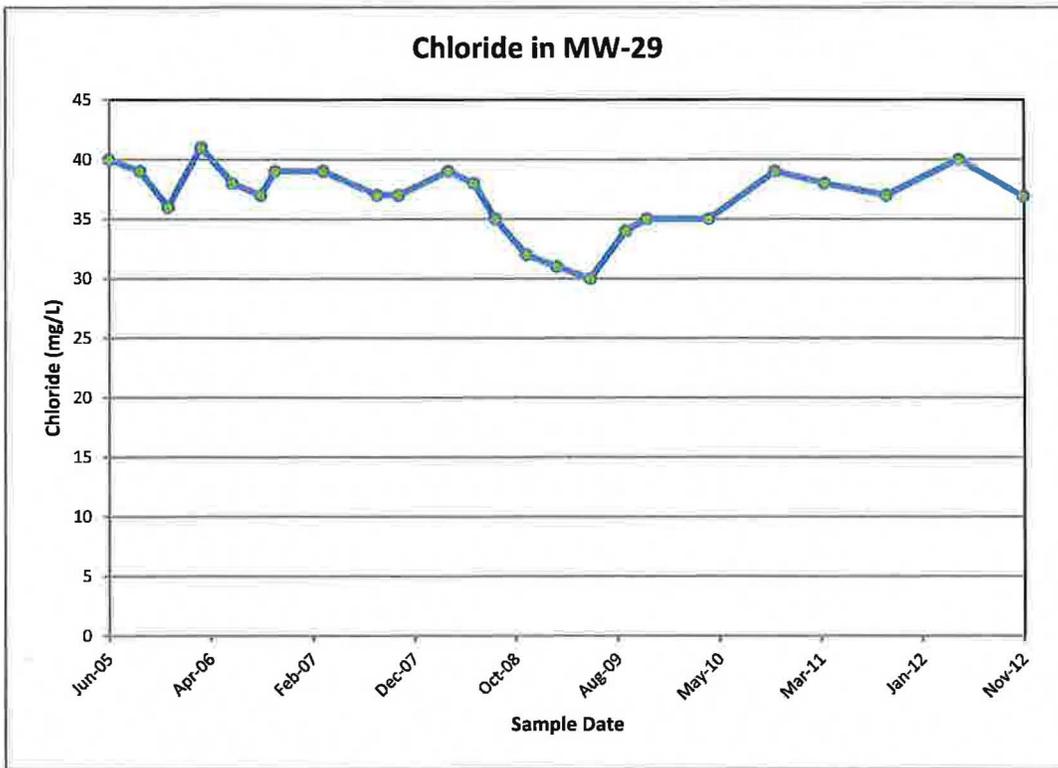
## Time concentration plots for MW-28



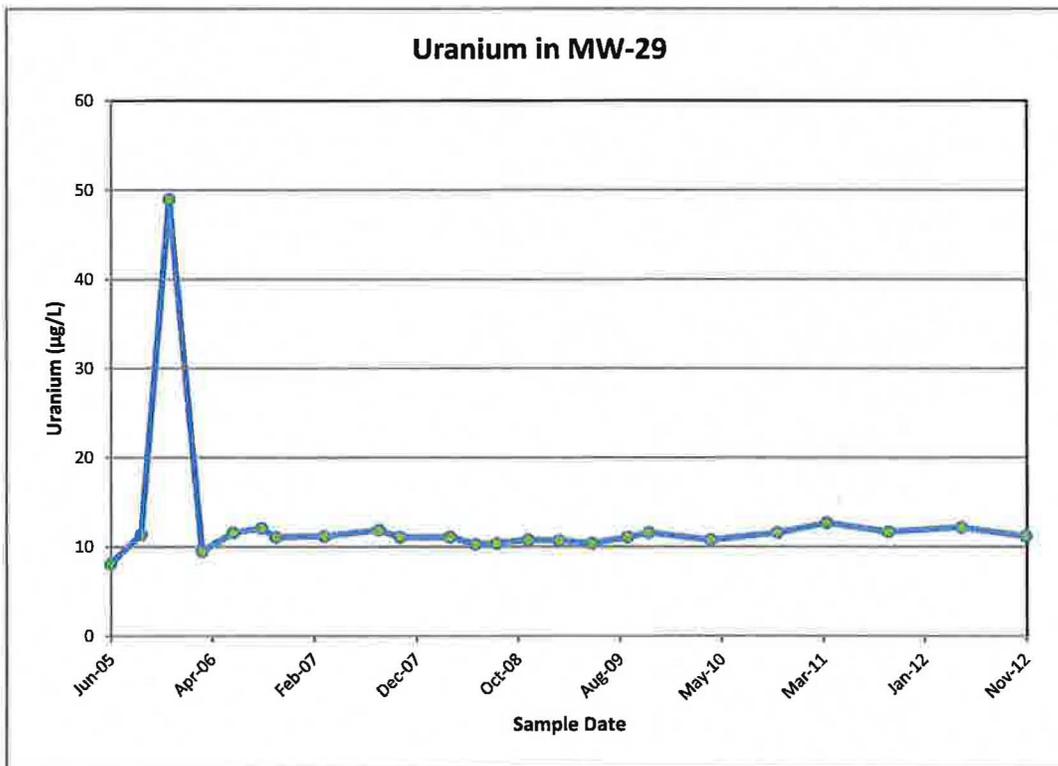
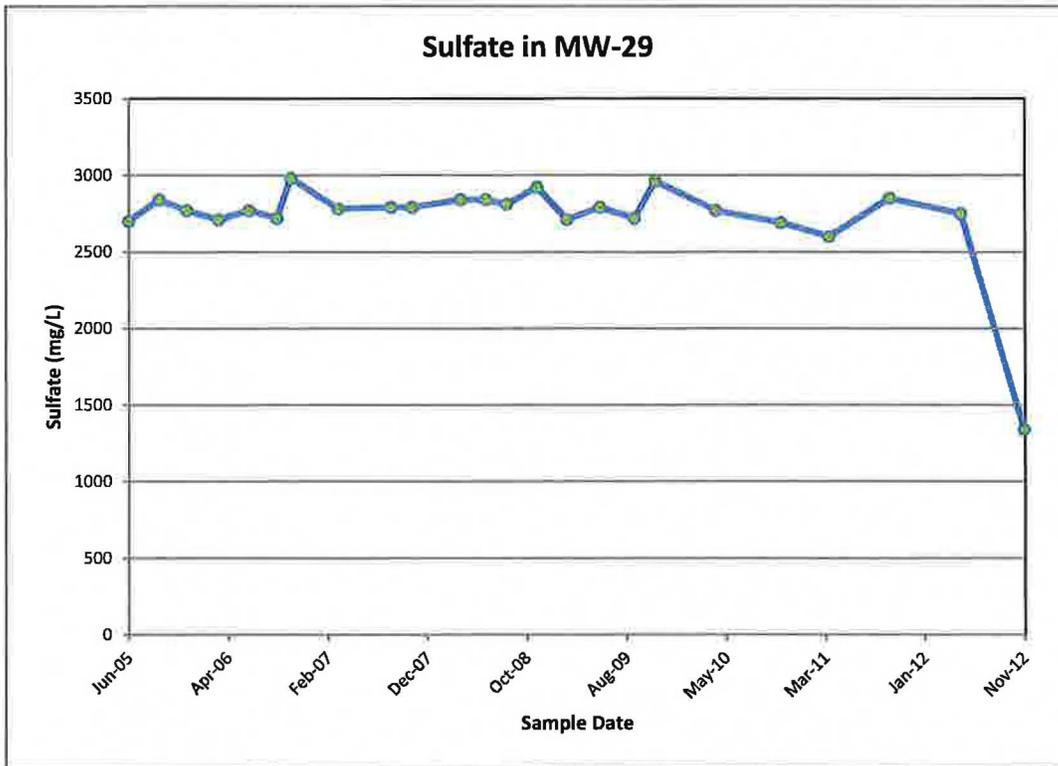
## Time concentration plots for MW-28



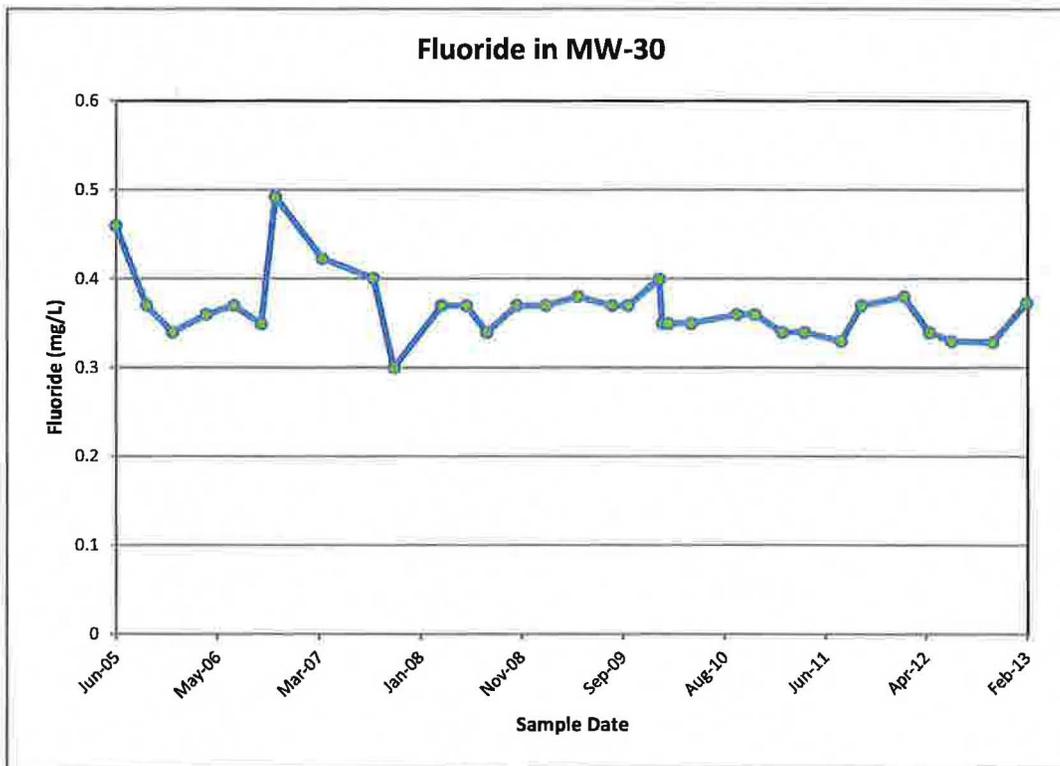
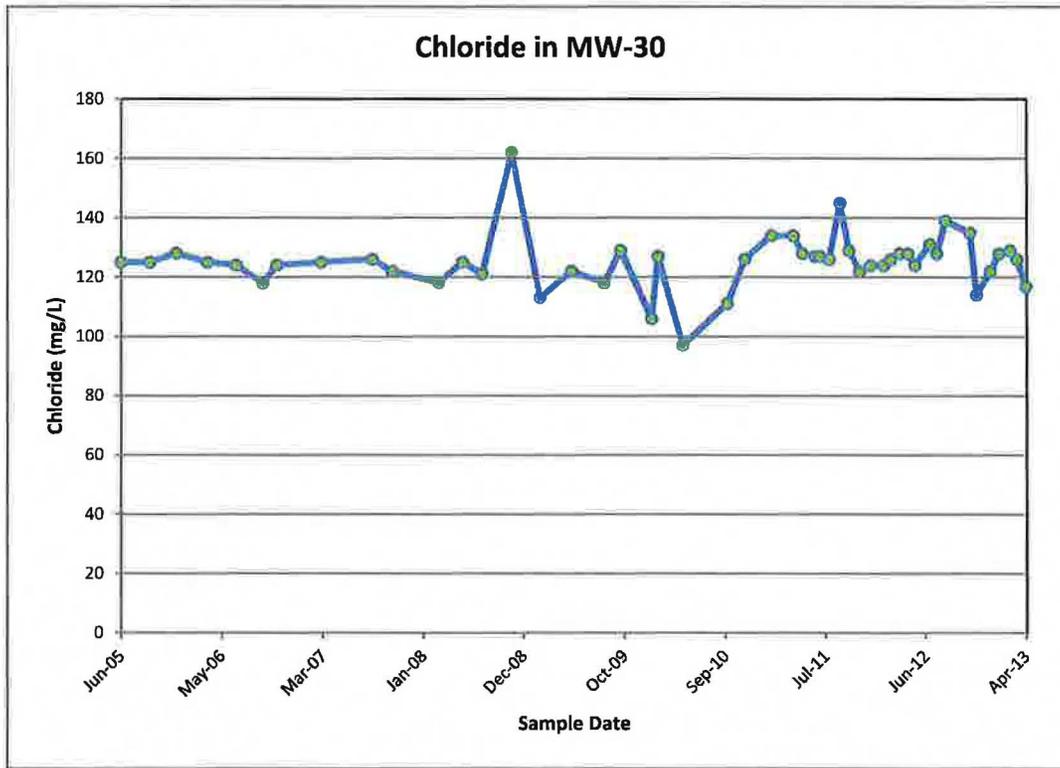
### Time concentration plots for MW-29



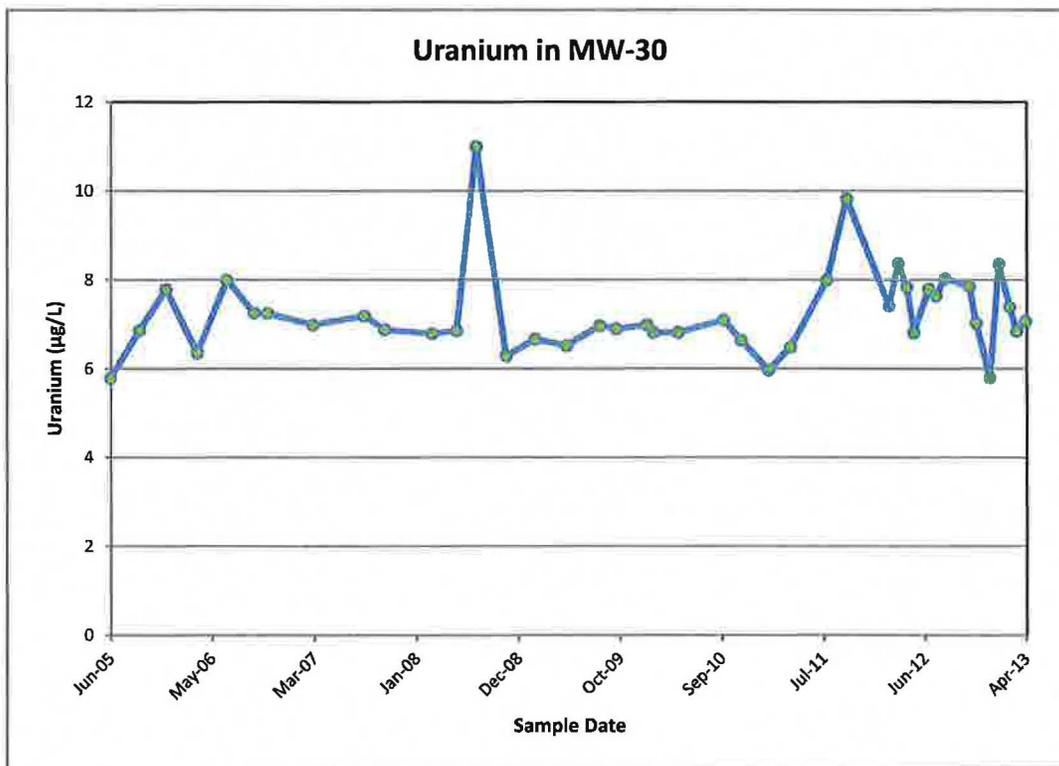
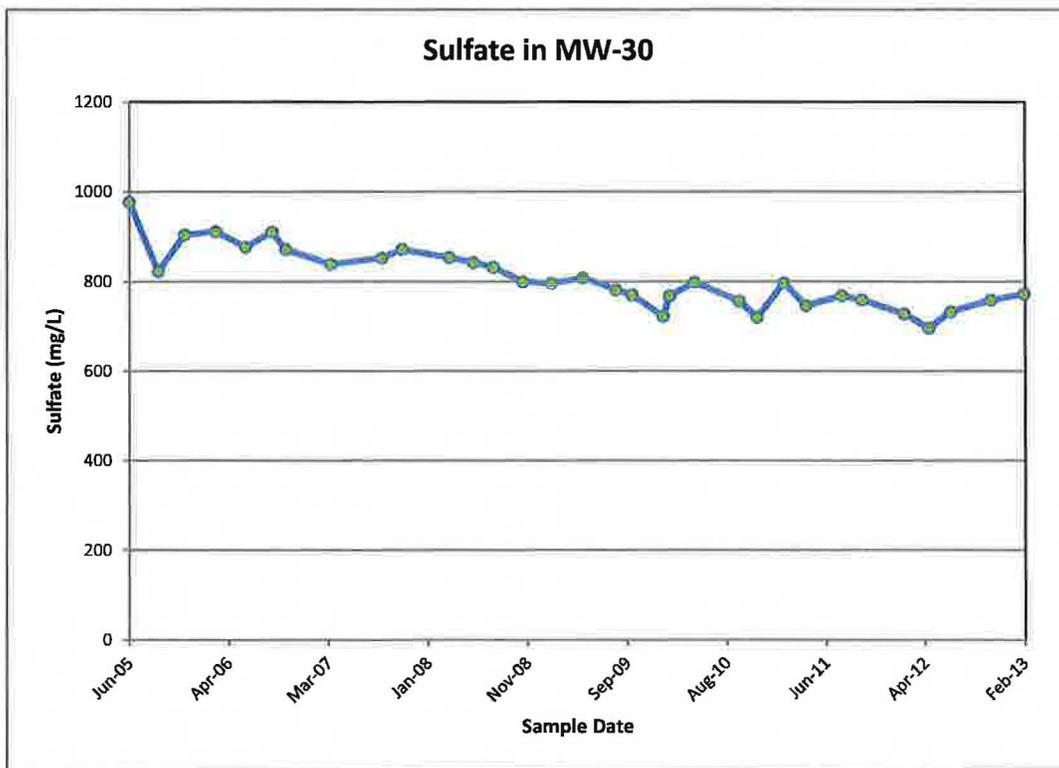
### Time concentration plots for MW-29



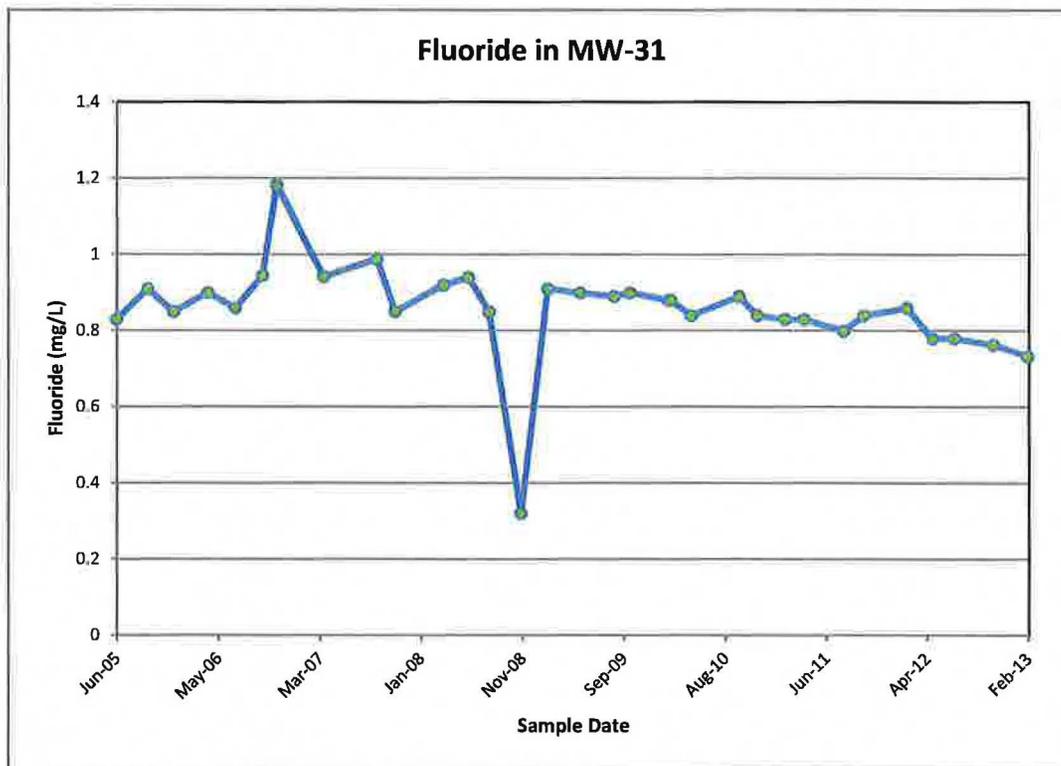
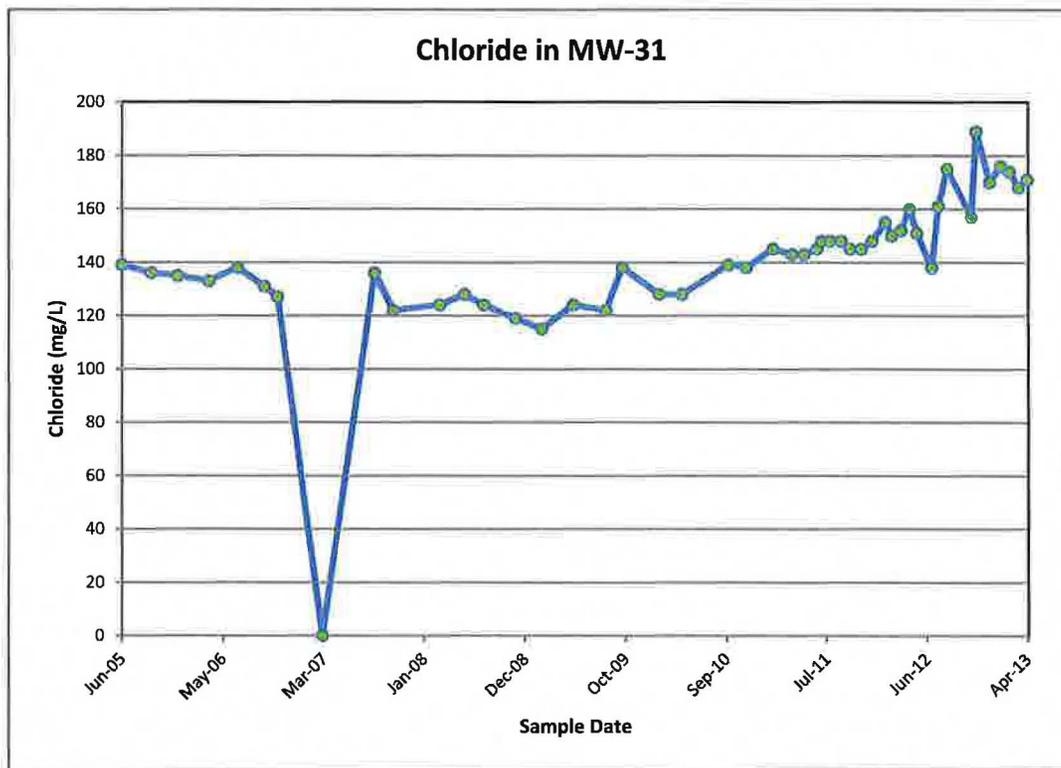
## Time concentration plots for MW-30



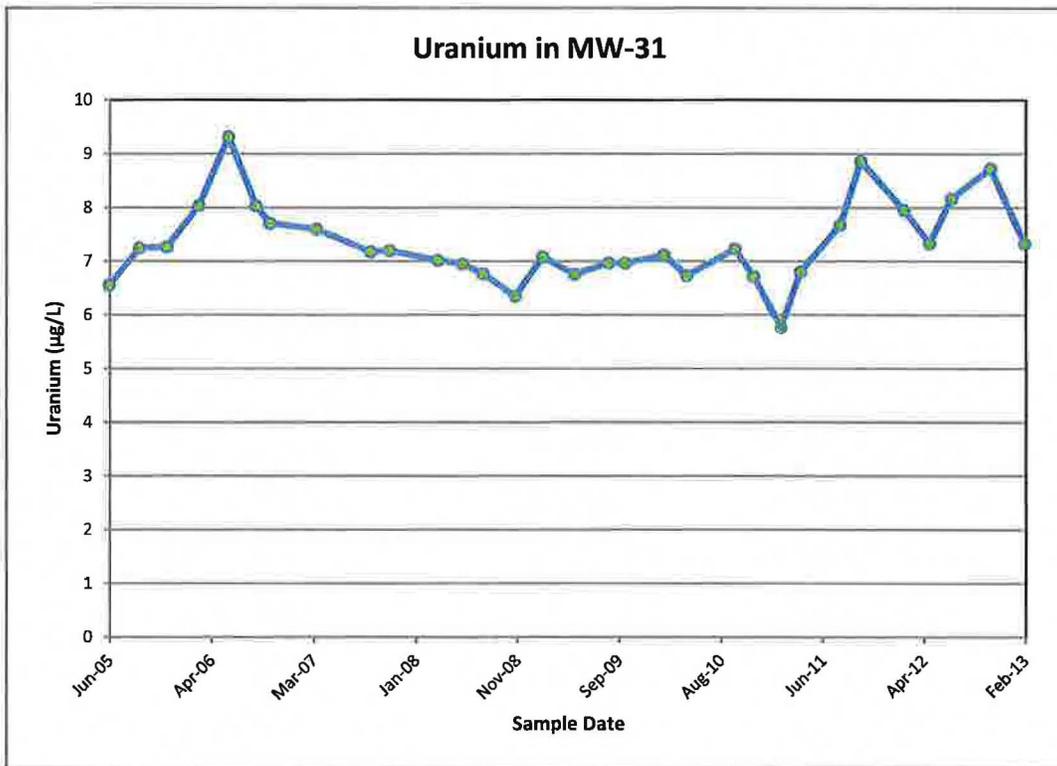
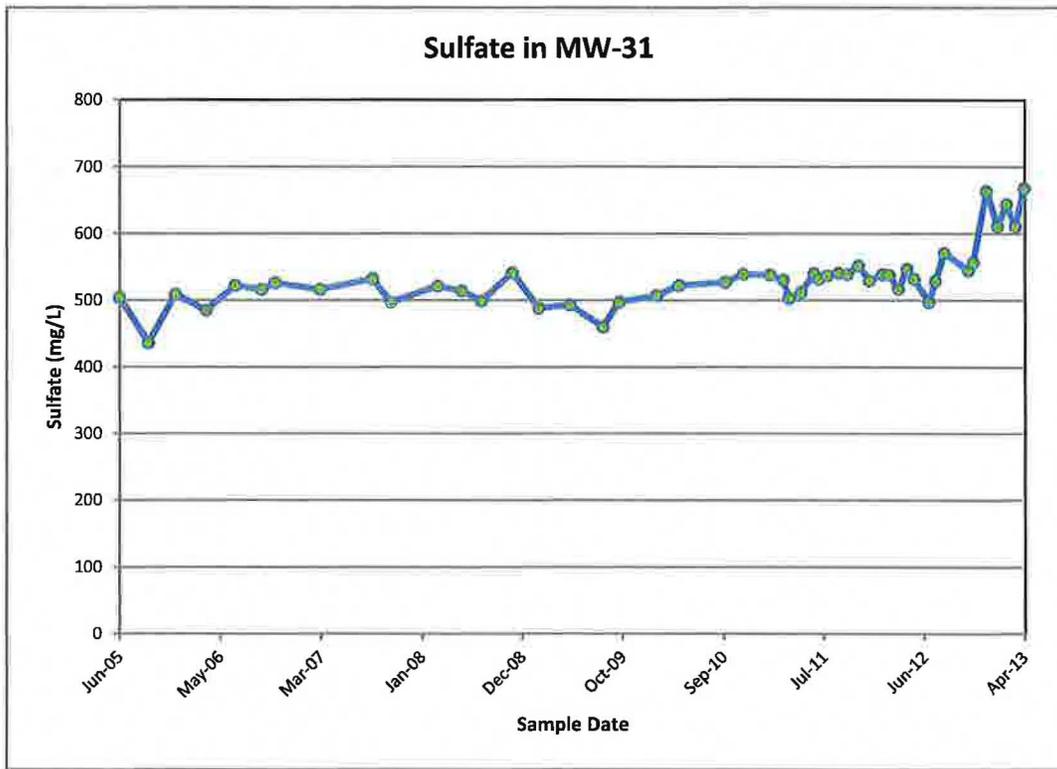
## Time concentration plots for MW-30



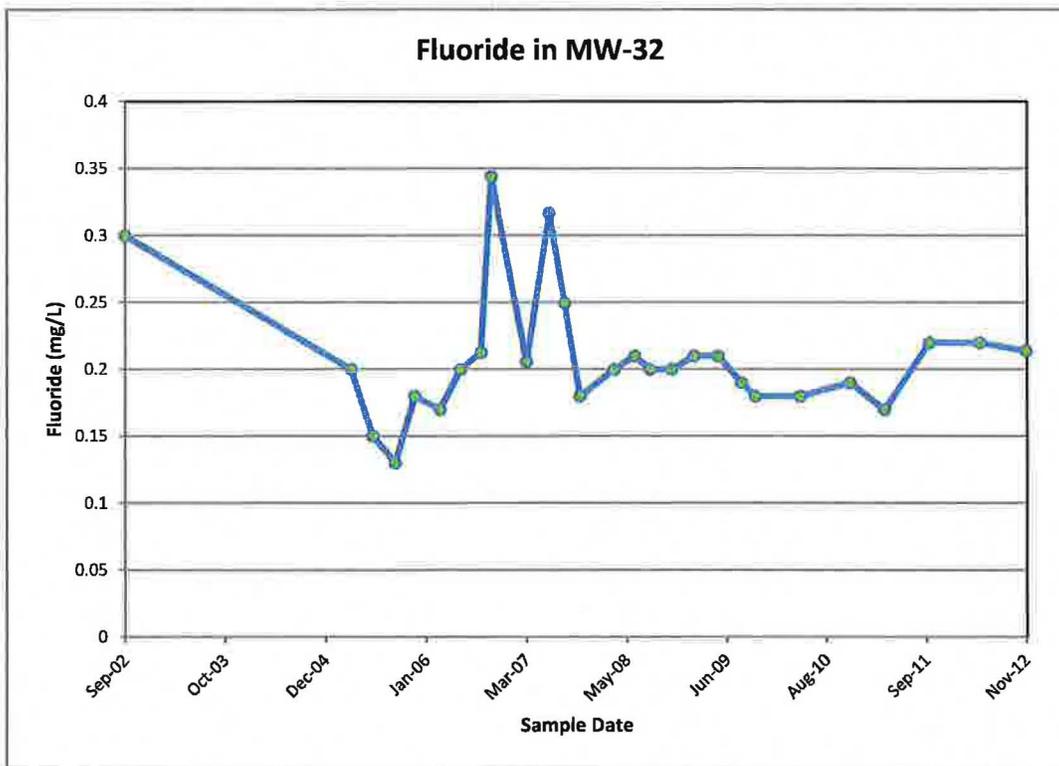
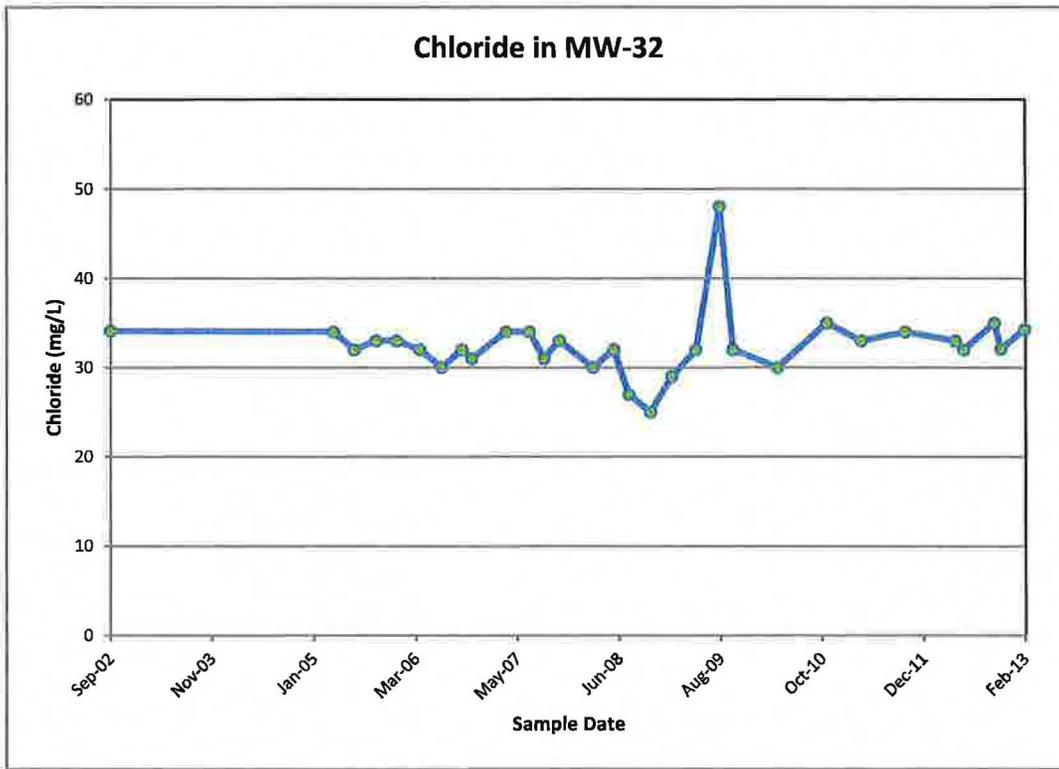
### Time concentration plots for MW-31



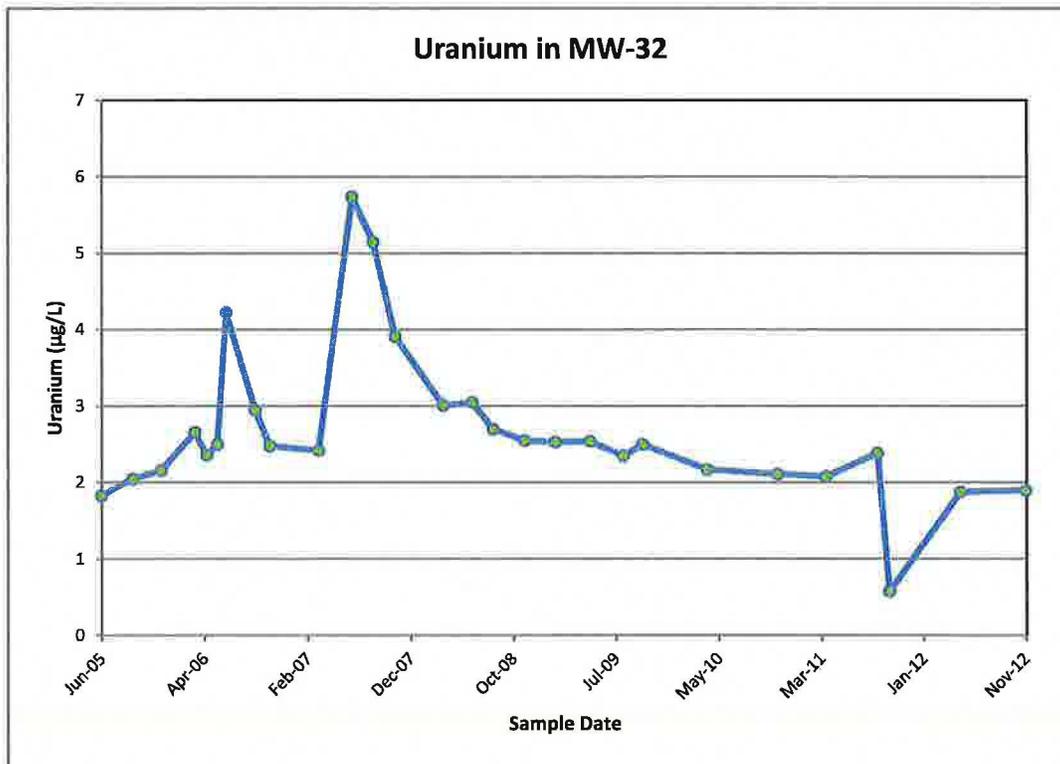
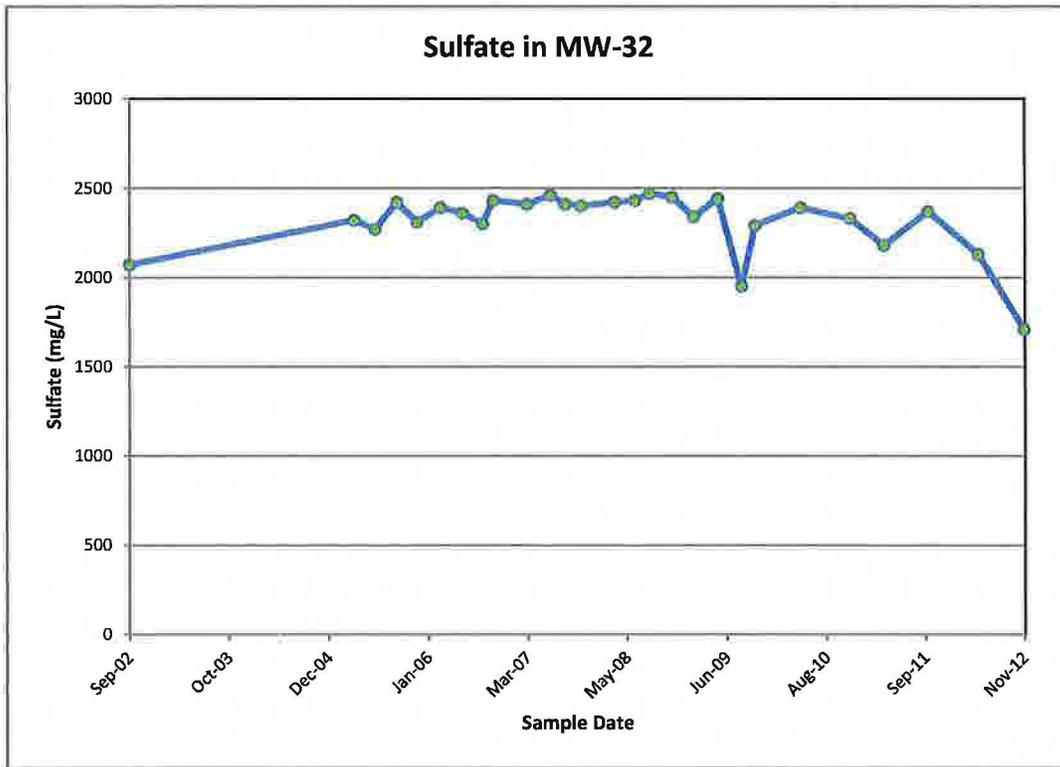
### Time concentration plots for MW-31



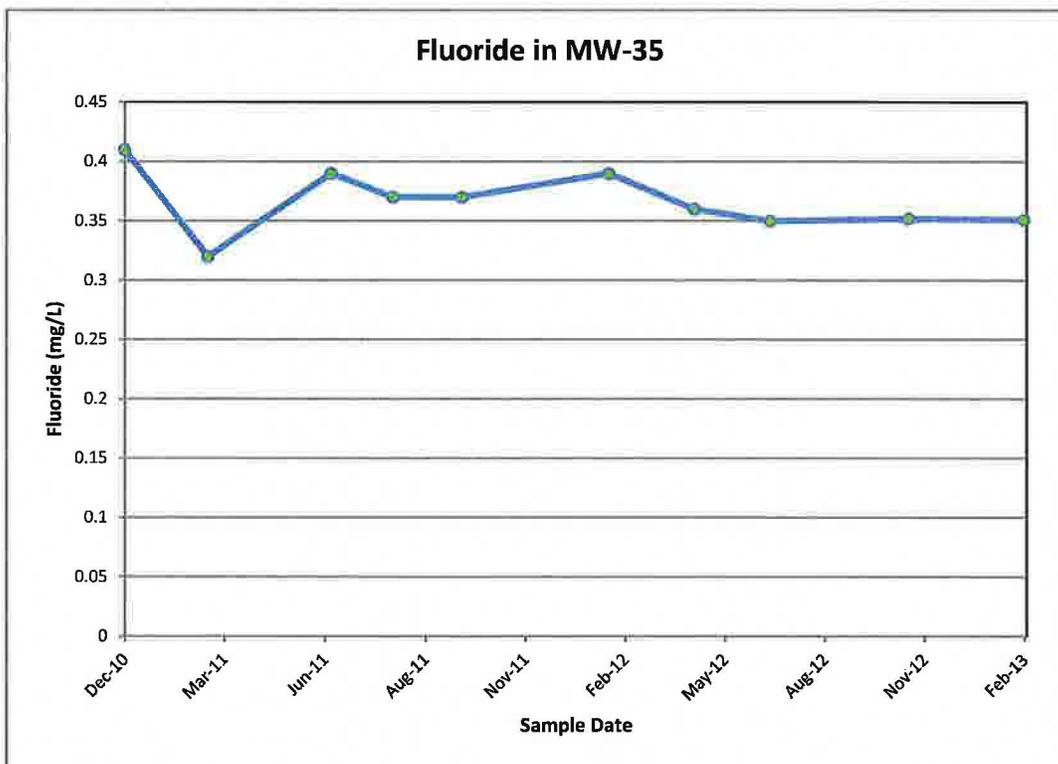
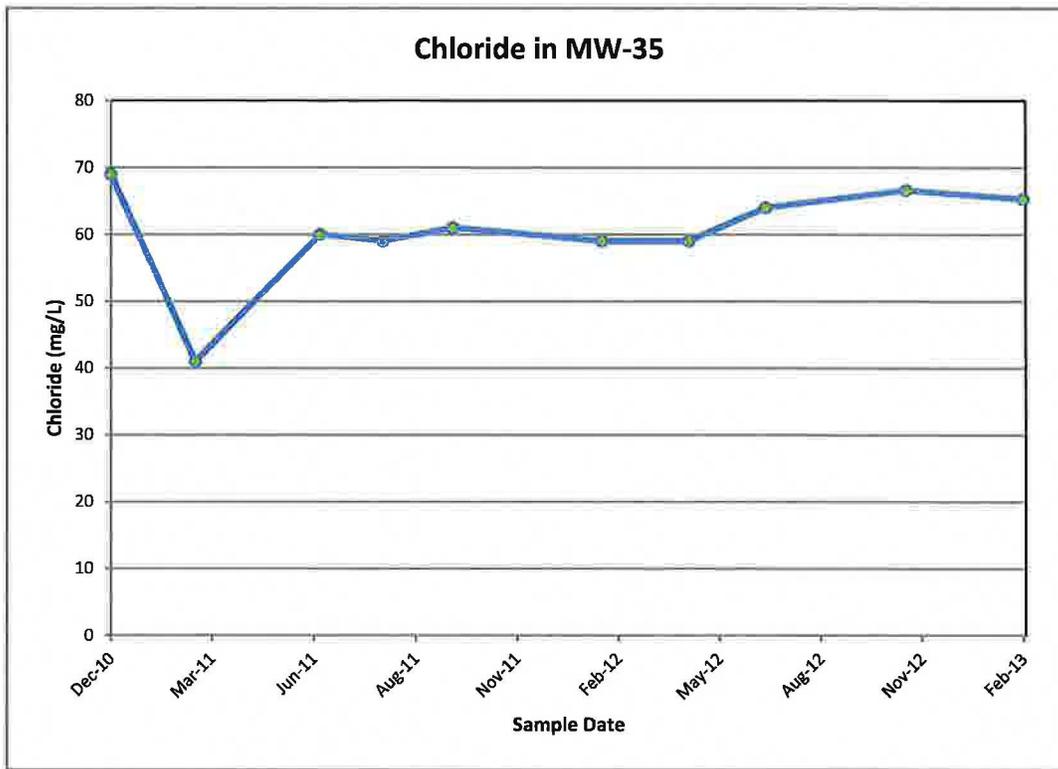
## Time concentration plots for MW-32



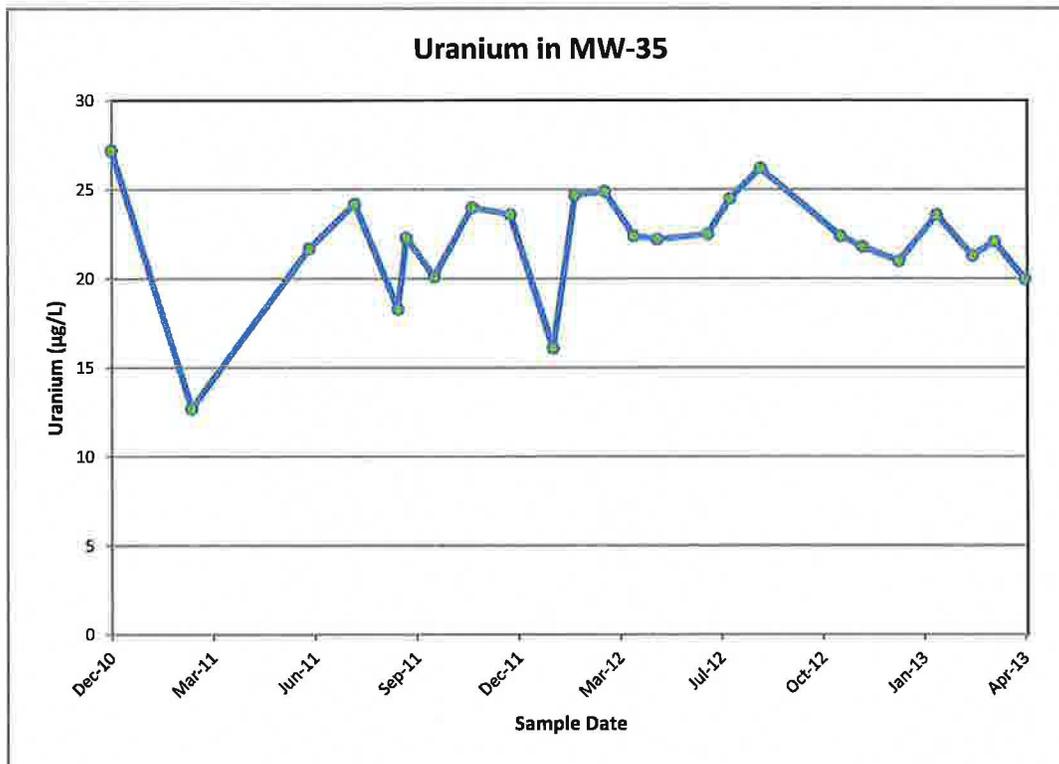
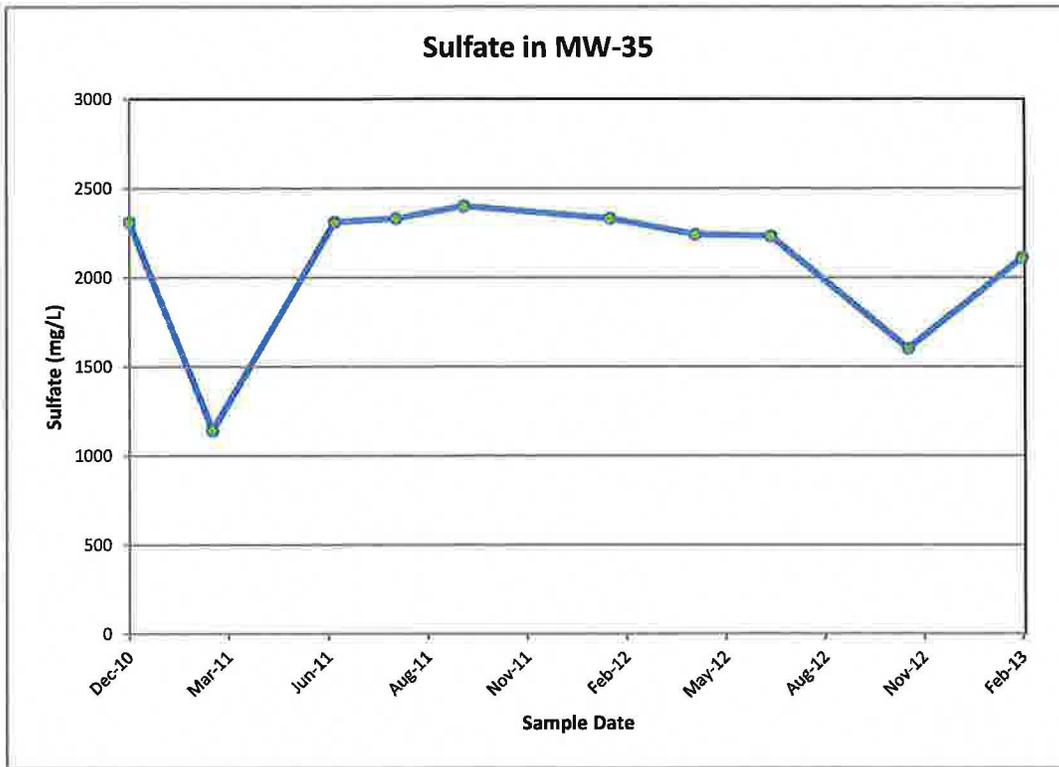
## Time concentration plots for MW-32



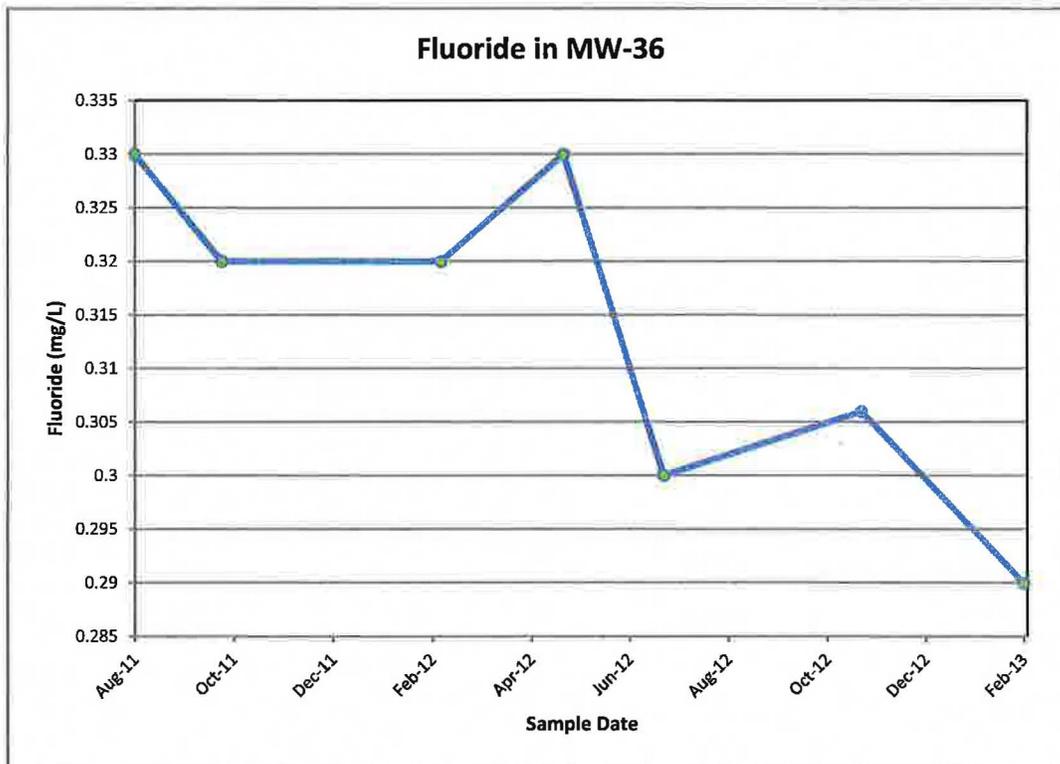
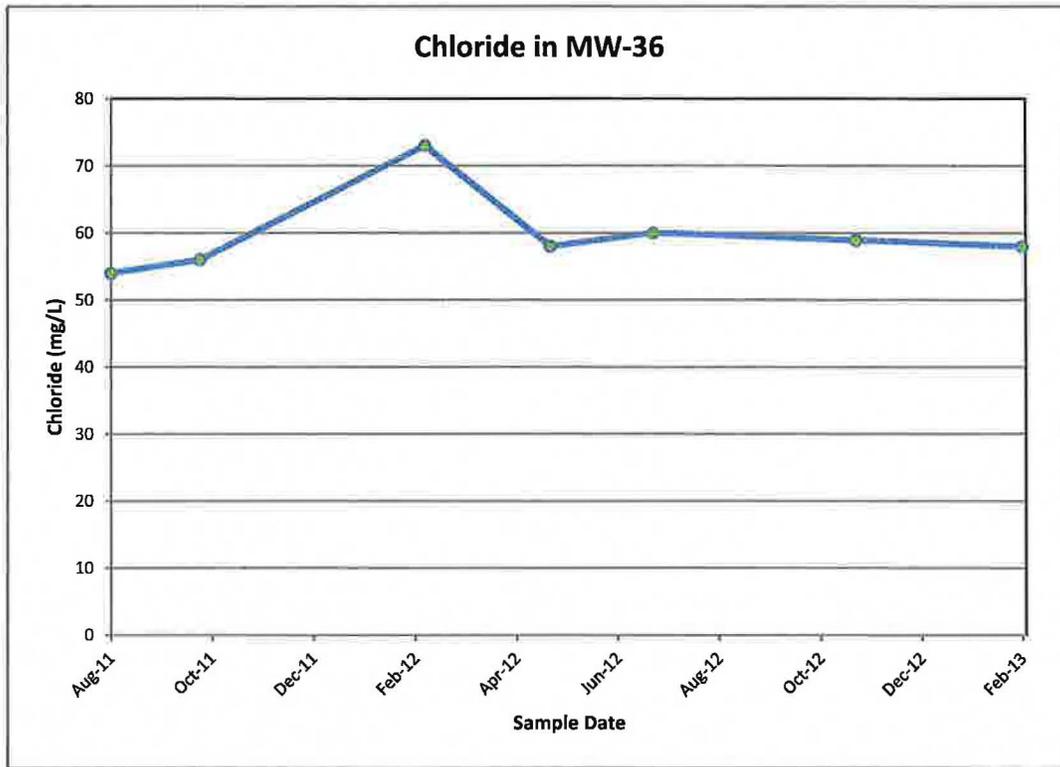
## Time concentration plots for MW-35



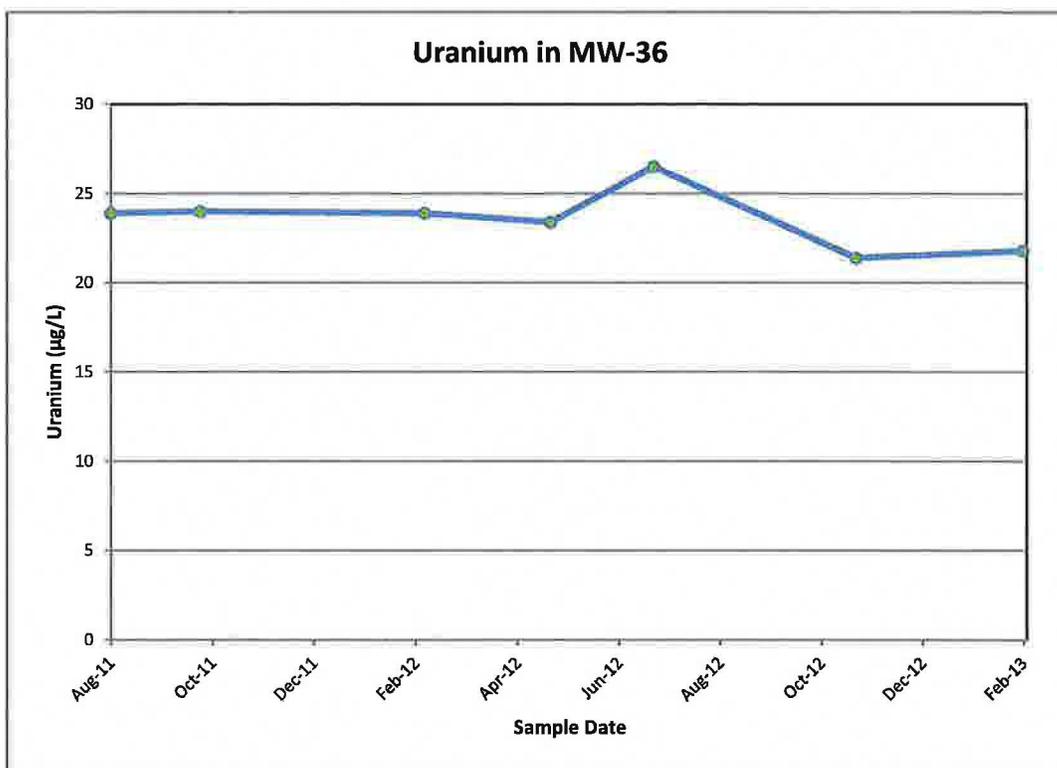
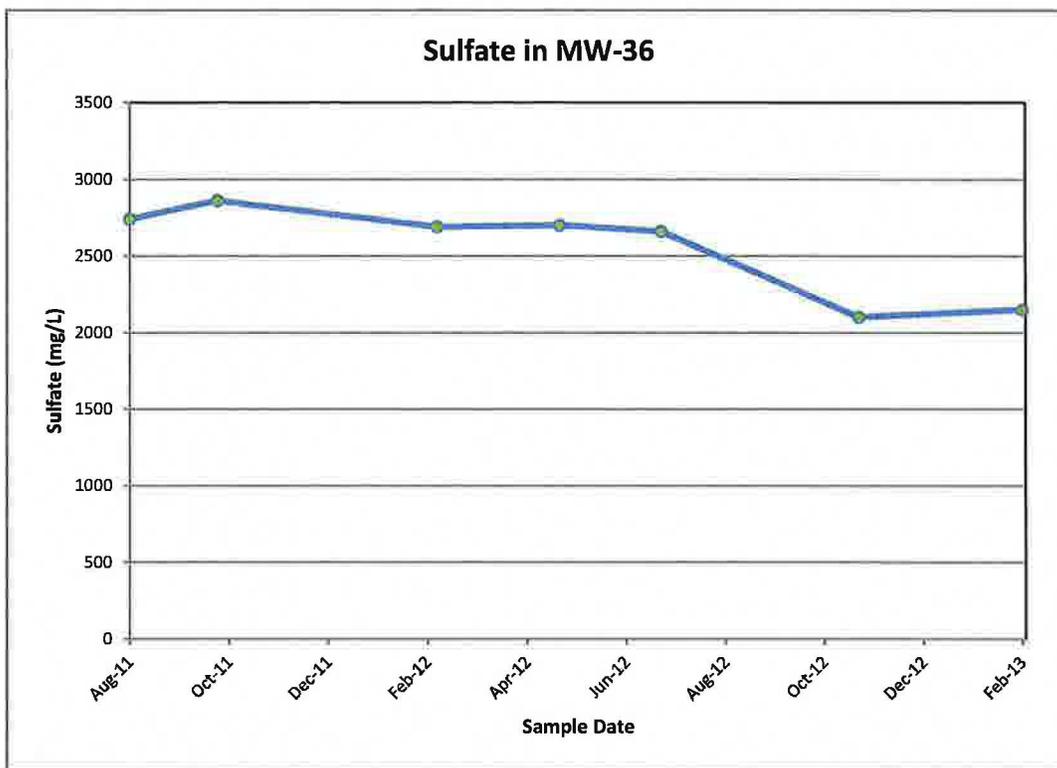
## Time concentration plots for MW-35



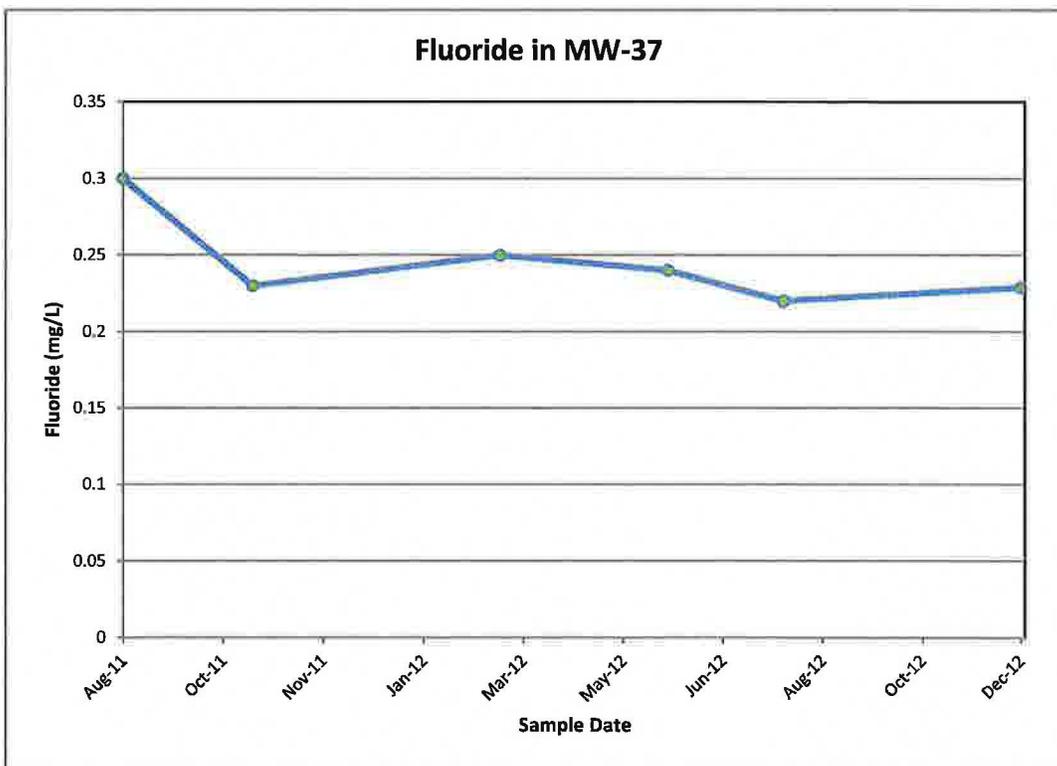
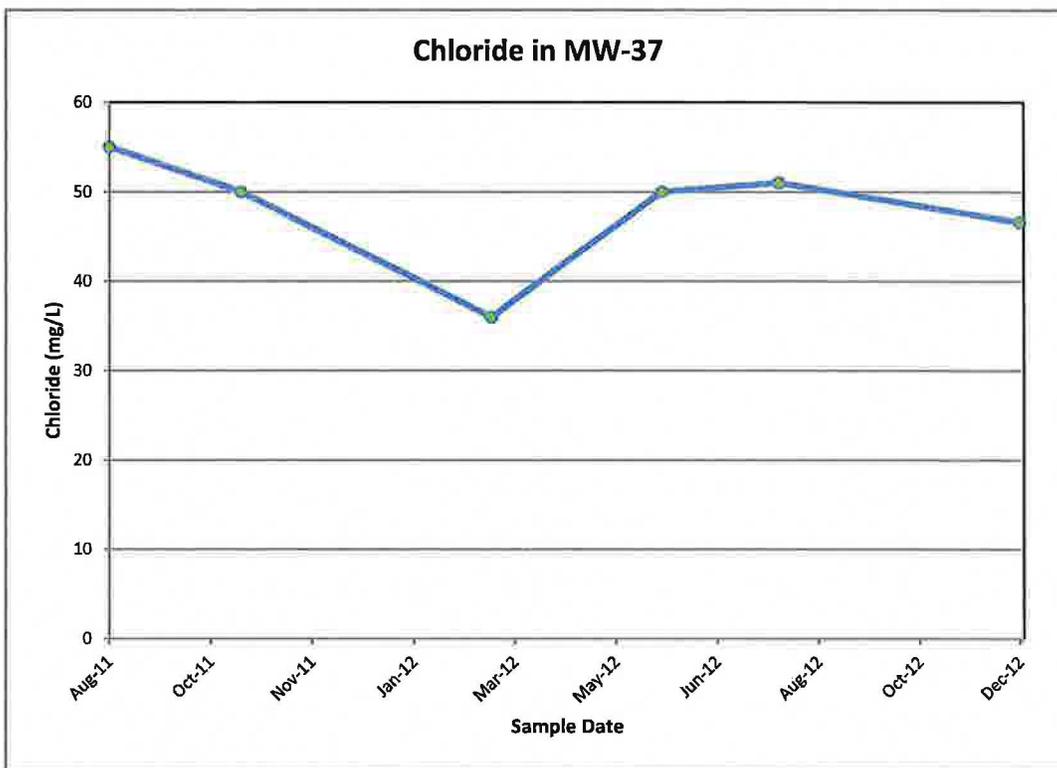
### Time concentration plots for MW-36



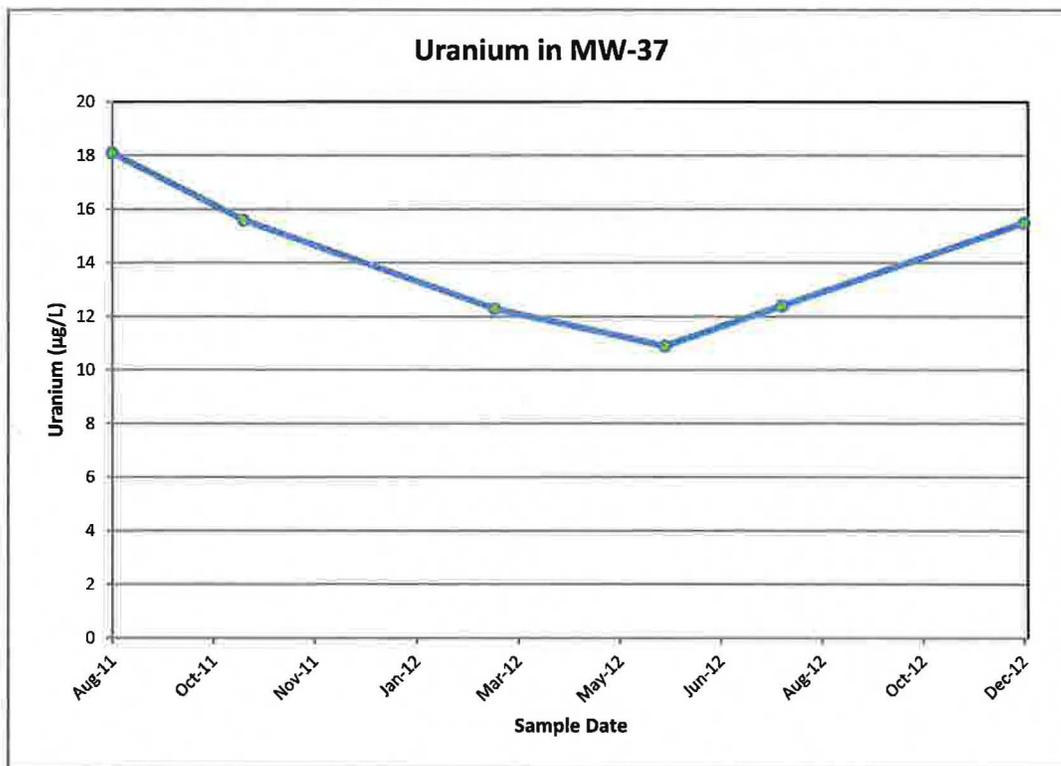
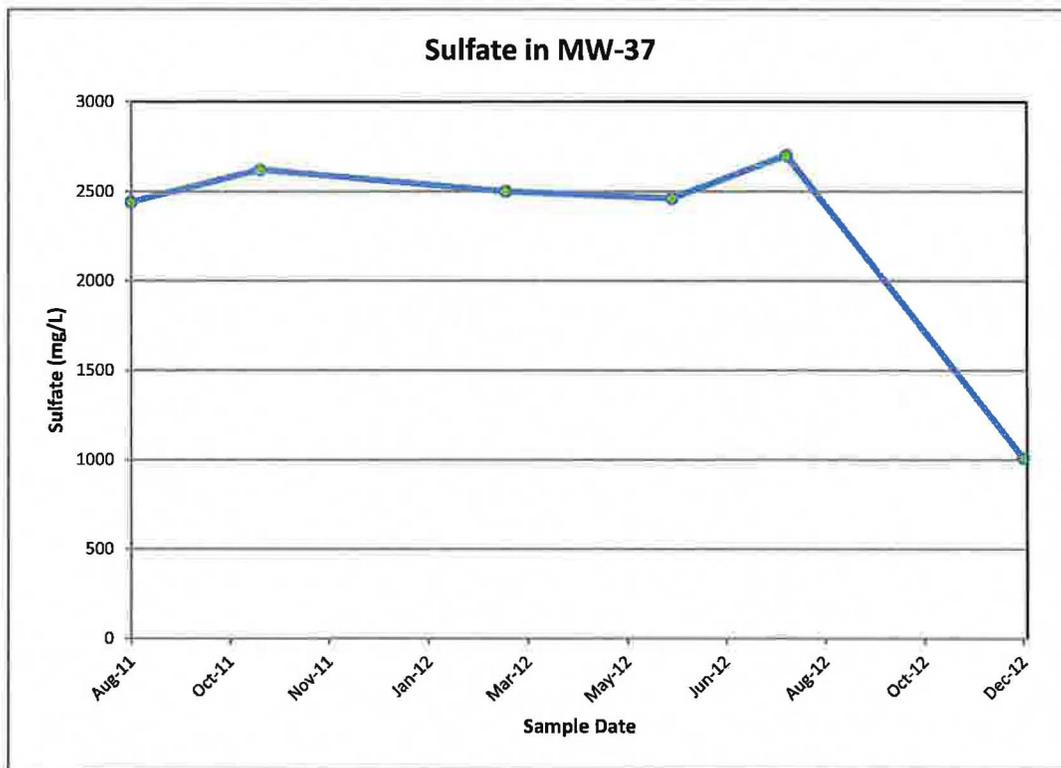
### Time concentration plots for MW-36



### Time concentration plots for MW-37



### Time concentration plots for MW-37



Tab J

CSV Transmittal Letter

## Kathy Weinel

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**From:** Kathy Weinel  
**Sent:** Thursday, May 23, 2013 9:07 AM  
**To:** 'rlundberg@utah.gov'  
**Cc:** 'Phillip Goble'; 'Thomas Rushing'; Harold Roberts; David Frydenlund; Jo Ann Tischler; David Turk; N. Tanner Holliday; Garrin Palmer; Jaime Massey; Dan Hillsten  
**Subject:** Transmittal of CSV Files White Mesa Mill 2013 Q1 Groundwater Monitoring  
**Attachments:** Q1\_2013\_GW.csv

Dear Mr. Lundberg,

Attached to this e-mail is an electronic copy of laboratory results for groundwater monitoring conducted at the White Mesa Mill during the first quarter of 2013, in Comma Separated Value (CSV) format.

Please contact me at 303-389-4134 if you have any questions on this transmittal.

Yours Truly

Kathy Weinel