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November 11, 2014

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 3rd Quarter 2014 Nitrate Monitoring Report
Stipulation and Consent Order Docket Number UGW12-04 White Mesa Uranium Mill**

Dear Mr. Lundberg:

Enclosed are two copies of the White Mesa Uranium Mill Nitrate Monitoring Report for the 3rd Quarter of 2014 as required by the Stipulation and Consent Order Docket Number UGW12-04, 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 'Kathy Weinel'.

ENERGY FUELS RESOURCES (USA) INC.
Kathy Weinel
Quality Assurance Manager

cc: David C. Frydenlund
Dan Hillsten
Harold R. Roberts
David E. Turk
Scott Bakken

White Mesa Uranium Mill
Nitrate Monitoring Report

State of Utah
Stipulated Consent Agreement, January 2009
Docket No. UGW09-03

3rd Quarter
(July through September)
2014

Prepared by:



Energy Fuels Resources (USA) Inc.
225 Union Boulevard, Suite 600
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November 11, 2014

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ACRONYM LIST

AWAL	American West Analytical Laboratory
CA	Consent Agreement
CAP	Corrective Action Plan
CIR	Contamination Investigation Report
DIFB	Deionized Field Blanks
DRC	Utah Division of Radiation Control
EFRI	Energy Fuels Resources (USA) Inc.
ft amsl	feet above mean sea level
GWDP	Groundwater Discharge Permit
LCS	Laboratory Control Spike
MS	Matrix Spike
MSD	Matrix Spike Duplicate
QA	Quality Assurance
QAP	Groundwater Monitoring Quality Assurance Plan
QC	Quality Control
RPD	Relative Percent Difference
SCO	Stipulated Consent Order
SOPs	Standard Operating Procedures
UDEQ	Utah Department of Environmental Quality
VOC	Volatile Organic Compounds

1.0 INTRODUCTION

The Utah Department of Environmental Quality (“UDEQ”) Division of Radiation Control (“DRC”) noted in a Request dated September 30, 2008 (the “Request”), for a Voluntary Plan and Schedule to Investigate and Remediate Nitrate Contamination at the White Mesa Uranium Mill (the “Mill”) (the “Plan”), that nitrate levels have exceeded the State water quality standard of 10 mg/L in certain monitoring wells. As a result of the Request, Energy Fuels Resources (USA) Inc. (“EFRI”) entered into a Stipulated Consent Agreement with the Utah Water Quality Board in January 2009 which directed the preparation of a Nitrate Contamination Investigation Report (“CIR”). A subsequent letter dated December 1, 2009, among other things, recommended that EFRI also address elevated chloride concentrations in the CIR. The Stipulated Consent Agreement was amended in August 2011. Under the amended Consent Agreement (“CA”), EFRI submitted a Corrective Action Plan (“CAP”), pursuant to the requirements of the Utah Groundwater Quality Protection Rules [UAC R317-6-6.15(C – E)] on November 29, 2011 and revised versions of the CAP on February 27, 2012 and May 7, 2012. On December 12, 2012, DRC signed the Stipulation and Consent Order (“SCO”), Docket Number UGW12-04, which approved the EFRI CAP, dated May 7, 2012. The SCO ordered EFRI to fully implement all elements of the May 7, 2012 CAP.

Based on the schedule included in the CAP and as delineated and approved by the SCO, the activities associated with the implementation of the CAP began in January 2013. The reporting requirements specified in the CAP and SCO are included in this quarterly nitrate report.

This is the Quarterly Nitrate Monitoring Report, as required under the SCO, State of UDEQ Docket No. UGW12-04 for the third quarter of 2014. This report meets the requirements of the SCO, State of UDEQ Docket No. UGW12-04 and is the document which covers nitrate corrective action and monitoring activities during the third quarter of 2014.

2.0 GROUNDWATER NITRATE MONITORING

2.1 Samples and Measurements Taken During the Quarter

A map showing the location of all groundwater monitoring wells, piezometers, existing wells, temporary chloroform contaminant investigation wells and temporary nitrate investigation wells is attached under Tab A. Nitrate samples and measurements taken during this reporting period are discussed in the remainder of this section.

2.1.1 Nitrate Monitoring

Quarterly sampling for nitrate monitoring parameters was performed in the following wells:

TWN-1	TW4-24*
TWN-2	TW4-25*
TWN-3	Piezometer 1
TWN-4	Piezometer 2
TWN-7	Piezometer 3
TWN-18	
TW4-22*	

As discussed in Section 2.1.2 the analytical constituents required by the CAP are inorganic chloride and nitrate+nitrite as N (referred to as nitrate in this document)

* Wells TW4-22, TW4-24, TW4-25 are chloroform investigation wells (wells installed and sampled primarily for the chloroform investigation) and are sampled as part of the chloroform program. The analytical suite for these three wells includes nitrate, chloride and a select list of Volatile Organic Compounds (“VOCs”) as specified in the chloroform program. These three wells are included here because they are being pumped as part of the remediation of the nitrate contamination as required by the SCO and the CAP. The nitrate and chloride data are included in this report as well as in the chloroform program quarterly report. The VOC data for these three wells will be reported in the chloroform quarterly monitoring report only.

The December 12, 2012 SCO approved the CAP, which specified the cessation of sampling in TWN-5, TWN-6, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-14, TWN-15, TWN-16, TWN-17, and TWN-19. The CAP and SCO also approved the abandonment of TWN-5, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-15, and TWN-17 within 1 year of the SCO approval. These wells were abandoned in accordance with the DRC-approved Well Abandonment Procedure on July 31, 2013. Wells TWN-6, TWN-14, TWN-16, and TWN-19 have been maintained for depth to groundwater monitoring only, as noted in the CAP.

Table 1 provides an overview of all locations sampled during the current period, along with the date samples were collected from each location, and the date(s) upon which analytical data were received from the contract laboratory. Table 1 also identifies rinsate samples collected, as well as sample numbers associated with any required duplicates.

As indicated in Table 1, nitrate monitoring was performed in the nitrate monitoring wells, chloroform wells TW4-22, TW4-24, TW4-25 and Piezometers 1, 2, and 3. Analytical data for all of the above-listed wells, and the piezometers, are included in Tab G.

Nitrate and chloride are also monitored in all of the Mill’s groundwater monitoring wells and chloroform investigation wells. Data from those wells for this quarter are incorporated in certain maps and figures in this report but are discussed in their respective programmatic reports.

2.1.2 Parameters Analyzed

Locations sampled during this reporting period were analyzed for the following constituents:

- Inorganic Chloride
- Nitrate plus Nitrite as Nitrogen (referred to herein as nitrate)

Use of analytical methods consistent with the requirements found in the White Mesa Mill Groundwater Quality Assurance Plan, (“QAP”) Revision 7.2, dated June 6, 2012 was confirmed for all analytes, as discussed later in this report.

2.1.3 Groundwater Head and Level Monitoring

Depth to groundwater was measured in the following wells and/or piezometers, pursuant to Part I.E.3 of the Groundwater Discharge Permit (“GWDP”) (dated August 24, 2012):

- The quarterly groundwater compliance monitoring wells
- Existing well MW-4 and all of the temporary chloroform investigation wells
- Piezometers – P-1, P-2, P-3, P-4 and P-5
- MW-20, MW-22, and MW-34
- The DR piezometers that were installed during the Southwest Hydrogeologic Investigation
- Nitrate wells TWN-1, TWN-2, TWN-3, TWN-4, TWN-6, TWN-7, TWN-14, TWN-16, TWN-18 and TWN-19

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 well 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 C. Field data sheets for groundwater measurements are also provided in Tab C.

Weekly and monthly depth to groundwater measurements were taken in the chloroform pumping wells MW-4, MW-26, TW4-19, TW4-20, and TW4-4, and the nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2. In addition, monthly water level measurements were taken in non-pumping wells MW-27, MW-30, MW-31, TW4-21, TWN-1, TWN-3, TWN-4, TWN-7, and TWN-18 as required by the CAP.

2.2 Sampling Methodology and Equipment and Decontamination Procedures

The QAP provides a detailed presentation of procedures utilized for groundwater sampling activities under the GWDP (August 24, 2012).

The sampling methodology, equipment and decontamination procedures that were performed for the nitrate contaminant investigation, as summarized below, are consistent with the QAP.

2.2.1 Well Purging, Sampling and Depth to Groundwater

A list of the wells in order of increasing nitrate contamination is generated quarterly. The order for purging is thus established. The list is included with the Field Data Worksheets under Tab B. Mill personnel start purging with all of the nondetect wells and then move to the wells with detectable nitrate concentrations, progressing from the wells having the lowest nitrate contamination to wells with the highest nitrate contamination.

Before leaving the Mill office, the pump and hose are decontaminated using the cleaning agents described in Attachment 2-2 of the QAP. Rinsate blanks are collected at a frequency of one rinsate per 20 field samples.

Purging is completed to remove stagnant water from the casing and to assure that representative samples of formation water are collected for analysis. There are three purging strategies specified in 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% Relative Percent Difference [“RPD”])
3. Purging a well to dryness and stability (within 10% RPD) of a limited list of field parameters after recovery.

Mill personnel proceed to the first well, which is the well with the lowest concentration (i.e. non-detect) of nitrate based on the previous quarter’s sampling results. Well depth measurements are taken and the one casing volume is calculated. The purging strategy that will be used for the well is determined at this time based on the depth to water measurement and the previous production of the well. The Grundfos pump (a 6 to 10 gallon per minute [gpm] pump) is then lowered to the appropriate depth in the well and purging is started. At the first well, the purge rate is measured for the purging event by using a calibrated 5 gallon bucket. After the evacuation of the well has been completed, the well is sampled when possible, and the pump is removed from the well and the process is repeated at each well location moving from the least contaminated to most contaminated well. If sample collection is not possible due to the well being purged dry, a sample is collected after recovery using a disposable bailer and as described in Attachment 2-3 of the QAP. Sample collection follows the procedures described in Attachment 2-4 of the QAP.

After the samples have been collected for a particular well, the samples are placed into a cooler that contains ice. The well is then recapped and Mill personnel proceed to the next well. If a bailer has been used it is disposed of.

Decontamination of non-dedicated equipment, using the reagents in Attachment 2-2 of the QAP, is performed between each sample location, and at the beginning of each sampling day, in addition to the pre-event decontamination described above.

2.2.2 Piezometer Sampling

Samples are collected from Piezometers 1, 2 and 3, if possible. Samples are collected from piezometers using a disposable bailer after one set of field measurements have been collected. Due to the difficulty in obtaining samples from the piezometers, the purging protocols set out in the QAP are not followed.

After samples are collected, the bailer is disposed of and samples are placed into a cooler containing ice for sample preservation and transit to the Mill's contract analytical laboratory, ChemTech-Ford Analytical Laboratory ("CTF"). The Mill's usual contract analytical laboratory, American West Analytical Laboratories ("AWAL"), suffered a catastrophic fire at their facility in July of 2014 and could not accept the third quarter 2014 samples. EFRI will continue to use CTF until AWAL's analytical capabilities have been restored and they can accept samples again.

2.3 Field Data

Attached under Tab B are copies of all Field Data Worksheets that were completed during the quarter for the nitrate investigation monitoring wells and piezometers identified in Section 2.1.1 and Table 1.

2.4 Depth to Groundwater Data and Water Table Contour Map

Depth-to-groundwater measurements that were utilized for groundwater contours are included on the Quarterly Depth to Water Sheet at Tab C of this Report along with the kriged groundwater contour map for the current quarter generated from this data. All well 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 C. A copy of the kriged groundwater contour map generated from the previous quarter's data is provided under Tab D.

2.5 Laboratory Results

2.5.1 Copy of Laboratory Results

The analytical results were provided by CTF. Table 1 lists the dates when analytical results were reported to the Quality Assurance ("QA") Manager for each well or other sample.

Analytical results for the samples collected for this quarter's nitrate investigation and a limited list of chloroform investigation nitrate and chloride results are provided under Tab G of this Report. Also included under Tab G are the results of analyses for duplicate samples and rinsate samples for this sampling effort, as identified in Table 1. See the Groundwater Monitoring Report and Chloroform Monitoring Report for this quarter for nitrate and chloroform analytical results for the groundwater monitoring wells and chloroform investigation wells not listed in Table 1.

2.5.2 Regulatory Framework

As discussed in Section 1.0 above, the Request, Plan, and CA each triggered a series of actions on EFRI's part. Potential surficial sources of nitrate and chloride have been described in the

December 30, 2009 CIR and additional investigations into potential sources were completed and discussed with DRC in 2011. Pursuant to the CA, the CAP was submitted to the Director of the Division of Radiation Control (the “Director”) on May 7, 2012. The CAP describes activities associated with the nitrate in groundwater. The CAP was approved by the Director on December 12, 2012. This quarterly report documents the monitoring consistent with the program described in the CAP.

3.0 QUALITY ASSURANCE AND DATA VALIDATION

EFRI’s QA Manager performed a QA/Quality Control (“QC”) review to confirm compliance of the monitoring program with the 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 QC 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 field data QA/QC, holding times, receipt temperature and laboratory data QA/QC are discussed in Sections 3.4.1 through 3.4.7 below.

The analytical laboratory has provided summary reports of the analytical QA/QC measurements necessary to maintain conformance with National Environmental Laboratory Accreditation Conference 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 Tab G. Results of the review of the laboratory QA/QC information are provided under Tab H and discussed in Section 3.4, below.

3.1 Field QC Samples

The following 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.

Field QC samples for the nitrate investigation program consist of one field duplicate sample for each 20 samples, DI Field Blanks (“DIFB”), and equipment rinsate samples.

During the quarter, one duplicate sample was collected as indicated in Table 1. The duplicate was sent blind to the analytical laboratory and analyzed for the same parameters as the nitrate wells.

One rinsate blank sample was collected as indicated on Table 1. Rinsate samples are labeled with the name of the subsequently purged well with a terminal letter “R” added (e.g. TWN-7R).

The field QC sample results are included with the routine analyses under Tab G.

3.2 Adherence to Mill Sampling SOPs

The QA Manager review of Mill Personnel's adherence to the existing SOPs, confirmed that the QA/QC requirements established in the QAP and Chloroform QAP were met.

3.3 Analyte Completeness Review

All analyses required by the GWDP for nitrate monitoring for the period were performed.

3.4 Data Validation

The QAP and GWDP (August 24, 2012) identify the data validation steps and data QC checks required for the nitrate monitoring program. Consistent with these requirements, the QA Manager performed the following evaluations: a field data QA/QC evaluation, a holding time evaluation, an analytical method check, a reporting limit evaluation, a QC evaluation of sample duplicates, a QC evaluation of control limits for analysis and blanks, a receipt temperature evaluation, and a rinsate evaluation. Because no VOCs are analyzed for the nitrate contamination investigation, no trip blanks are required in the sampling program. Each evaluation is discussed in the following sections. Data check tables indicating the results of each test are provided under Tab H.

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 stability of five parameters: conductance, pH, temperature, redox potential, and turbidity. Review of the Depth to Water data confirms that all depth measurements used for development of groundwater contour maps were conducted within a five-day period of each other. The results of this quarter's review are provided under Tab H.

Based upon the review of the field data sheets, field work conformed with the QAP purging and field measurement requirements. A summary of the purging techniques employed and field measurements taken is described below:

Purging Two Casing Volumes with Stable Field Parameters (within 10% RPD)

Wells TWN-01, TWN-04, and TWN-18 were sampled after two casing volumes were removed. Field parameters pH, specific conductivity, turbidity, water temperature, and redox potential were measured during purging. All field parameters for this requirement were stable within 10% RPD.

Purging a Well to Dryness and Stability of a Limited List of Field Parameters

Wells TWN-03 and TWN-07 were purged to dryness before two casing volumes were evacuated. After well recovery, one set of measurements for the field parameters of pH, specific conductivity, and water temperature only were taken; the samples were collected, and another set of measurements for pH, specific conductivity, and water temperature were taken. Stabilization of pH, conductivity and temperature are required within 10% RPD under the QAP. All field

parameters for this requirement were stable within 10% RPD.

Continuously Pumped Wells

Wells TWN-02, TW4-22, TW4-24, and TW4-25 are continuously pumped wells. These wells are pumped on a set schedule per the remediation plan and are considered sufficiently evacuated to immediately collect a sample. As previously noted, TW4-22, TW4-24, and TW4-25 are chloroform investigation wells and are sampled under the chloroform program. Data for nitrate and chloride are provided here for completeness purposes.

During review of the field data sheets, it was observed that sampling personnel consistently recorded depth to water to the nearest 0.01 foot.

All field parameters for all wells were within the QAP required limits, as indicated below.

The review of the field sheets for compliance with QAP 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 2 consecutive measurements for wells purged to two casing volumes or to dryness. 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,

- Six well measurements exceeded the QAP's 5 NTU turbidity goal as noted in Tab H. All required turbidity RPD's met the QAP Requirement to stabilize within 10%.

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 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 in Tab H. All samples were received and analyzed within the required holding time.

3.4.3 Analytical Method Checklist

All analytical methods reported by the laboratory were checked against the required methods enumerated in the QAP. Analytical method checks are provided in Tab H. All methods were consistent with the requirements of the QAP.

3.4.4 Reporting Limit Evaluation

All analytical method reporting limits (“RLs”) reported by the laboratory were checked against the reporting limits enumerated in the QAP. Reporting Limit Checks are provided in Tab H. All analytes were measured and reported to the required reporting limits, with the exception of several samples that had increased reporting limits due to matrix interference or required dilution due to the sample concentration. However, in all of those cases the analytical results were greater than the reporting limit used.

3.4.5 QA/QC Evaluation for Sample Duplicates

Section 9.1.4 a) of the QAP states 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 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 duplicate results were within a 20% RPD. Results of the RPD test are provided in Tab H.

3.4.6 Other Laboratory QA/QC

Section 9.2 of the QAP requires 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 in Tab H.

The lab QA/QC results met these specified acceptance limits.

The QAP Section 8.1.2 requires that a Matrix Spike/Matrix Spike Duplicate (“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 QAP requirement to analyze an 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 the samples were within acceptable laboratory limits for the regulated compounds except as indicated in Tab H. The MS/MSD recoveries that are outside the laboratory established acceptance limits do not affect the quality or usability of the data because recoveries 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 QAP to analyze a MS/MSD pair with each analytical batch was met and as such the data are compliant with the QAP.

The information from the Laboratory QA/QC Summary Reports indicates that the Laboratory Control Sample recoveries were acceptable, which indicate that the analytical system was operating properly.

The QAP Section 8.1.2 requires that each analytical batch shall be accompanied by a reagent blank. All analytical batches routinely contain a blank, which is a laboratory-grade water blank sample made and carried through all analytical steps. For the Mill samples, a method blank is prepared for all analytical methods. The information from the Laboratory QA/QC Summary Reports indicates that the method blanks did not contain detections of any target analytes above the Reporting Limit.

3.4.7 Receipt Temperature Evaluation

Chain of Custody sheets were reviewed to confirm compliance with the QAP requirement in QAP Table 1 that samples be received at 6°C or lower. Sample temperature checks are provided in Tab H. All samples were received within the required temperature limit.

3.4.8 Rinsate Check

Rinsate checks are provided in Tab H. A comparison of the rinsate blank sample concentration levels to the QAP requirements – that rinsate sample concentrations be one order of magnitude lower than that of the actual well – indicated that all of the rinsate blank analytes met this criterion during the quarter.

While not required by the Nitrate QAP, DIFB samples are collected to analyze the quality of the DI water system at the Mill, which is also used to collect rinsate samples. A review of the analytical results reported one DIFB sample contained a low level nitrate detection at 0.01 mg/L. Since the rinsate collected for the quarter is non-detect, EFRI believes the nitrate present in the DIFB is due to laboratory contamination and does not represent actual nitrate contamination in the DI water system at the Mill.

As discussed in Section 2.2.2 above, EFRI had to use an alternative lab during the quarter, because the usual contact laboratory, AWAL, suffered a catastrophic fire at their facility and could not accept samples. EFRI has addressed low level detection in rinsates and DIFBs in the past by changing the rinsate requirements in the currently approved QAP and by changing laboratories to AWAL in the 1st quarter of 2013. All of the AWAL data for rinsates and DIFBs have been reported as non-detect to date. EFRI anticipates the low level detections will be

eliminated once AWAL's analytical capabilities are restored. Corrective actions for this issue are described in Section 6.0.

4.0 INTERPRETATION OF DATA

4.1 Interpretation of Groundwater Levels, Gradients and Flow Directions.

4.1.1 Current Site Groundwater Contour Map

As stated above, a listing of groundwater level readings for the current quarter (shown as depth to groundwater in feet) is included under Tab C. The data from this tab has been interpreted (interpolated by kriging) and plotted in a water table contour map, provided under the same tab. The contour map is based on the current quarter's data for all wells.

The water level contour map indicates that perched water flow ranges from generally southwesterly beneath the Mill site and tailings cells to generally southerly along the eastern and western margins of White Mesa. Perched water mounding associated with the wildlife ponds locally changes the generally southerly perched water flow patterns. For example, northeast of the Mill site, mounding associated with wildlife ponds results in locally northerly flow near PIEZ-1. The impact of the mounding associated with the northern ponds, to which water has not been delivered since March 2012, is diminishing and is expected to continue to diminish as the mound decays due to reduced recharge.

Not only has recharge from the wildlife ponds impacted perched water elevations and flow directions at the site, but the cessation of water delivery to the northern ponds, which are generally upgradient of the nitrate and chloroform plumes at the site, has resulted in changing conditions that are expected to impact constituent concentrations and migration rates within the plumes. Specifically, past recharge from the ponds has helped limit many constituent concentrations within the plumes by dilution while the associated groundwater mounding has increased hydraulic gradients and contributed to plume migration. Since use of the northern wildlife ponds ceased in March 2012, the reduction in recharge and decay of the associated groundwater mound are expected to increase many constituent concentrations within the plumes while reducing hydraulic gradients and acting to reduce rates of plume migration. EFRI and its consultants have raised the issues and potential effects associated with cessation of water delivery to the northern wildlife ponds during discussions with DRC in March 2012 and May 2013.

The impacts associated with cessation of water delivery to the northern ponds are expected to propagate downgradient (south and southwest) over time. Wells close to the ponds are generally expected to be impacted sooner than wells farther downgradient of the ponds. Therefore, constituent concentrations are generally expected to increase in downgradient wells close to the ponds before increases are detected in wells farther downgradient of the ponds. Although such increases are anticipated to result from reduced dilution, the magnitude and timing of the increases are difficult to predict due to the complex permeability distribution at the site and factors such as pumping and the rate of decay of the groundwater mound. The potential exists for some wells completed in higher permeability materials to be impacted sooner than some wells

completed in lower permeability materials even though the wells completed in lower permeability materials may be closer to the ponds.

Localized increases in concentrations of constituents such as nitrate and chloride within and near the nitrate plume may occur even when the nitrate plume is under control based on the Nitrate CAP requirements. Ongoing mechanisms that can be expected to increase the concentrations of nitrate and chloride locally as a result of reduced wildlife pond recharge include but are not limited to:

- 1) Reduced dilution - the mixing of low constituent concentration pond recharge into existing perched groundwater will be reduced over time.
- 2) Reduced saturated thicknesses – dewatering of higher permeability zones receiving primarily low constituent concentration pond water will result in wells intercepting the zones receiving a smaller proportion of the low constituent concentration water.

The combined impact of the above two mechanisms may be especially evident at chloroform pumping wells MW-4, MW-26, TW4-4, TW4-19, and TW4-20; nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2; and non-pumped wells adjacent to the pumped wells. The overall impact is expected to be generally higher constituent concentrations in these wells over the short term until mass reduction resulting from pumping and natural attenuation eventually reduce concentrations.

In addition to changes in the flow regime caused by reduced wildlife pond recharge, perched flow directions are locally influenced by operation of the chloroform and nitrate pumping wells. As shown in the detail water level map provided under Tab C, well defined cones of depression are evident in the vicinity of all chloroform pumping wells except TW4-4, which began pumping in the first quarter of 2010. Although operation of chloroform pumping well TW4-4 has depressed the water table in the vicinity of TW4-4, a well-defined cone of depression is not clearly evident. The lack of a well-defined cone of depression near TW4-4 likely results from 1) variable permeability conditions in the vicinity of TW4-4, and 2) persistent relatively low water levels at adjacent well TW4-14.

Pumping of nitrate wells TW4-22, TW4-24, TW4-25, and TWN-2 began during the first quarter of 2013. Water level patterns near these wells are expected to be influenced by the presence of and the decay of the groundwater mound associated with the northern wildlife ponds, and by the persistently low water level elevation at TWN-7, which is located upgradient of the nitrate pumping wells.

Capture associated with nitrate pumping is expected to increase over time as water levels decline due to pumping and to cessation of water delivery to the northern wildlife ponds. Interaction between nitrate and chloroform pumping is expected to enhance the capture of the nitrate pumping system. The long term interaction between the nitrate and chloroform pumping systems will, however, require more data to be collected as part of routine monitoring.

As discussed above, variable permeability conditions are one likely reason for the lack of a well-defined cone of depression near chloroform pumping well TW4-4. Changes in water levels at wells immediately south of TW4-4 resulting from TW4-4 pumping are expected to be muted

because TW4-4 is located at a transition from relatively high to relatively low permeability conditions south (downgradient) of TW4-4. The permeability of the perched zone at TW4-6 and TW4-26, recently installed wells TW4-29, TW4-30, TW4-31, TW4-33, and TW4-34, and new well TW4-35 is one to two orders of magnitude lower than at TW4-4. Any drawdown of water levels at wells immediately south of TW4-4 resulting from TW4-4 pumping is also difficult to determine because of the general, long-term increase in water levels in this area due to recharge from the wildlife ponds.

Water levels at TW4-4 and TW4-6 increased by nearly 2.7 and 2.9 feet, respectively, between the fourth quarter of 2007 and the fourth quarter of 2009 (just prior to the start of TW4-4 pumping) at rates of approximately 1.2 feet/year and 1.3 feet/year, respectively. However, the rate of increase in water level at TW4-6 after the start of pumping at TW4-4 (first quarter of 2010) was reduced to approximately 0.5 feet/year suggesting that TW4-6 is within the hydraulic influence of TW4-4. Furthermore, water levels at TW4-6 have been trending downward since the fourth quarter of 2013 suggesting an additional influence related to the cessation of water delivery to the northern wildlife ponds as discussed above. (note: hydrographs for these wells are provided in the quarterly Chloroform Monitoring Report). Recharge from the southern wildlife pond is expected to continue to have an effect on water levels near TW4-4 even as the groundwater mound associated with recharge from the northern ponds diminishes over time due to cessation of water delivery to those ponds.

The lack of a well-defined cone of depression at TW4-4 is also influenced by the persistent, relatively low water level at non-pumping well TW4-14, located east of TW4-4 and TW4-6. For the current quarter, the water level at TW4-14 was measured at approximately 5529.8 feet above mean sea level ("ft amsl"). This is approximately 9 feet lower than the water level at TW4-6 (approximately 5538.7 ft amsl) and 14 feet lower than the water level at TW4-4 (approximately 5543.7 ft amsl) even though TW4-4 is pumping.

Well TW4-27 (installed south of TW4-14 in the fourth quarter of 2011) has a static water level of approximately 5527.5 ft amsl, similar to TW4-14 (approximately 5529.8 ft amsl). Prior to the installation of TW4-27, the persistently low water level at TW4-14 was considered anomalous because it appeared to be downgradient of TW4-4, TW4-6, and TW4-26, yet chloroform was not detected at TW4-14. Chloroform had apparently migrated from TW4-4 to TW4-6 and from TW4-6 to TW4-26 which suggested that TW4-26 was actually downgradient of TW4-6, and TW4-6 was actually downgradient of TW4-4, regardless of the flow direction implied by the low water level at TW4-14. The water level at TW4-26 (5537.3 feet amsl) is, however, lower than water levels at adjacent wells TW4-6 (5538.7 feet amsl), and TW4-23 (5540.7 feet amsl), as shown in the detail water level map under Tab C.

Hydraulic tests indicate that the permeability at TW4-27 is an order of magnitude lower than at TW4-6 and three orders of magnitude lower than at TW4-4 (see Hydro Geo Chem, Inc. [HGC], September 20, 2010: Hydraulic Testing of TW4-4, TW4-6, and TW4-26, White Mesa Uranium Mill, July 2010; and HGC, November 28, 2011: Installation, Hydraulic Testing, and Perched Zone Hydrogeology of Perched Monitoring Well TW4-27, White Mesa Uranium Mill Near Blanding, Utah). The similar water levels at TW4-14 and TW4-27, and the low permeability estimate at TW4-27 suggest that both wells are completed in materials having lower permeability than nearby wells. The low permeability condition likely reduced the rate of long-term water

level increase at TW4-14 and TW4-27 compared to nearby wells, yielding water levels that appeared anomalously low. This behavior is consistent with hydraulic test data collected from recently installed wells TW4-29, TW4-30, TW4-31, TW4-33 and TW4-34 which indicate that the permeability of these wells is one to two orders of magnitude higher than the permeability of TW4-27 (see HGC, January 23, 2014; Contamination Investigation Report, TW4-12 and TW4-27 Areas, White Mesa Uranium Mill Near Blanding, Utah; and HGC, July 1, 2014, Installation and Hydraulic Testing of TW4-35 and TW4-36, White Mesa Uranium Mill Near Blanding, Utah [As-Built Report]). Hydraulic tests also indicate that the permeability at TW4-36 is slightly higher than but comparable to the low permeability at TW4-27, suggesting that TW4-36, TW4-14 and TW4-27 are completed in a continuous low permeability zone.

4.1.2 Comparison of Current Groundwater Contour Map to Groundwater Contour Map for Previous Quarter

The groundwater contour maps for the Mill site for the previous quarter, as submitted with the Nitrate Monitoring Report for the previous quarter, are attached under Tab D.

A comparison of the water table contour maps for the current quarter (third quarter of 2014) to the water table contour maps for the previous quarter (second quarter of 2014) indicates slightly smaller drawdowns related to operation of chloroform pumping wells MW-26, TW4-19 and TW4-20 and nitrate pumping well TW4-25. Nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 were brought into operation during the first quarter of 2013 and their impact on water level patterns was evident as of the fourth quarter of 2013. While water levels in nitrate pumping wells TW4-22 and TW4-25 showed small increases, the water level at TWN-2 showed a large decrease this quarter

As discussed in Section 4.1.1, pumping at chloroform well TW4-4, which began in the first quarter of 2010, has depressed the water table near TW4-4, but a well-defined cone of depression is not clearly evident, likely due to variable permeability conditions near TW4-4 and the persistently low water level at adjacent well TW4-14.

Small (<1foot) decreases in water levels were reported at the majority of site wells; otherwise, water levels and water level contours for the site have not changed significantly since the last quarter except for a few locations. Reported increases in water levels (decreases in drawdown) of approximately 1.8, 1.2, 2.0, 1.0, 1.5 feet occurred in chloroform pumping wells MW-26, TW4-19, and TW4-20, and nitrate pumping wells TW4-22 and TW4-25, respectively. A decrease in water level (increase in drawdown) of approximately 8 feet was reported for nitrate pumping well TWN-2. Changes in water levels at other pumping wells (chloroform pumping wells MW-4 and TW4-4, and nitrate pumping well TW4-24) were less than 1 foot. Water level fluctuations at pumping wells typically occur in part because of fluctuations in pumping conditions just prior to and at the time the measurements are taken.

The increases in water levels (decreases in drawdown) at chloroform pumping wells MW-26, TW4-19 and TW4-20 and nitrate pumping wells TW4-22 and TW4-25 have slightly decreased the apparent capture of these wells relative to other pumping wells.

Reported water level decreases of less than 1 foot at Piezometers 1 through 3, TWN-1, TWN-3, TWN-4, TWN-6, TWN-18, and MW-19 may result from cessation of water delivery to the northern wildlife ponds as discussed in Section 4.1.1 and the consequent continuing decay of the associated perched water mound. However, because water levels at most site wells decreased slightly this quarter, many of the small decreases may result from a change in barometric pressure over the measurement period. Reported water level decreases greater than 1 foot (approximately 1.3 feet and 1.7 feet, respectively) at Piezometers 4 and 5 may result from reduced recharge at the southern wildlife pond.

Reported water levels increased by approximately 3.8 feet at MW-20 and decreased by approximately 3.3 feet at MW-37 between the previous quarter and the current quarter. These water level changes compensate in part for the changes reported last quarter. Water level variability at these wells is likely the result of low permeability and variable intervals between purging/sampling and water level measurement.

4.1.3 Hydrographs

Attached under Tab E are hydrographs showing groundwater elevation in each nitrate contaminant investigation monitor well over time. Per the CAP, nitrate wells TWN-6, TWN-14, TWN-16, and TWN-19 have been maintained for depth to groundwater monitoring only. These hydrographs are also included in Tab E.

4.1.4 Depth to Groundwater Measured and Groundwater Elevation

Attached in Tab F are tables showing depth to groundwater measured and groundwater elevation over time for each of the wells listed in Section 2.1.1 above.

4.2 Effectiveness of Hydraulic Containment and Capture

4.2.1 Hydraulic Containment and Control

The CAP states that hydraulic containment and control will be evaluated in part based on water level data and in part on concentrations in wells downgradient of pumping wells TW4-22 and TW4-24.

As per the CAP, the fourth quarter of 2013 was the first quarter that hydraulic capture associated with nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 was evaluated. Hydraulic containment and control based on water level data is considered successful per the CAP if the entire nitrate plume upgradient of TW4-22 and TW4-24 falls within the combined capture of the nitrate pumping wells. Capture zones based on water level contours calculated by kriging the current quarter's water level data are provided on water level contour maps included under Tab C. The nitrate capture zones are defined by the bounding stream tubes associated with nitrate pumping wells. Each bounding stream tube represents a flow line parallel to the hydraulic gradient and therefore perpendicular to the intersected water level contours. Assuming that the stream tubes do not change over time, all flow between the bounding stream tubes associated with a particular pumping well is presumed to eventually reach and be removed by that well. Capture associated with chloroform pumping wells is also included on these maps because the influence of the chloroform and nitrate pumping systems overlap.

The specific methodology for calculating the nitrate capture zones is substantially the same as that used since the fourth quarter of 2005 to calculate the capture zones for the chloroform program, as agreed to by the DRC and International Uranium (USA) Corp. The procedure for calculating nitrate capture zones is as follows:

- 1) Calculate water level contours by gridding the water level data on approximately 50-foot centers using the ordinary linear kriging method in SurferTM. Default kriging parameters are used that include a linear variogram, an isotropic data search, and all the available water level data for the quarter, including relevant seep and spring elevations.
- 2) Calculate the capture zones by hand from the kriged water level contours following the rules for flow nets:
 - from each pumping well, reverse track the stream tubes that bound the capture zone of each well,
 - maintain perpendicularity between each stream tube and the kriged water level contours.

Compared to last quarter, reported changes in water levels at nitrate pumping wells other than TWN-2 were less than two feet, as were the reported water level changes at chloroform pumping wells other than TW4-20. A large decrease of approximately 8 feet was reported for nitrate pumping well TWN-2, and an increase slightly greater than 2 feet was reported for chloroform pumping well TW4-20. The relatively large decrease in water level at TWN-2 affected the apparent capture of other nearby pumping wells, but the overall capture of the combined nitrate and chloroform pumping systems does not appear to have changed significantly since last quarter.

The capture associated with nitrate pumping wells is expected to increase over time as water levels continue to decline due to pumping and to cessation of water delivery to the northern wildlife ponds. Slow development of hydraulic capture is consistent with and expected based on the relatively low permeability of the perched zone at the site. Furthermore, the presence of the perched groundwater mound, and the apparently anomalously low water level at TWN-7, will influence the definition of capture associated with the nitrate pumping system.

That pumping is likely sufficient to eventually capture the entire plume upgradient of TW4-22 and TW4-24 can be demonstrated by comparing the combined average pumping rates of all nitrate pumping wells for the current quarter to estimates of pre-pumping flow through the nitrate plume near the locations of TW4-22 and TW4-24. The pre-pumping flow calculation is assumed to represent a steady state 'background' condition that includes constant recharge, hydraulic gradients, and saturated thicknesses. Changes after pumping are assumed to result only from pumping. As will be discussed below, the average combined nitrate pumping rate for the quarter exceeds the calculated pre-pumping rate of perched water flow through the nitrate plume by a factor between approximately 1.1 and 2.4.

The cumulative volume of water removed by TW4-22, TW4-24, TW4-25, and TWN-2 during the current quarter was approximately 404,855 gallons. This equates to an average total

extraction rate of approximately 3.1 gpm over the 92 day quarter. This average accounts for time periods when pumps were off due to insufficient water columns in the wells.

Pre-pumping flow through the nitrate plume near TW4-22 and TW4-24 was estimated using Darcy's Law to lie within a range of approximately 1.31 gpm to 2.79 gpm. Calculations were based on an average hydraulic conductivity range of 0.15 feet per day (ft/day) to 0.32 ft/day (depending on the calculation method), a pre-pumping hydraulic gradient of 0.025 feet per foot (ft/ft), a plume width of 1,200 feet, and a saturated thickness (at TW4-22 and TW4-24) of 56 feet. The hydraulic conductivity range was estimated by averaging the results obtained from slug test data that were collected automatically by data loggers from wells within the plume and analyzed using the KGS unconfined slug test solution available in Aqtesolve™ (see Hydro Geo Chem, Inc. [HGC], August 3, 2005: Perched Monitoring Well Installation and Testing at the White Mesa Uranium Mill, April Through June 2005; HGC, March 10, 2009: Perched Nitrate Monitoring Well Installation and Hydraulic Testing, White Mesa Uranium Mill; and HGC, March 17 2009: Letter Report to David Frydenlund, Esq, regarding installation and testing of TW4-23, TW4-24, and TW4-25). These results are summarized in Table 6. Data from fourth quarter 2012 were used to estimate the pre-pumping hydraulic gradient and saturated thickness. These data are also summarized in Tables 7 and 8.

The average hydraulic conductivity was estimated to lie within a range of 0.15 ft/day to 0.32 ft/day. Averages were calculated four ways. As shown in Table 6 arithmetic and geometric averages for wells MW-30, MW-31, TW4-22, TW4-24, TW4-25, TWN-2, and TWN-3 were calculated as 0.22 and 0.15 ft/day, respectively. Arithmetic and geometric averages for a subset of these wells (MW-30, MW-31, TW4-22, and TW4-24) were calculated as 0.32 and 0.31 ft/day, respectively. The lowest value, 0.15 ft/day, represented the geometric average of the hydraulic conductivity estimates for all the plume wells. The highest value, 0.32 ft/day, represented the arithmetic average for the four plume wells having the highest hydraulic conductivity estimates (MW-30, MW-31, TW4-22, and TW4-24).

Pre-pumping hydraulic gradients were estimated at two locations; between TW4-25 and MW-31 (estimated as 0.023 ft/ft), and between TWN-2 and MW-30 (estimated as 0.027 ft/ft). These results were averaged to yield the value used in the calculation (0.025 ft/ft). The pre-pumping saturated thickness of 56 feet was an average of pre-pumping saturated thicknesses at TW4-22 and TW4-24.

The hydraulic gradient and saturated thickness used in the calculations are assumed to represent a steady state 'background' condition. However, assumption of a steady state 'background' is inconsistent with the cessation of water delivery to the northern wildlife ponds, located upgradient of the nitrate plume. Hydraulic gradients and saturated thicknesses within the plume are declining as a result of two factors: reduced recharge from the ponds, and the effects of nitrate pumping. Separating the impacts of nitrate pumping from the impacts of reduced recharge from the ponds is problematic. Should pumping cease and 'background' conditions be allowed to re-establish, however, smaller hydraulic gradients and saturated thicknesses would be expected due to reduced recharge, which would lower estimates of 'background' flow.

As a result, the 'background' flow calculated using the hydraulic gradient of 0.025 ft/ft and saturated thickness of 56 feet is considered conservatively large. Furthermore, using the

arithmetic average hydraulic conductivity of a subset of plume wells having the highest conductivities is considered less representative of actual conditions than using the geometric average conductivity of all of the plume wells. Nitrate pumping may therefore exceed flow through the plume by a factor greater than 2.4, the high end of the calculated range.

The CAP states that MW-5, MW-11, MW-30, and MW-31 are located downgradient of TW4-22 and TW4-24. MW-30 and MW-31 are within the plume near its downgradient edge and MW-5 and MW-11 are outside and downgradient of the plume. Per the CAP, hydraulic control based on concentration data will be considered successful if the concentrations of nitrate in MW-30 and MW-31 remain stable or decline, and concentrations of nitrate in downgradient wells MW-5 and MW-11 do not exceed the 10 mg/L standard.

Table 5 presents the nitrate concentration data for MW-30, MW-31, MW-5 and MW-11, which are down-gradient of pumping wells TW4-22 and TW4-24. Based on these concentration data, the nitrate plume is under control.

The plume has not migrated downgradient to MW-5 or MW-11 because nitrate was not detected at MW-11. MW-5, located adjacent to MW-11 and not sampled this quarter was non-detect last quarter. Between the previous and current quarters, nitrate concentrations decreased in both MW-30 and MW-31. Nitrate in MW-30 decreased from 17.9 mg/L to 13.8 mg/L and nitrate in MW-31 decreased from 23.3 mg/L to 15.2 mg/L. Although short-term fluctuations have occurred, nitrate concentrations in MW-30 and MW-31 have been relatively stable, demonstrating that plume migration is minimal or absent.

Chloride has been relatively stable at MW-30 but is increasing at MW-31 (see Tab J and Tab K, discussed in Section 4.2.4). The apparent increase in chloride and stable nitrate at MW-31 suggests a natural attenuation process that is affecting nitrate but not chloride. A likely process that would degrade nitrate but leave chloride unaffected is reduction of nitrate by pyrite. The likelihood of this process in the perched zone is discussed in HGC, December 7 2012; Investigation of Pyrite in the Perched Zone, White Mesa Uranium Mill Site, Blanding, Utah.

4.2.2 Current Nitrate and Chloride Isoconcentration Maps

Included under Tab I of this Report are current nitrate and chloride iso-concentration maps for the Mill site. Nitrate iso-contours start at 5 mg/L and chloride iso-contours start at 100 mg/L because those values appear to separate the plumes from background. All nitrate and chloride data used to develop these iso-concentration maps are from the current quarter's sampling events.

4.2.3 Comparison of Areal Extent

Decreases in nitrate concentrations in all wells within the nitrate plume since last quarter have resulted in a slight shrinkage of the plume area. The concentration in TWN-3 decreased from approximately 24 mg/L to 20 mg/L; the concentration in MW-30 decreased from approximately 18 mg/L to 14 mg/L; and the concentration in MW-31 decreased from approximately 23 mg/L to 15 mg/L. The concentration in nitrate pumping well TWN-2 decreased from approximately 45 mg/L to 42 mg/L; the concentration in nitrate pumping well TW4-22 decreased from approximately 47 mg/L to 42 mg/L; and the concentration in nitrate pumping well TW4-24

decreased from approximately 35 mg/L to 32 mg/L (see Tab J and Tab K, discussed in Section 4.2.4).

The nitrate concentration at TW4-18 decreased for the third consecutive quarter, from 12.2 mg/L to 9.8 mg/L, reversing a previously upward trend. Changes in nitrate concentrations near TW4-18 are expected to result from changes in pumping and from the cessation of water delivery to the northern wildlife ponds. The reduction in low-nitrate recharge from the ponds appeared to be having the anticipated effect of generally increased nitrate concentrations in wells downgradient of the ponds. However, over the last two quarters, most wells in the vicinity of TW4-18 showed slight decreases in nitrate concentrations, suggesting that conditions in this area have stabilized.

Although increases in concentration in the area downgradient of the wildlife ponds have been anticipated as the result of reduced dilution, the magnitude and timing of the increases are difficult to predict due to the measured variations in hydraulic conductivity at the site and other factors. Nitrate in the area directly downgradient (south to south-southwest) of the northern wildlife ponds is associated with the chloroform plume, is cross-gradient of the nitrate plume as defined in the CAP, and is within the capture zone of the chloroform pumping system (primarily chloroform pumping well MW-26). Perched water flow in the area is to the southwest in the same approximate direction as the main body of the nitrate plume.

Nitrate concentrations at the downgradient edge of the plume (MW-30 and MW-31) continue to be relatively stable, demonstrating that plume migration is minimal or absent. With regard to chloroform, since the initiation of nitrate pumping, the boundary of the chloroform plume has migrated to the west toward nitrate pumping well TW4-24, and more recently toward chloroform monitoring wells TW4-6 and TW4-16. More details regarding the chloroform data and interpretation are included in the Quarterly Chloroform Monitoring Report submitted under separate cover.

4.2.4 Nitrate and Chloride Concentration Trend Data and Graphs

Attached under Tab J is a table summarizing values for nitrate and chloride for each well over time.

Attached under Tab K are graphs showing nitrate and chloride concentration plots in each monitor well over time.

4.2.5 Interpretation of Analytical Data

Comparing the nitrate analytical results to those of the previous quarter, as summarized in the tables included under Tab J, the following observations can be made for wells within and immediately surrounding the nitrate plume:

- a) Nitrate concentrations have increased by more than 20% in the following wells compared to last quarter: TW4-25, TWN-4, and TWN-7;
- b) Nitrate concentrations have decreased by more than 20% in the following wells compared to last quarter: MW-26, MW-30, MW-31, TW4-10, TW4-18, TW4-20, and TW4-21;

- c) Nitrate concentrations have remained within 20% in the following wells compared to last quarter: MW-27, TW4-5, TW4-16, TW4-19, TW4-22, TW4-24, TWN-1, TWN-2, TWN-3, and TWN-18; and
- d) MW-11, MW-25, and MW-32 remained non-detect

Concentrations in all wells with increases greater than 20% (TW4-25, TWN-4, and TWN-7) were less than or equal to 2 mg/L

As indicated, nitrate concentrations for many of the wells with detected nitrate were within 20% of the values reported during the previous quarter, suggesting that variations are within the range typical for sampling and analytical error. The remaining wells had changes in concentration greater than 20%. The latter includes chloroform pumping wells MW-26 and TW4-20, nitrate pumping well TW4-25, and non-pumping wells MW-30, MW-31, TW4-10, TW4-18, TW4-21, TWN-4, and TWN-7. TW4-10 is located adjacent to chloroform pumping well MW-26; TW4-18 and TW4-21 are located adjacent to chloroform pumping well TW4-19; TWN-4 is located between the northern wildlife ponds and nitrate pumping wells TW4-25 and TWN-2; and TWN-7 is located adjacent to nitrate pumping well TWN-2. Fluctuations in concentrations at pumping wells and wells adjacent to pumping wells likely result in part from the effects of pumping as discussed in Section 4.1.1. Concentrations at TW4-21 are also influenced by its location near the eastern nitrate and northern chloroform plume boundaries. MW-30 and MW-31 are located in the downgradient portion of the nitrate plume and are expected to be influenced by changes in upgradient pumping at nitrate pumping wells TW4-22 and TW4-24 and chloroform pumping wells MW-26, TW4-19 and TW4-20.

The nitrate concentration at TW4-21 decreased from 11.6 mg/L last quarter to 7.1 mg/L this quarter, bringing it outside the nitrate plume boundary. The nitrate concentration in nitrate pumping well TW4-25 increased from approximately 1.2 mg/L last quarter to 1.6 mg/L this quarter. The nitrate concentrations in chloroform pumping wells MW-26 and TW4-20 decreased from approximately 0.9 mg/L and 6.0 mg/L, respectively, to approximately 0.7 mg/L and 4.3 mg/L. The chloroform concentration at nitrate pumping well TW4-24 increased from 62.7 µg/L to 76.3 µg/L. The increase at TW4-24 pushed the chloroform plume boundary back to the west of TW4-24; last quarter, a chloroform concentration decrease from 78.5 µg/L to 62.7 µg/L moved the chloroform plume boundary to the east of TW4-24. Chloroform changes at TW4-22 and TW4-24 are likely in response to the start-up of nitrate pumping in the first quarter of 2013 and are affected by the presence of historically high chloroform concentrations at adjacent, cross-gradient well TW4-20. MW-27, located west of TWN-2, and TWN-18, located north of TWN-3, bound the nitrate plume to the west and north (See Figure I-1 under Tab I). In addition, the southernmost (downgradient) boundary of the plume remains between MW-30/MW-31 and MW-5/MW-11. Nitrate concentrations at MW-5 (adjacent to MW-11) and MW-11 have historically been low (< 1 mg/L) or non-detect for nitrate (See Table 5). MW-25, MW-26, MW-32, TW4-16, TW4-19, TW4-20, TW4-21 (outside the plume this quarter), TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

As discussed above, the areal extent of the plume has been slightly reduced, with the plume boundaries moving inward, primarily due to decreases in concentrations at wells within the plume. Nitrate concentrations outside the nitrate plume exceed 10 mg/L at a few locations:

TW4-12 (13.0 mg/L), TW4-26 (10.8 mg/L), TW4-27 (27.0 mg/L), and TW4-28 (14.2 mg/L). All these wells are located southeast of the nitrate plume as defined in the CAP and all are separated from the plume by wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. Concentrations at TW4-26, TW4-27 and TW4-28 are within 20% of their concentrations during the previous quarter, while the concentration at TW4-12 decreased more than 20%, from approximately 17 mg/L to 13 mg/L. From the third quarter of 2013 through last quarter, nitrate concentrations at TW4-10 and TW4-18 exceeded 10 mg/L. In the current quarter, nitrate concentrations at both TW4-10 and TW4-18 decreased to 9.8 mg/L. Elevated nitrate concentrations at these wells are associated with the chloroform plume, and both are within the capture zone of the chloroform pumping system. Elevated nitrate at TW4-12, TW4-26, TW4-27, and TW4-28 is likely related to former cattle ranching operations at the site.

Chloride concentrations are measured because elevated chloride (greater than 100 mg/L) is associated with the nitrate plume. Chloride concentrations are within 20% of their respective concentrations during the previous quarter except at one location within or adjacent to the nitrate plume. Chloride concentrations at nitrate pumping well TW4-25 increased from 51.1 mg/L last quarter, to 67.0 mg/L this quarter. Fluctuations in concentrations at pumping wells and wells adjacent to pumping wells likely result in part from the effects of pumping. TW4-25 is also located immediately downgradient of the northern wildlife ponds. Increases in concentrations at wells near (and downgradient of) the northern wildlife ponds are anticipated as a result of reduced dilution caused by cessation of water delivery to the northern wildlife ponds.

4.3 Estimation of Pumped Nitrate Mass and Residual Nitrate Mass within the Plume

Nitrate mass removed by pumping is summarized in Table 2, and includes mass removed by both chloroform and nitrate pumping wells. Table 3 shows the volume of water pumped at each well and Table 4 provides the details of the nitrate removal for each well. Mass removal calculations begin with the third quarter of 2010 because the second quarter, 2010 data were specified to be used to establish a baseline mass for the nitrate plume. As stated in the CAP, the baseline mass is to be calculated using the second quarter, 2010 concentration and saturated thickness data “within the area of the kriged 10 mg/L plume boundary.” The second quarter, 2010 data set was considered appropriate because “the second quarter, 2010 concentration peak at TWN-2 likely identifies a high concentration zone that still exists but has migrated away from the immediate vicinity of TWN-2.”

As shown in Table 2, a total of approximately 1,065 lb of nitrate has been removed from the perched zone since the third quarter of 2010. Prior to the first quarter of 2013, all direct nitrate mass removal resulted from operation of chloroform pumping wells MW-4, MW-26, TW4-4, TW4-19, and TW4-20. During the current quarter:

- A total of approximately 93 lb of nitrate was removed by the chloroform pumping wells and by nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2.
- Of the 93 lb removed during the current quarter, approximately 82.7 lb, (or 89 %), was removed by the nitrate pumping wells.

Baseline mass and current quarter mass estimates (nitrate + nitrite as N) for the nitrate plume are approximately 43,700 lb and 24,140 lbs, respectively. Mass estimates were calculated within the

plume boundaries as defined by the kriged 10 mg/L isocon by 1) gridding (kriging) the nitrate concentration data on 50-foot centers; 2) calculating the volume of water in each grid cell based on the saturated thickness and assuming a porosity of 0.18; 3) calculating the mass of nitrate+nitrite as N in each cell based on the concentration and volume of water for each cell; and 4) totaling the mass of all grid cells within the 10 mg/L plume boundary. Data used in these calculations included data from wells listed in Table 3 of the CAP.

The nitrate mass estimate for the current quarter is lower than the baseline estimate by 13,080 lb, and this difference is greater than the amount of nitrate mass removed directly by pumping. Changes in the quarterly mass estimates are expected to result primarily from 1) nitrate mass removed directly by pumping, 2) natural attenuation of nitrate, and 3) changes in nitrate concentrations in wells within the plume as a result of re-distribution of nitrate within the plume and changes in saturated thicknesses. Redistribution of nitrate within the plume and changes in saturated thicknesses will be impacted by changes in pumping and in background conditions such as the decay of the perched water mound associated with the northern wildlife ponds. Cessation of water delivery to the northern wildlife ponds is expected to result in reduced saturated thicknesses and reduced dilution, which in turn is expected to result in increases in concentrations.

The mass estimate during the current quarter (24,140 lb) was smaller than the mass estimate during the previous quarter (30,620 lb) by 6,480 lb or 21 %. This difference results from lower nitrate concentrations measured in wells within the plume and reduced areal extent this quarter compared to last quarter.

Nitrate mass removal by pumping and natural attenuation (expected to result primarily from pyrite oxidation/nitrate reduction) act to lower nitrate mass within the plume. Changes resulting from redistribution of nitrate within the plume are expected to result in both increases and decreases in concentrations at wells within the plume and therefore increases and decreases in mass estimates based on those concentrations, thus generating 'noise' in the mass estimates. Furthermore, because the sum of sampling and analytical error is typically about 20%, changes in the mass estimates from quarter to quarter of up to 20% could result from typical sampling and analytical error alone. Only longer-term analyses of the mass estimates that minimize the impacts of these quarter to quarter variations will provide useful information on plume mass trends. Over the long term, nitrate mass estimates are expected to trend downward as a result of direct removal by pumping and through natural attenuation.

As specified in the CAP, once eight quarters of data have been collected (starting with the first quarter of 2013), a regression trend line will be applied to the quarterly mass estimates and evaluated. The trend line will then be updated quarterly and reevaluated as additional quarters of data are collected. The evaluation will determine whether the mass estimates are increasing, decreasing, or stable.

5.0 LONG TERM PUMP TEST AT TWN-02, TW4-22, TW4-24, and TW4-25 OPERATIONS REPORT

5.1 Introduction

Beginning in January 2013, EFRI began long term pumping of TW4-22, TW4-24, TW4-25, and TWN-02 as required by the Nitrate CAP, dated May 7, 2012 and the SCO dated December 12, 2012.

In addition, as a part of the investigation of chloroform contamination at the Mill site, EFRI has been conducting a Long Term Pump Test on MW-4, TW4-19, MW-26, and TW4-20, and, since January 31, 2010, TW4-4. The purpose of the test is to serve as an interim action that will remove a significant amount of chloroform-contaminated water while gathering additional data on hydraulic properties in the area of investigation.

Because wells MW-4, TW4-19, MW-26, TW4-4 and TW4-20 are pumping wells that may impact the removal of nitrate, they are included in this report and any nitrate removal realized as part of this pumping is calculated and included in the quarterly reports.

The following information documents the operational activities during the quarter.

5.2 Pumping Well Data Collection

Data collected during the quarter included the following:

- Measurement of water levels at MW-4, TW4-19, MW-26, and TW4-20 and, commencing regularly on March 1, 2010, TW4-4, on a weekly basis, and at selected temporary wells and permanent monitoring wells on a monthly basis.
- Measurement of pumping history, including:
 - pumping rates
 - total pumped volume
 - operational and non-operational periods.
- Periodic sampling of pumped water for chloroform and nitrate/nitrite analysis and other constituents
- Measurement of water levels weekly at TW4-22, TW4-24, TW4-25, and TWN-02 commencing January 28, 2013, and on a monthly basis selected temporary wells and permanent monitoring wells.

5.3 Water Level Measurements

Beginning August 16, 2003, water level measurements from chloroform pumping wells MW-4, MW-26, and TW4-19 were conducted weekly. From commencement of pumping TW4-20, and regularly after March 1, 2010 for TW4-4, water levels in these two chloroform pumping wells have been measured weekly. From commencement of pumping in January 2013, water levels in wells TW4-22, TW4-24, TW4-25, and TWN-02 have been measured weekly. Copies of the weekly Depth to Water monitoring sheets for MW-4, MW-26, TW4-19, TW4-20, TW4-4, TW4-22, TW4-24, TW4-25 and TWN-02 are included under Tab C.

Monthly depth to water monitoring is required for all of the chloroform contaminant investigation wells and non-pumping wells MW-27, MW-30, MW-31, TW4-21, TWN-1, TWN-3, TWN-4, TWN-7, and TWN-18. Copies of the monthly depth to Water monitoring sheets are included under Tab C.

5.4 Pumping Rates and Volumes

The pumping wells do not pump continuously, but are on a delay device. The wells purge for a set amount of time and then shut off to allow the well to recharge. Water from the pumping wells is either transferred to the Cell 1 evaporation pond or is used in the Mill process.

The pumped wells are fitted with a flow meter which records the volume of water pumped from the well in gallons. The flow meter readings shown in Tab C are used to calculate the gallons of water pumped from the wells each quarter as required by Section 7.2.2 of the CAP. The average pumping rates and quarterly volumes for each of the pumping wells are shown in Table 3. The cumulative volume of water pumped from each of the wells is shown in Table 4.

No operational problems were observed with the wells or pumping equipment during the quarter.

6.0 CORRECTIVE ACTION REPORT

Necessary corrective actions identified during the current monitoring period are discussed below.

6.1 Identification and Definition of the Problem

One DIFB sample contained a low level nitrate detection at 0.01 mg/L which is mostly likely the result of laboratory contamination.

6.2 Assignment of Responsibility for Investigation of the Problem

The issue has been investigated by the QA Manager.

6.3 Investigation and Determination of Cause of the Problem

Since the rinsate collected for the quarter is non-detect, EFRI believes the nitrate present in the DIFB is due to laboratory contamination and does not represent actual nitrate contamination in the DI water system at the Mill. EFRI had to use an alternative laboratory, CTF, during the quarter, because the Mill's usual contract laboratory, AWAL, suffered a catastrophic fire and could not accept samples.

6.4 Determination of a Corrective Action to Eliminate the Problem

EFRI has implemented corrective actions for low level detections in rinsates and DIFBs in the past by changing the rinsate requirements in the currently approved QAP and by changing laboratories to AWAL in the first quarter of 2013. This corrective action has proven to be successful as all of the AWAL data for rinsates and DIFBs have been reported as non-detect to

date. EFRI anticipates the low level detections will be eliminated once AWAL's analytical capabilities are restored.

6.5 Assigning and Accepting Responsibility for Implementing the Corrective Action

It will be the responsibility of the QA manager to review the data for the quarter after AWAL's analytical capabilities are restored to determine if any further investigation is required.

6.6 Implementing the Corrective Action and Evaluating Effectiveness

The corrective action will be implemented and evaluated after AWAL's analytical capabilities are restored. EFRI anticipates this will occur during either the fourth quarter of 2014 or the first quarter of 2015 sampling events.

6.7 Verifying That the Corrective Action Has Eliminated the Problem

Verification that low level detections in the DIFBs have been eliminated will occur during the assessment of the data collected for the quarter after AWAL's analytical capabilities are restored. If contamination persists, EFRI will research and investigate additional sources causing the contamination.

6.8 Assessment of Previous Quarter's Corrective Actions

There were no corrective actions in the 2nd quarter 2014 nitrate sampling event.

7.0 CONCLUSIONS AND RECOMMENDATIONS

As per the CAP, the current quarter is the fourth quarter that hydraulic capture associated with nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 was evaluated. Water level monitoring indicates that the apparent combined capture of the nitrate and chloroform pumping systems is similar to last quarter. Capture associated with nitrate pumping wells is developing and is expected to increase over time as water levels decline due to pumping and to cessation of water delivery to the northern wildlife ponds. Furthermore, the evaluation of the long term interaction between nitrate and chloroform pumping systems will require more data to be collected as part of routine monitoring. Slow development of hydraulic capture by the nitrate pumping system is consistent with and expected based on the relatively low permeability of the perched zone at the site. Definition of capture associated with the nitrate pumping system will also be influenced by the perched groundwater mound and the apparently anomalously low water level at TWN-7.

Current pumping is likely sufficient to eventually capture the entire nitrate plume upgradient of TW4-22 and TW4-24. Pumping during the current quarter exceeds the estimated pre-pumping ('background') rate of perched water flow through the nitrate plume by a factor between approximately 1.1 and 2.4. Because the pre-pumping flow calculations likely overestimate the new 'background' conditions caused by reduced recharge from the northern wildlife ponds, and because the average plume hydraulic conductivity estimate from the low end of the calculated

range is likely to be more representative of actual conditions, nitrate pumping may exceed flow through the plume by a factor greater than 2.4.

Third quarter, 2014 nitrate concentrations at many of the wells within and adjacent to the nitrate plume were within 20% of the values reported during the previous quarter, suggesting that variations are within the range typical for sampling and analytical error. Changes in concentration greater than 20% occurred in MW-26, MW-30, MW-31, TW4-10, TW4-18, TW4-20, TW4-21, TW4-25, TWN-4, and TWN-7. Concentrations in all wells with increases greater than 20% (TW4-25, TWN-4, and TWN-7) were less than or equal to 2 mg/L. The concentrations in wells MW-11, MW-25, and MW-32 remained non-detect.

Of the wells showing changes in concentration greater than 20%, MW-26 and TW4-20 are chloroform pumping wells and TW4-25 is a nitrate pumping well. TW4-10 is located adjacent to chloroform pumping well MW-26; TW4-18 and TW4-21 are located adjacent to chloroform pumping well TW4-19; TWN-4 is located between the northern wildlife ponds and nitrate pumping wells TW4-25 and TWN-2; and TWN-7 is located adjacent to nitrate pumping well TWN-2. Nitrate concentration fluctuations at pumping wells and adjacent wells likely result in part from the effects of pumping. Concentrations at TW4-21 are also influenced by its location near the eastern nitrate and northern chloroform plume boundaries. MW-30 and MW-31 are located in the downgradient portion of the nitrate plume and are expected to be influenced by changes in upgradient pumping at nitrate pumping wells TW4-22 and TW4-24 and chloroform pumping wells MW-26, TW4-19 and TW4-20.

The nitrate concentration at TW4-21 decreased from 11.5 mg/L last quarter to 7.1 mg/L this quarter, bringing it outside the nitrate plume boundary. The nitrate concentration in nitrate pumping well TW4-25 increased from approximately 1.2 mg/L last quarter to 1.6 mg/L this quarter. The nitrate concentrations in chloroform pumping wells MW-26 and TW4-20 decreased from approximately 0.9 mg/L and 6.0 mg/L, respectively, to approximately 0.7 mg/L and 4.3 mg/L. The chloroform concentration at nitrate pumping well TW4-24 increased from 62.7 µg/L to 76.3 µg/L this quarter. The increase at TW4-24 pushed the chloroform plume boundary back to the west of TW4-24; last quarter, a chloroform concentration decrease from 78.5 µg/L to 62.7 µg/L moved the chloroform plume boundary to the east of TW4-24. Chloroform changes at TW4-22 and TW4-24 are likely in response to the start-up of nitrate pumping in the first quarter of 2013 and are affected by the presence of historically high chloroform concentrations at adjacent, cross-gradient well TW4-20

Decreases in nitrate concentrations at wells within the nitrate plume since the last quarter have resulted in a slight shrinkage of the plume area. MW-27, located west of TWN-2, and TWN-18, located north of TWN-3, bound the nitrate plume to the west and north (See Figure I-1 under Tab I). In addition, the southernmost (downgradient) boundary of the plume remains between MW-30/MW-31 and MW-5/MW-11. Nitrate concentrations at MW-5 (adjacent to MW-11) and MW-11 have historically been low (< 1 mg/L) or non-detect for nitrate (See Table 5). MW-25, MW-26, MW-32, TW4-16, TW4-19, TW4-20, TW4-21 (outside the plume this quarter), TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

Nitrate concentrations at MW-30 and MW-31 continue to be relatively stable, suggesting that plume migration is minimal or absent. Between the previous and current quarters, nitrate in MW-

30 decreased from 17.9 mg/L to 13.8 mg/L and nitrate in MW-31 decreased from 23.3 mg/L to 15.2 mg/L. Based on the concentration data at MW-5, MW-11, MW-30, and MW-31, the nitrate plume is under control.

Chloride has been relatively stable at MW-30 but is increasing at MW-31. The apparent increase in chloride and relatively stable nitrate at MW-31 suggests a natural attenuation process that is affecting nitrate but not chloride. A likely process that would degrade nitrate but leave chloride unaffected is reduction of nitrate by pyrite. The likelihood of this process in the perched zone is discussed in HGC, December 7 2012; Investigation of Pyrite in the Perched Zone, White Mesa Uranium Mill Site, Blanding, Utah.

Nitrate mass removal by pumping and natural attenuation (expected to result primarily from pyrite oxidation/nitrate reduction) act to lower nitrate mass within the plume. Changes resulting from redistribution of nitrate within the plume are expected to result in both increases and decreases in concentrations at wells within the plume and therefore increases and decreases in mass estimates based on those concentrations, thus generating 'noise' in the mass estimates. Furthermore, because the sum of sampling and analytical error is typically about 20%, changes in the mass estimates from quarter to quarter of up to 20% could result from typical sampling and analytical error alone. Only longer-term analyses of the mass estimates that minimize the impact of these quarter to quarter variations will provide useful information on plume mass trends. Over the long term, nitrate mass estimates are expected to trend downward as a result of direct removal by pumping and through natural attenuation.

As specified in the CAP, once eight quarters of data have been collected (starting with the first quarter of 2013), a regression trend line will be applied to the quarterly mass estimates and evaluated. The trend line will then be updated quarterly and reevaluated as additional quarters of data are collected. The evaluation will determine whether the mass estimates are increasing, decreasing, or stable.

During the current quarter, a total of approximately 93 lb of nitrate was removed by the chloroform pumping wells and by nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2. Of the 93 lb removed during the current quarter, approximately 82.7 lb, (or 89 %), was removed by the nitrate pumping wells.

The baseline nitrate (nitrate+nitrite as N) plume mass calculated as specified in the CAP (based on second quarter, 2010 data) was approximately 43,700 lb. The mass estimate during the current quarter was calculated as 24,140 lb which was smaller than the mass estimate during the previous quarter (30,620 lb) by 6,480 lb or 21%. This difference results from lower nitrate concentrations measured in wells within the plume and reduced areal extent this quarter compared to last quarter.

Nitrate concentrations outside the nitrate plume exceed 10 mg/L at a few locations: TW4-12 (13.0 mg/L), TW4-26 (10.8 mg/L), TW4-27 (27.0 mg/L), and TW4-28 (14.2 mg/L). All these wells are located southeast of the nitrate plume as defined in the CAP and all are separated from the plume by wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. Concentrations at TW4-26, TW4-27 and TW4-28 are within 20% of their concentrations during the previous quarter, while the concentration at TW4-12 decreased more

than 20%, from approximately 17 mg/L to 13 mg/L. From the third quarter of 2013 through last quarter, nitrate concentrations at TW4-10 and TW4-18 exceeded 10 mg/L. In the current quarter, nitrate concentrations at both TW4-10 and TW4-18 decreased to 9.8 mg/L. Elevated nitrate concentrations at these wells are associated with the chloroform plume, and both are within the capture zone of the chloroform pumping system. Elevated nitrate at TW4-12, TW4-26, TW4-27, and TW4-28 is likely related to former cattle ranching operations at the site. Increases in both nitrate and chloride concentrations at wells near the northern wildlife ponds (for example TW4-18) were anticipated as a result of reduced dilution caused by cessation of water delivery to the northern wildlife ponds. Decreased nitrate concentrations in most wells near TW4-18 this quarter (after a previously generally increasing trend that was interrupted in the first quarter of 2014) suggests that conditions in this area are stabilizing or entering a downward trend. The increase in chloride at nitrate pumping well TW4-25 from approximately 51 mg/L last quarter, to 67 mg/L this quarter may result in part from reduced dilution.

Nitrate mass removal from the perched zone was increased substantially by the start-up of nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 during the first quarter of 2013. Continued operation of these wells is therefore recommended. Pumping these wells, regardless of any short term fluctuations in concentrations detected at the wells, helps to reduce downgradient nitrate migration by removing nitrate mass and reducing average hydraulic gradients, thereby allowing natural attenuation to be more effective. Continued operation of the nitrate pumping system is expected to eventually reduce nitrate concentrations within the plume and to further reduce or halt downgradient nitrate migration.

EFRI and its consultants have raised the issues and potential effects associated with cessation of water delivery to the northern wildlife ponds in March, 2012 during discussions with DRC in March 2012 and May 2013. While past recharge from the ponds has helped limit many constituent concentrations within the chloroform and nitrate plumes by dilution, the associated groundwater mounding has increased hydraulic gradients and contributed to plume migration. Since use of the northern wildlife ponds ceased in March 2012, the reduction in recharge and decay of the associated groundwater mound was expected to increase many constituent concentrations within the plumes while reducing hydraulic gradients and rates of plume migration.

The net impact of reduced wildlife pond recharge is expected to be beneficial even though it was also expected to result in temporarily higher concentrations until continued mass reduction via pumping and natural attenuation ultimately reduce concentrations. Temporary increases in nitrate concentrations are judged less important than reduced nitrate migration rates. The actual impacts of reduced recharge on concentrations and migration rates will be defined by continued monitoring.

8.0 ELECTRONIC DATA FILES AND FORMAT

EFRI has provided to the Director an electronic copy of all laboratory results for groundwater quality monitoring conducted under the nitrate contaminant investigation during the quarter, in Comma Separated Values (“CSV”) format. A copy of the transmittal e-mail is included under Tab L.

9.0 SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc. on November 11, 2014.

Energy Fuels Resources (USA) Inc.

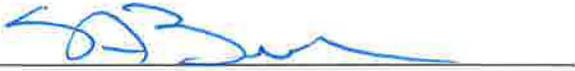
By:



Scott Bakken
Director, Permitting & Environmental Affairs

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.



Scott Bakken
Director, Permitting & Environmental Affairs
Energy Fuels Resources (USA) Inc.

Tables

Table 1
Summary of Well Sampling and Constituents for the Period

Well	Sample Collection Date	Date of Lab Report
Piezometer 01	8/6/2014	9/15/2014
Piezometer 02	8/6/2014	9/15/2014
Piezometer 03	8/6/2014	9/15/2014
TWN-01	8/5/2014	9/15/2014
TWN-02	8/6/2014	9/15/2014
TWN-03	8/6/2014	9/15/2014
TWN-04	8/5/2014	9/15/2014
TWN-07	8/6/2014	9/15/2014
TWN-07R	8/5/2014	9/15/2014
TWN-18	8/5/2014	9/15/2014
TW4-22	8/11/2014	9/15/2014
TW4-24	8/11/2014	9/15/2014
TW4-25	8/11/2014	9/15/2014
TWN-60	8/5/2014	9/15/2014
TW4-60	8/27/2014	9/18/2014
TWN-65	8/5/2014	9/15/2014

Note: All wells were sampled for Nitrate and Chloride.

TWN-60 is a DI Field Blank.

TWN-65 is a duplicate of TWN-01.

TW4-60 is the chloroform program DI Field Blank.

Continuously pumped well.

Table 2
Nitrate Mass Removal Per Well Per Quarter

Quarter	MW-4 (lbs.)	MW-26 (lbs.)	TW4-19 (lbs.)	TW4-20 (lbs.)	TW4-4 (lbs.)	TW4-22 (lbs.)	TW4-24 (lbs.)	TW4-25 (lbs.)	TWN-02 (lbs.)	Quarter Totals (lbs.)
Q3 2010	3.2	0.3	5.8	1.7	4.7	NA	NA	NA	NA	15.7
Q4 2010	3.8	0.4	17.3	1.4	5.1	NA	NA	NA	NA	28.0
Q1 2011	2.9	0.2	64.5	1.4	4.3	NA	NA	NA	NA	73.3
Q2 2011	3.5	0.1	15.9	2.7	4.7	NA	NA	NA	NA	27.0
Q3 2011	3.5	0.5	3.5	3.9	5.4	NA	NA	NA	NA	16.8
Q4 2011	3.8	0.8	6.2	2.5	6.4	NA	NA	NA	NA	19.7
Q1 2012	3.6	0.4	0.7	5.0	6.0	NA	NA	NA	NA	15.9
Q2 2012	3.7	0.6	3.4	2.1	5.2	NA	NA	NA	NA	15.0
Q3 2012	3.8	0.5	3.6	2.0	4.7	NA	NA	NA	NA	14.7
Q4 2012	3.2	0.4	5.4	1.8	4.2	NA	NA	NA	NA	14.9
Q1 2013	2.5	0.4	14.1	1.4	3.6	8.1	43.4	7.5	14.8	95.7
Q2 2013	2.5	0.5	5.6	1.7	3.5	10.7	37.1	6.4	23.9	91.7
Q3 2013	3.0	0.4	48.4	1.4	3.8	6.3	72.8	6.9	33.4	176.5
Q4 2013	3.1	0.3	15.8	1.6	3.9	9.4	75.2	6.4	46.3	162.1
Q1 2014	2.7	0.4	4.1	1.2	3.6	11.2	60.4	2.3	17.2	103.1
Q2 2014	2.4	0.3	3.3	0.9	3.0	9.5	63.4	1.3	17.8	101.87
Q3 2014	2.3	0.1	4.1	0.6	3.1	8.5	56.2	1.6	16.5	93.00
Well Totals (pounds)	53.6	6.7	221.8	33.4	75.1	63.7	408.5	32.5	169.8	1065.0

Table 3 Nitrate Well Pumping Rates and Volumes

Pumping Well Name	Volume of Water Pumped During the Quarter (gals)	Average Pump Rate (gpm)
MW-4	74,788.2	4.39
MW-26	24,062.4	10.08
TW4-4	69,229.4	8.12
TW4-19	309,742.0	13.04
TW4-20	17,237.9	8.75
TW4-22	24,610.9	17.91
TW4-24	213,652.5	17.75
TW4-25	119,663.9	17.66
TWN-2	46,927.2	18.44

Table 4
Table 4 Quarterly Calculation of Nitrate Removed and Total Volume of Water Pumped

Quarter	MW-4							MW-26						
	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)
Calculations and Data Origination	Total Gallons pumped for the quarter from the Flow Meter data	Concentration from the analytical data	Concentration in mg/LX1000 to convert to ug/L	Total pumped gallons/3.785 to convert to liters	Concentration in ug/L X total liters	Total ug/1000000 to convert to grams	Total grams/453.592 to convert to pounds							
Q3 2010	79859.1	4.8	4800	302266.7	1450880129	1450.9	3.20	63850.0	0.6	600	241672.3	145003350	145	0.32
Q4 2010	90042.2	5	5000	340809.7	1704048635	1704.0	3.76	60180.0	0.7	700	227781.3	159446910	159	0.35
Q1 2011	76247.6	4.6	4600	288597.2	1327546964	1327.5	2.93	55130.0	0.5	500	208667.1	104333525	104	0.23
Q2 2011	85849.3	4.9	4900	324939.6	1592204042	1592.2	3.51	55800.6	0.3	300	211205.3	63361581	63	0.14
Q3 2011	85327.7	4.9	4900	322965.3	1582530188	1582.5	3.49	65618.0	0.9	900	248364.1	223527717	224	0.49
Q4 2011	89735.0	5.1	5100	339647.0	1732199573	1732.2	3.82	50191.3	2	2000	189974.1	379948141	380	0.84
Q1 2012	90376.4	4.8	4800	342074.7	1641958435	1642.0	3.62	31440.1	1.7	1700	119000.8	202301323	202	0.45
Q2 2012	90916.5	4.9	4900	344118.8	1686181940	1686.2	3.72	26701.2	2.5	2500	101064.1	252660294	253	0.56
Q3 2012	91607.0	5	5000	346732.5	1733662475	1733.7	3.82	25246.0	2.6	2600	95556.1	248445886	248	0.55
Q4 2012	78840.0	4.8	4800	298409.4	1432365120	1432.4	3.16	30797.0	1.46	1460	116566.6	170187302	170	0.38
Q1 2013	62943.7	4.78	4780	238241.9	1138796304	1138.8	2.51	22650.7	2.27	2270	85732.9	194613682	195	0.43
Q2 2013	71187.3	4.22	4220	269443.9	1137053387	1137.1	2.51	25343.4	2.11	2110	95924.8	202401263	202	0.45
Q3 2013	72898.8	4.89	4890	275922.0	1349258375	1349.3	2.97	25763.0	1.98	1980	97513.0	193075651	193	0.43
Q4 2013	70340.4	5.25	5250	266238.4	1397751674	1397.8	3.08	24207.6	1.38	1380	91625.8	126443557	126	0.28
Q1 2014	69833.8	4.7	4700	264320.9	1242308385	1242.3	2.74	23263.1	2.12	2120	88050.8	186667767	187	0.41
Q2 2014	71934.9	4.08	4080	272273.6	1110876274	1110.9	2.45	23757.5	1.42	1420	89922.1	127689435	128	0.28
Q3 2014	74788.2	3.7	3700	283073.3	1047371347	1047.4	2.31	24062.4	0.7	700	91076.2	63753329	64	0.14

Totals Since Q3

2010 1352727.85

53.59 634001.9

6.71

Highlighted cells are the total for the current quarter

Table 4
Table 4 Quarterly Calculation of Nitrate Removed and Total Volume of Water Pumped

Quarter	TW4-19							TW4-20						
	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)
Calculations and Data Origination														
Q3 2010	116899.2	5.9	5900	442463.5	2.611E+09	2611	5.76	39098.3	5.3	5300	147987.1	784331447	784	1.73
Q4 2010	767970.5	2.7	2700	2906768.3	7.848E+09	7848	17.30	36752.5	4.6	4600	139108.2	639897778	640	1.41
Q1 2011	454607.9	17	17000	1720690.9	2.925E+10	29252	64.49	37187.5	4.4	4400	140754.7	619320625	619	1.37
Q2 2011	159238.9	12	12000	602719.2	7.233E+09	7233	15.95	67907.7	4.8	4800	257030.6	1.234E+09	1234	2.72
Q3 2011	141542.6	3	3000	535738.7	1.607E+09	1607	3.54	72311.2	6.5	6500	273697.9	1.779E+09	1779	3.92
Q4 2011	147647.2	5	5000	558844.7	2.794E+09	2794	6.16	72089.3	4.2	4200	272858.0	1.146E+09	1146	2.53
Q1 2012	148747.0	0.6	600	563007.4	337804437	338	0.74	76306.0	7.9	7900	288818.2	2.282E+09	2282	5.03
Q2 2012	172082.0	2.4	2400	651330.5	1.563E+09	1563	3.45	22956.4	11	11000	86890.1	955790963	956	2.11
Q3 2012	171345.0	2.5	2500	648540.8	1.621E+09	1621	3.57	22025.0	10.8	10800	83364.6	900337950	900	1.98
Q4 2012	156653.0	4.1	4100	592931.6	2.431E+09	2431	5.36	20114.0	11	11000	76131.5	837446390	837	1.85
Q1 2013	210908.0	7.99	7990	798286.8	6.378E+09	6378	14.06	18177.0	9.07	9070	68799.9	624015501	624	1.38
Q2 2013	226224.0	2.95	2950	856257.8	2.526E+09	2526	5.57	20252.4	9.76	9760	76655.3	748156060	748	1.65
Q3 2013	329460.1	17.6	17600	1247006.5	2.195E+10	21947	48.39	19731.0	8.65	8650	74681.8	645997873	646	1.42
Q4 2013	403974.0	4.7	4700	1529041.6	7.186E+09	7186	15.84	19280.2	9.64	9640	72975.6	703484369	703	1.55
Q1 2014	304851.0	1.62	1620	1153861.0	1.869E+09	1869	4.12	18781.6	7.56	7560	71088.4	537427971	537	1.18
Q2 2014	297660.0	1.34	1340	1126643.1	1.51E+09	1510	3.33	18462.4	5.95	5950	69880.2	415787095	416	0.92
Q3 2014	309742.0	1.6	1600	1172373.5	1.876E+09	1876	4.14	17237.9	4.3	4300	65245.5	280555441	281	0.62

Totals Since Q3

2010 4519552.4

221.76 598670.4

33.36

Highlighted cells are the total for the current quarter

Table 4
Quarterly Calculation of Nitrate Removed and Total Volume of Water Pumped

Quarter	TW4-4							TW4-22							
	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	
Calculations and Data Origination															
Q3 2010	76916.8	7.30	7300.00	291130.1	2.1E+09	2125.25	4.69	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2010	86872.1	7.10	7100.00	328810.9	2.3E+09	2334.56	5.15	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2011	73360.0	7.00	7000.00	277667.6	1.9E+09	1943.67	4.29	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2011	80334.6	7.00	7000.00	304066.5	2.1E+09	2128.47	4.69	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2011	97535.0	6.60	6600.00	369170.0	2.4E+09	2436.52	5.37	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2011	109043.5	7.00	7000.00	412729.6	2.9E+09	2889.11	6.37	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2012	101616.8	7.10	7100.00	384619.6	2.7E+09	2730.80	6.02	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2012	87759.1	7.10	7100.00	332168.2	2.4E+09	2358.39	5.20	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2012	80006.0	7.10	7100.00	302822.7	2.2E+09	2150.04	4.74	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2012	71596.0	7.00	7000.00	270990.9	1.9E+09	1896.94	4.18	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2013	58716.8	7.36	7360.00	222243.1	1.6E+09	1635.71	3.61	16677.4	58.0	58000.0	63124.0	3661189622.0	3661.2	8.07	
Q2 2013	65603.4	6.30	6300.00	248308.9	1.6E+09	1564.35	3.45	25523.2	50.2	50200.0	96605.3	4849586662.4	4849.6	10.69	
Q3 2013	63515.4	7.22	7220.00	240405.8	1.7E+09	1735.73	3.83	25592.9	29.7	29700.0	96869.1	2877013057.1	2877.0	6.34	
Q4 2013	60233.6	7.84	7840.00	227984.2	1.8E+09	1787.40	3.94	24952.2	45.2	45200.0	94444.1	4268872280.4	4268.9	9.41	
Q1 2014	58992.9	7.28	7280.00	223288.1	1.6E+09	1625.54	3.58	24532.0	54.6	54600.0	92853.6	5069807652.0	5069.8	11.18	
Q2 2014	60235.3	5.91	5910.00	227990.6	1.3E+09	1347.42	2.97	24193.9	47.2	47200.0	91573.9	4322288622.8	4322.3	9.53	
Q3 2014	69229.4	5.30	5300.00	262033.3	1.4E+09	1388.78	3.06	24610.9	41.5	41500.0	93152.3	3865818644.8	3865.8	8.52	

Totals Since Q3
2010

1301566.7

75.13

166082.5

63.75

Highlighted cells are the total for the current quarter

Table 4
Quarterly Calculation of Nitrate Removed and Total Volume of Water Pumped

Quarter	TW4-24							TW4-25						
	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)
Calculations and Data Origination														
Q3 2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2013	144842.6	35.9	35900.0	548229.2	19681429751.9	19681.4	43.39	99369.9	9.0	9000.0	376115.1	3385035643.5	3385.0	7.46
Q2 2013	187509.3	23.7	23700.0	709722.7	16820428001.9	16820.4	37.08	147310.4	5.2	5240.0	557569.9	2921666087.4	2921.7	6.44
Q3 2013	267703.5	32.6	32600.0	1013257.7	33032202568.5	33032.2	72.82	145840.9	5.69	5690.0	552007.8	3140924419.0	3140.9	6.92
Q4 2013	260555.3	34.6	34600.0	986201.8	34122582643.3	34122.6	75.23	126576.5	6.10	6100.0	479092.1	2922461520.3	2922.5	6.44
Q1 2014	229063.9	31.6	31600.0	867006.9	27397416823.4	27397.4	60.40	129979.2	2.16	2160.0	491971.3	1062657947.5	1062.7	2.34
Q2 2014	216984.1	35.0	35000.0	821284.8	28744968647.5	28745.0	63.37	124829.8	1.21	1210.0	472480.8	571701759.5	571.7	1.26
Q3 2014	213652.5	31.5	31500.0	808674.7	25473253443.8	25473.3	56.16	119663.9	1.60	1600.0	452927.9	724684578.4	724.7	1.60

Totals Since Q3

2010 1520311.2

408.46 893570.6

32.47

Highlighted cells are the total for the current quarter

Table 4
Quarterly Calculation of Nitrate Removed and Total Volume of Water Pumped

TWN-02								
Quarter	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Removed by All Wells (pounds)
Calculations and Data Origination								
Q3 2010	NA	NA	NA	NA	NA	NA	NA	15.69
Q4 2010	NA	NA	NA	NA	NA	NA	NA	27.97
Q1 2011	NA	NA	NA	NA	NA	NA	NA	73.30
Q2 2011	NA	NA	NA	NA	NA	NA	NA	27.01
Q3 2011	NA	NA	NA	NA	NA	NA	NA	16.82
Q4 2011	NA	NA	NA	NA	NA	NA	NA	19.71
Q1 2012	NA	NA	NA	NA	NA	NA	NA	15.86
Q2 2012	NA	NA	NA	NA	NA	NA	NA	15.03
Q3 2012	NA	NA	NA	NA	NA	NA	NA	14.67
Q4 2012	NA	NA	NA	NA	NA	NA	NA	14.92
Q1 2013	31009.4	57.3	57300.0	117370.6	6725334176.7	6725.3	14.83	95.73
Q2 2013	49579.3	57.7	57700.0	187657.7	10827846433.9	10827.8	23.87	91.71
Q3 2013	50036.5	80.0	80000.0	189388.2	15151052200.0	15151.1	33.40	176.53
Q4 2013	49979.9	111.0	111000.0	189173.9	20998305286.5	20998.3	46.29	162.07
Q1 2014	48320.4	42.6	42600.0	182892.7	7791229616.4	7791.2	17.18	103.14
Q2 2014	47611.9	44.7	44700.0	180211.0	8055433555.1	8055.4	17.76	101.87
Q3 2014	46927.2	42.0	42000.0	177619.5	7460016984.0	7460.0	16.45	92.99

Totals Since Q3

2010 323464.6

169.78 1065.01

Highlighted cells are the total for the current quarter

Table 5**Nitrate Data Over Time for MW-30, MW-31, MW-5, and MW-11**

Location	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014
MW-30	15.8	15	16	16	17	16	16	17	16	17	18.5	21.4	18.8	17.6	19.5	18.4	19.4	16.8
MW-31	22.5	21	20	21	22	21	21	21	20	21	23.6	19.3	23.8	21.7	23.9	20.6	23.1	18.9
MW-5	ND	NS	0.2	NS	0.2	NS	0.2	NS	0.1	NS	ND	NS	ND	NS	0.279	NS	ND	NS
MW-11	ND																	

ND = Not detected

NS = Not Sampled

TABLE 6
Slug Test Results
(Using KGS Solution and Automatically Logged Data)

Well	K (cm/s)	K (ft/day)
MW-30	1.0E-04	0.28
MW-31	7.1E-05	0.20
TW4-22	1.3E-04	0.36
TW4-24	1.6E-04	0.45
TW4-25	5.8E-05	0.16
TWN-2	1.5E-05	0.042
TWN-3	8.6E-06	0.024
Average 1		0.22
Average 2		0.15
Average 3		0.32
Average 4		0.31

Notes:

Average 1 = arithmetic average of all wells

Average 2 = geometric average of all wells

Average 3 = arithmetic average of MW-30, MW-31, TW4-22, and TW4-24

Average 4 = geometric average of MW-30, MW-31, TW4-22, and TW4-24

cm/s = centimeters per second

ft/day = feet per day

K = hydraulic conductivity

KGS = KGS Unconfined Slug Test Solution in Aqtesolve™.

TABLE 7
Pre-Pumping Saturated Thicknesses

Well	Depth to Brushy Basin (ft)	Depth to Water Fourth Quarter, 2012 (ft)	Saturated Thickness Above Brushy Basin (ft)
TW4-22	112	53	58
TW4-24	110	55	55

Notes:

ft = feet

TABLE 8
Pre-Pumping Hydraulic Gradients and Flow Calculations

Pathline Boundaries	Path Length (ft)	Head Change (ft)	Hydraulic Gradient (ft/ft)
TW4-25 to MW-31	2060	48	0.023
TWN-2 to MW-30	2450	67	0.027
		average	0.025
		¹ min flow (gpm)	1.31
		² max flow (gpm)	2.79

Notes:

ft = feet

ft/ft = feet per foot

gpm = gallons per minute

¹ assumes width = 1,200 ft; saturated thickness = 56 ft; K = 0.15 ft/day; and gradient = 0.025 ft/ft

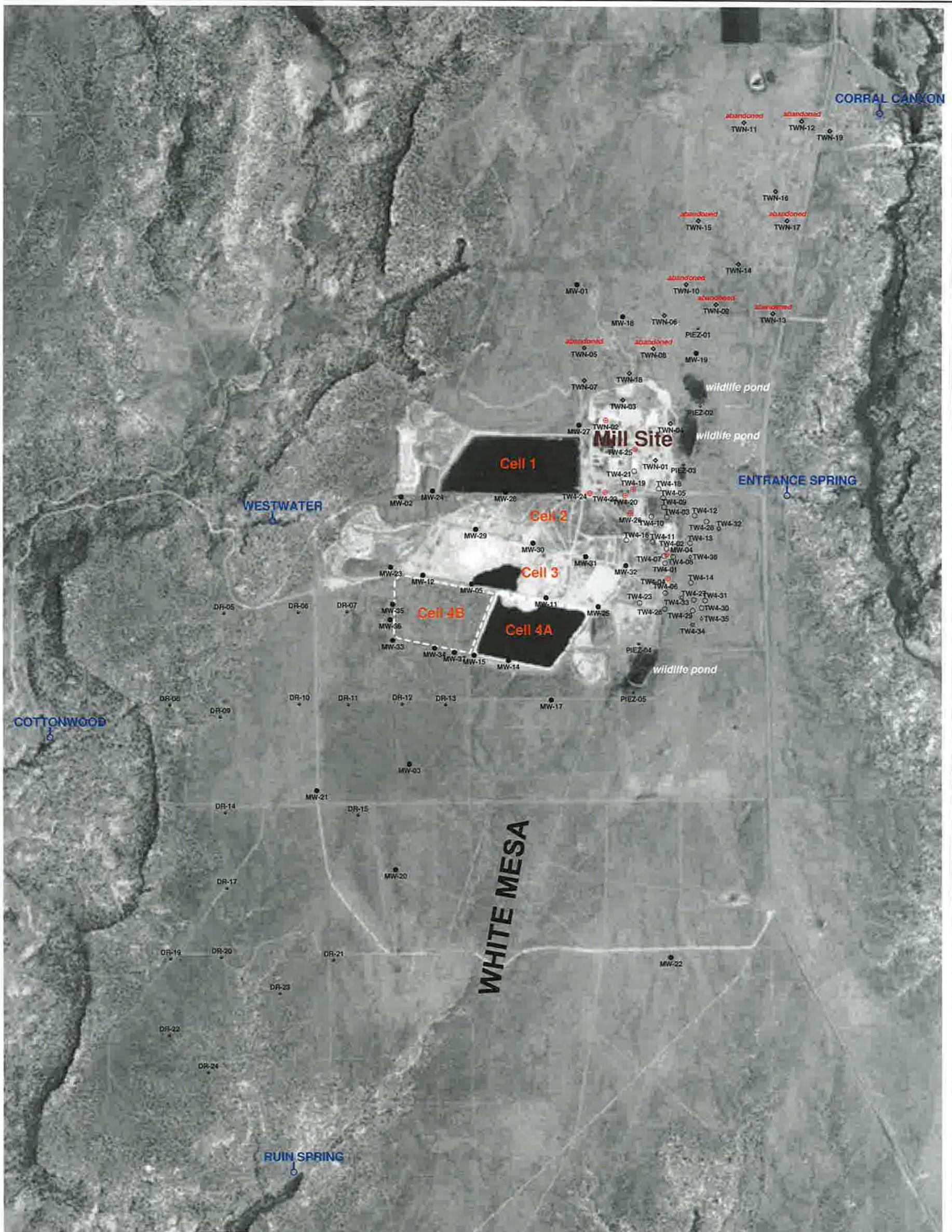
² assumes width = 1,200 ft; saturated thickness = 56 ft; K = 0.32 ft/day; and gradient = 0.025 ft/ft

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- Tab B Order of Sampling and Field Data Worksheets
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- Tab D Kriged Previous Quarter Groundwater Contour Map
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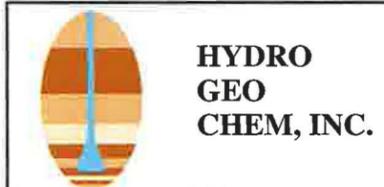
Tab A

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-7  temporary perched nitrate monitoring well
- PIEZ-1  perched piezometer
- TW4-32  temporary perched monitoring well installed September, 2013
- TW4-35  temporary perched monitoring well installed May, 2014
- RUIN SPRING  seep or spring



WHITE MESA SITE PLAN SHOWING LOCATIONS OF PERCHED WELLS AND PIEZOMETERS

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug14/Uwelloc0614.srf	A-1

Tab B

Order of Sampling and Field Data Worksheets

Nitrate Order 3rd Quarter 2014

Nitrate Samples					
Name	Nitrate Mg/L Previous Qrt.	Date/Purge	sample	Depth	Total Depth

TWN-7	0.564	8/6/14	0828		105
TWN-4	1.55	8/5/14	0927		125.7
TWN-1	1.63	8/5/14	1009		112.5
TWN-18	2.18	8/5/14	1252		145
TWN-3	23.6	8/6/14	0838		96
TWN-2	44.7	8/6/14	1250		96
Duplicate of _____					
Rinsate _____		8/6/14	1400		
DI Sample _____					

Piez 1	7.57	8/6/14	0928		
Piez 2	0.736	8/6/14	0900		
Piez 3	1.79	8/6/14	0915		

Rinsate Samples		
Name	Date	Sample

TWN-7R	8/5/13	0833
TWN-4R		
TWN-1R		
TWN-18R		
TWN-3R		
TWN-2R		

Samplers: _____



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): Piez-01 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID Piez-0108062014

Date and Time for Purging 8/6/2014 and Sampling (if different) N/A

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 Nitrate Prev. Well Sampled in Sampling Event Piez-03

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm Well Depth(0.01ft): 0

Depth to Water Before Purging 63.40 Casing Volume (V) 4" Well: 0 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 24°

Time	<u>0927</u>	Gal. Purged	<u>0</u>
Conductance	<u>2286</u>	pH	<u>9.02</u>
Temp. °C	<u>16.85</u>		
Redox Potential Eh (mV)	<u>266</u>		
Turbidity (NTU)	<u>6.4</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 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 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"/>

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

Final Depth

Sample Time

 See instruction

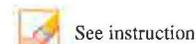
Comment

Arrived on site at 0923 Tanner and Garrin present to collect samples.
 samples bailed at 0928 water was mostly clear with some wood chips floating.
 Left site at 0933

Piez-01 08-06-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): Piez-02 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID Piez-02_08062014

Date and Time for Purging 8/6/2014 and Sampling (if different) N/A

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 Nitrate Prev. Well Sampled in Sampling Event TWN-03

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μMHOS/ cm Well Depth(0.01ft): 0

Depth to Water Before Purging 35.45 Casing Volume (V) 4" Well: 0 (.653h)
3" Well: 0 (.367h)

Weather Cond. Sunny Ext'l Amb. Temp. °C (prior sampling event) 22°

Time	<u>0859</u>	Gal. Purged	<u>0</u>
Conductance	<u>788</u>	pH	<u>8.02</u>
Temp. °C	<u>15.14</u>		
Redox Potential Eh (mV)	<u>296</u>		
Turbidity (NTU)	<u>16</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 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"/>

Chloride

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

Final Depth

Sample Time

 See instruction

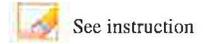
Comment

Arrived on site at 0855 Tanner and Garrin present to collect samples.
 Samples bailed at 0900 water was mostly clear
 Left site at 0906

Piez-02 08-06-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): Piez-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID Piez-03_08062014

Date and Time for Purging 8/6/2014

and Sampling (if different) N/A

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 Nitrate

Prev. Well Sampled in Sampling Event T Piez-02

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging 46.55

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

Weather Cond. Sunny

Ext'l Amb. Temp. °C (prior sampling event) 22°

Time	<u>0914</u>	Gal. Purged	<u>0</u>
Conductance	<u>2920</u>	pH	<u>12.30</u>
Temp. °C	<u>15.83</u>		
Redox Potential Eh (mV)	<u>165</u>		
Turbidity (NTU)	<u>6.4</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 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 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"/>

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

Final Depth

Sample Time

 See instruction

Comment

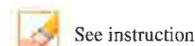
Arrived on site at 0910
 Samples bailed at 0915
 Left site at 0919

Tanner and Garrin present to collect samples.
 water was mostly clear with tiny wood like chips floating in water

Piez-03 08-06-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-01 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-01_08052014

Date and Time for Purging 8/5/2014 and Sampling (if different) N/A

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

Purging Method Used: 2 casings 3 casings

Sampling Event Quarterly Nitrate Prev. Well Sampled in Sampling Event TWN-04

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm Well Depth(0.01ft): 112.50

Depth to Water Before Purging 59.60 Casing Volume (V) 4" Well: 34.54 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event) 22°

Time	<u>1006</u>	Gal. Purged	<u>66</u>
Conductance	<u>889</u>	pH	<u>7.42</u>
Temp. °C	<u>15.18</u>		
Redox Potential Eh (mV)	<u>302</u>		
Turbidity (NTU)	<u>11.8</u>		

Time	<u>1007</u>	Gal. Purged	<u>77</u>
Conductance	<u>893</u>	pH	<u>7.45</u>
Temp. °C	<u>15.24</u>		
Redox Potential Eh (mV)	<u>299</u>		
Turbidity (NTU)	<u>11.7</u>		

Time	<u>1008</u>	Gal. Purged	<u>88</u>
Conductance	<u>895</u>	pH	<u>7.47</u>
Temp. °C	<u>15.25</u>		
Redox Potential Eh (mV)	<u>298</u>		
Turbidity (NTU)	<u>11.8</u>		

Time	<u>1009</u>	Gal. Purged	<u>99</u>
Conductance	<u>895</u>	pH	<u>7.47</u>
Temp. °C	<u>15.26</u>		
Redox Potential Eh (mV)	<u>298</u>		
Turbidity (NTU)	<u>11.9</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 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"/>

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

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0957 Tanner and Garrin present for purge and sampling event. Purge began at 1000. Purged well for a total of 9 minutes. water was clear Purge ended and samples collected at 1009. Left site at 1012

TWN-01 08-05-2014 Do not touch this cell (SheetName)



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



See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-02_08062014

Date and Time for Purging 8/6/2014

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

TWN-03

Sampling Event Quarterly Nitrate

Prev. Well Sampled in Sampling Event TWN-03 Pic 01

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Pic 01

Specific Conductance 999 μMHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging 32.30

Casing Volume (V) 4" Well: 41.59 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Sunny

Ext'l Amb. Temp. °C (prior sampling event) 20°
30°

Time	<u>1249</u>	Gal. Purged	<u>0</u>
Conductance	<u>3094</u>	pH	<u>7.00</u>
Temp. °C	<u>15.81</u>		
Redox Potential Eh (mV)	<u>339</u>		
Turbidity (NTU)	<u>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)			

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"/>

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

Final Depth

Sample Time



See instruction

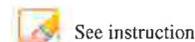
Comment

Arrived on site at ¹²⁴⁷0855 Tanner and Garrin present to collect samples.
 samples collected at 1250 water was clear
 Left site at ¹²⁵²1252
 Continuous Pumping Well

TWN-02 08-06-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-03_08062014

Date and Time for Purging 8/5/2014

and Sampling (if different) 8/6/2014

Well Purging Equip Used: pump or bailer

Well Pump (if other than Bennet) Grundfos

Purging Method Used: 2 casings 3 casings

Sampling Event Quarterly Nitrate

Prev. Well Sampled in Sampling Event TWN-18

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging 38.60

Casing Volume (V) 4" Well: 37.48 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 30°

Time	<u>1327</u>	Gal. Purged	<u>55</u>
Conductance	<u>2397</u>	pH	<u>7.29</u>
Temp. °C	<u>15.13</u>		
Redox Potential Eh (mV)	<u>293</u>		
Turbidity (NTU)	<u>5.4</u>		

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

Time	<u>0838</u>	Gal. Purged	<u>0</u>
Conductance	<u>2368</u>	pH	<u>7.46</u>
Temp. °C	<u>15.38</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>0839</u>	Gal. Purged	<u>0</u>
Conductance	<u>2372</u>	pH	<u>7.45</u>
Temp. °C	<u>15.40</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) 1.46

If well evacuated to dryness, number of gallons evacuated 55

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"/>

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

Final Depth

Sample Time

 See instruction

Comment

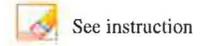
Arrived on site at 1320 Tanner and Garrin present for purge. Purge began at 1322
Purged well for a total of 5 minutes. Purged well dry! water was clear.
Purge ended at 1327. Left site at 1330

Arrived on site at 0835 Tanner and Garrin present to collect samples. samples bailed at 0838
Left site at 0840 Depth to water before samples were taken was 38.60

TWN-03 08-05-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-04

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-04_08052014

Date and Time for Purging 8/5/2014

and Sampling (if different) N/A

Well Purging Equip Used: pump or bailer

Well Pump (if other than Bennet) Grundfos

Purging Method Used: 2 casings 3 casings

Sampling Event Quarterly Nitrate

Prev. Well Sampled in Sampling Event TWN-07

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm

Well Depth(0.01ft): 125.70

Depth to Water Before Purging 51.95

Casing Volume (V) 4" Well: 48.15 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly cloudy

Ext'l Amb. Temp. °C (prior sampling event) 20°

Time	<u>0924</u>	Gal. Purged	<u>99</u>
Conductance	<u>1044</u>	pH	<u>7.23</u>
Temp. °C	<u>14.82</u>		
Redox Potential Eh (mV)	<u>301</u>		
Turbidity (NTU)	<u>10.4</u>		

Time	<u>0925</u>	Gal. Purged	<u>110</u>
Conductance	<u>1044</u>	pH	<u>7.22</u>
Temp. °C	<u>14.81</u>		
Redox Potential Eh (mV)	<u>300</u>		
Turbidity (NTU)	<u>10.3</u>		

Time	<u>0926</u>	Gal. Purged	<u>121</u>
Conductance	<u>1042</u>	pH	<u>7.25</u>
Temp. °C	<u>14.81</u>		
Redox Potential Eh (mV)	<u>300</u>		
Turbidity (NTU)	<u>10.4</u>		

Time	<u>0927</u>	Gal. Purged	<u>132</u>
Conductance	<u>1039</u>	pH	<u>7.24</u>
Temp. °C	<u>14.81</u>		
Redox Potential Eh (mV)	<u>300</u>		
Turbidity (NTU)	<u>11.0</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 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 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

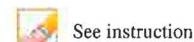
Arrived on site at 0913 Tanner and Garrin present for purge and sampling event.
 Purge began at 0915 Purged well for a total of 12 Minutes. water was mostly clear. Purge ended and samples collected at 0927. Left site at 0929

TWN-04 08-05-2014

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



Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-07 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-07-08062014

Date and Time for Purging: 8/5/2014 and Sampling (if different): 8/6/2014

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

Purging Method Used: 2 casings 3 casings

Sampling Event: Quarterly Prev. Well Sampled in Sampling Event: TWN-07R

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999 μ MHOS/cm Well Depth(0.01ft): 105.00

Depth to Water Before Purging: 86.32 Casing Volume (V) 4" Well: 12.19 (.653h)
3" Well: 0 (.367h)

Weather Cond. Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event) 19°

Time	<u>0847</u>	Gal. Purged	<u>16.50</u>
Conductance	<u>1281</u>	pH	<u>7.86</u>
Temp. °C	<u>15.52</u>		
Redox Potential Eh (mV)	<u>325</u>		
Turbidity (NTU)	<u>16.9</u>		

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

Time	<u>0827</u>	Gal. Purged	<u>0</u>
Conductance	<u>1274</u>	pH	<u>7.50</u>
Temp. °C	<u>16.01</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)	<u>6.5</u>		

Time	<u>0828</u>	Gal. Purged	<u>0</u>
Conductance	<u>1277</u>	pH	<u>7.52</u>
Temp. °C	<u>15.97</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 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"/>

Chloride

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

Final Depth

Sample Time

 See instruction

Comment

Arrived on site at 0840. Tanner and Garrin Present for purge.
Purge began at 0846. Purged well for a total of 1 minute and 30 seconds.
Purged well dry; water was clear. Purge ended at 0847. Left site at 0849
Arrived on site at 0825 Tanner and Garrin present to collect samples. Depth to water was 95.70 samples bailed at 0828 Left site at 0830

TWN-07 08-05-2014 Do not touch this cell (SheetName)



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



See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2014

Location (well name): TWN-07R Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-07R_08052014

Date and Time for Purging 8/5/2014 and Sampling (if different) N/A

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

Purging Method Used: 2 casings 3 casings

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

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm Well Depth(0.01ft): 0

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

Weather Cond. Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event) 18°

Time	<u>0832</u>	Gal. Purged	<u>132</u>
Conductance	<u>5.4</u>	pH	<u>8.11</u>
Temp. °C	<u>21.49</u>		
Redox Potential Eh (mV)	<u>322</u>		
Turbidity (NTU)	<u>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)			

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"/>

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

Final Depth

Sample Time

 See instruction

Comment

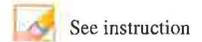
Arrived on site at 0818. Rinsate began at 0820. Purged 50 Gallons of soap water and 100 gallons of D.I. water. Rinsate ended and samples were collected at 0833
 Left site at 0835

⊕ Rinsate

TWN-07R 08-05-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 2nd Quarter Nitrate 3rd Quarter 2014

Location (well name): TWN-18 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-18_08052014

Date and Time for Purging 8/5/2014 and Sampling (if different) N/A

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

Purging Method Used: 2 casings 3 casings

Sampling Event Quarterly Nitrate Prev. Well Sampled in Sampling Event TWN-01

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm Well Depth(0.01ft): 145.00

Depth to Water Before Purging 59.46 Casing Volume (V) 4" Well: 55.85 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly cloudy Ext'l Amb. Temp. °C (prior sampling event) 28°

Time	<u>1249</u>	Gal. Purged	<u>99</u>
Conductance	<u>2210</u>	pH	<u>7.01</u>
Temp. °C	<u>14.67</u>		
Redox Potential Eh (mV)	<u>277</u>		
Turbidity (NTU)	<u>27</u>		

Time	<u>1250</u>	Gal. Purged	<u>110</u>
Conductance	<u>2205</u>	pH	<u>7.02</u>
Temp. °C	<u>14.67</u>		
Redox Potential Eh (mV)	<u>277</u>		
Turbidity (NTU)	<u>26</u>		

Time	<u>1251</u>	Gal. Purged	<u>121</u>
Conductance	<u>2195</u>	pH	<u>7.02</u>
Temp. °C	<u>14.67</u>		
Redox Potential Eh (mV)	<u>277</u>		
Turbidity (NTU)	<u>27</u>		

Time	<u>1252</u>	Gal. Purged	<u>132</u>
Conductance	<u>2207</u>	pH	<u>7.02</u>
Temp. °C	<u>14.66</u>		
Redox Potential Eh (mV)	<u>276</u>		
Turbidity (NTU)	<u>27</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"/>

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

Final Depth

Sample Time

 See instruction

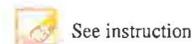
Comment

Arrived on site at 1236 Tanner and Garrin present for purge and sampling event.
 Purge began at 1240 Purged well for a total of 12 minutes. water was a little Murky
 Purge ended and samples collected at 1252. Left site at 1255

TWN-18 08-05-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Chloroform 2014

Location (well name): TW4-22

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-22_08112014

Date and Time for Purging: 8/11/2014

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 Chloroform

Prev. Well Sampled in Sampling Event: TW4-24

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 μ MHOS/cm

Well Depth(0.01ft): 113.50

Depth to Water Before Purging: 60.90

Casing Volume (V) 4" Well: 34.34 (.653h)
 3" Well: 0 (.367h)

Weather Cond.: Sunny

Ext'l Amb. Temp. °C (prior sampling event): 30°

Time	<u>1256</u>	Gal. Purged	<u>0</u>
Conductance	<u>5907</u>	pH	<u>6.82</u>
Temp. °C	<u>16.56</u>		
Redox Potential Eh (mV)	<u>247</u>		
Turbidity (NTU)	<u>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)			

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 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"/>

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

Final Depth
 105.75

Sample Time

 See instruction

Comment

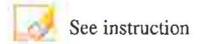
Arrived on site at 1251 Tanner and Garrin present to collect samples
 samples collected at 1256 water was clear
 Left site at 1259

Continuous Pumping Well

TW4-22 08-11-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Chloroform 2014

Location (well name): TW4-24

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TW4-24_08112014

Date and Time for Purging 8/11/2014

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 Chloroform

Prev. Well Sampled in Sampling Event TW-25

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging 69.50

Casing Volume (V) 4" Well: 28.07 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Sunny

Ext'l Amb. Temp. °C (prior sampling event) 29°

Time	<u>1247</u>	Gal. Purged	<u>0</u>
Conductance	<u>8727</u>	pH	<u>6.80</u>
Temp. °C	<u>15.99</u>		
Redox Potential Eh (mV)	<u>279</u>		
Turbidity (NTU)	<u>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)			

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 type="checkbox"/>	<input type="checkbox"/>	250 ml	<input type="checkbox"/>	<input type="checkbox"/>	HNO3	<input 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 1241 Tanner and Garrin present to collect samples
 Samples collected at 1247. water was clear
 Left site at 1249

Continuous Pumping Well

TW4-24 08-11-2014 Do not touch this cell (SheetName)



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

See instruction

Description of Sampling Event: 3rd Quarter Chloroform 2014

Location (well name): TW4-25

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-25_08112014

Date and Time for Purging: 8/11/2014

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 Chloroform

Prev. Well Sampled in Sampling Event: N/A

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 994 μ MHOS/cm

Well Depth(0.01ft): 134.80

Depth to Water Before Purging: 82.70

Casing Volume (V) 4" Well: 34.02 (.653h)
 3" Well: 0 (.367h)

Weather Cond.: Sunny

Ext'l Amb. Temp. °C (prior sampling event): 29°

Time	<u>1227</u>	Gal. Purged	<u>0</u>
Conductance	<u>2544</u>	pH	<u>6.83</u>
Temp. °C	<u>16.60</u>		
Redox Potential Eh (mV)	<u>282</u>		
Turbidity (NTU)	<u>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)			

01/20/2014 09:25:13 AM CAP REV 2.0 21-13 01/20/2014 09:25:13 AM CAP REV 2.0 21-13 01/20/2014 09:25:13 AM CAP REV 2.0 21-13 01/20/2014 09:25:13 AM CAP REV 2.0 21-13

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 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"/>

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

Final Depth

Sample Time

See instruction

Comment

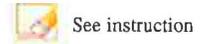
Arrived on site at 1223 Tanner and Garrin present to collect samples
 samples collected at 1228, water was clear
 Left site at 1231

Continuous Pumping well

Do not touch this cell (SheetName)



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



Description of Sampling Event: 3rd Quarter Chloroform 2014

Location (well name): TW4-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TW4-60-08272014

Date and Time for Purging 8/27/2014

and Sampling (if different) N/A

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 Chloroform

Prev. Well Sampled in Sampling Event TW4-36

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging 0

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

Weather Cond. Partly Cloudy

Ext'l Amb. Temp. °C (prior sampling event) 21°

Time	<u>08:0644</u>	Gal. Purged	<u>0</u>
Conductance	<u>0.3</u>	pH	<u>6.29</u>
Temp. °C	<u>22.71</u>		
Redox Potential Eh (mV)	<u>270</u>		
Turbidity (NTU)	<u>3.6</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 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"/>

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

Final Depth

Sample Time

 See instruction

Comment

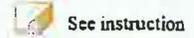
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Sample collected at lab at 0645

TW4-60 08-27-2014 Do not touch this cell (SheetName)



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



Description of Sampling Event: 2nd Quarter Nitrate 2014

Location (well name): TWN-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-60-05082014

Date and Time for Purging 5/8/2014

and Sampling (if different) N/A

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 Nitrate

Prev. Well Sampled in Sampling Event TWN Piez-01

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Piez-01

Specific Conductance 999 μ MHOS/cm

Well Depth(0.01ft): 0

Depth to Water Before Purging 0

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

Weather Cond. Clear

Ext'l Amb. Temp. °C (prior sampling event) 20°

Time	<u>0729</u>	Gal. Purged	<u>0</u>
Conductance	<u>2.4</u>	pH	<u>8.31</u>
Temp. °C	<u>18.74</u>		
Redox Potential Eh (mV)	<u>182</u>	<u>182</u>	
Turbidity (NTU)	<u>5.7</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)			

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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 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

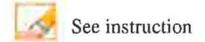
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**ATTACHMENT 1-2
 WHITE MESA URANIUM MILL
 FIELD DATA WORKSHEET FOR GROUNDWATER**



Description of Sampling Event: 3rd Quarter Nitrate 2014

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

Field Sample ID TWN-65_08052014

Date and Time for Purging 8/5/2014 and Sampling (if different) N/A

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

Purging Method Used: 2 casings 3 casings

Sampling Event Quarterly Nitrate Prev. Well Sampled in Sampling Event TWN-04

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 μ MHOS/ cm Well Depth(0.01ft): 112.50

Depth to Water Before Purging 59.60 Casing Volume (V) 4" Well: 34.54 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly cloudy Ext'l Amb. Temp. °C (prior sampling event) 22°

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 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 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"/>

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

Final Depth

Sample Time

 See instruction

Comment

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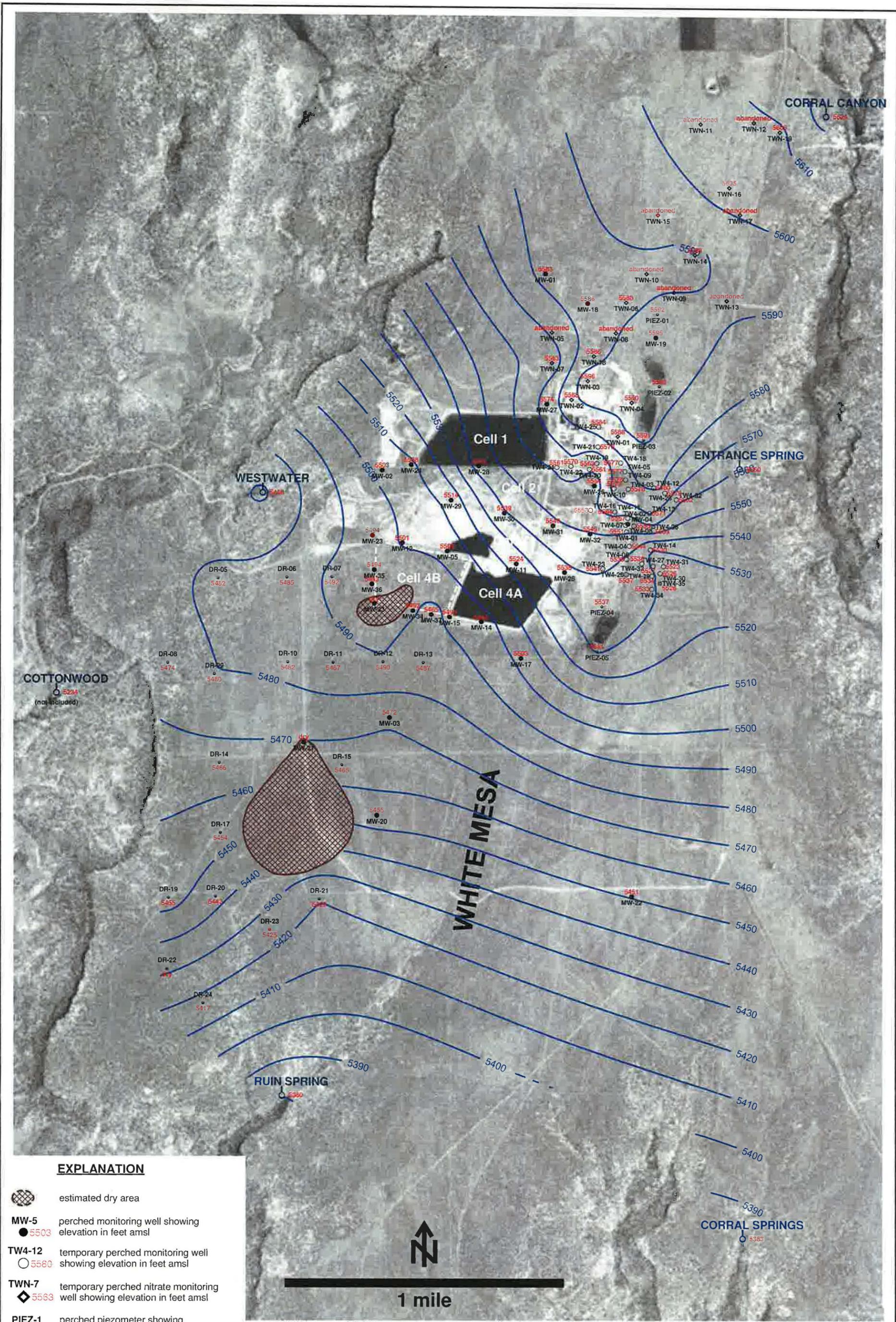
Tab C

Kriged Current Quarter Groundwater Contour Map, Capture Zone Map, Capture Zone Details Map, and
Weekly, Monthly and Quarterly Depth to Water Data

NAME: Garrin Palmer, Tanner Holliday

DATE: 9/25/14

TIME	WELL	Depth to Water (ft.)	TIME	WELL	Depth to Water (ft.)	TIME	WELL	Depth to Water (ft.)	TIME	WELL	Depth to Water (ft.)
1253	MW-1	64.14	1249	MW-4	70.10	1235	PIEZ-1	63.90	NA	DR-1	Abandoned
1305	MW-2	109.69	1247	TW4-1	67.45	1229	PIEZ-2	35.80	NA	DR-2	Abandoned
1447	MW-3	83.30	1250	TW4-2	67.63	1227	PIEZ-3	46.97	1334	DR-5	83.13
1448	MW-3A	85.05	1257	TW4-3	54.64	1237	PIEZ-4	54.54	1337	DR-6	94.35
1311	MW-5	106.22	1245	TW4-4	69.82	1234	PIEZ-5	53.45	1037	DR-7	92.2
1056	MW-11	86.58	1302	TW4-5	63.55	1211	TWN-1	59.94	1347	DR-8	51.24
1309	MW-12	108.33	1244	TW4-6	70.09	1208	TWN-2	39.02	1345	DR-9	86.58
1049	MW-14	103.45	1248	TW4-7	68.11	1219	TWN-3	38.20	1342	DR-10	78.07
1046	MW-15	106.35	1252	TW4-8	66.58	1224	TWN-4	52.23	1442	DR-11	98.2
1455	MW-17	72.45	1259	TW4-9	61.35	NA	TWN-5	Abandoned	1444	DR-12	90.35
1250	MW-18	71.26	1304	TW4-10	61.05	1248	TWN-6	77.20	1453	DR-13	69.9
1232	MW-19	59.65	1254	TW4-11	60.10	1256	TWN-7	86.20	1357	DR-14	76.41
1327	MW-20	85.66	1224	TW4-12	43.74	NA	TWN-8	Abandoned	1353	DR-15	93
1320	MW-22	66.93	1223	TW4-13	48.90	NA	TWN-9	Abandoned	NA	DR-16	Abandoned
1030	MW-23	117.71	1213	TW4-14	82.99	NA	TWN-10	Abandoned	1401	DR-17	65.05
1027	MW-24	113.69	1150	TW4-15	71.40	NA	TWN-11	Abandoned	NA	DR-18	Abandoned
1054	MW-25	74.88	1307	TW4-16	65.66	NA	TWN-12	Abandoned	1405	DR-19	63.11
1150	MW-26	71.40	1309	TW4-17	75.95	NA	TWN-13	Abandoned	1416	DR-20	55.57
1206	MW-27	53.58	1213	TW4-18	64.49	1239	TWN-14	61.77	1433	DR-21	101.3
1025	MW-28	75.65	1001	TW4-19	68.72	NA	TWN-15	Abandoned	1440	DR-22	DRY
1315	MW-29	101.18	1148	TW4-20	68.50	1241	TWN-16	47.60	1430	DR-23	70.61
1317	MW-30	75.31	1215	TW4-21	66.15	NA	TWN-17	Abandoned	1410	DR-24	44.18
1312	MW-31	68.21	1147	TW4-22	59.00	1221	TWN-18	59.43	NA	DR-25	Abandoned
1309	MW-32	75.95	1242	TW4-23	66.72	1400	TWN-19	53.25			
1036	MW-33	DRY	1146	TW4-24	64.40						
1043	MW-34	107.90	1210	TW4-25	60.96						
1032	MW-35	112.44	1240	TW4-26	64.35						
1035	MW-36	110.55	1202	TW4-27	80.46						
1045	MW-37	114.80	1226	TW4-28	38.16						
			1204	TW4-29	72.51						
			1209	TW4-30	76.81						
			1211	TW4-31	81.94						
			1228	TW4-32	49.94						
			1200	TW4-33	71.00						
			1207	TW4-34	70.40						
			1220	TW4-35	74.35						
			1215	TW4-36	57.45						

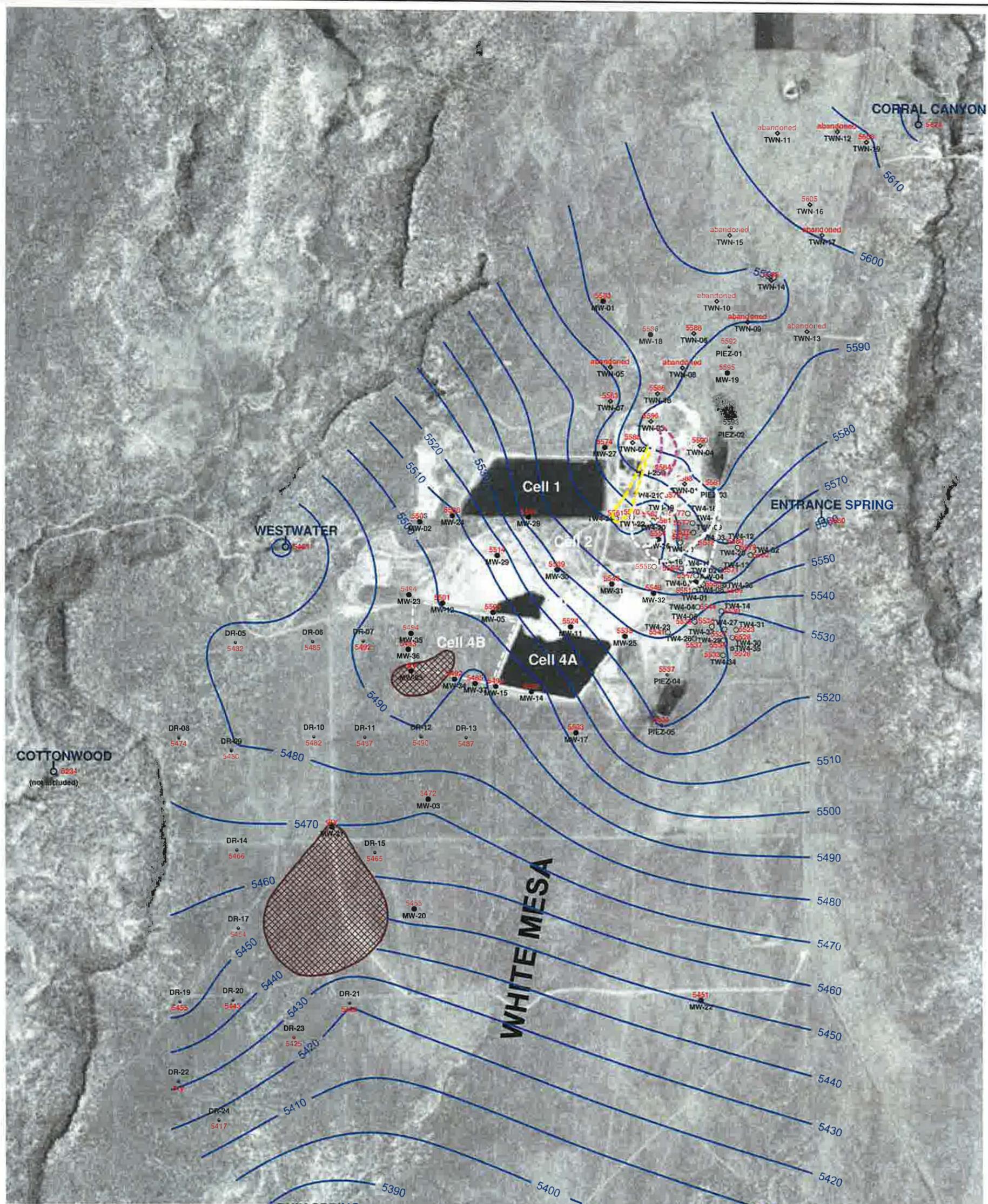


EXPLANATION

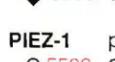
-  estimated dry area
- MW-5  5503 perched monitoring well showing elevation in feet amsl
- TW4-12  5580 temporary perched monitoring well showing elevation in feet amsl
- TWN-7  5563 temporary perched nitrate monitoring well showing elevation in feet amsl
- PIEZ-1  5592 perched piezometer showing elevation in feet amsl
- TW4-35  5526 temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
- RUIN SPRING  5380 seep or spring showing elevation in feet amsl

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

 <p>HYDRO GEO CHEM, INC.</p>	<p>KRIGED 3rd QUARTER, 2014 WATER LEVELS WHITE MESA SITE</p>		
	APPROVED	DATE	REFERENCE
		H:/718000/nov14/Uwl0914.srf	C-1



EXPLANATION

-  estimated nitrate capture zone boundary stream tubes resulting from pumping
-  estimated chloroform capture zone boundary stream tubes resulting from pumping
-  estimated dry area
- MW-5**
 5503 perched monitoring well showing elevation in feet amsl
- TW4-12**
 5580 temporary perched monitoring well showing elevation in feet amsl
- TWN-7**
 5563 temporary perched nitrate monitoring well showing elevation in feet amsl
- PIEZ-1**
 5592 perched piezometer showing elevation in feet amsl
- TW4-35**
 5526 temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
- RUIN SPRING**
 5380 seep or spring showing elevation in feet amsl

RUIN SPRING
5380

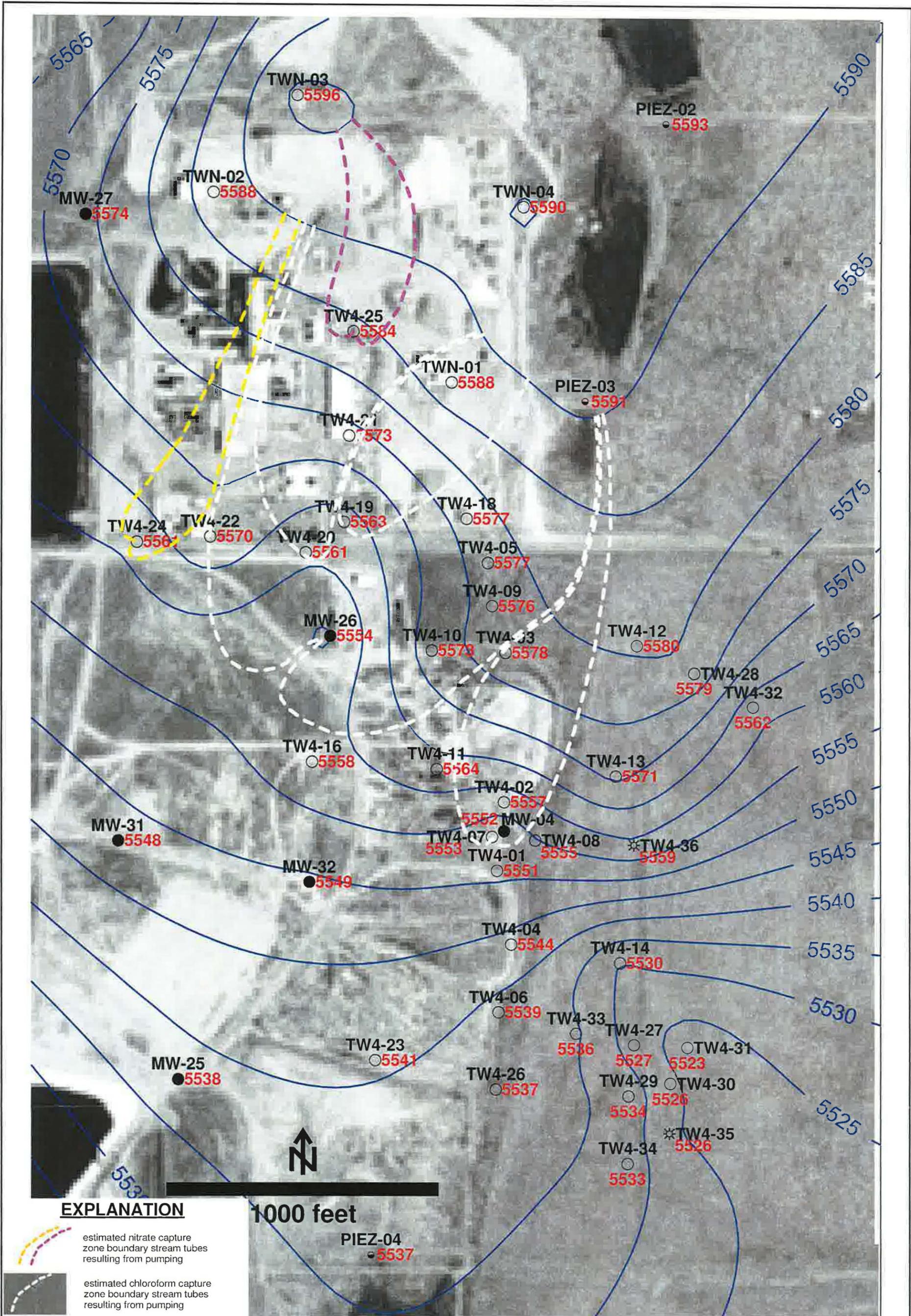
NOTE: MW-4, MW-26, TW4-4, TW4-19, and TW4-20 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells



**HYDRO
GEO
CHEM, INC.**

**KRIGED 3rd QUARTER, 2014 WATER LEVELS
AND ESTIMATED CAPTURE ZONES
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov14/Uwl0914NTcz2.srf	C-2

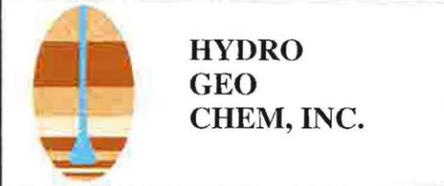


EXPLANATION

-  estimated nitrate capture zone boundary stream tubes resulting from pumping
-  estimated chloroform capture zone boundary stream tubes resulting from pumping
-  MW-4 5552 perched monitoring well showing elevation in feet amsl
-  TW4-1 5551 temporary perched monitoring well showing elevation in feet amsl
-  PIEZ-2 5593 perched piezometer showing elevation in feet amsl
-  TW4-35 5526 temporary perched monitoring well installed May, 2014 showing elevation in feet amsl

1000 feet

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



KRIGED 3rd QUARTER, 2014 WATER LEVELS AND ESTIMATED CAPTURE ZONES WHITE MESA SITE (detail map)			
APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov14/Uwl0914NTcz.srf	C-3

Weekly Inspection Form

Date 7/7/2014

Name Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1259	MW-4	77.20	Flow 4.4 GPM Meter 420301.12	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1253	MW-26	71.66	Flow 10.2 GPM Meter 435522.10	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1404	TW4-19	75.84	Flow 18.2 GPM Meter 2606602.01	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1250	TW4-20	69.29	Flow 10.4 GPM Meter 13147.87	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1303	TW4-4	69.43	Flow 8.0 GPM Meter 372374.3	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1240	TWN-2	31.78	Flow 18.5 GPM Meter 280032.6	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1247	TW4-22	60.35	Flow 18.0 GPM Meter 1432264	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1244	TW4-24	68.13	Flow 18.4 GPM Meter 1323404.4	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1234	TW4-25	67.40	Flow 18.5 GPM Meter 783252.3	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 7/14/14

Name Garcia Palmer / Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1238	MW-4	69.94	Flow 4.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 425978.08	<input checked="" type="radio"/> Yes <input type="radio"/> No
1235	MW-26	73.19	Flow 10.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 437613.37	<input checked="" type="radio"/> Yes <input type="radio"/> No
1257	TW4-19	71.40	Flow 18.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2623031.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1230	TW4-20	69.61	Flow 9.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 14584.29	<input checked="" type="radio"/> Yes <input type="radio"/> No
1241	TW4-4	69.78	Flow 8.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 377762.30	<input checked="" type="radio"/> Yes <input type="radio"/> No
1219	TWN-2	39.20	Flow 18.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 283699.01	<input checked="" type="radio"/> Yes <input type="radio"/> No
1226	TW4-22	60.61	Flow 18.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 145114.30	<input checked="" type="radio"/> Yes <input type="radio"/> No
1223	TW4-24	68.42	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1340131.22	<input checked="" type="radio"/> Yes <input type="radio"/> No
1216	TW4-25	130.94	Flow 18.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 792654.04	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 7/21/14

Name Garcia Palmer / Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1230	MW-4	70.09	Flow 4.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 431679.90	<input checked="" type="radio"/> Yes <input type="radio"/> No
1226	MW-26	73.76	Flow 10.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 439485.68	<input checked="" type="radio"/> Yes <input type="radio"/> No
1148	TW4-19	66.94	Flow 16.2 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2646730.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1222	TW4-20	69.53	Flow 9.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 15811.32	<input checked="" type="radio"/> Yes <input type="radio"/> No
1234	TW4-4	69.88	Flow 8.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 383251.22	<input checked="" type="radio"/> Yes <input type="radio"/> No
1208	TWN-2	66.31	Flow 18.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 287257.60	<input checked="" type="radio"/> Yes <input type="radio"/> No
1220	TW4-22	60.72	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 147078.50	<input checked="" type="radio"/> Yes <input type="radio"/> No
1217	TW4-24	68.40	Flow 17.8 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1356779.30	<input checked="" type="radio"/> Yes <input type="radio"/> No
1204	TW4-25	88.20	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 801653.60	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

0732151

Monthly Depth Check Form

Date 7/22/14

Name Gerrin Palmer / Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Time</u>	<u>Well</u>	<u>Depth*</u>
<u>1248</u>	MW-4	<u>69.98</u>	<u>1219</u>	TWN-1	<u>59.51</u>
<u>1247</u>	TW4-1	<u>66.78</u> ^{66.78}	<u>1225</u>	TWN-2	<u>30.10</u>
<u>1256</u>	TW4-2	<u>67.11</u>	<u>1216</u>	TWN-3	<u>38.65</u>
<u>1243</u>	TW4-3	<u>54.14</u>	<u>1211</u>	TWN-4	<u>51.80</u>
<u>1303</u>	TW4-4	<u>69.89</u>	<u>1229</u>	TWN-7	<u>86.29</u>
<u>1241</u>	TW4-5	<u>63.00</u>	<u>1213</u>	TWN-18	<u>59.48</u>
<u>1301</u>	TW4-6	<u>69.90</u>	<u>1227</u>	MW-27	<u>53.55</u>
<u>1248</u>	TW4-7	<u>67.40</u>	<u>1341</u>	MW-30	<u>75.40</u>
<u>1246</u>	TW4-8	<u>66.18</u>	1337	MW-31	<u>68.15</u>
<u>1242</u>	TW4-9	<u>60.80</u>	<u>1308</u>	TW4-28	<u>38.00</u>
<u>1238</u>	TW4-10	<u>60.55</u>	<u>1323</u>	TW4-29	<u>72.44</u>
<u>1252</u>	TW4-11	<u>59.78</u>	<u>1317</u>	TW4-30	<u>76.99</u>
<u>1307</u>	TW4-12	<u>43.48</u>	<u>1316</u>	TW4-31	<u>82.25</u>
<u>1311</u>	TW4-13	<u>48.70</u>	<u>1309</u>	TW4-32	<u>49.74</u>
<u>1314</u>	TW4-14	<u>83.42</u>	<u>1326</u>	TW4-33	<u>70.87</u>
<u>1140</u>	TW4-15	<u>72.18</u>	<u>1322</u>	TW4-34	<u>70.24</u>
<u>1255</u>	TW4-16	<u>65.16</u>	<u>1319</u>	TW4-35	<u>74.32</u>
<u>1336</u>	TW4-17	<u>75.55</u>	<u>1313</u>	TW4-36	<u>58.10</u>
<u>1222</u>	TW4-18	<u>64.00</u>			
<u>1110</u>	TW4-19	<u>67.40</u>			
<u>1128</u>	TW4-20	<u>69.48</u>			
<u>1223</u>	TW4-21	<u>65.74</u>			
<u>1251</u>	TW4-22	<u>59.97</u>			
<u>1257</u>	TW4-23	<u>66.32</u>			
<u>1250</u>	TW4-24	<u>66.80</u>			
<u>1224</u>	TW4-25	<u>62.86</u>			
<u>1259</u>	TW4-26	<u>64.10</u>			
<u>1325</u>	TW4-27	<u>80.61</u>			

Comments: (Please note the well number for any comments)

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 7/28/14

Name Garrin Palmer / Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
1324	MW-4	71.34	Flow 4.4 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 437394.71	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1321	MW-26	71.17	Flow 10.5 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 440678.96	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1400	TW4-19	69.84	Flow 14.8 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 2669654.00	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1318	TW4-20	69.34	Flow 10.0 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 17145.48	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1327	TW4-4	69.72	Flow 8.2 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 388786.20	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1304	TWN-2	32.15	Flow 18.1 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 290725.90	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1315	TW4-22	60.75	Flow 18.0 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 146975.00	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1312	TW4-24	67.91	Flow 17.2 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 1373066.70	<input checked="" type="radio"/> Yes	<input type="radio"/> No
1300	TW4-25	63.40	Flow 18.2 GPM	<input checked="" type="radio"/> Yes	<input type="radio"/> No
			Meter 810037.70	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/4/2014

Name Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1310	MW-4	76.74	Flow 4.3 Meter 443012.57	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1306	MW-26	71.50	Flow 10.4 Meter 442405.27	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1322	TW4-19	76.81	Flow 10.0 Meter 269427202	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1303	TW4-20	69.60	Flow 8.0 Meter 18461.44	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1314	TW4-4	74.19	Flow 8.0 Meter 394186.3	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1246	TWN-2	31.30	Flow 18.50 Meter 294387.5	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1300	TW4-22	60.70	Flow 17.0 Meter 150871.3	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1256	TW4-24	68.30	Flow 18.4 GPM Meter 1389830.4	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
1245	TW4-25	65.80	Flow 50.80 16.40 Meter 820197.4	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Monthly Depth Check Form

Date 8/7/14

Name Garrin Palmer

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Time</u>	<u>Well</u>	<u>Depth*</u>
<u>0916</u>	<u>MW-4</u>	<u>67.02</u>	<u>1250</u>	<u>TWN-1</u>	<u>59.50</u>
<u>0913</u>	<u>TW4-1</u>	<u>66.90</u>	<u>0747</u>	<u>TWN-2</u>	<u>30.86</u>
<u>0918</u>	<u>TW4-2</u>	<u>67.15</u>	<u>1241</u>	<u>TWN-3</u>	<u>38.49</u>
<u>0909</u>	<u>TW4-3</u>	<u>54.10</u>	<u>1234</u>	<u>TWN-4</u>	<u>51.80</u>
<u>0934</u>	<u>TW4-4</u>	<u>68.90</u>	<u>1207</u>	<u>TWN-7</u>	<u>92.40</u>
<u>0905</u>	<u>TW4-5</u>	<u>63.00</u>	<u>1239</u>	<u>TWN-18</u>	<u>59.39</u>
<u>0931</u>	<u>TW4-6</u>	<u>69.78</u>	<u>1204</u>	<u>MW-27</u>	<u>53.40</u>
<u>0915</u>	<u>TW4-7</u>	<u>67.42</u>	<u>0951</u>	<u>MW-30</u>	<u>76.85</u>
<u>0911</u>	<u>TW4-8</u>	<u>66.12</u>	<u>1032</u>	<u>MW-31</u>	<u>68.35</u>
<u>0906</u>	<u>TW4-9</u>	<u>60.83</u>	<u>1012</u>	<u>TW4-28</u>	<u>37.95</u>
<u>0901</u>	<u>TW4-10</u>	<u>60.57</u>	<u>1010</u>	<u>TW4-29</u>	<u>72.35</u>
<u>0920</u>	<u>TW4-11</u>	<u>59.17</u>	<u>1031</u>	<u>TW4-30</u>	<u>75.30</u>
<u>1007</u>	<u>TW4-12</u>	<u>43.40</u>	<u>0954</u>	<u>TW4-31</u>	<u>82.07</u>
<u>0957</u>	<u>TW4-13</u>	<u>48.45</u>	<u>1004</u>	<u>TW4-32</u>	<u>49.67</u>
<u>0957</u>	<u>TW4-14</u>	<u>83.25</u>	<u>0940</u>	<u>TW4-33</u>	<u>70.80</u>
<u>0859</u>	<u>TW4-15</u>	<u>71.44</u>	<u>0946</u>	<u>TW4-34</u>	<u>70.18</u>
<u>0922</u>	<u>TW4-16</u>	<u>65.21</u>	<u>0949</u>	<u>TW4-35</u>	<u>74.30</u>
<u>0924</u>	<u>TW4-17</u>	<u>75.55</u>	<u>0956</u>	<u>TW4-36</u>	<u>57.80</u>
<u>1248</u>	<u>TW4-18</u>	<u>64.04</u>			
<u>1055</u>	<u>TW4-19</u>	<u>70.85</u>			
<u>0804</u>	<u>TW4-20</u>	<u>69.50</u>			
<u>1245</u>	<u>TW4-21</u>	<u>65.76</u>			
<u>0802</u>	<u>TW4-22</u>	<u>58.80</u>			
<u>0924</u>	<u>TW4-23</u>	<u>66.31</u>			
<u>0800</u>	<u>TW4-24</u>	<u>65.72</u>			
<u>0745</u>	<u>TW4-25</u>	<u>64.02</u>			
<u>0937</u>	<u>TW4-26</u>	<u>64.06</u>			
<u>0943</u>	<u>TW4-27</u>	<u>80.47</u>			

Comments: (Please note the well number for any comments)

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 8/11/14

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1320	MW-4	72.29	Flow 4.4 GPM	<input checked="" type="radio"/> Yes No
			Meter 448761.98	<input checked="" type="radio"/> Yes No
1312	MW-26	71.64	Flow 9.4 GPM	<input checked="" type="radio"/> Yes No
			Meter 444778.79	<input checked="" type="radio"/> Yes No
1400	TW4-19	76.90	Flow 12.5 GPM	<input checked="" type="radio"/> Yes No
			Meter 2718661.00	<input checked="" type="radio"/> Yes No
1303	TW4-20	69.55	Flow 8.2 GPM	<input checked="" type="radio"/> Yes No
			Meter 19867.00	<input checked="" type="radio"/> Yes No
1329	TW4-4	69.52	Flow 8.4 GPM	<input checked="" type="radio"/> Yes No
			Meter 399447.12	<input checked="" type="radio"/> Yes No
1233	TWN-2	33.30	Flow 18.6 GPM	<input checked="" type="radio"/> Yes No
			Meter 297988.20	<input checked="" type="radio"/> Yes No
1254	TW4-22	60.90	Flow 17.9 GPM	<input checked="" type="radio"/> Yes No
			Meter 152037.80	<input checked="" type="radio"/> Yes No
1245	TW4-24	69.50	Flow 17.6 GPM	<input checked="" type="radio"/> Yes No
			Meter 1406688.10	<input checked="" type="radio"/> Yes No
1224	TW4-25	82.70	Flow 17.0 GPM	<input checked="" type="radio"/> Yes No
			Meter 829436.60	<input checked="" type="radio"/> Yes No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/18/14

Name Gerrin Palmer

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Comments</u>	<u>System Operational (If no note any problems/corrective actions)</u>
1414	MW-4	70.71	Flow 4.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 454569.84	<input checked="" type="radio"/> Yes <input type="radio"/> No
1411	MW-26	70.41	Flow 10.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 446693.67	<input checked="" type="radio"/> Yes <input type="radio"/> No
1441	TW4-19	69.84	Flow 12.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2742158.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1408	TW4-20	77.89	Flow 8.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 21101.05	<input checked="" type="radio"/> Yes <input type="radio"/> No
1417	TW4-4	70.40	Flow 8.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 404861.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1354	TWN-2	31.20	Flow 18.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 301400.70	<input checked="" type="radio"/> Yes <input type="radio"/> No
1405	TW4-22	84.60	Flow 18.2 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 154694.10	<input checked="" type="radio"/> Yes <input type="radio"/> No
1400	TW4-24	68.40	Flow 17.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1423047.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1350	TW4-25	61.38	Flow 18.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 838689.90	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/25/14

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1228	MW-4	70.39	Flow 4.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 460134.62	<input checked="" type="radio"/> Yes <input type="radio"/> No
1226	MW-26	73.75	Flow 10.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 448365.80	<input checked="" type="radio"/> Yes <input type="radio"/> No
1150	TW4-19	66.44	Flow 11.5 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2765804.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1225	TW4-20	69.90	Flow 8.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 22476.90	<input checked="" type="radio"/> Yes <input type="radio"/> No
1231	TW4-4	69.97	Flow 8.2 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 410187.40	<input checked="" type="radio"/> Yes <input type="radio"/> No
1202	TWN-2	58.71	Flow 18.3 GPM GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 305007.60	<input checked="" type="radio"/> Yes <input type="radio"/> No
1222	TW4-22	60.97	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 156568.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1218	TW4-24	68.40	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1439391.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1159	TW4-25	60.78	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 847740.60	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/2/14

Name Gavin Palmer / Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Comments</u>	<u>System Operational (If no note any problems/corrective actions)</u>
1244	MW-4	70.14	Flow 4.4 GPM	(Yes) No
			Meter 466490.82	(Yes) No
1242	MW-26	75.70	Flow 10.0 GPM	(Yes) No
			Meter 450275.02	(Yes) No
1322	TW4-19	67.88	Flow 11.6 GPM	(Yes) No
			Meter 2791482.00	(Yes) No
1239	TW4-20	70.94	Flow 8.7 GPM	(Yes) No
			Meter 23899.90	(Yes) No
1247	TW4-4	69.92	Flow 8.0 GPM	(Yes) No
			Meter 415037.91	(Yes) No
1223	TWN-2	29.36	Flow 18.5 GPM	(Yes) No
			Meter 309200.30	(Yes) No
1236	TW4-22	59.22	Flow 18.0 GPM	(Yes) No
			Meter 158599.70	(Yes) No
1232	TW4-24	65.82	Flow 17.6 GPM	(Yes) No
			Meter 1459601.80	(Yes) No
1220	TW4-25	59.40	Flow 18.0 GPM	(Yes) No
			Meter 858105.00	(Yes) No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/8/14

Name Garrin Palmer

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Comments</u>	<u>System Operational (If no note any problems/corrective actions)</u>
1417	MW-4	71.10	Flow 4.4 GPM	(Yes) No
			Meter 471830.94	(Yes) No
1414	MW-26	70.57	Flow 10.0 GPM	(Yes) No
			Meter 451680.00	(Yes) No
1500	TW4-19	75.10	Flow 10.6 GPM	(Yes) No
			Meter 2814546.09	(Yes) No
1411	TW4-20	75.49	Flow 8.2 GPM	(Yes) No
			Meter 25019.71	(Yes) No
1420	TW4-4	69.98	Flow 8.0 GPM	(Yes) No
			Meter 420927.10	(Yes) No
1359	TWN-2	28.37	Flow 18.2 GPM	(Yes) No
			Meter 312388.90	(Yes) No
1408	TW4-22	77.26	Flow 17.8 GPM	(Yes) No
			Meter 160369.40	(Yes) No
1405	TW4-24	69.10	Flow 17.4 GPM	(Yes) No
			Meter 1471843.30	(Yes) No
1355	TW4-25	61.50	Flow 17.2 GPM	(Yes) No
			Meter 866258.20	(Yes) No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/15/14

Name Garrin Palmer / Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Comments</u>	<u>System Operational (If no note any problems/corrective actions)</u>
1231	MW-4	70.78	Flow 4.50 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 477660.72	<input checked="" type="radio"/> Yes <input type="radio"/> No
1228	MW-26	74.21	Flow 10.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 453457.50	<input checked="" type="radio"/> Yes <input type="radio"/> No
1200	TW4-19	70.12	Flow 12.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2838083.05	<input checked="" type="radio"/> Yes <input type="radio"/> No
1225	TW4-20	70.15	Flow 8.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 26307.38	<input checked="" type="radio"/> Yes <input type="radio"/> No
1234	TW4-4	70.10	Flow 8.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 426120.10	<input checked="" type="radio"/> Yes <input type="radio"/> No
1210	TWN-2	38.40	Flow 18.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 315066.40	<input checked="" type="radio"/> Yes <input type="radio"/> No
1221	TW4-22	61.12	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 162139.40	<input checked="" type="radio"/> Yes <input type="radio"/> No
1218	TW4-24	69.42	Flow 17.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1487998.20	<input checked="" type="radio"/> Yes <input type="radio"/> No
1206	TW4-25	117.81	Flow 18.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 875236.00	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/22/14

Name Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Comments</u>	<u>System Operational (If no note any problems/corrective actions)</u>
1217	MW-4	70.83	Flow 4.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 70 483412.20	<input checked="" type="radio"/> Yes <input type="radio"/> No
1214	MW-26	76.17	Flow 10.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 455563.84	<input checked="" type="radio"/> Yes <input type="radio"/> No
1223	TW4-19	75.02	Flow 11.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2862082.03	<input checked="" type="radio"/> Yes <input type="radio"/> No
1208	TW4-20	70.45	Flow 8.3 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 27625.22	<input checked="" type="radio"/> Yes <input type="radio"/> No
1221	TW4-4	69.41	Flow 8.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 431323.1	<input checked="" type="radio"/> Yes <input type="radio"/> No
1153	TWN-2	27.38	Flow 18.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 319615.7	<input checked="" type="radio"/> Yes <input type="radio"/> No
1202	TW4-22	61.45	Flow 18.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 164024.2	<input checked="" type="radio"/> Yes <input type="radio"/> No
1158	TW4-24	69.82	Flow 18.2 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1504014.2	<input checked="" type="radio"/> Yes <input type="radio"/> No
1150	TW4-25	61.12	Flow 16.50 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 884202.7	<input checked="" type="radio"/> Yes <input type="radio"/> No

Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/29/14

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1512	MW-4	70.85	Flow 4.4 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 484489.46	<input checked="" type="radio"/> Yes <input type="radio"/> No
1507	MW-26	75.11	Flow 10.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 457614.77	<input checked="" type="radio"/> Yes <input type="radio"/> No
1428	TW4-19	68.40	Flow 11.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 2886551.00	<input checked="" type="radio"/> Yes <input type="radio"/> No
1503	TW4-20	70.35	Flow 8.6 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 29060.26	<input checked="" type="radio"/> Yes <input type="radio"/> No
1515	TW4-4	70.18	Flow 8.0 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 436526.80	<input checked="" type="radio"/> Yes <input type="radio"/> No
1449	TWN-2	30.22	Flow 18.5 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 323464.60	<input checked="" type="radio"/> Yes <input type="radio"/> No
1454	TW4-22	61.32	Flow 17.7 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 166072.50	<input checked="" type="radio"/> Yes <input type="radio"/> No
1457	TW4-24	68.50	Flow 17.8 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 1520311.20	<input checked="" type="radio"/> Yes <input type="radio"/> No
1441	TW4-25	60.98	Flow 17.1 GPM	<input checked="" type="radio"/> Yes <input type="radio"/> No
			Meter 893570.60	<input checked="" type="radio"/> Yes <input type="radio"/> No

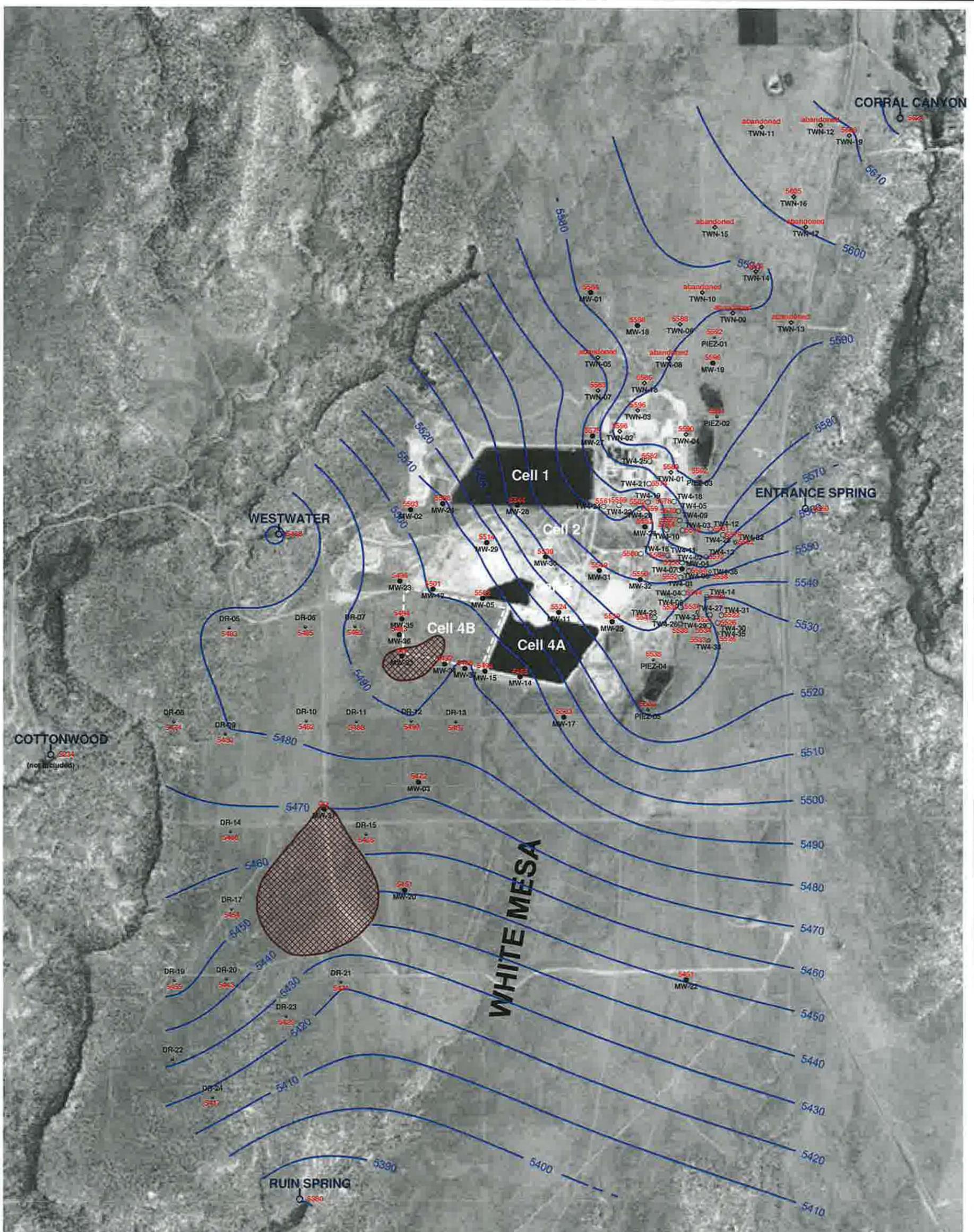
Operational Problems (Please list well number): _____

Corrective Action(s) Taken (Please list well number): _____

* Depth is measured to the nearest 0.01 feet.

Tab D

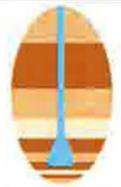
Kriged Previous Quarter Groundwater Contour Map



EXPLANATION

-  estimated dry area
-  TW4-35 5526 temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
-  MW-5 5502 perched monitoring well showing elevation in feet amsl
-  TW4-12 5581 temporary perched monitoring well showing elevation in feet amsl
-  TWN-7 5563 temporary perched nitrate monitoring well showing elevation in feet amsl
-  PIEZ-1 5592 perched piezometer showing elevation in feet amsl
-  TW4-32 5562 temporary perched monitoring well installed September, 2013 showing elevation in feet amsl
-  RUIN SPRING 5380 seep or spring showing elevation in feet amsl

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.**

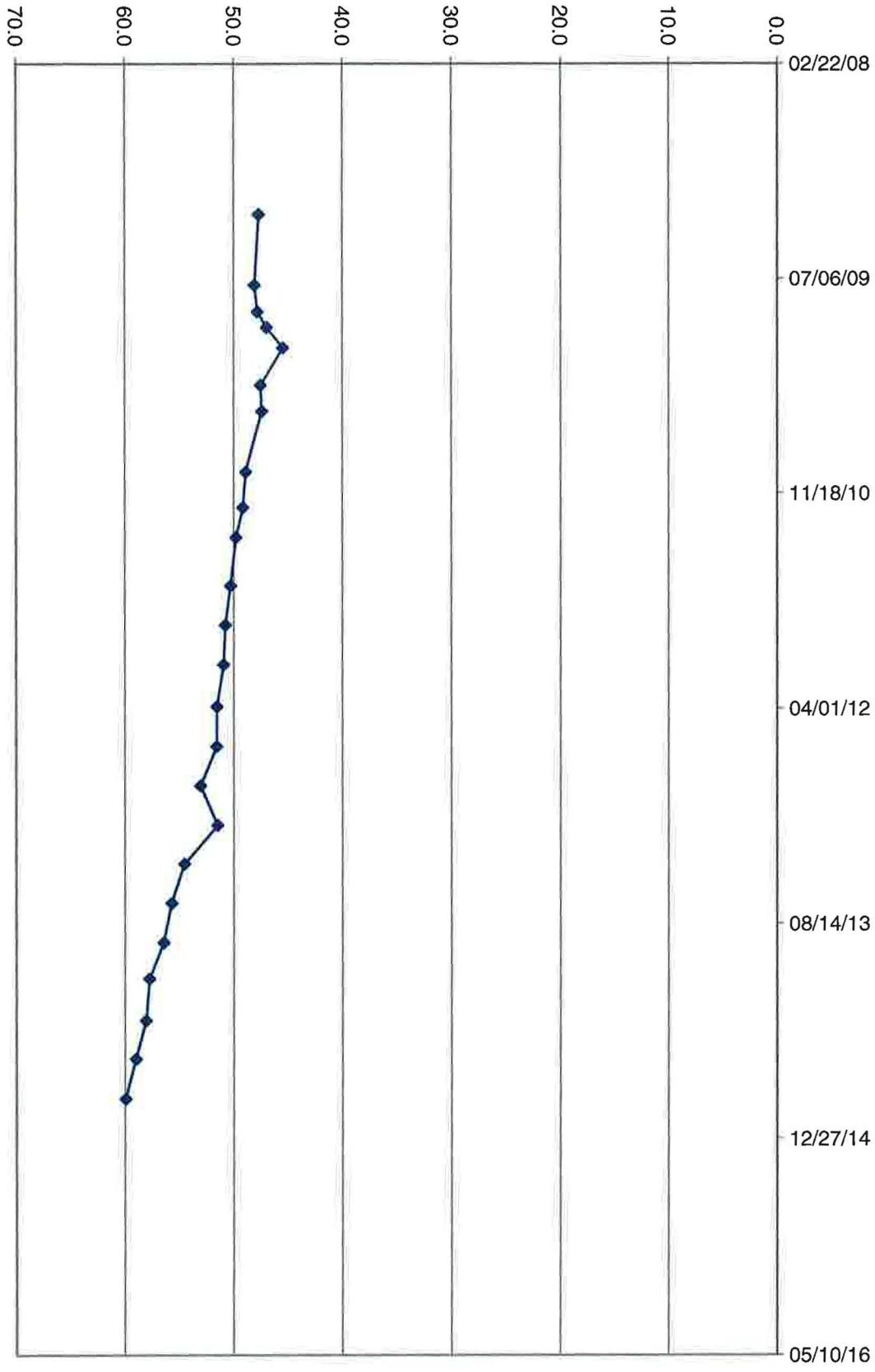
**KRIGED 2nd QUARTER, 2014 WATER LEVELS
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug14/Uwl0614.srf	D-1

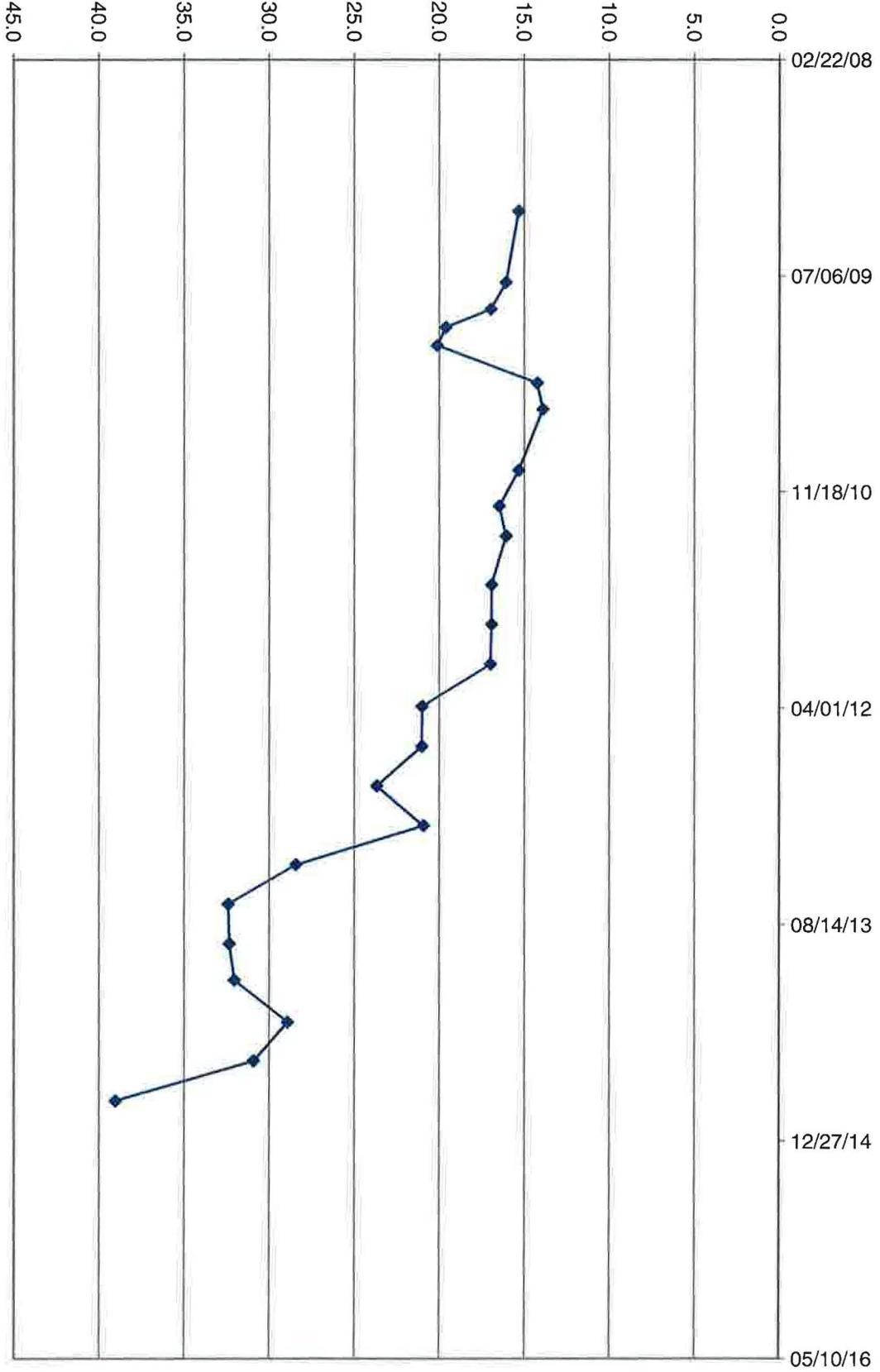
Tab E

Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

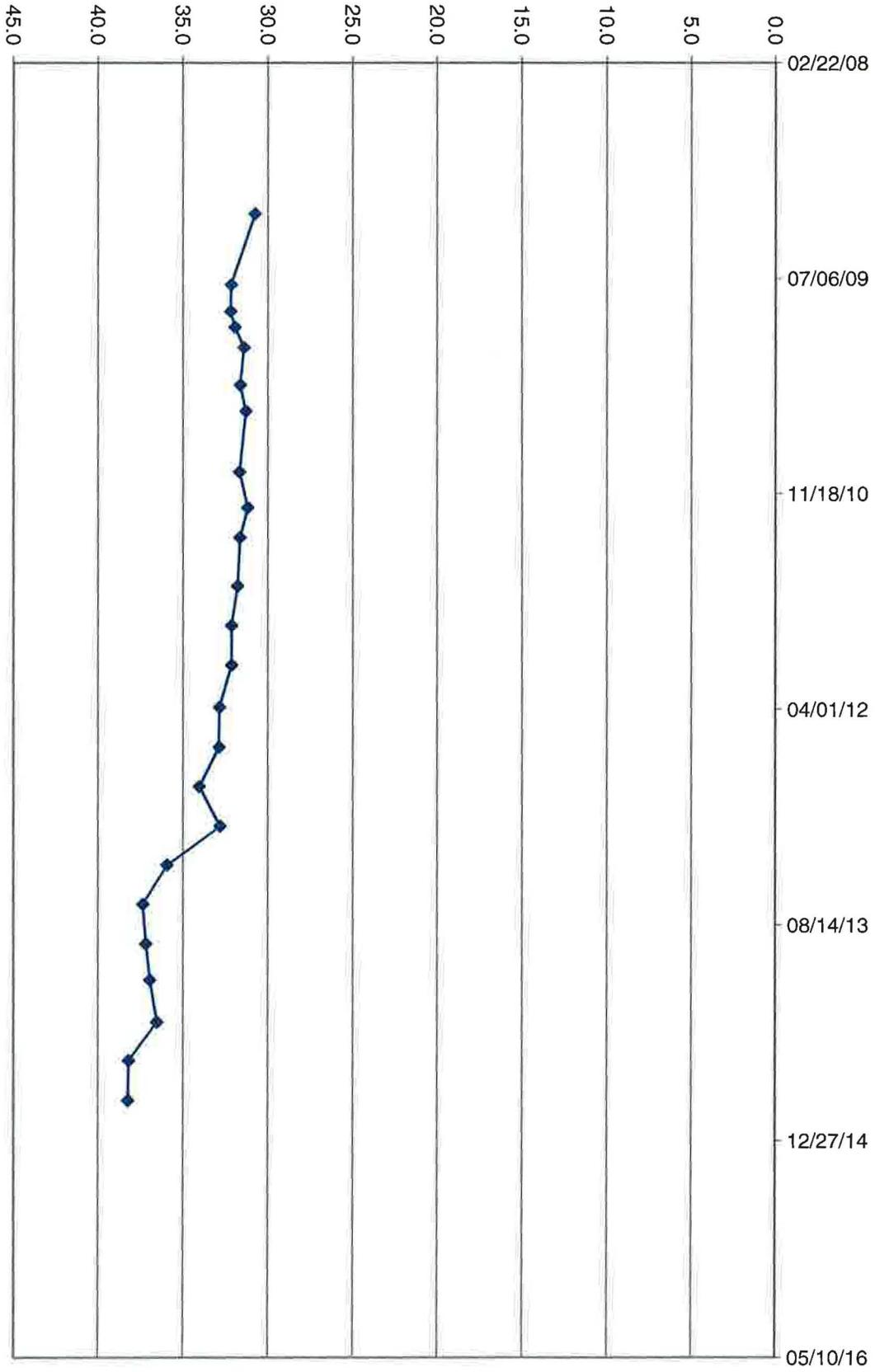
Depth Below Measuring Point (ft.)



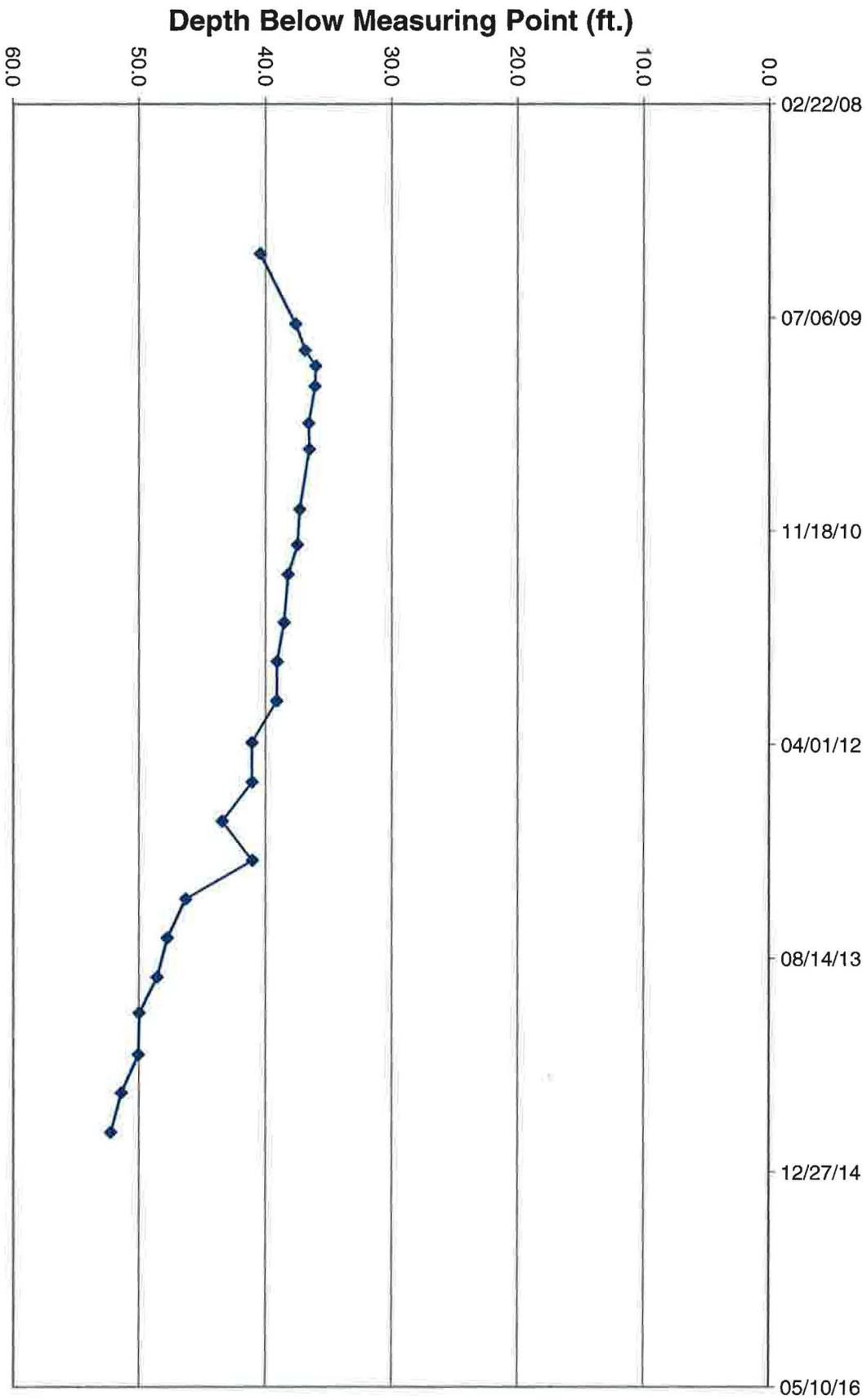
Depth Below Measuring Point (ft.)



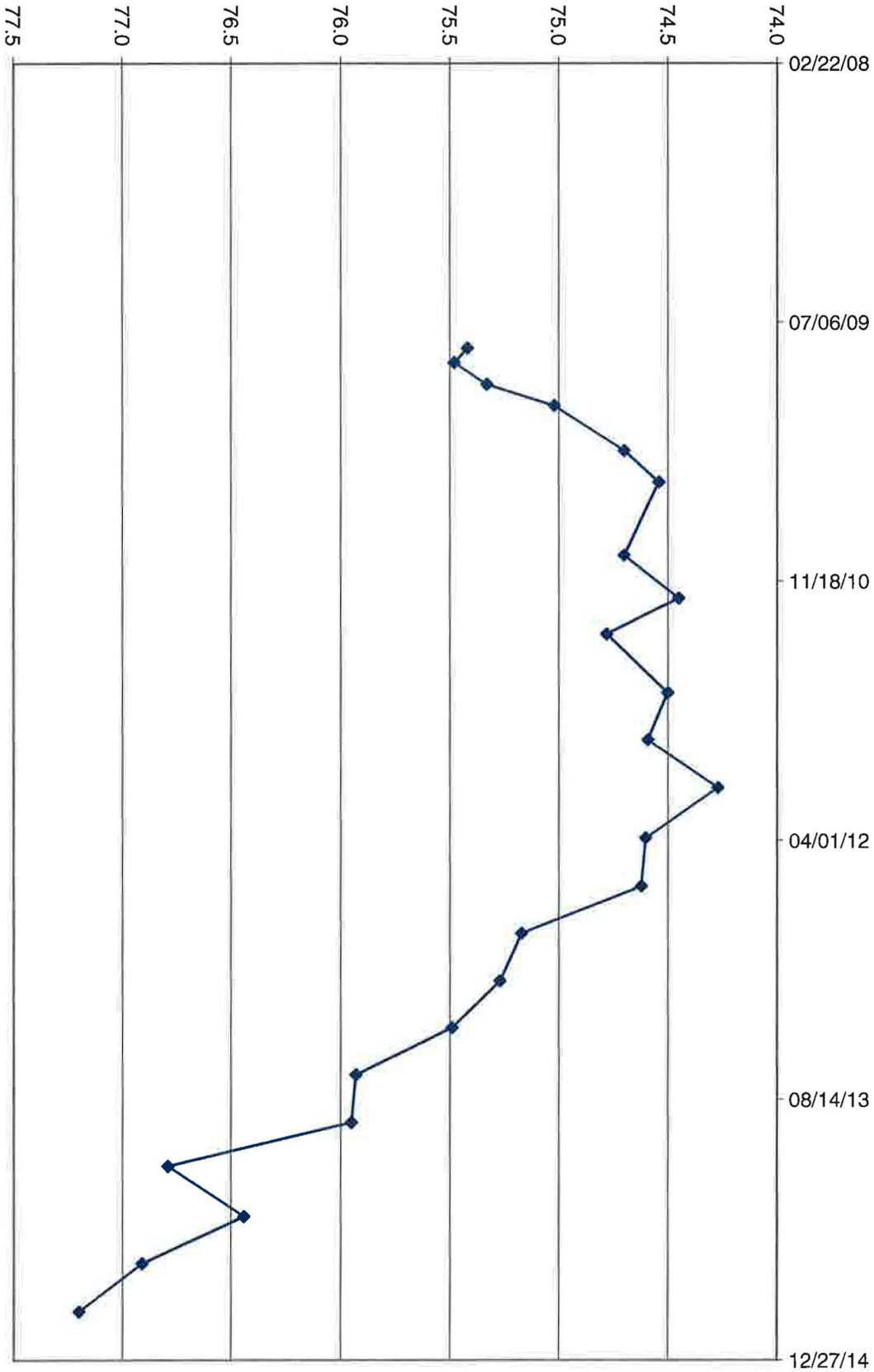
Depth Below Measuring Point (ft.)



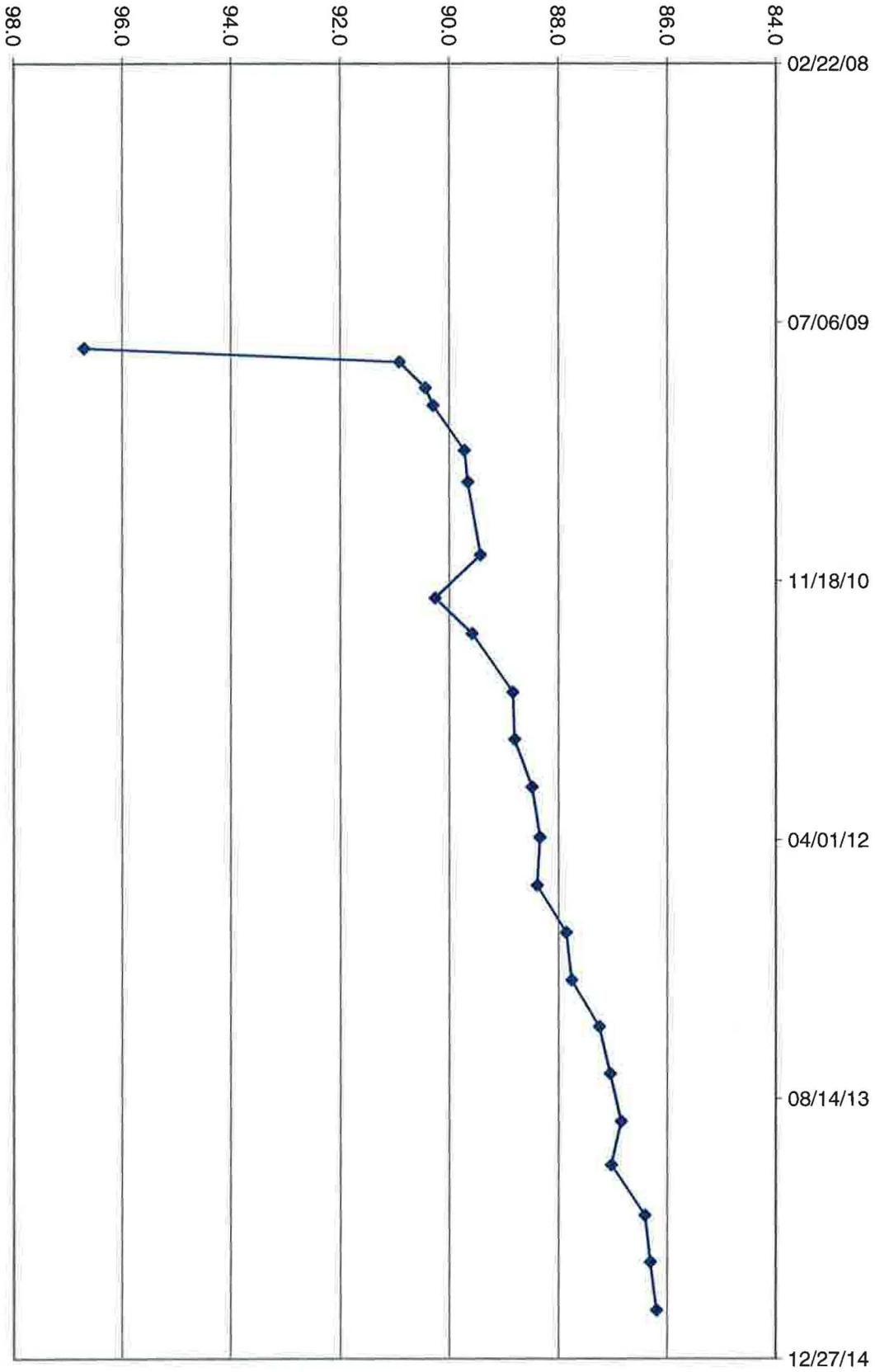
TWN-3 Water Level Over Time (ft. blmp)

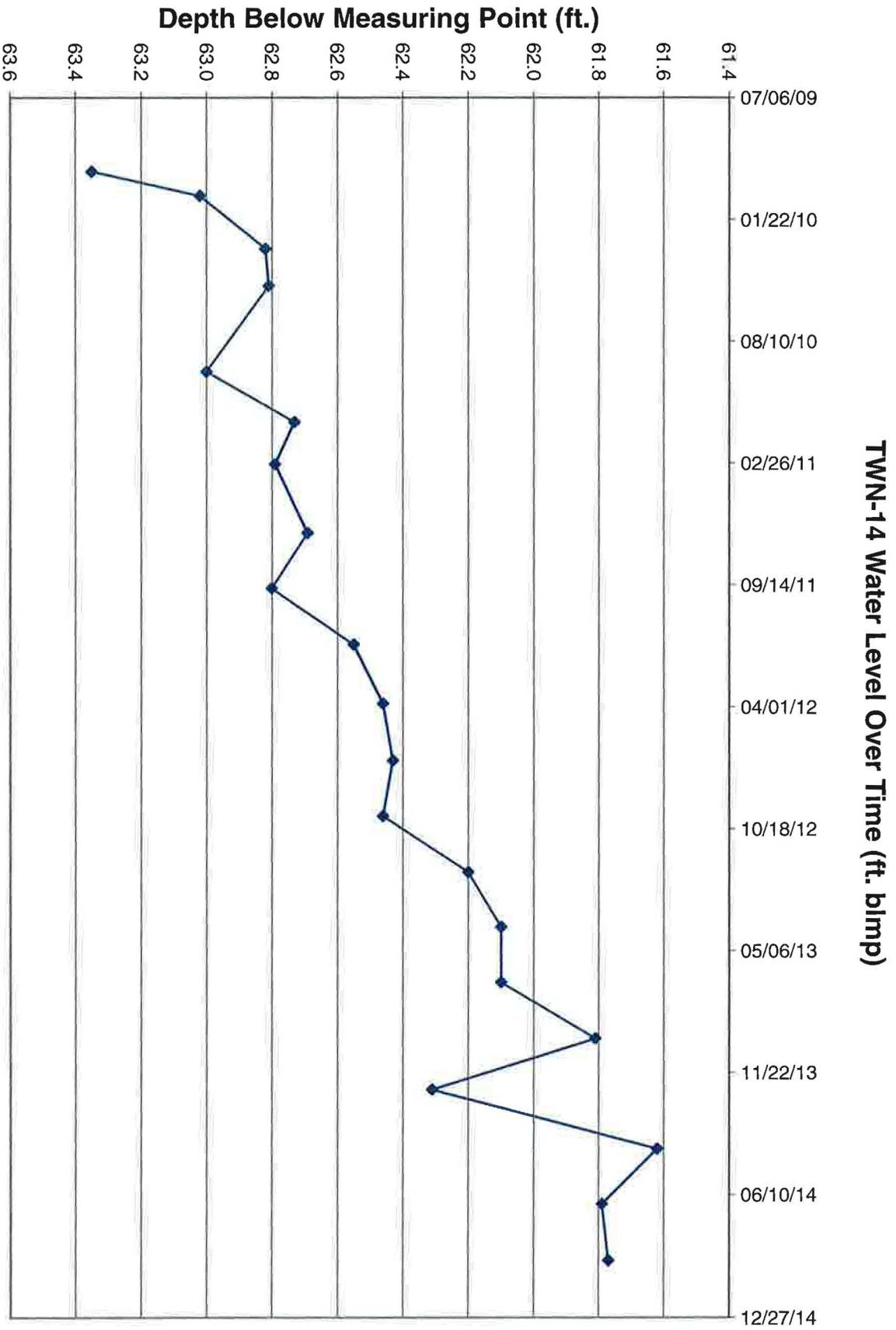


Depth Below Measuring Point (ft.)

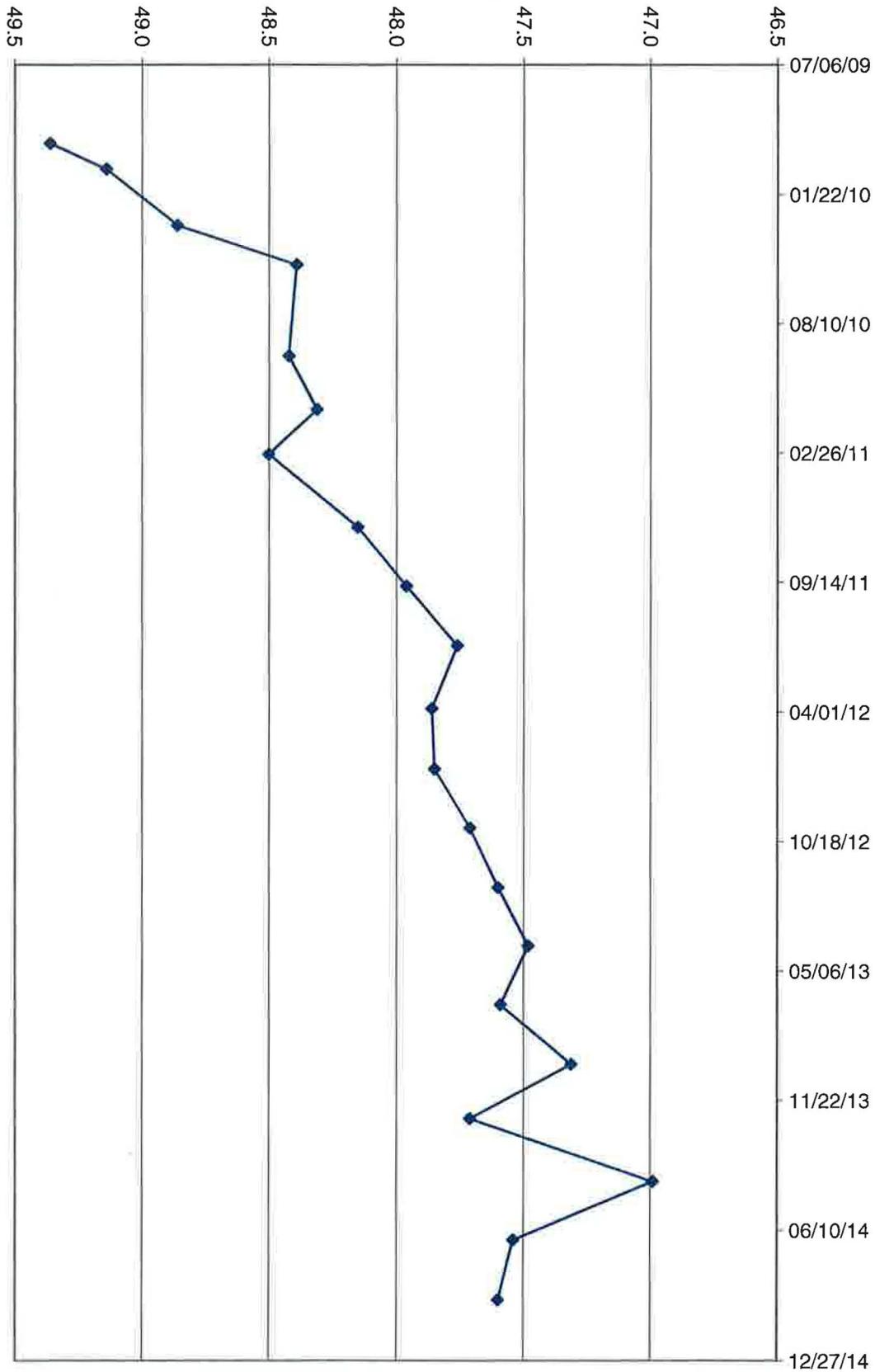


Depth Below Measuring Point (ft.)

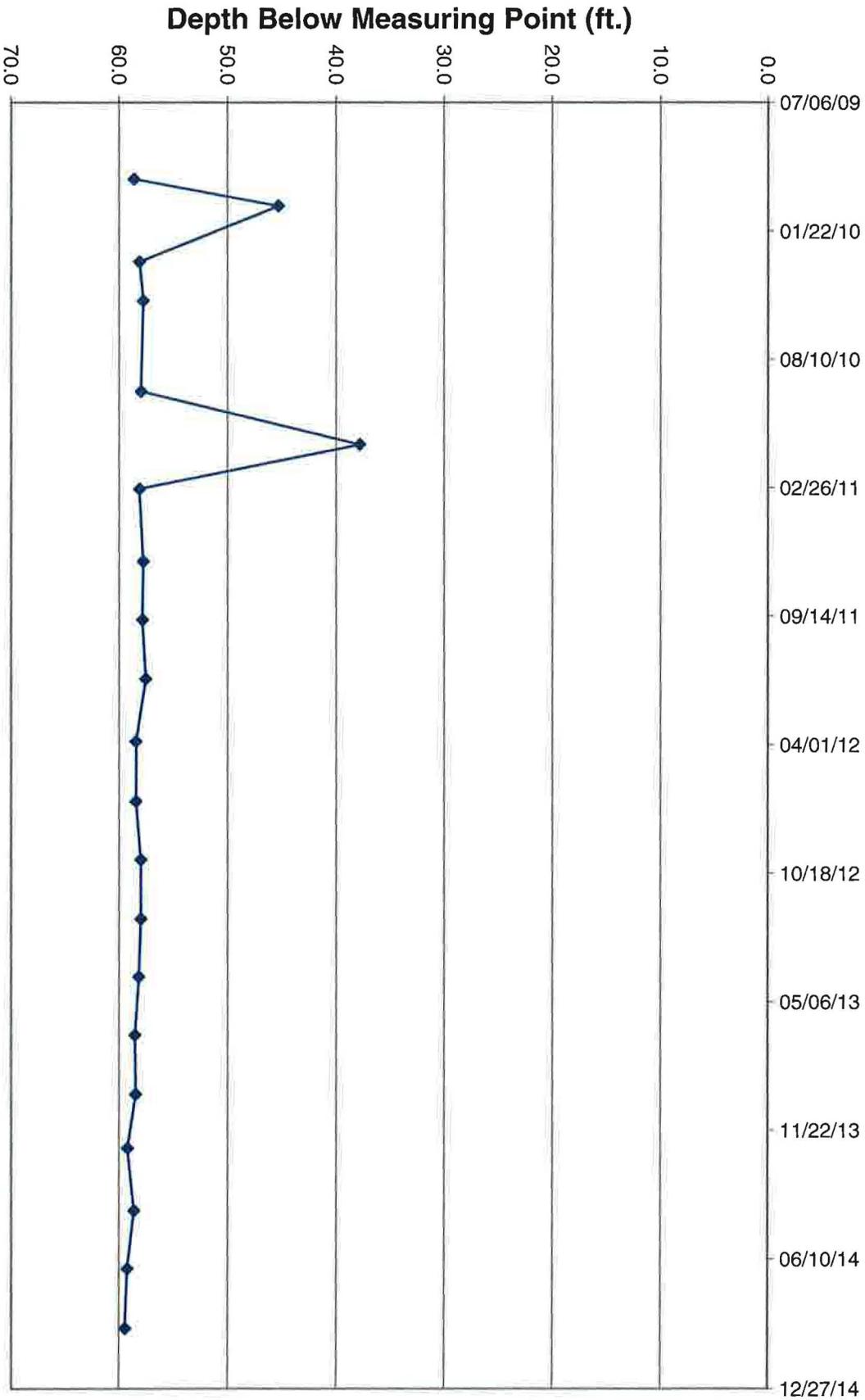




Depth Below Measuring Point (ft.)

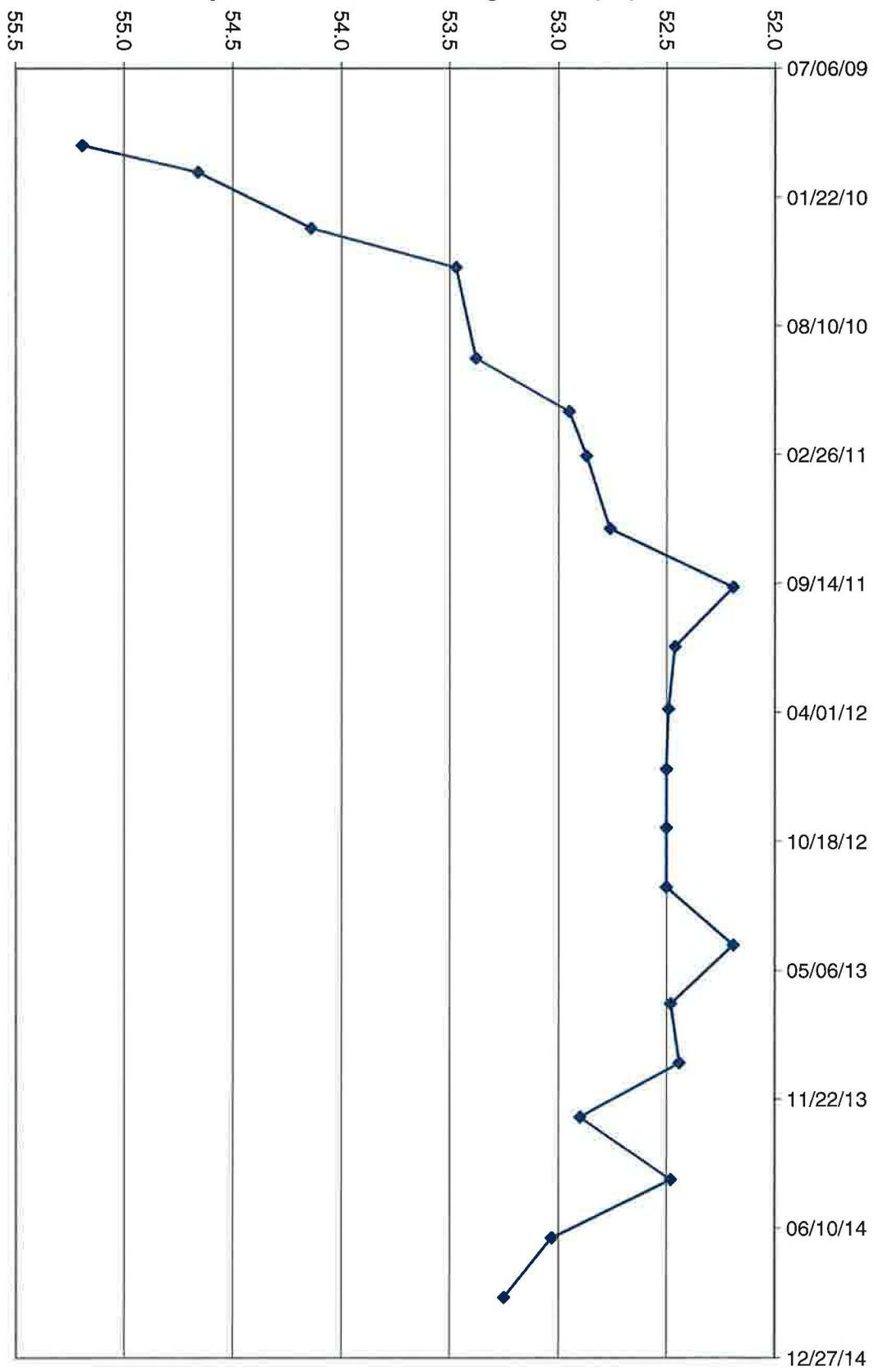


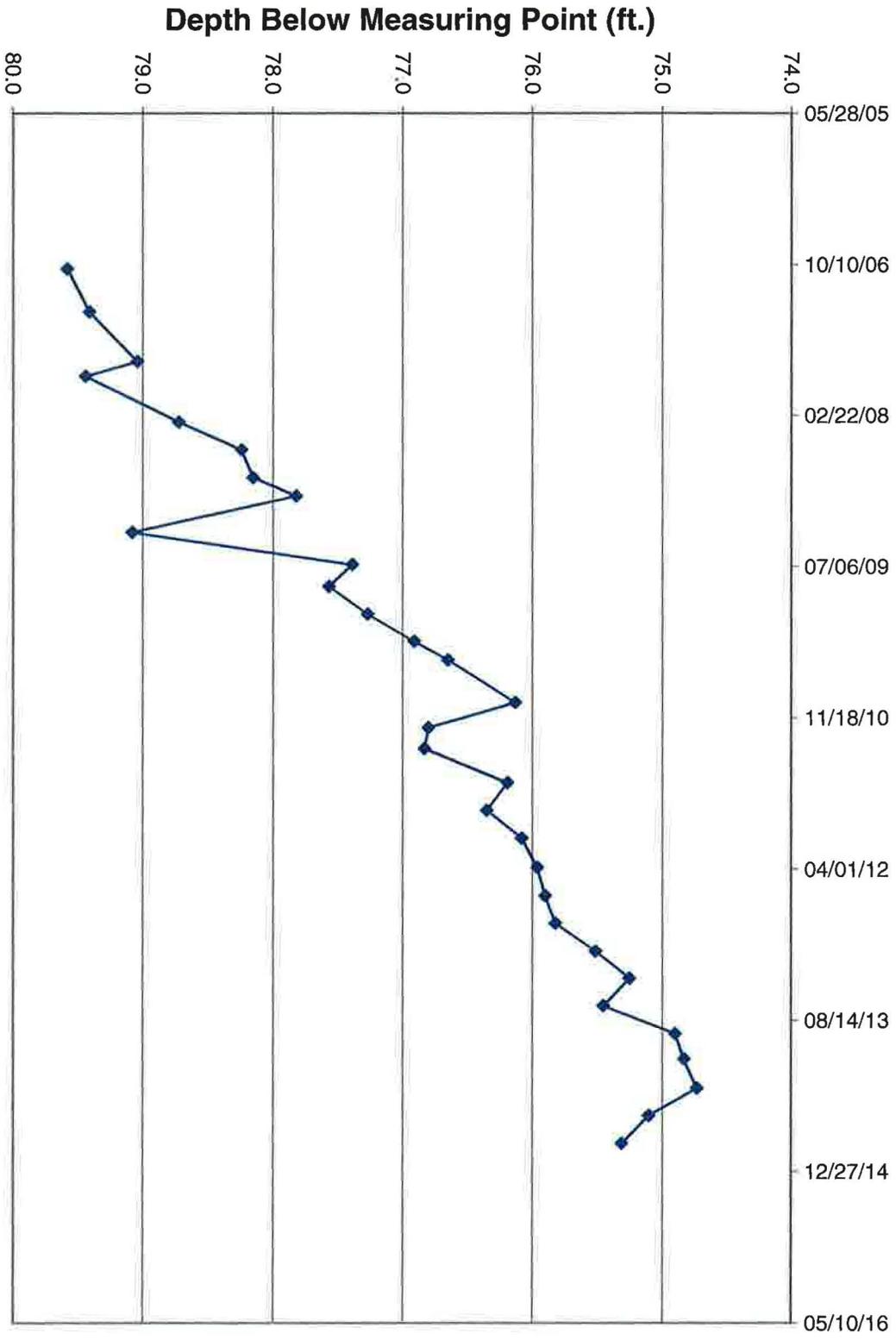
TW/N-16 Water Level Over Time (ft. blmp)



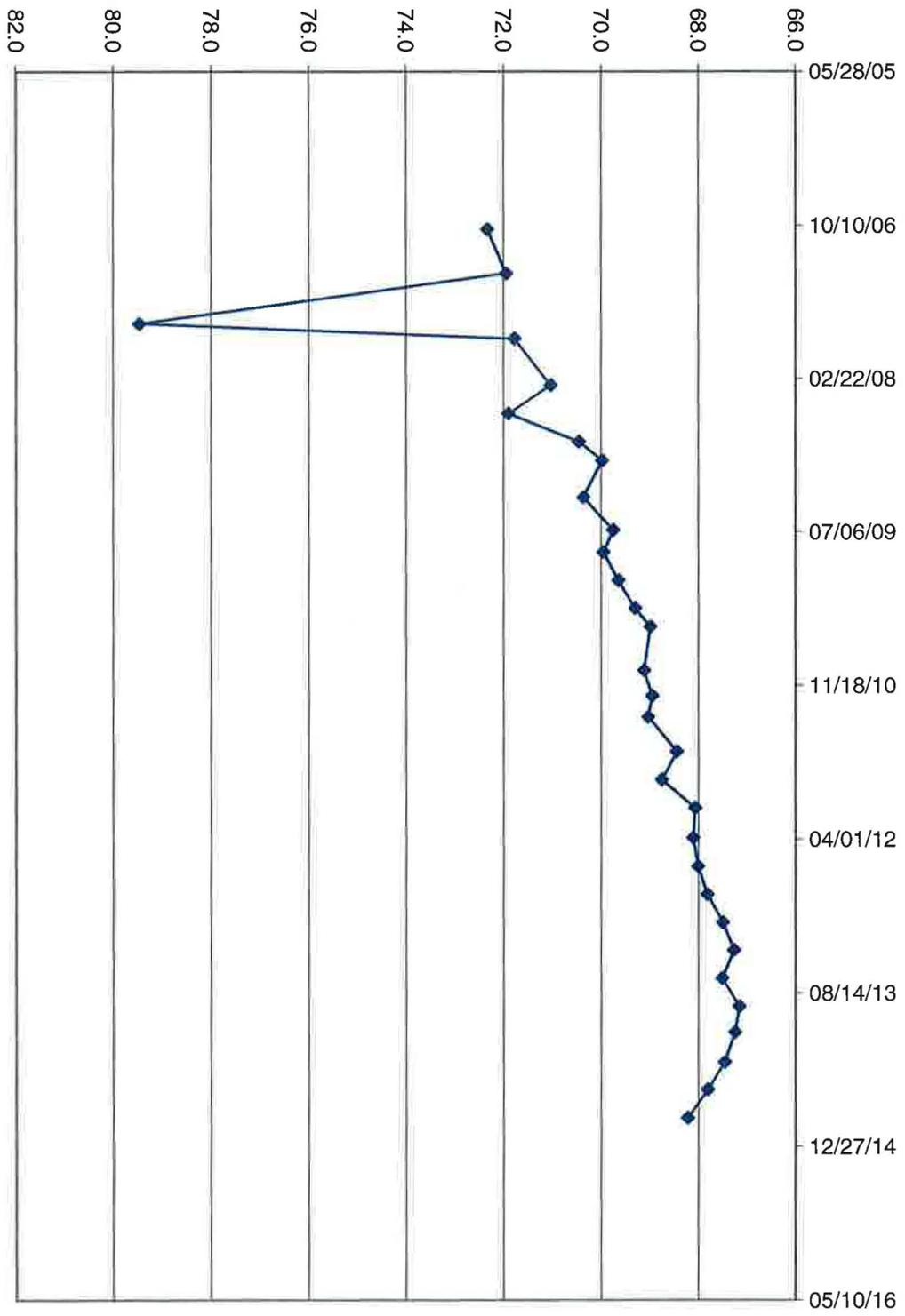
TWN-18 Water Level Over Time (ft. blimp)

Depth Below Measuring Point (ft.)





Depth Below Measuring Point (ft.)



Tab F

Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells

**Water Levels and Data over Time
White Mesa Mill - Well TWN-1**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,646.96	5,648.09	1.13				112.5
5,600.38				02/06/09	47.71	46.58	
5,599.99				07/21/09	48.10	46.97	
5,600.26				09/21/09	47.83	46.70	
5,601.10				10/28/09	46.99	45.86	
5,602.59				12/14/09	45.50	44.37	
5,600.55				03/11/10	47.54	46.41	
5,600.66				05/11/10	47.43	46.30	
5,599.18				09/29/10	48.91	47.78	
5,598.92				12/21/10	49.17	48.04	
5,598.29				02/28/11	49.80	48.67	
5,597.80				06/21/11	50.29	49.16	
5,597.32				09/20/11	50.77	49.64	
5,597.15				12/21/11	50.94	49.81	
5,596.54				03/27/12	51.55	50.42	
5,596.52				06/28/12	51.57	50.44	
5,595.03				09/27/12	53.06	51.93	
5,596.62				12/28/12	51.47	50.34	
5,593.54				03/28/13	54.55	53.42	
5,592.38				06/27/13	55.71	54.58	
5,591.65				09/27/13	56.44	55.31	
5,590.34				12/20/13	57.75	56.62	
5,590.03				03/27/14	58.06	56.93	
5,589.09				06/25/14	59.00	57.87	
5,588.15				09/25/14	59.94	58.81	

Water Levels and Data over Time
White Mesa Mill - Well TWN-2

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,625.75	5,626.69	0.94				95
5,611.37				02/06/09	15.32	14.38	
5,610.63				07/21/09	16.06	15.12	
5,609.73				09/21/09	16.96	16.02	
5,607.08				11/02/09	19.61	18.67	
5,606.57				12/14/09	20.12	19.18	
5,612.45				03/11/10	14.24	13.30	
5,612.78				05/11/10	13.91	12.97	
5,611.37				09/29/10	15.32	14.38	
5,610.24				12/21/10	16.45	15.51	
5,610.64				02/28/11	16.05	15.11	
5,609.78				06/21/11	16.91	15.97	
5609.79				09/20/11	16.90	15.96	
5609.72				12/21/11	16.97	16.03	
5,605.69				03/27/12	21.00	20.06	
5,605.67				06/28/12	21.02	20.08	
5,603.03				09/27/12	23.66	22.72	
5,605.76				12/28/12	20.93	19.99	
5,598.28				03/28/13	28.41	27.47	
5,594.32				06/27/13	32.37	31.43	
5,594.38				09/27/13	32.31	31.37	
5,594.68				12/20/13	32.01	31.07	
5,597.79				03/27/14	28.9	27.96	
5,595.80				06/25/14	30.89	29.95	
5,587.67				09/25/14	39.02	38.08	

**Water Levels and Data over Time
White Mesa Mill - Well TWN-3**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,633.64	5,634.50	0.86				110
5,603.77				02/06/09	30.73	29.87	
5,602.37				07/21/09	32.13	31.27	
5,602.34				09/21/09	32.16	31.30	
5,602.60				10/28/09	31.90	31.04	
5,603.12				12/14/09	31.38	30.52	
5,602.90				03/11/10	31.60	30.74	
5,603.23				05/11/10	31.27	30.41	
5,602.86				09/29/10	31.64	30.78	
5,603.35				12/21/10	31.15	30.29	
5,602.89				02/28/11	31.61	30.75	
5,602.75				06/21/11	31.75	30.89	
5,602.40				09/20/11	32.10	31.24	
5,602.40				12/21/11	32.10	31.24	
5,601.70				03/27/12	32.80	31.94	
5,601.67				06/28/12	32.83	31.97	
5,600.50				09/27/12	34.00	33.14	
5,601.74				12/28/12	32.76	31.90	
5,598.60				03/28/13	35.90	35.04	
5,597.18				06/27/13	37.32	36.46	
5,597.36				09/27/13	37.14	36.28	
5,597.60				12/20/13	36.90	36.04	
5,598.00				03/27/14	36.50	35.64	
5,596.34				06/25/14	38.16	37.30	
5,596.30				09/25/14	38.20	37.34	

**Water Levels and Data over Time
White Mesa Mill - Well TWN-4**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,641.04	5,641.87	0.83				136
5,601.47				02/06/09	40.40	39.57	
5,604.26				07/21/09	37.61	36.78	
5,605.02				09/21/09	36.85	36.02	
5,605.87				10/28/09	36.00	35.17	
5,605.81				12/14/09	36.06	35.23	
5,605.31				03/11/10	36.56	35.73	
5,605.36				05/11/10	36.51	35.68	
5,604.59				09/29/10	37.28	36.45	
5,604.42				12/21/10	37.45	36.62	
5,603.69				02/28/11	38.18	37.35	
5,603.36				06/21/11	38.51	37.68	
5,602.82				09/20/11	39.05	38.22	
5,602.79				12/21/11	39.08	38.25	
5,600.82				03/27/12	41.05	40.22	
5,600.84				06/28/12	41.03	40.20	
5,598.47				09/27/12	43.40	42.57	
5,600.86				12/28/12	41.01	40.18	
5,595.57				03/28/13	46.30	45.47	
5,594.12				06/27/13	47.75	46.92	
5,593.33				09/27/13	48.54	47.71	
5,591.92				12/20/13	49.95	49.12	
5,591.85				03/27/14	50.02	49.19	
5,590.49				06/25/14	51.38	50.55	
5,589.64				09/25/14	52.23	51.40	

Water Levels and Data over Time
White Mesa Mill - Well TWN-6

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,663.03	5,664.94	1.91				135
5,589.52				08/25/09	75.42	73.51	
5,589.46				09/22/09	75.48	73.57	
5,589.61				11/03/09	75.33	73.42	
5,589.92				12/14/09	75.02	73.11	
5,590.24				03/11/10	74.70	72.79	
5,590.40				05/11/10	74.54	72.63	
5,590.24				09/29/10	74.70	72.79	
5,590.49				12/21/10	74.45	72.54	
5,590.16				02/28/11	74.78	72.87	
5,590.44				06/21/11	74.50	72.59	
5,590.35				09/20/11	74.59	72.68	
5,590.67				12/21/11	74.27	72.36	
5,590.34				03/27/12	74.60	72.69	
5,590.32				06/28/12	74.62	72.71	
5,589.77				09/27/12	75.17	73.26	
5,589.67				12/28/12	75.27	73.36	
5,589.45				03/28/13	75.49	73.58	
5,589.01				06/27/13	75.93	74.02	
5,588.99				09/27/13	75.95	74.04	
5,588.15				12/20/13	76.79	74.88	
5,588.50				03/27/14	76.44	74.53	
5,588.03				06/25/14	76.91	75.00	
5,587.74				09/25/14	77.20	75.29	

Water Levels and Data over Time
White Mesa Mill - Well TWN-7

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,647.39	5,649.26	1.87				120
5,552.56				08/25/09	96.70	94.83	
5,558.34				09/21/09	90.92	89.05	
5,558.82				11/10/09	90.44	88.57	
5,558.96				12/14/09	90.30	88.43	
5,559.54				03/11/10	89.72	87.85	
5,559.60				05/11/10	89.66	87.79	
5,559.83				09/29/10	89.43	87.56	
5,559.00				12/21/10	90.26	88.39	
5,559.68				02/28/11	89.58	87.71	
5,560.43				06/21/11	88.83	86.96	
5,560.46				09/20/11	88.80	86.93	
5,560.78				12/21/11	88.48	86.61	
5,560.92				03/27/12	88.34	86.47	
5,560.87				06/28/12	88.39	86.52	
5,561.40				09/27/12	87.86	85.99	
5,561.50				12/28/12	87.76	85.89	
5,562.01				03/28/13	87.25	85.38	
5,562.21				06/27/13	87.05	85.18	
5,562.41				09/27/13	86.85	84.98	
5,562.23				12/20/13	87.03	85.16	
5,562.85				03/27/14	86.41	84.54	
5,562.95				06/25/14	86.31	84.44	
5,563.06				09/25/14	86.20	84.33	

Water Levels and Data over Time
White Mesa Mill - Well TWN-14

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,647.80	5,649.53	1.73				135
5,586.18				11/04/09	63.35	61.62	
5,586.51				12/14/09	63.02	61.29	
5,586.71				03/11/10	62.82	61.09	
5,586.72				05/11/10	62.81	61.08	
5,586.53				09/29/10	63.00	61.27	
5,586.80				12/21/10	62.73	61.00	
5,586.74				02/28/11	62.79	61.06	
5,586.84				06/21/11	62.69	60.96	
5,586.73				09/20/11	62.80	61.07	
5,586.98				12/21/11	62.55	60.82	
5,587.07				03/27/12	62.46	60.73	
5,587.10				06/28/12	62.43	60.70	
5,587.07				09/27/12	62.46	60.73	
5,587.33				12/28/12	62.20	60.47	
5,587.43				03/28/13	62.10	60.37	
5,587.43				06/27/13	62.10	60.37	
5,587.72				09/27/13	61.81	60.08	
5,587.22				12/20/13	62.31	60.58	
5,587.91				03/27/14	61.62	59.89	
5,587.74				06/25/14	61.79	60.06	
5,587.76				09/25/14	61.77	60.04	

**Water Levels and Data over Time
White Mesa Mill - Well TWN-16**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,651.07	5,652.70	1.63				100
5,603.34				11/04/09	49.36	47.73	
5,603.56				12/14/09	49.14	47.51	
5,603.84				03/11/10	48.86	47.23	
5,604.31				05/11/10	48.39	46.76	
5,604.28				09/29/10	48.42	46.79	
5,604.39				12/21/10	48.31	46.68	
5,604.20				02/28/11	48.50	46.87	
5,604.55				06/21/11	48.15	46.52	
5,604.74				09/20/11	47.96	46.33	
5,604.94				12/21/11	47.76	46.13	
5,604.84				03/27/12	47.86	46.23	
5,604.85				06/28/12	47.85	46.22	
5,604.99				09/27/12	47.71	46.08	
5,605.10				12/28/12	47.60	45.97	
5,605.22				03/28/13	47.48	45.85	
5,605.11				06/27/13	47.59	45.96	
5,605.39				09/27/13	47.31	45.68	
5,604.99				12/20/13	47.71	46.08	
5,605.71				03/27/14	46.99	45.36	
5,605.16				06/25/14	47.54	45.91	
5,605.10				09/25/14	47.60	45.97	

**Water Levels and Data over Time
White Mesa Mill - Well TWN -18**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,643.95	5,645.45	1.50				100
5,586.85				11/02/09	58.60	57.10	
5,600.14				12/14/09	45.31	43.81	
5,587.36				03/11/10	58.09	56.59	
5,587.71				05/11/10	57.74	56.24	
5,587.50				09/29/10	57.95	56.45	
5,607.66				12/21/10	37.79	36.29	
5,587.35				02/28/11	58.10	56.60	
5,587.71				06/21/11	57.74	56.24	
5,587.65				09/20/11	57.80	56.30	
5,587.95				12/21/11	57.50	56.00	
5,587.05				03/27/12	58.40	56.90	
5,587.05				06/28/12	58.40	56.90	
5,587.50				09/27/12	57.95	56.45	
5,587.50				12/28/12	57.95	56.45	
5,587.32				03/28/13	58.13	56.63	
5,586.95				06/27/13	58.50	57.00	
5,587.02				09/27/13	58.43	56.93	
5,586.26				12/20/13	59.19	57.69	
5,586.87				03/27/14	58.58	57.08	
5,586.23				06/25/14	59.22	57.72	
5,586.02				09/25/14	59.43	57.93	

**Water Levels and Data over Time
White Mesa Mill - Well TWN-19**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,659.59	5,661.36	1.77				110
5,606.17				11/02/09	55.19	53.42	
5,606.70				12/14/09	54.66	52.89	
5,607.22				03/11/10	54.14	52.37	
5,607.89				05/11/10	53.47	51.70	
5,607.98				09/29/10	53.38	51.61	
5,608.41				12/21/10	52.95	51.18	
5,608.49				02/28/11	52.87	51.10	
5,608.60				06/21/11	52.76	50.99	
5,609.17				09/20/11	52.19	50.42	
5,608.90				12/21/11	52.46	50.69	
5,608.87				03/27/12	52.49	50.72	
5,608.86				06/28/12	52.50	50.73	
5,608.86				09/27/12	52.50	50.73	
5,608.86				12/28/12	52.50	50.73	
5,609.17				03/28/13	52.19	50.42	
5,608.88				06/27/13	52.48	50.71	
5,608.92				09/27/13	52.44	50.67	
5,608.46				12/20/13	52.90	51.13	
5,608.88				03/27/14	52.48	50.71	
5,608.33				06/25/14	53.03	51.26	
5,608.11				09/25/14	53.25	51.48	

**Water Levels and Data over Time
White Mesa Mill - Well MW-30**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,613.34	5,614.50	1.16				110
5,534.92				10/24/2006	79.58	78.42	
5,535.09				3/16/2007	79.41	78.25	
5,535.46				8/27/2007	79.04	77.88	
5,535.06				10/15/2007	79.44	78.28	
5,535.78				3/15/2008	78.72	77.56	
5,536.26				6/15/2008	78.24	77.08	
5,536.35				9/15/2008	78.15	76.99	
5,536.68				11/15/2008	77.82	76.66	
5,535.42				3/15/2009	79.08	77.92	
5,537.11				6/30/2009	77.39	76.23	
5,536.93				9/10/2009	77.57	76.41	
5,537.23				12/11/2009	77.27	76.11	
5,537.59				3/11/2010	76.91	75.75	
5,537.85				5/11/2010	76.65	75.49	
5,538.37				9/29/2010	76.13	74.97	
5537.70				12/21/2010	76.8	75.64	
5537.67				2/28/2011	76.83	75.67	
5538.31				6/21/2011	76.19	75.03	
5538.15				9/20/2011	76.35	75.19	
5538.42				12/21/2011	76.08	74.92	
5538.54				3/27/2012	75.96	74.8	
5538.60				6/28/2012	75.9	74.74	
5538.68				9/27/2012	75.82	74.66	
5538.99				12/28/2012	75.51	74.35	
5539.25				3/28/2013	75.25	74.09	
5539.05				6/27/2013	75.45	74.29	
5539.60				9/27/2013	74.90	73.74	
5539.67				12/20/2013	74.83	73.67	
5539.77				3/27/2014	74.73	73.57	
5539.40				6/25/2014	75.10	73.94	
5539.19				9/25/2014	75.31	74.15	

Water Levels and Data over Time
White Mesa Mill - Well MW-31

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,615.26	5,616.40	1.14				130
5,544.07				10/24/2006	72.33	71.19	
5,544.45				3/16/2007	71.95	70.81	
5,536.94				8/27/2007	79.46	78.32	
5,544.62				10/15/2007	71.78	70.64	
5,545.37				3/15/2008	71.03	69.89	
5,544.50				6/15/2008	71.90	70.76	
5,545.94				9/15/2008	70.46	69.32	
5,546.42				11/15/2008	69.98	68.84	
5,546.03				3/15/2009	70.37	69.23	
5,546.65				6/30/2009	69.75	68.61	
5,546.45				9/10/2009	69.95	68.81	
5,546.75				12/11/2009	69.65	68.51	
5,547.09				3/11/2010	69.31	68.17	
5,547.41				5/11/2010	68.99	67.85	
5,547.28				9/29/2010	69.12	67.98	
5547.45				12/21/2010	68.95	67.81	
5547.37				2/28/2011	69.03	67.89	
5547.96				6/21/2011	68.44	67.3	
5547.65				9/20/2011	68.75	67.61	
5548.34				12/21/2011	68.06	66.92	
5548.30				3/27/2012	68.10	66.96	
5548.40				6/28/2012	68.00	66.86	
5548.59				9/27/2012	67.81	66.67	
5548.91				12/28/2012	67.49	66.35	
5549.14				3/28/2013	67.26	66.12	
5548.90				6/27/2013	67.50	66.36	
5549.25				9/27/2013	67.15	66.01	
5549.16				12/20/2013	67.24	66.10	
5548.95				3/27/2014	67.45	66.31	
5548.60				6/25/2014	67.80	66.66	
5548.19				9/25/2014	68.21	67.07	

Tab G

Laboratory Analytical Reports



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-09

Name: Energy Fuels	Sample Date: 8/6/2014 9:28 AM
Sample Site: Piez-01_08062014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	55	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	5.1	1.0	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-10

Name: Energy Fuels

Sample Date: 8/6/2014 9:00 AM

Sample Site: Piez-02_08062014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	12	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	0.8	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-11

Name: Energy Fuels	Sample Date: 8/6/2014 9:15 AM
Sample Site: Piez-03_08062014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	26	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	1.7	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-03

Name: Energy Fuels

Sample Date: 8/5/2014 10:09 AM

Sample Site: TWN-01_08052014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	28	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	1.7	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-06

Name: Energy Fuels

Sample Date: 8/6/2014 12:50 PM

Sample Site: TWN-02_08062014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	80	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	42.0	10.0	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-05

Name: Energy Fuels	Sample Date: 8/6/2014 8:38 AM
Sample Site: TWN-03_08062014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	174	2	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	19.5	5.0	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-02

Name: Energy Fuels

Sample Date: 8/5/2014 9:27 AM

Sample Site: TWN-04_08052014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	28	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	2.0	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-01

Name: Energy Fuels	Sample Date: 8/6/2014 8:28 AM
Sample Site: TWN-07_08062014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	6	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	0.9	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-12

Name: Energy Fuels

Sample Date: 8/5/2014 8:33 AM

Sample Site: TWN-07R_08052014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	ND	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	ND	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-04

Name: Energy Fuels	Sample Date: 8/5/2014 12:52 PM
Sample Site: TWN-18_08052014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	70	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	1.8	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408496-25

Name: Energy Fuels	Sample Date: 8/11/2014 12:56 PM
Sample Site: TW4-22_08112014	Receipt Date: 8/15/2014 9:35 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Chloroform
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	540	10	mg/L	EPA 300.0	08/15/2014 17:00	8/15/2014 17:00	
Nitrate + Nitrite, Total	41.5	5.0	mg/L	EPA 353.2	08/28/2014 10:18	8/28/2014 10:18	
Volatile Organic Compounds							
Carbon Tetrachloride	1.9	1.0	ug/L	EPA 8260B	08/24/2014 14:43	8/24/2014 14:43	
Chloroform	12400	1.0	ug/L	EPA 8260B	08/24/2014 14:43	8/24/2014 14:43	
Chloromethane	40.0	1.0	ug/L	EPA 8260B	08/24/2014 14:43	8/24/2014 14:43	
Methylene Chloride	ND	1.0	ug/L	EPA 8260B	08/24/2014 14:43	8/24/2014 14:43	



Certificate of Analysis

Lab Sample No.: 1408496-20

Name: Energy Fuels	Sample Date: 8/11/2014 12:47 PM
Sample Site: TW4-24_08112014	Receipt Date: 8/15/2014 9:35 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Chloroform
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	1150	20	mg/L	EPA 300.0	08/15/2014 17:00	8/15/2014 17:00	
Nitrate + Nitrite, Total	31.5	5.0	mg/L	EPA 353.2	08/28/2014 10:18	8/28/2014 10:18	
Volatile Organic Compounds							
Carbon Tetrachloride	ND	1.0	ug/L	EPA 8260B	08/22/2014 16:30	8/22/2014 16:30	
Chloroform	76.3	1.0	ug/L	EPA 8260B	08/22/2014 16:30	8/22/2014 16:30	
Chloromethane	ND	1.0	ug/L	EPA 8260B	08/22/2014 16:30	8/22/2014 16:30	
Methylene Chloride	ND	1.0	ug/L	EPA 8260B	08/22/2014 16:30	8/22/2014 16:30	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408496-14

Name: Energy Fuels

Sample Date: 8/11/2014 12:28 PM

Sample Site: TW4-25_08112014

Receipt Date: 8/15/2014 9:35 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Chloroform

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	67	1	mg/L	EPA 300.0	08/15/2014 13:00	8/15/2014 13:00	
Nitrate + Nitrite, Total	1.6	0.1	mg/L	EPA 353.2	08/28/2014 10:18	8/28/2014 10:18	
Volatile Organic Compounds							
Carbon Tetrachloride	ND	1.0	ug/L	EPA 8260B	08/22/2014 14:26	8/22/2014 14:26	
Chloroform	ND	1.0	ug/L	EPA 8260B	08/22/2014 14:26	8/22/2014 14:26	
Chloromethane	ND	1.0	ug/L	EPA 8260B	08/22/2014 14:26	8/22/2014 14:26	
Methylene Chloride	ND	1.0	ug/L	EPA 8260B	08/22/2014 14:26	8/22/2014 14:26	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1409251-14

Name: Energy Fuels
Sample Site: TW4-60_08272014
Comments: White Mesa Mill
Sample Matrix: Water
PO Number:

Sample Date: 8/27/2014 6:45 AM
Receipt Date: 8/28/2014 9:50 AM
Sampler: Tanner Holliday
Project: White Mesa Mill - Groundwater
Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	ND	1	mg/L	EPA 300.0	08/29/2014 06:00	8/29/2014 6:00	
Nitrate + Nitrite, Total	ND	0.1	mg/L	EPA 353.2	09/12/2014 14:02	9/12/2014 14:02	
Volatile Organic Compounds							
Carbon Tetrachloride	ND	1.0	ug/L	EPA 8260B	09/05/2014 01:04	9/5/2014 1:04	
Chloroform	ND	1.0	ug/L	EPA 8260B	09/05/2014 01:04	9/5/2014 1:04	
Chloromethane	ND	1.0	ug/L	EPA 8260B	09/05/2014 01:04	9/5/2014 1:04	
Methylene Chloride	ND	1.0	ug/L	EPA 8260B	09/05/2014 01:04	9/5/2014 1:04	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-08

Name: Energy Fuels

Sample Date: 8/6/2014 2:00 PM

Sample Site: TWN-60_08062014

Receipt Date: 8/8/2014 9:20 AM

Comments: White Mesa Mill

Sampler: Tanner Holliday

Sample Matrix: Water

Project: White Mesa Mill - Nitrate Program

PO Number:

Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	ND	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	0.1	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Lab Sample No.: 1408071-07

Name: Energy Fuels	Sample Date: 8/5/2014 10:09 AM
Sample Site: TWN-65_08052014	Receipt Date: 8/8/2014 9:20 AM
Comments: White Mesa Mill	Sampler: Tanner Holliday
Sample Matrix: Water	Project: White Mesa Mill - Nitrate Program
PO Number:	Project Number: White Mesa Mill - Groundwater

Parameter	Sample Result	Minimum Reporting Limit	Units	Analytical Method	Preparation Date/Time	Analysis Date/Time	Flag
Inorganic							
Chloride	28	1	mg/L	EPA 300.0	08/08/2014 16:30	8/8/2014 16:30	
Nitrate + Nitrite, Total	1.4	0.1	mg/L	EPA 353.2	08/26/2014 07:40	8/26/2014 7:40	



9/15/2014

Work Order: 1408071

Energy Fuels

Attn: Garrin Palmer

6425 South Highway 191

Blanding, UT 84511

Client Service Contact: 801.262.7299

The analyses presented on this report were performed in accordance with the National Environmental Laboratory Accreditation Program (NELAP) unless noted in the comments, flags or case narrative. If the report is to be used for regulatory compliance, it should be presented in its entirety, and not be altered.



Approved By:


Dave Gayer, Laboratory Director



Case Narrative for Sample Delivery Group - 1408071

Energy Fuels

<u>SampleID</u>	<u>SampleName</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
1408071-01	TWN-07_08062014	Water	08/06/2014	08/08/2014
1408071-02	TWN-04_08052014	Water	08/05/2014	08/08/2014
1408071-03	TWN-01_08052014	Water	08/05/2014	08/08/2014
1408071-04	TWN-18_08052014	Water	08/05/2014	08/08/2014
1408071-05	TWN-03_08062014	Water	08/06/2014	08/08/2014
1408071-06	TWN-02_08062014	Water	08/06/2014	08/08/2014
1408071-07	TWN-65_08052014	Water	08/05/2014	08/08/2014
1408071-08	TWN-60_08062014	Water	08/06/2014	08/08/2014
1408071-09	Piez-01_08062014	Water	08/06/2014	08/08/2014
1408071-10	Piez-02_08062014	Water	08/06/2014	08/08/2014
1408071-11	Piez-03_08062014	Water	08/06/2014	08/08/2014
1408071-12	TWN-07R_08052014	Water	08/05/2014	08/08/2014

Method Blanks

All method blanks were below the Minimum Reporting Limit (MRL).

Laboratory Control Samples

All Laboratory Control Sample (LCS) recoveries were within laboratory control limits.

Holding Times

All preparations and analyses were performed within holding times

Matrix Spike/Matrix Spike Duplicate

All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries were within control except for those mentioned in the QC report.

Surrogates

All surrogates were within laboratory control limits.

Analytical Summary - 1408071

Lab ID: 1408071-01
Client ID: TWN-07_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-02
Client ID: TWN-04_08052014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-03
Client ID: TWN-01_08052014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-04
Client ID: TWN-18_08052014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-05
Client ID: TWN-03_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-06
Client ID: TWN-02_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-07
Client ID: TWN-65_08052014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-08
Client ID: TWN-60_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-09
Client ID: Piez-01_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-10
Client ID: Piez-02_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-11
Client ID: Piez-03_08062014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

Lab ID: 1408071-12
Client ID: TWN-07R_08052014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

QC Summary for Sample Delivery Group - 1408071

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF	
Calibration Blank - Method EPA 300.0																			
4H09001-CCB1	Chloride						0					4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCB2	Chloride						0					4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCB3	Chloride						0					4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCB4	Chloride						0					4H09001	08/08/14	08/08/14	08/08/14				1
Calibration Check - Method EPA 300.0																			
4H09001-CCV1	Chloride	105		90	110		21			20.0		4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCV2	Chloride	100		90	110		20			20.0		4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCV3	Chloride	100		90	110		20			20.0		4H09001	08/08/14	08/08/14	08/08/14				1
4H09001-CCV4	Chloride	105		90	110		21			20.0		4H09001	08/08/14	08/08/14	08/08/14				1
LCSW - Method EPA 300.0																			
B408251-BS1	Chloride	98.0		90	110		49			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-BS2	Chloride	100		90	110		50			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-BS3	Chloride	104		90	110		52			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
LCSW Dup - Method EPA 300.0																			
B408251-BSD1	Chloride	104	5.94	90	110	20	52			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-BSD2	Chloride	102	1.98	90	110	20	51			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-BSD3	Chloride	102	1.94	90	110	20	51			50.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
Matrix Spike - Method EPA 300.0																			
B408251-MS1	Chloride	90.0		80	120		15	1408071-01	6	10.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-MS2	Chloride	94.0		80	120		100	1408071-01	6	100		B408251	08/08/14	08/08/14	08/08/14	0.7	10		10
B408251-MS3	Chloride	100		80	120		10	1408071-12	0	10.0		B408251	08/08/14	08/08/14	08/08/14	0.07	1		1
B408251-MS4	Chloride	100		80	120		100	1408071-12	0	100		B408251	08/08/14	08/08/14	08/08/14	0.7	10		10
Matrix Spike Dup - Method EPA 300.0																			

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
B408251-MSD1	Chloride	100	6.45	80	120	20	16	1408071-01	6	10.0		B408251	08/08/14	08/08/14	0.07	1	1	
B408251-MSD2	Chloride	94.0	0.00	80	120	20	100	1408071-01	6	100		B408251	08/08/14	08/08/14	0.7	10	10	
B408251-MSD3	Chloride	100	0.00	80	120	20	10	1408071-12	0	10.0		B408251	08/08/14	08/08/14	0.07	1	1	
B408251-MSD4	Chloride	100	0.00	80	120	20	100	1408071-12	0	100		B408251	08/08/14	08/08/14	0.7	10	10	

PBW - Method EPA 300.0

B408251-BLK1	Chloride						0					B408251	08/08/14	08/08/14	0.07	1	1
B408251-BLK2	Chloride						0					B408251	08/08/14	08/08/14	0.07	1	1
B408251-BLK3	Chloride						0					B408251	08/08/14	08/08/14	0.07	1	1
B408251-BLK4	Chloride						0					B408251	08/08/14	08/08/14	0.07	1	1

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF	
Blank - Method EPA 353.2																			
B408777-BLK1	Nitrate + Nitrite, Total						0.06					B408777	08/26/14	08/26/14	0.03	0.1	1		
Calibration Blank - Method EPA 353.2																			
4H26014-CCB1	Nitrate + Nitrite, Total						0.05					4H26014	08/26/14	08/26/14				1	
4H26014-CCB2	Nitrate + Nitrite, Total						0.04					4H26014	08/26/14	08/26/14				1	
4H26014-CCB3	Nitrate + Nitrite, Total						0.04					4H26014	08/26/14	08/26/14				1	
4H26014-CCB4	Nitrate + Nitrite, Total						0.06					4H26014	08/26/14	08/26/14				1	
4H26014-CCB5	Nitrate + Nitrite, Total						0.06					4H26014	08/26/14	08/26/14				1	
4H26014-CCB6	Nitrate + Nitrite, Total						0.04					4H26014	08/26/14	08/26/14				1	
Calibration Check - Method EPA 353.2																			
4H26014-CCV1	Nitrate + Nitrite, Total	100		90	110		1.0			1.00		4H26014	08/26/14	08/26/14				1	
4H26014-CCV2	Nitrate + Nitrite, Total	102		90	110		1.0			1.00		4H26014	08/26/14	08/26/14				1	
4H26014-CCV3	Nitrate + Nitrite, Total	103		90	110		1.0			1.00		4H26014	08/26/14	08/26/14				1	
4H26014-CCV4	Nitrate + Nitrite, Total	107		90	110		1.1			1.00		4H26014	08/26/14	08/26/14				1	
4H26014-CCV5	Nitrate + Nitrite, Total	105		90	110		1.0			1.00		4H26014	08/26/14	08/26/14				1	
4H26014-CCV6	Nitrate + Nitrite, Total	106		90	110		1.1			1.00		4H26014	08/26/14	08/26/14				1	
Initial Cal Blank - Method EPA 353.2																			
4H26014-ICB1	Nitrate + Nitrite, Total						0.05					4H26014	08/26/14	08/26/14				1	
Initial Cal Check - Method EPA 353.2																			
4H26014-ICV1	Nitrate + Nitrite, Total	95.0		90	110		1.0			1.00		4H26014	08/26/14	08/26/14				1	
LCS - Method EPA 353.2																			
B408777-BS1	Nitrate + Nitrite, Total	102		90	110		2.0			2.00		B408777	08/26/14	08/26/14	0.03	0.1	1		
Matrix Spike - Method EPA 353.2																			
B408777-MS1	Nitrate + Nitrite, Total	76.0		80	120		0.8	XXXXXX-XX	0.08	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1		
QM-010 - The MS recovery was outside acceptance limits but passed Duplicate Spike acceptance limits. The batch was accepted based on the acceptability of the MSD as the batch Spike.																			
B408777-MS2	Nitrate + Nitrite, Total	91.0		80	120		0.9	XXXXXX-XX	0	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1		

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed MDL	MRL	DF
B408777-MS3	Nitrate + Nitrite, Total	75.0		80	120		1.7	1408071-01	0.9	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1
<p>QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.</p>																	

Matrix Spike Dup - Method EPA 353.2

B408777-MSD1	Nitrate + Nitrite, Total	89.0	14.4	80	120	20	1.0	XXXXXX-XX	0.08	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1
B408777-MSD2	Nitrate + Nitrite, Total	100	9.42	80	120	20	1.0	XXXXXX-XX	0	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1
B408777-MSD3	Nitrate + Nitrite, Total	86.0	6.38	80	120	20	1.8	1408071-01	0.9	1.00		B408777	08/26/14	08/26/14	0.03	0.1	1

KP

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: Energy Fuels Resources (USA) Inc.
ADDRESS: 6425 South Highway 191
CITY/STATE/ZIP: Blanding Utah 84511
PHONE #: 435-678-4115 **FAX:**
CONTACT: Garrin Palmer **PROJECT:** White Mesa Mill
EMAIL: gpalmer@energyfuels.com, kweibel@energyfuels.com

BILLING ADDRESS: 225 Union Boulevard, Suite 600
BILLING CITY/STATE/ZIP: Lakewood, Colorado 80228
PURCHASE ORDER #:



TURNAROUND REQUIRED:* Standard
* Extended turnaround subject to additional charge

Lab Use Only	CLIENT SAMPLE INFORMATION						TESTS REQUESTED				Bacteria				
	LOCATION / IDENTIFICATION	DATE	TIME	MATRIX	Field Bottled Chloride	Nitrate/Nitrite as N (353-2)	Chloride (SM4500-Cl B or SM4500-Cl E or E300.0)					Total Coliform + E coli (Present/Absent)	Total Coliform + E coli (Enumerated)	HPC (Plate Count)	E. Coli Only
08071															
-01	1. TWN-07_08062014	8/6/2014	828	GW		X	X								
-02	2. TWN-04_08052014	8/5/2014	927	GW		X	X								
-03	3. TWN-01_08052014	8/5/2014	1009	GW		X	X								
-04	4. TWN-18_08052014	8/5/2014	1252	GW		X	X								
-05	5. TWN-03_08062014	8/6/2014	838	GW		X	X								
-06	6. TWN-02_08062014	8/6/2014	1250	GW		X	X								
-07	7. TWN-65_08052014	8/5/2014	1009	GW		X	X								
-08	8. TWN-60_08062014	8/6/2014	1400	GW		X	X								
-09	9. Piez-01_08062014	8/6/2014	0928	GW		X	X								
-10	10. Piez-02_08062014	8/6/2014	0900	GW		X	X								
-11	11. Piez-03_08062014	8/6/2014	0915	GW		X	X								
-12	12. TWN-07R_08052014	8/5/2014	0833	Rinsate		X	X								
-13	13. Temp Blank	8/7/2014													
Sampled by: [print] Tanner Holliday					Sampled by: [signature] Tanner Holliday					ON ICE NOT ON ICE Temp (C): 1.1 Samples received outside the EPA recommended temperature range of 0-6 C may be rejected.					
Special Instructions: TWN-60 is a DI System blank - please run this after the batch QC/NB at the beginning of the analytical run. PDF Data packages are to be sent to Garrin Palmer and Kathy Weiner.															
Relinquished by: [signature] Tanner Holliday					Date/Time: 8/7/2014 1006		Received by: [signature]				Date/Time: 8/6/14 9:20				
Relinquished by: [signature]					Date/Time:		Received by: [signature]				Date/Time:				
Relinquished by: [signature]					Date/Time:		Received by: [signature]				Date/Time:				

CHEMTECH-FORD
 9632 South 500 West
 Sandy, UT 84070

801.262.7299 PHONE
 866.792.0093 FAX
 www.chemtechford.com

Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum). Client agrees to pay collection costs and attorney's fees.

Nitrate Program





CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit.

1 mg/L = one milligram per liter or 1 mg/Kg = one milligram per kilogram = 1 part per million.

1 ug/L = one microgram per liter or 1 ug/Kg = one microgram per kilogram = 1 part per billion.

1 ng/L = one nanogram per liter or 1 ng/Kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions



9/18/2014

Work Order: 1409251

Energy Fuels
Attn: Garrin Palmer
6425 South Highway 191
Blanding, UT 84511

Client Service Contact: 801.262.7299

The analyses presented on this report were performed in accordance with the National Environmental Laboratory Accreditation Program (NELAP) unless noted in the comments, flags or case narrative. If the report is to be used for regulatory compliance, it should be presented in its entirety, and not be altered.



Approved By: 
Dave Gayer, Laboratory Director



Case Narrative for Sample Delivery Group - 1409251

Energy Fuels

<u>SampleID</u>	<u>SampleName</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
1409251-01	TW4-33R_08252014	Water	08/25/2014	08/28/2014
1409251-02	MW-32_08262014	Water	08/26/2014	08/28/2014
1409251-03	TW4-33_08272014	Water	08/27/2014	08/28/2014
1409251-04	TW4-08_08272014	Water	08/27/2014	08/28/2014
1409251-05	TW4-21_08272014	Water	08/27/2014	08/28/2014
1409251-06	TW4-29_08272014	Water	08/27/2014	08/28/2014
1409251-07	TW4-11_08272014	Water	08/27/2014	08/28/2014
1409251-08	TW4-07_08272014	Water	08/27/2014	08/28/2014
1409251-09	TW4-01_08272014	Water	08/27/2014	08/28/2014
1409251-10	TW4-10_08272014	Water	08/27/2014	08/28/2014
1409251-11	TW4-02_08272014	Water	08/27/2014	08/28/2014
1409251-12	TW4-35_08272014	Water	08/27/2014	08/28/2014
1409251-13	TW4-36_08272014	Water	08/27/2014	08/28/2014
1409251-14	TW4-60_08272014	Water	08/27/2014	08/28/2014
1409251-15	TW4-70_08272014	Water	08/27/2014	08/28/2014
1409251-16	Trip Blank	Water	08/25/2014	08/28/2014

Method Blanks

All method blanks were below the Minimum Reporting Limit (MRL).

Laboratory Control Samples

All Laboratory Control Sample (LCS) recoveries were within laboratory control limits.

Holding Times

All preparations and analyses were performed within holding times

Matrix Spike/Matrix Spike Duplicate

All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries were within control except for those noted in the QC report.

Surrogates

All surrogates were within laboratory control limits.

Lab ID: 1409251-12
Client ID: TW4-35_08272014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1409251-13
Client ID: TW4-36_08272014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1409251-14
Client ID: TW4-60_08272014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1409251-15
Client ID: TW4-70_08272014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1409251-16
Client ID: Trip Blank
Matrix: Water

Analyses

EPA 8260B

QC Summary for Sample Delivery Group - 1409251

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF	
Calibration Blank - Method EPA 300.0																			
4H31004-CCB1	Chloride						0					4H31004	08/29/14	08/29/14				1	
4H31004-CCB2	Chloride						0					4H31004	08/29/14	08/29/14				1	
4H31004-CCB3	Chloride						0					4H31004	08/29/14	08/29/14				1	
4H31004-CCB4	Chloride						0					4H31004	08/29/14	08/29/14				1	
Calibration Check - Method EPA 300.0																			
4H31004-CCV1	Chloride	100		90	110		20			20.0		4H31004	08/29/14	08/29/14				1	
4H31004-CCV2	Chloride	100		90	110		20			20.0		4H31004	08/29/14	08/29/14				1	
4H31004-CCV3	Chloride	100		90	110		20			20.0		4H31004	08/29/14	08/29/14				1	
4H31004-CCV4	Chloride	100		90	110		20			20.0		4H31004	08/29/14	08/29/14				1	
LCSW - Method EPA 300.0																			
B408924-BS1	Chloride	98.0		90	110		49			50.0		B408924	08/29/14	08/29/14	0.07	1		1	
B408924-BS2	Chloride	98.0		90	110		49			50.0		B408924	08/29/14	08/29/14	0.07	1		1	
B408925-BS1	Chloride	98.0		90	110		49			50.0		B408925	08/29/14	08/29/14	0.07	1		1	
LCSW Dup - Method EPA 300.0																			
B408924-BSD1	Chloride	98.0	0.00	90	110	20	49			50.0		B408924	08/29/14	08/29/14	0.07	1		1	
B408924-BSD2	Chloride	100	2.02	90	110	20	50			50.0		B408924	08/29/14	08/29/14	0.07	1		1	
B408925-BSD1	Chloride	98.0	0.00	90	110	20	49			50.0		B408925	08/29/14	08/29/14	0.07	1		1	
Matrix Spike - Method EPA 300.0																			
B408924-MS1	Chloride	-130		80	120		217	1409251-05	230	10.0		B408924	08/29/14	08/29/14	0.07	1		1	
QM-4X - The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.																			
B408924-MS2	Chloride	80.0		80	120		310	1409251-05	230	100		B408924	08/29/14	08/29/14	0.7	10		10	
B408924-MS3	Chloride	80.0		80	120		42	1409251-12	34	10.0		B408924	08/29/14	08/29/14	0.07	1		1	
B408924-MS4	Chloride	96.0		80	120		130	1409251-12	34	100		B408924	08/29/14	08/29/14	0.7	10		10	
B408925-MS1	Chloride	100		80	120		10	1409251-14	0	10.0		B408925	08/29/14	08/29/14	0.07	1		1	

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed MDL	MRL	DF
B408925-MS2	Chloride	100		80	120		100	1409251-14	0	100		B408925	08/29/14	08/29/14	0.7	10	10

Matrix Spike Dup - Method EPA 300.0

B408924-MSD1	Chloride	-150	0.926	80	120	20	215	1409251-05	230	10.0		B408924	08/29/14	08/29/14	0.07	1	1
QM-4X - The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.																	
B408924-MSD2	Chloride	80.0	0.00	80	120	20	310	1409251-05	230	100		B408924	08/29/14	08/29/14	0.7	10	10
B408924-MSD3	Chloride	80.0	0.00	80	120	20	42	1409251-12	34	10.0		B408924	08/29/14	08/29/14	0.07	1	1
B408924-MSD4	Chloride	96.0	0.00	80	120	20	130	1409251-12	34	100		B408924	08/29/14	08/29/14	0.7	10	10
B408925-MSD1	Chloride	100	0.00	80	120	20	10	1409251-14	0	10.0		B408925	08/29/14	08/29/14	0.07	1	1
B408925-MSD2	Chloride	100	0.00	80	120	20	100	1409251-14	0	100		B408925	08/29/14	08/29/14	0.7	10	10

PBW - Method EPA 300.0

B408924-BLK1	Chloride						0					B408924	08/29/14	08/29/14	0.07	1	1
B408924-BLK2	Chloride						0					B408924	08/31/14	08/31/14	0.07	1	1
B408925-BLK1	Chloride						0					B408925	08/29/14	08/29/14	0.07	1	1

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Sok Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
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Blank - Method EPA 353.2

B409365-BLK1	Nitrate + Nitrite, Total						0.08					B409365	09/12/14	09/12/14	0.03	0.1	1
B409368-BLK1	Nitrate + Nitrite, Total						0.1					B409368	09/12/14	09/12/14	0.03	0.1	1
B409502-BLK1	Nitrate + Nitrite, Total						0.01					B409502	09/17/14	09/17/14	0.03	0.1	1

Calibration Blank - Method EPA 353.2

4110023-CCB1	Nitrate + Nitrite, Total						0.04					4110023	09/10/14	09/10/14			1
4110023-CCB2	Nitrate + Nitrite, Total						0.02					4110023	09/10/14	09/10/14			1
4110023-CCB3	Nitrate + Nitrite, Total						0.02					4110023	09/10/14	09/10/14			1
4110023-CCB4	Nitrate + Nitrite, Total						0.01					4110023	09/10/14	09/10/14			1
4112022-CCB1	Nitrate + Nitrite, Total						0.04					4112022	09/12/14	09/12/14			1
4112023-CCB1	Nitrate + Nitrite, Total						0.06					4112023	09/12/14	09/12/14			1
4117023-CCB1	Nitrate + Nitrite, Total						0.01					4117023	09/17/14	09/17/14			1

Calibration Check - Method EPA 353.2

4110023-CCV1	Nitrate + Nitrite, Total	96.0		90	110		1.0		1.00			4110023	09/10/14	09/10/14			1
4110023-CCV2	Nitrate + Nitrite, Total	94.0		90	110		0.9		1.00			4110023	09/10/14	09/10/14			1
4110023-CCV3	Nitrate + Nitrite, Total	95.0		90	110		1.0		1.00			4110023	09/10/14	09/10/14			1
4110023-CCV4	Nitrate + Nitrite, Total	94.0		90	110		0.9		1.00			4110023	09/10/14	09/10/14			1
4112022-CCV1	Nitrate + Nitrite, Total	93.0		90	110		0.9		1.00			4112022	09/12/14	09/12/14			1
4112023-CCV1	Nitrate + Nitrite, Total	92.0		90	110		0.9		1.00			4112023	09/12/14	09/12/14			1
4117023-CCV1	Nitrate + Nitrite, Total	97.0		90	110		1.0		1.00			4117023	09/17/14	09/17/14			1

Initial Cal Blank - Method EPA 353.2

4110023-ICB1	Nitrate + Nitrite, Total						0.04					4110023	09/10/14	09/10/14			1
4112022-ICB1	Nitrate + Nitrite, Total						0.03					4112022	09/12/14	09/12/14			1
4112023-ICB1	Nitrate + Nitrite, Total						0.05					4112023	09/12/14	09/12/14			1
4117023-ICB1	Nitrate + Nitrite, Total						0.02					4117023	09/17/14	09/17/14			1

Initial Cal Check - Method EPA 353.2

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
4I10023-ICV1	Nitrate + Nitrite, Total	92.0		90	110		0.9			1.00		4I10023	09/10/14	09/10/14				1
4I12022-ICV1	Nitrate + Nitrite, Total	92.0		90	110		0.9			1.00		4I12022	09/12/14	09/12/14				1
4I12023-ICV1	Nitrate + Nitrite, Total	90.0		90	110		0.9			1.00		4I12023	09/12/14	09/12/14				1
4I17023-ICV1	Nitrate + Nitrite, Total	98.0		90	110		1.0			1.00		4I17023	09/17/14	09/17/14				1

LCS - Method EPA 353.2

B409365-BS1	Nitrate + Nitrite, Total	95.0		90	110		1.9			2.00		B409365	09/12/14	09/12/14	0.03	0.1		1
B409368-BS1	Nitrate + Nitrite, Total	91.0		90	110		1.8			2.00		B409368	09/12/14	09/12/14	0.03	0.1		1
B409502-BS1	Nitrate + Nitrite, Total	93.0		90	110		1.9			2.00		B409502	09/17/14	09/17/14	0.03	0.1		1

Matrix Spike - Method EPA 353.2

B409277-MS1	Nitrate + Nitrite, Total	92.0		80	120		1.6	1409251-04	0.6	1.00		B409277	09/10/14	09/10/14	0.03	0.1		1
B409365-MS1	Nitrate + Nitrite, Total	71.0		80	120		0.7	1409251-14	0	1.00		B409365	09/12/14	09/12/14	0.03	0.1		1
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B409368-MS1	Nitrate + Nitrite, Total	82.0		80	120		1.1	1409251-12	0.2	1.00		B409368	09/12/14	09/12/14	0.03	0.1		1
B409502-MS1	Nitrate + Nitrite, Total	95.0		80	120		1.0	XXXXXXXX-XX	0	1.00		B409502	09/17/14	09/17/14	0.03	0.1		1

Matrix Spike Dup - Method EPA 353.2

B409277-MSD1	Nitrate + Nitrite, Total	90.0	1.29	80	120	20	1.5	1409251-04	0.6	1.00		B409277	09/10/14	09/10/14	0.03	0.1		1
B409365-MSD1	Nitrate + Nitrite, Total	74.0	4.14	80	120	20	0.7	1409251-14	0	1.00		B409365	09/12/14	09/12/14	0.03	0.1		1
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B409368-MSD1	Nitrate + Nitrite, Total	80.0	1.90	80	120	20	1.0	1409251-12	0.2	1.00		B409368	09/12/14	09/12/14	0.03	0.1		1
B409502-MSD1	Nitrate + Nitrite, Total	97.0	2.08	80	120	20	1.0	XXXXXXXX XX	0	1.00		B409502	09/17/14	09/17/14	0.03	0.1		1

Chloroform Program

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: Energy Fuels Resources (USA) Inc
ADDRESS: 6425 South Highway 191
CITY/STATE/ZIP: Blanding Utah 84511
PHONE #: 435-678-4115 **FAX:**
CONTACT: Garrin Palmer **PROJECT:** White Mesa Mill
EMAIL: ggaltner@energyfuels.com, kweiner@energyfuels.com

BILLING ADDRESS: Jan Dalla
 225 Union Boulevard, Suite 600
BILLING CITY/STATE/ZIP: Lakewood, Colorado 80228
PURCHASE ORDER #:
TURNAROUND REQUIRED:* Standard



CLIENT SAMPLE INFORMATION							TESTS REQUESTED										Bacteria						
Lab Use Only	LOCATION / IDENTIFICATION	DATE	TIME	MATRIX	Field Number Coliform		Nitrate/Nitrite as N (353.2)	Chloride (SM4500-Cl B or SM4500-Cl E or E300.0)	VOCs (8260B or 8260C) (Carbon Tetrachloride, Chloroform, Methylene Chloride, Chloromethane)											Total Coliform + F. coli (Presence/Absent)	Total Coliform + E. coli (Enumerated)	MPN (Plate Count)	E. Coli Only
0925	1 TW4-60_08272014	8/27/2014	0645	GW			X	X	X														
-14	2 TW4-70_08272014	8/27/2014	0745	GW			X	X	X														
-15	3 TRIP BLANK	8/25/2014		GW					X														
-16	4 TEMP BLANK	8/27/2014		GW																			
	5																						
	6																						
	7																						
	8																						
	9																						
	10																						
	11																						
	12																						
	13																						
Sampled by: (print) TANNER HOSLEBAK						Initiated by: (signature) <i>Tanner Hoslebak</i>						ON ICE NOT ON ICE Temp (C): 5.9											
Special Instructions: TW4-60 is a Qi System blank - please run this after the batch QC/MB at the beginning of the analytical run. PDF data packages are to be sent to Garrin Palmer and Kathy Walzel.												Samples received outside the EPA recommended temperature range of 0-6 C may be rejected.											
Requisitioned by: (signature) <i>Tanner Hoslebak</i>						Date/Time 8/27/2014 11:00						Initiated by: (signature) <i>Paul Bell</i>											
Requisitioned by: (signature)						Date/Time						Initiated by: (signature)											
Requisitioned by: (signature)						Date/Time						Initiated by: (signature)											
Requisitioned by: (signature)						Date/Time						Initiated by: (signature)											

Lab Use Only

Lab Use Only	LOCATION / IDENTIFICATION	DATE	TIME	MATRIX	Field Number Coliform
1	TW4-60_08272014	8/27/2014	0645	GW	
2	TW4-70_08272014	8/27/2014	0745	GW	
3	TRIP BLANK	8/25/2014		GW	
4	TEMP BLANK	8/27/2014		GW	
5					
6					
7					
8					
9					
10					
11					
12					
13					

CHEMTECH-FORD
 9632 South 500 West
 Sandy, UT 84070
 801.262.7299 PHONE
 866.792.0093 FAX
www.chemtechford.com

Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum). Client agrees to pay collection costs and attorney's fees.

CHEMTECH FORD LABORATORIES

Sample Receipt



CHEMTECH-FORD
LABORATORIES

Work Order # 09251

Delivery Method:

- UPS
- FedEx
- Walk-in
- USPS
- Chemtech Courier
- Courier

Receiving Temperature 5.9 °C

Sample #	Container	Chemtech Lot # or Preservative	Number of Subsamples	Received by Client/Third Party	Preserved at Receiving Laboratory	Received in Field by Client	Misc Volume (L)	Comments
01-03	W1-3	298						
	N	292						
	AP							
-04	W1-3	298						
	N	296						
	AP							
05-08	W1-3	298						
	N	292						
	AP							
-09-	W1-3	298						
	N	296						
	AP							
-10	W1-3	298						
	N	no lot #						
	AP							
-11-15	W1-3	298						
	N	292						
	AP							
-16	W1-3					X		

Sample Condition

- (check if yes)
- Custody Seals
 - Containers Intact
 - COC/Label Agree
 - Identification Confirmed
 - Received on Ice
 - Correct Container(s)
 - Sufficient Sample Volume
 - Headspace Present (VOC)
 - Temperature Blank
 - Received within Holding Time

Plastic Containers

- A- Plastic Unpreserved
- B- Miscellaneous Plastic
- C- Cyanide Qt (NaOH)
- F- Sulfide Qt (Zn Acetate)
- L- Mercury 1631
- M- Metals Pint (HNO3)
- N- Nutrient Pint (H2SO4)
- R- Radiological (HNO3)
- S- Sludge Cup/Tub
- U- Plastic Bag
- V- Coliform/Coli

Glass Containers

- D- H2S (H2SO3)
- G- Glass Unpreserved
- H- HAA5 (NH4Cl)
- J- 508/515/525 (Na2SO3)
- K- 515 J Herbicides
- Q- Oil & Grease (HCl)
- P- Phenols (H2SO4)
- T- TOC/TOX (H3PO4)
- U- 521 (MCAA, Na2SO3)
- V- 524/THMs (Ascorbic Acid)
- W- 626 VOC (1:1 HCl)
- X- Vial Unpreserved
- Y- 624/504 (H2SO3)
- Z- Miscellaneous Glass



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit.

1 mg/L = one milligram per liter or 1 mg/Kg = one milligram per kilogram = 1 part per million.

1 ug/L = one microgram per liter or 1 ug/Kg = one microgram per kilogram = 1 part per billion.

1 ng/L = one nanogram per liter or 1 ng/Kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions



9/15/2014

Work Order: 1408496

**Energy Fuels
Attn: Garrin Palmer
6425 South Highway 191
Blanding, UT 84511**

Client Service Contact: 801.262.7299

The analyses presented on this report were performed in accordance with the National Environmental Laboratory Accreditation Program (NELAP) unless noted in the comments, flags or case narrative. If the report is to be used for regulatory compliance, it should be presented in its entirety, and not be altered.



Approved By:

Dave Gayer, Laboratory Director

CHEMTECH-FORD
LABORATORY

Case Narrative for Sample Delivery Group - 1408496

Energy Fuels

<u>SampleID</u>	<u>SampleName</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
1408496-01	TW4-03R_08122014	Water	08/12/2014	08/15/2014
1408496-02	TW4-03_08132014	Water	08/13/2014	08/15/2014
1408496-03	TW4-12_08132014	Water	08/13/2014	08/15/2014
1408496-04	TW4-28_08132014	Water	08/13/2014	08/15/2014
1408496-05	TW4-32_08132014	Water	08/13/2014	08/15/2014
1408496-06	TW4-13_08132014	Water	08/13/2014	08/15/2014
1408496-07	TW4-14_08132014	Water	08/13/2014	08/15/2014
1408496-08	TW4-27_08132014	Water	08/13/2014	08/15/2014
1408496-09	TW4-30_08132014	Water	08/13/2014	08/15/2014
1408496-10	TW4-31_08132014	Water	08/13/2014	08/15/2014
1408496-11	TW4-34_08132014	Water	08/13/2014	08/15/2014
1408496-12	TW4-23_08132014	Water	08/13/2014	08/15/2014
1408496-13	TW4-09_08142014	Water	08/14/2014	08/15/2014
1408496-14	TW4-25_08112014	Water	08/11/2014	08/15/2014
1408496-15	TW4-26_08142014	Water	08/14/2014	08/15/2014
1408496-16	TW4-06_08142014	Water	08/14/2014	08/15/2014
1408496-17	TW4-05_08142014	Water	08/14/2014	08/15/2014
1408496-18	TW4-16_08142014	Water	08/14/2014	08/15/2014
1408496-19	TW4-18_08142014	Water	08/14/2014	08/15/2014
1408496-20	TW4-24_08112014	Water	08/11/2014	08/15/2014
1408496-21	TW4-19_08112014	Water	08/11/2014	08/15/2014
1408496-22	TW4-04_08112014	Water	08/11/2014	08/15/2014
1408496-23	MW-04_08112014	Water	08/11/2014	08/15/2014
1408496-24	MW-26_08112014	Water	08/11/2014	08/15/2014
1408496-25	TW4-22_08112014	Water	08/11/2014	08/15/2014
1408496-26	TW4-20_08112014	Water	08/11/2014	08/15/2014
1408496-27	TW4-65_08132014	Water	08/13/2014	08/15/2014
1408496-28	TRIP BLANK	Water	08/11/2014	08/15/2014

Method Blanks

All method blanks were below the Minimum Reporting Limit (MRL).

Laboratory Control Samples

All Laboratory Control Sample (LCS) recoveries were within laboratory control limits.

Holding Times

All preparations and analyses were performed within holding times

Matrix Spike/Matrix Spike Duplicate

All Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries were within control except for those mentioned in the QC report.

Surrogates

All surrogates were within laboratory control limits.

Lab ID: 1408496-12
Client ID: TW4-23_08132014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-13
Client ID: TW4-09_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-14
Client ID: TW4-25_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-15
Client ID: TW4-26_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-16
Client ID: TW4-06_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-17
Client ID: TW4-05_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2

EPA 8260B

Lab ID: 1408496-18
Client ID: TW4-16_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-19
Client ID: TW4-18_08142014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-20
Client ID: TW4-24_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-21
Client ID: TW4-19_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-22
Client ID: TW4-04_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-23
Client ID: MW-04_08112014
Matrix: Water

Analyses

EPA 300.0

EPA 353.2
EPA 8260B

Lab ID: 1408496-24
Client ID: MW-26_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-25
Client ID: TW4-22_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-26
Client ID: TW4-20_08112014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-27
Client ID: TW4-65_08132014
Matrix: Water

Analyses

EPA 300.0
EPA 353.2
EPA 8260B

Lab ID: 1408496-28
Client ID: TRIP BLANK
Matrix: Water

Analyses

EPA 8260B

QC Summary for Sample Delivery Group - 1408496

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF	
Calibration Blank - Method EPA 300.0																			
4H15019-CCB1	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCB2	Chloride						0.3					4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCB3	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCB4	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCB5	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCB6	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB1	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB2	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB3	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB4	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB5	Chloride						0.2					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB6	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB7	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB8	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
4H17004-CCB9	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1	
Calibration Check - Method EPA 300.0																			
4H15019-CCV1	Chloride	105		90	110		21			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCV2	Chloride	105		90	110		21			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCV3	Chloride	100		90	110		20			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCV4	Chloride	100		90	110		20			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCV5	Chloride	100		90	110		20			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H15019-CCV6	Chloride	100		90	110		20			20.0		4H15019	08/14/14	08/14/14	08/14/14			1	
4H17004-CCV1	Chloride	105		90	110		21			20.0		4H17004	08/14/14	08/14/14	08/14/14			1	

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
4H17004-CCV2	Chloride	105		90	110		21			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV3	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV4	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV5	Chloride	105		90	110		21			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV6	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV7	Chloride	105		90	110		21			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV8	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1
4H17004-CCV9	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1

Initial Cal Blank - Method EPA 300.0

4H15019-ICB1	Chloride						0					4H15019	08/14/14	08/14/14	08/14/14			1
4H17004-ICB1	Chloride						0					4H17004	08/14/14	08/14/14	08/14/14			1

Initial Cal Check - Method EPA 300.0

4H15019-ICV1	Chloride	100		90	110		20			20.0		4H15019	08/14/14	08/14/14	08/14/14			1
4H17004-ICV1	Chloride	100		90	110		20			20.0		4H17004	08/14/14	08/14/14	08/14/14			1

LCSW - Method EPA 300.0

B408469-BS1	Chloride	100		90	110		50			50.0		B408469	08/15/14	08/15/14	0.07	1	1
B408469-BS2	Chloride	100		90	110		50			50.0		B408469	08/15/14	08/15/14	0.07	1	1
B408472-BS1	Chloride	102		90	110		51			50.0		B408472	08/15/14	08/15/14	0.07	1	1
B408472-BS2	Chloride	102		90	110		51			50.0		B408472	08/15/14	08/15/14	0.07	1	1
B408473-BS1	Chloride	102		90	110		51			50.0		B408473	08/15/14	08/15/14	0.07	1	1
B408473-BS2	Chloride	102		90	110		51			50.0		B408473	08/15/14	08/15/14	0.07	1	1
B408473-BS3	Chloride	104		90	110		52			50.0		B408473	08/15/14	08/15/14	0.07	1	1

LCSW Dup - Method EPA 300.0

B408469-BSD1	Chloride	100	0.00	90	110	20	50			50.0		B408469	08/15/14	08/15/14	0.07	1	1
B408469-BSD2	Chloride	100	0.00	90	110	20	50			50.0		B408469	08/15/14	08/15/14	0.07	1	1
B408472-BSD1	Chloride	104	1.94	90	110	20	52			50.0		B408472	08/15/14	08/15/14	0.07	1	1

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
B408472-BSD2	Chloride	102	0.00	90	110	20	51			50.0		B408472	08/15/14	08/15/14	0.07	1	1	
B408473-BSD1	Chloride	102	0.00	90	110	20	51			50.0		B408473	08/15/14	08/15/14	0.07	1	1	
B408473-BSD2	Chloride	102	0.00	90	110	20	51			50.0		B408473	08/15/14	08/15/14	0.07	1	1	
B408473-BSD3	Chloride	102	1.94	90	110	20	51			50.0		B408473	08/15/14	08/15/14	0.07	1	1	

Matrix Spike - Method EPA 300.0

B408469-MS1	Chloride	100		80	120		100	1408496-01	0	100		B408469	08/15/14	08/15/14	0.7	10	10
B408469-MS2	Chloride	102		80	120		140	1408496-09	38	100		B408469	08/15/14	08/15/14	0.7	10	10
B408472-MS1	Chloride	100		80	120		240	1408496-21	140	100		B408472	08/15/14	08/15/14	0.7	10	10
B408472-MS2	Chloride	99.0		80	120		150	1408496-27	51	100		B408472	08/15/14	08/15/14	0.7	10	10
B408473-MS1	Chloride	98.0		80	120		140	XXXXXX-XX	42	100		B408473	08/15/14	08/15/14	0.7	10	10
B408473-MS2	Chloride	104		80	120		140	XXXXXX-XX	36	100		B408473	08/15/14	08/15/14	0.7	10	10
B408473-MS3	Chloride	104		80	120		140	XXXXXX-XX	36	100		B408473	08/15/14	08/15/14	0.7	10	10

Matrix Spike Dup - Method EPA 300.0

B408469-MSD1	Chloride	100	0.00	80	120	20	100	1408496-01	0	100		B408469	08/15/14	08/15/14	0.7	10	10
B408469-MSD2	Chloride	102	0.00	80	120	20	140	1408496-09	38	100		B408469	08/15/14	08/15/14	0.7	10	10
B408472-MSD1	Chloride	100	0.00	80	120	20	240	1408496-21	140	100		B408472	08/15/14	08/15/14	0.7	10	10
B408472-MSD2	Chloride	99.0	0.00	80	120	20	150	1408496-27	51	100		B408472	08/15/14	08/15/14	0.7	10	10
B408473-MSD1	Chloride	98.0	0.00	80	120	20	140	XXXXXX-XX	42	100		B408473	08/15/14	08/15/14	0.7	10	10
B408473-MSD2	Chloride	104	0.00	80	120	20	140	XXXXXX-XX	36	100		B408473	08/15/14	08/15/14	0.7	10	10
B408473-MSD3	Chloride	104	0.00	80	120	20	140	XXXXXX-XX	36	100		B408473	08/15/14	08/15/14	0.7	10	10

PBW - Method EPA 300.0

B408469-BLK1	Chloride						0					B408469	08/15/14	08/15/14	0.07	1	1
B408469-BLK2	Chloride						0					B408469	08/15/14	08/15/14	0.07	1	1
B408472-BLK1	Chloride						0					B408472	08/15/14	08/15/14	0.07	1	1
B408472-BLK2	Chloride						0					B408472	08/15/14	08/15/14	0.07	1	1
B408473-BLK1	Chloride						0					B408473	08/15/14	08/15/14	0.07	1	1

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
B408473-BLK2	Chloride						0					B408473	08/15/14	08/15/14	0.07	1	1	
B408473-BLK3	Chloride						0					B408473	08/15/14	08/15/14	0.07	1	1	

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
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Blank - Method EPA 353.2

B408834-BLK1	Nitrate + Nitrite, Total						0.07					B408834	08/28/14	08/28/14	0.03	0.1	1
B408834-BLK2	Nitrate + Nitrite, Total						0.05					B408834	08/28/14	08/28/14	0.03	0.1	1
B408868-BLK1	Nitrate + Nitrite, Total						0.06					B408868	08/28/14	08/28/14	0.03	0.1	1

Calibration Blank - Method EPA 353.2

4H28015-CCB1	Nitrate + Nitrite, Total						0.05					4H28015	08/28/14	08/28/14			1
4H28015-CCB2	Nitrate + Nitrite, Total						0.05					4H28015	08/28/14	08/28/14			1
4H28015-CCB3	Nitrate + Nitrite, Total						0.05					4H28015	08/28/14	08/28/14			1
4H28015-CCB4	Nitrate + Nitrite, Total						0.07					4H28015	08/28/14	08/28/14			1
4H28018-CCB1	Nitrate + Nitrite, Total						0.06					4H28018	08/28/14	08/28/14			1

Calibration Check - Method EPA 353.2

4H28015-CCV1	Nitrate + Nitrite, Total	96.0		90	110		1.0		1.00			4H28015	08/28/14	08/28/14			1
4H28015-CCV2	Nitrate + Nitrite, Total	97.0		90	110		1.0		1.00			4H28015	08/28/14	08/28/14			1
4H28015-CCV3	Nitrate + Nitrite, Total	98.0		90	110		1.0		1.00			4H28015	08/28/14	08/28/14			1
4H28015-CCV4	Nitrate + Nitrite, Total	100		90	110		1.0		1.00			4H28015	08/28/14	08/28/14			1
4H28018-CCV1	Nitrate + Nitrite, Total	93.0		90	110		0.9		1.00			4H28018	08/28/14	08/28/14			1

Initial Cal Blank - Method EPA 353.2

4H28015-ICB1	Nitrate + Nitrite, Total						0.05					4H28015	08/28/14	08/28/14			1
4H28018-ICB1	Nitrate + Nitrite, Total						0.04					4H28018	08/28/14	08/28/14			1

Initial Cal Check - Method EPA 353.2

4H28015-ICV1	Nitrate + Nitrite, Total	94.0		90	110		0.9		1.00			4H28015	08/28/14	08/28/14			1
4H28018-ICV1	Nitrate + Nitrite, Total	91.0		90	110		0.9		1.00			4H28018	08/28/14	08/28/14			1

LCS - Method EPA 353.2

B408834-B51	Nitrate + Nitrite, Total	96.5		90	110		1.9		2.00			B408834	08/28/14	08/28/14	0.03	0.1	1
B408834-B52	Nitrate + Nitrite, Total	98.5		90	110		2.0		2.00			B408834	08/28/14	08/28/14	0.03	0.1	1
B408868-B51	Nitrate + Nitrite, Total	96.0		90	110		1.9		2.00			B408868	08/28/14	08/28/14	0.03	0.1	1

QC ID	Analyte	% Rec	RPD	LCL	UCL	RPD Max	Result	QC Source	Source Conc	Spk Value	Surr?	Batch	Sampled	Prepared	Analyzed	MDL	MRL	DF
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Matrix Spike - Method EPA 353.2

B408834-MS1	Nitrate + Nitrite, Total	72.0		80	120		0.7	XXXXXXXX-XX		1.00		B408834	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408834-MS2	Nitrate + Nitrite, Total	73.0		80	120		0.7	XXXXXXXX-XX		1.00		B408834	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408838-MS1	Nitrate + Nitrite, Total	67.0		80	120		0.8	1408496-01	0.1	1.00		B408838	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408838-MS2	Nitrate + Nitrite, Total	72.0		80	120		8.8	1408496-21	1.6	10.0		B408838	08/28/14	08/28/14	0.3	1.0	10	
QM-010 - The MS recovery was outside acceptance limits but passed Duplicate Spike acceptance limits. The batch was accepted based on the acceptability of the MSD as the batch Spike.																		
B408868-MS1	Nitrate + Nitrite, Total	42.0		80	120		0.4	XXXXXXXX-XX	0.03	1.00		B408868	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		

Matrix Spike Dup - Method EPA 353.2

B408834-MSD1	Nitrate + Nitrite, Total	85.0	16.6	80	120	20	0.8	XXXXXXXX-XX		1.00		B408834	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408834-MSD2	Nitrate + Nitrite, Total	85.0	15.2	80	120	20	0.8	XXXXXXXX-XX		1.00		B408834	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408838-MSD1	Nitrate + Nitrite, Total	75.0	9.76	80	120	20	0.9	1408496-01	0.1	1.00		B408838	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408838-MSD2	Nitrate + Nitrite, Total	86.0	14.7	80	120	20	10.2	1408496-21	1.6	10.0		B408838	08/28/14	08/28/14	0.3	1.0	10	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		
B408868-MSD1	Nitrate + Nitrite, Total	51.0	18.2	80	120	20	0.5	XXXXXXXX-XX	0.03	1.00		B408868	08/28/14	08/28/14	0.03	0.1	1	
QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The analytical batch was accepted based on the acceptable data provided by the Laboratory Control Sample(s) [LCS] and/or LCS Duplicates.																		

Chloroform Program

1 of 3

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

Jan Dalla

COMPANY: Energy Fuels Resources (USA) Inc.
 ADDRESS: 6425 South Highway 191
 CITY/STATE/ZIP: Blanding Utah 84511
 PHONE #: 435-678-4115 FAX: _____
 CONTACT: Garrin Palmer PROJECT: White Mesa Mill
 EMAIL: gpalmer@energyfuels.com, kwelnel@energyfuels.com

BILLING ADDRESS: 225 Union Boulevard, Suite 600
 BILLING CITY/STATE/ZIP: Lakewood, Colorado 80228
 PURCHASE ORDER #: _____
 TURNAROUND REQUIRED: * _____
* Excludes Turnaround subject to additional charge



Lab Use Only	CLIENT SAMPLE INFORMATION						TESTS REQUESTED			Bacteria					
	LOCATION / IDENTIFICATION	DATE	TIME	MATRIX	Field Analysis/ Chloride	Nitrate/Nitrite as N (353.2)	Chloride (SM4500-Cl B or SM4500-Cl E or E300.0)	VOCs (8260B or 8260C) (Carbon Tetrachloride, Chloroform, Methylene Chloride, Chloromethane)				Total Coliform + E coli (Present/Absent)	Total Coliform + E coli (Enumerated)	HPC (Plate Count)	E. Coli Only
08496															
-01	1. TW4-03R_08122014	8/12/2014	0641	GW		X	X	X							
-02	2. TW4-03_08132014	8/13/2014	0847	GW		X	X	X							
-03	3. TW4-12_08132014	8/13/2014	0857	GW		X	X	X							
-04	4. TW4-28_08132014	8/13/2014	0905	GW		X	X	X							
-05	5. TW4-32_08132014	8/13/2014	0914	GW		X	X	X							
-06	6. TW4-13_08132014	8/13/2014	0921	GW		X	X	X							
-07	7. TW4-14_08132014	8/13/2014	0930	GW		X	X	X							
-08	8. TW4-27_08132014	8/13/2014	0937	GW		X	X	X							
-09	9. TW4-30_08132014	8/13/2014	0944	GW		X	X	X							
-10	10. TW4-31_08132014	8/13/2014	0955	GW		X	X	X							
-11	11. TW4-34_08132014	8/13/2014	1005	GW		X	X	X							
-12	12. TW4-23_08132014	8/13/2014	1015	GW		X	X	X							
-13	13. TW4-09_08142014	8/14/2014	0755	GW		X	X	X							

Sampled by: Tanner Holliday *James Holliday* Sampled by: (signature) _____

Special Instructions: TWS-BC R-10 or system blank, please run this after the batch GC/MS at the beginning of the analytical run. PDF Data packages are to be sent to Garrin Palmer and Kathy Welnel.

Relinquished by: (signature) James Holliday Date/Time: 8/14/2014 1030 Received by: (signature) [Signature] Date/Time: 8/15/14 9:35

Relinquished by: (signature) _____ Date/Time: _____ Received by: (signature) _____ Date/Time: _____

Relinquished by: (signature) _____ Date/Time: _____ Received by: (signature) _____ Date/Time: _____

ON ICE NOT ON ICE Temp (C): _____

Samples received outside the EPA recommended temperature range of 0-5 C may be rejected.

CHEMTECH-FORD
 9632 South 500 West
 Sandy, UT 84070

801.262.7299 PHONE
 866.792.0093 FAX
 www.chemtechford.com

Payment Terms are net 30 days OAC 1.5% interest charge per month (18% per annum). Client agrees to pay collection costs and attorney's fees

FSD EX TRACKING # : 8032-7122-3690

Chloroform Program

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

Jan Dalla

COMPANY: Energy Fuels Resources (USA) Inc.
 ADDRESS: 6425 South Highway 191
 CITY/STATE/ZIP: Blanding Utah 84511
 PHONE #: 435-678-4115 FAX: _____
 CONTACT: Garrin Palmer PROJECT: White Mesa Mill
 EMAIL: gpalmer@energyfuels.com twjw@energyfuels.com

BILLING ADDRESS: 225 Union Boulevard, Suite 600
 BILLING CITY/STATE/ZIP: Lakewood, Colorado 80228
 PURCHASE ORDER #: _____



TURNAROUND REQUIRED: * _____ Standard _____
 * Expedited turnaround subject to additional charge

Lab Use Only	CLIENT SAMPLE INFORMATION				
	LOCATION / IDENTIFICATION	DATE	TIME	MATRIX	Field Residual Chlorine
03-116 -27 -28	1 TW4-65_08132014	8/13/2014	0905	GW	
	2 TRIP BLANK	8/11/2014		GW	
	3 TEMP BLANK	8/14/2014		GW	
	4			GW	
	5			GW	
	6			GW	
	7			GW	
	8			GW	
	9			GW	
	10			GW	
	11			GW	
	12			GW	
	13			GW	

TESTS REQUESTED										Bacteria			
Nitrate/Nitrite as N (35.3.2)	Chloride (SM4500-Cl B or SM4500-Cl E or E200.0)	VOCs (8260B or 8260C) (Carbon Tetrachloride, Chloroform, Methylene Chloride, Chloromethane)								Total Coliform + F. coli (Presence/Absent)	Total Coliform + E. coli (Enumeration)	HPC (Plate Count)	E. Coli Only
X	X	X											
		X											

Sampled by: Tanner Holliday *Tanner Holliday* Sampled by (signature) _____

Special Instructions: TW4-65 is a Di System blank - please run this after the batch QC/MR at the beginning of the analytical run. PDF Data packages are to be sent to Garrin Palmer and Kathy Weiner.

Relinquished by (signature) Tanner Holliday Date/Time 8/14/2014 10:30 Received by (signature) Jan Dalla Date/Time 8/15/14 9:35

Relinquished by (signature) _____ Date/Time _____ Received by (signature) _____ Date/Time _____

Relinquished by (signature) _____ Date/Time _____ Received by (signature) _____ Date/Time _____

ON ICE NOT ON ICE Temp (C): _____
 Samples received outside the EPA recommended temperature range of 0-6 C may be rejected.

CHEMTECH-FORD 801.262.7299 PHONE
 9632 South 500 West 866.792.0093 FAX
 Sandy, UT 84070 www.chemtechford.com

Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum). Client agrees to pay collection costs and attorney's fees.

Work Order # 68496

CHEMTECH FORD LABORATORIES

Sample Receipt



CHEMTECH-FORD
LABORATORIES

Delivery Method:

- UPS
- USPS
- FedEx
- Chemtech Courier
- Walk-in
- Courier

Receiving Temperature 5.3°C

Number of Samples
Transferred by Chemtech/Ford
Received in Receiving Laboratory
Entered by Jobby Name

Sample #	Container	Chemtech lot # or Preservative	Misc Volume (mL)	Comments
01-08	AP			
	N	296		
	WI-3	298		
09	AP			
	N	292		
	WI-3	298		
10-13	AP			
	N	296		
	WI-3	298		
14	AP			
	N	292		
	WI-3	298		
15-20	AP			
	N	296		
	WI-3	298		
21-27	AP			
	N	292		
	WI-3	298		
28	WI-3	HLL	X	

Sample Condition

- (check if yes)
- Custody Seals
 - Containers Intact
 - COC/Labels Agree
 - Presence of Chemicals
 - Received on Ice
 - Correct Container(s)
 - Sufficient Sample Volume
 - Headspace Present (VOC)
 - Temperature Blank
 - Received within Holding Time

Plastic Containers

- A- Plastic Unpreserved
- B- Miscellaneous Plastic
- C- Cyanide Qt (NaOH)
- F- Sulfide Qt (Zn Acetate)
- G- Mercury 1631
- M- Metal Pint (HNO3)
- N- Nutrient Pint (H2SO4)
- R- Radiological (HNO3)
- S- Sludge Cups/Tubs
- Q- Plastic Bag
- T- Coliform/Ecol

Glass Containers

- D- 525 (Na2S2O7)
- G- Glass Unpreserved
- H- HAAs (NH4Cl)
- I- 508/515/525 (Na2SO3)
- J- 515.3 Herbicides
- K- Oil & Grease (HCl)
- P- Phenols (H2SO4)
- T- TOC/TOX (H3PO4)
- U- 531 (MCAA, Na2S2O3)
- V- 534/77(MA) (Ascorbic Acid)
- W- 8269 VDC (1.1 HCl)
- X- 861 Unpreserved
- Y- 534/504 (Na2S2O3)
- Z- Miscellaneous Glass



CHEMTECH-FORD
LABORATORIES

Certificate of Analysis

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit.

1 mg/L = one milligram per liter or 1 mg/Kg = one milligram per kilogram = 1 part per million.

1 ug/L = one microgram per liter or 1 ug/Kg = one microgram per kilogram = 1 part per billion.

1 ng/L = one nanogram per liter or 1 ng/Kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions

Tab H

Quality Assurance and Data Validation Tables

H-1 Field Data QA/QC Evaluation

Location	Casing Volume	2x Casing Volume	Volume Pumped	Volume Check	Conductivity		RPD	pH		RPD	Temp		RPD	Redox Potential		RPD	Turbidity		RPD
Piezometer 1			--		2286		NC	9.02		NC	16.85		NC	266		NC	6.4		NC
Piezometer 2			--		788		NC	8.02		NC	15.14		NC	296		NC	16.0		NC
Piezometer 3			--		2920		NC	12.03		NC	15.83		NC	165		NC	6.4		NC
TWN-1	34.54	69.08	99.00	OK	895.0	895.0	0.00	7.47	7.47	0.00	15.25	15.26	0.07	298	298	0.00	11.8	11.9	0.84
TWN-2	NA	Continuously Pumped Well			3094		NC	7.00		NC	15.81		NC	339		NC	0		NC
TWN-3	37.48	74.96	55.00	Pumped Dry	2368.0	2372.0	0.17	7.46	7.45	0.13	15.38	15.40	0.13	NM		NC	NM		NC
TWN-4	48.15	96.30	132.00	OK	1042.0	1039.0	0.29	7.25	7.24	0.14	14.81	14.81	0.00	300	300	0.00	10.4	11.0	5.61
TWN-7	12.19	24.38	16.50	Pumped Dry	1274.0	1277.0	0.24	7.50	7.52	0.27	16.01	15.97	0.25	NM		NC	NM		NC
TWN-18	55.85	111.70	132.00	OK	2195.0	2207.0	0.55	7.02	7.02	0.00	14.67	14.66	0.07	277	276	0.36	27.0	27.0	0.00
TW4-22	NA	Continuously pumped well			5907		NC	6.82		NC	16.56		NC	247		NC	0		NC
TW4-24	NA	Continuously pumped well			8727		NC	6.80		NC	15.94		NC	279		NC	0		NC
TW4-25	NA	Continuously pumped well			2544		NC	6.83		NC	16.60		NC	282		NC	0		NC

NC = Not Calculated

TWN-2 , TW4-22, TW4-24, and TW4-25 are continuously pumping wells.

Piezometers 1, 2, and 3 were not pumped, only one set of parameters were taken.

TWN-3 and TWN-7 were pumped dry and sampled after recovery.

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 below are included for information purposes only.

NM = Not Measured. The QAP does not require the measurement of redox potential or turbidity in wells that were purged to dryness.

H-2: Holding Time Evaluation

Location ID	Parameter Name	Sample Date	Analysis Date	Hold Time (Days)	Allowed Hold Time (Days)	Hold Time Check
PIEZ-01	Chloride	8/6/2014	8/8/2014	2	28	OK
PIEZ-01	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
PIEZ-02	Chloride	8/6/2014	8/8/2014	2	28	OK
PIEZ-02	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
PIEZ-03	Chloride	8/6/2014	8/8/2014	2	28	OK
PIEZ-03	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
TWN-01	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-01	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK
TWN-02	Chloride	8/6/2014	8/8/2014	2	28	OK
TWN-02	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
TWN-03	Chloride	8/6/2014	8/8/2014	2	28	OK
TWN-03	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
TWN-04	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-04	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK
TWN-07	Chloride	8/6/2014	8/8/2014	2	28	OK
TWN-07	Nitrate/Nitrite (as N)	8/6/2014	8/26/2014	20	28	OK
TWN-07R	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-07R	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK
TWN-18	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-18	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK
TW4-22	Chloride	8/11/2014	8/15/2014	4	28	OK
TW4-22	Nitrate/Nitrite (as N)	8/11/2014	8/28/2014	17	28	OK
TW4-24	Chloride	8/11/2014	8/15/2014	4	28	OK
TW4-24	Nitrate/Nitrite (as N)	8/11/2014	8/28/2014	17	28	OK
TW4-25	Chloride	8/11/2014	8/15/2014	4	28	OK
TW4-25	Nitrate/Nitrite (as N)	8/11/2014	8/28/2014	17	28	OK
TW4-60	Chloride	8/27/2014	8/29/2014	2	28	OK
TW4-60	Nitrate/Nitrite (as N)	8/27/2014	9/12/2014	16	28	OK
TWN-60	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-60	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK
TWN-65	Chloride	8/5/2014	8/8/2014	3	28	OK
TWN-65	Nitrate/Nitrite (as N)	8/5/2014	8/26/2014	21	28	OK

H-3: Analytical Method Check

Parameter	Method	Method Used by Lab
Nitrate	E353.1 or E353.2	E353.2
Chloride	A4500-Cl B or A4500-Cl E or E300.0	E300.0

Both Nitrate and Chloride were analyzed with the correct analytical method.

H-4 Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check
PIEZ-01	Chloride	1	mg/L		1	mg/L	OK
PIEZ-01	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK
PIEZ-02	Chloride	1	mg/L		1	mg/L	OK
PIEZ-02	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
PIEZ-03	Chloride	1	mg/L		1	mg/L	OK
PIEZ-03	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-01	Chloride	1	mg/L		1	mg/L	OK
TWN-01	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-02	Chloride	1	mg/L		1	mg/L	OK
TWN-02	Nitrate/Nitrite (as N)	10	mg/L		0.1	mg/L	OK
TWN-03	Chloride	2	mg/L		1	mg/L	OK
TWN-03	Nitrate/Nitrite (as N)	5	mg/L		0.1	mg/L	OK
TWN-04	Chloride	1	mg/L		1	mg/L	OK
TWN-04	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-07	Chloride	1	mg/L		1	mg/L	OK
TWN-07	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-07R	Chloride	1	mg/L	U	1	mg/L	OK
TWN-07R	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TWN-18	Chloride	1	mg/L		1	mg/L	OK
TWN-18	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TW4-22	Chloride	10	mg/L		1	mg/L	OK
TW4-22	Nitrate/Nitrite (as N)	5	mg/L		0.1	mg/L	OK
TW4-24	Chloride	20	mg/L		1	mg/L	OK
TW4-24	Nitrate/Nitrite (as N)	5	mg/L		0.1	mg/L	OK
TW4-25	Chloride	1	mg/L		1	mg/L	OK
TW4-25	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TW4-60	Chloride	1	mg/L	U	1	mg/L	OK
TW4-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TWN-60	Chloride	1	mg/L	U	1	mg/L	OK
TWN-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TWN-65	Chloride	1	mg/L		1	mg/L	OK
TWN-65	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK

U = Value was reported by the laboratory as nondetect.

H-5 QA/QC Evaluation for Sample Duplicates

Constituent	TWN-01	TWN-65	%RPD
Chloride	28	28	0.00
Nitrogen	1.7	1.4	19.35

H-6 QC Control Limits for Analysis and Blanks

Method Blank Detections

All Method Blanks for the quarter were non-detect.

Matrix Spike % Recovery Comparison

Lab Report	Lab Sample ID	Well	Analyte	MS %REC	MSD %REC	REC Range	RPD
1408071	B408777-MS1	N/A	Nitrate	76	89	80 - 120	14.4
1408071	B048777-MS3	TWN-07	Nitrate	75	86	80 - 120	6.38
1409251	B408924-MS1	TW4-21	Chloride	*	*	80 - 120	NC
1409251	B409365-MS1	TW4-60	Nitrate	71	74	80 - 120	4.14
1408496	B408834-MS1	N/A	Nitrate	72	85	80 - 120	16.6
1408496	B408834-MS2	N/A	Nitrate	73	85	80 - 120	15.2
1408496	B408838-MS1	TW4-03R	Nitrate	67	75	80 - 120	9.76
1408496	B408838-MS2	TW4-19	Nitrate	72	86	80 - 120	14.7
1408496	B408868-MS1	N/A	Nitrate	42	51	80 - 120	18.2

* - Recovery was not calculated because the analyte of the sample was greater than 4 times the spike amount

N/A - QC was not performed on an EFRI sample.

NC - Not calculated

Laboratory Control Sample

All Laboratory Control Samples were within acceptance limits for the quarter.

H-7 Receipt Temperature Evaluation

Sample Batch	Wells in Batch	Temperature
1408071	Piezometer 1, Piezometer 2, Piezometer 3, TWN-1, TWN-2, TWN-3, TWN-4, TWN-7, TWN-07R, TWN-18, TWN-60, TWN-65	1.1 °C
1408496	TW4-22, TW4-24, TW4-25	5.3 °C
1409251	TW4-60	5.9 °C

H-8 Rinsate Evaluation

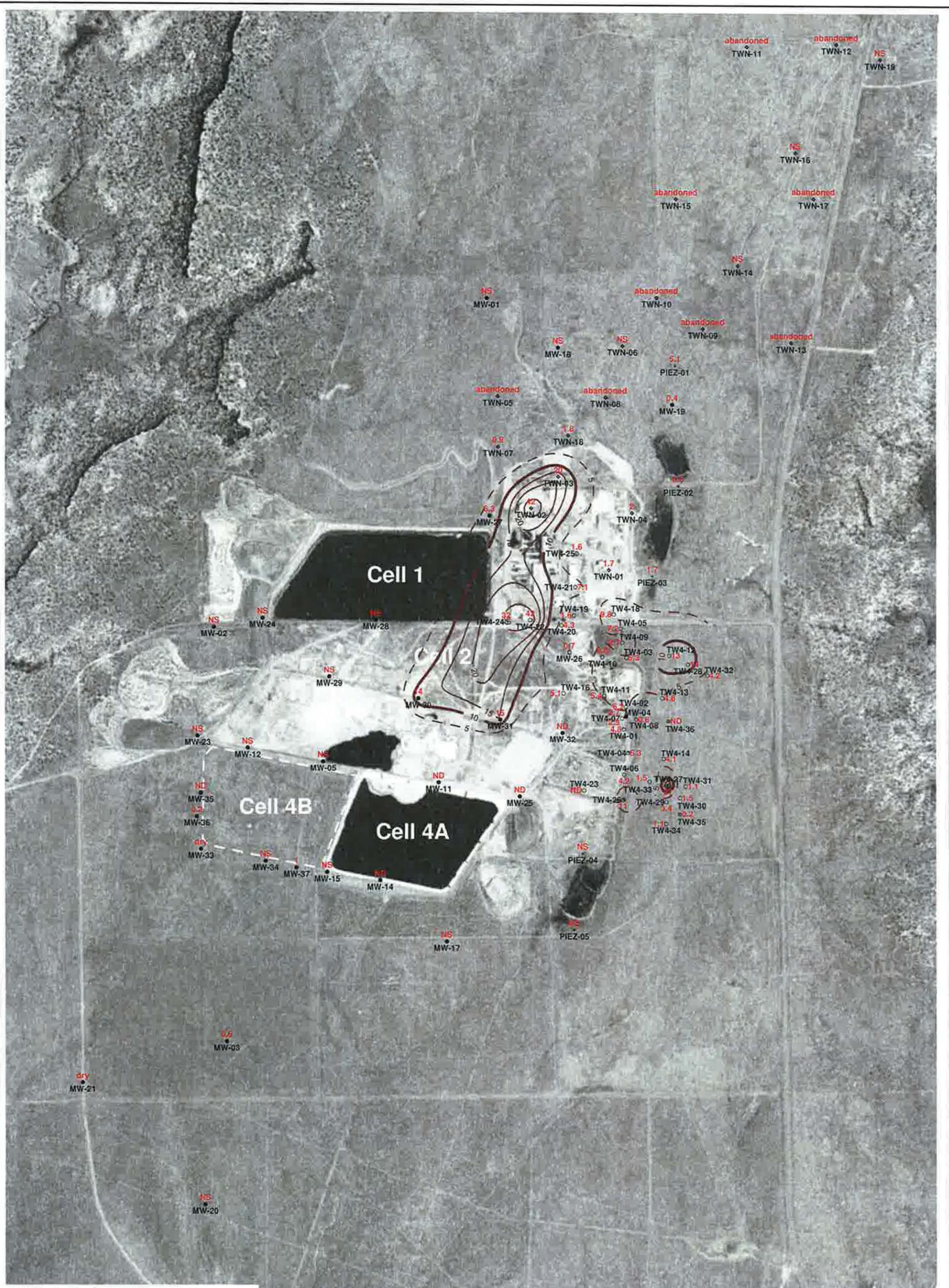
Rinsate Sample	Parameter	Rinsate Result		Previous Well Sample	Result for Well		Qualifier	Reporting Limit
			mg/L			mg/L		
TWN-07R	Nitrogen	ND	mg/L	N/A	NA			0.1 mg/L
TWN-07R	Chloride	ND	mg/L	N/A	NA			1 mg/L
TW4-60	Nitrogen	ND	mg/L	TW4-36	ND	mg/L		0.1 mg/L
TW4-60	Chloride	ND	mg/L	TW4-36	65	mg/L		1 mg/L
TWN-60	Nitrogen	0.1	mg/L	Piez-01	5.1	mg/L	D	0.1 mg/L
TWN-60	Chloride	ND	mg/L	Piez-01	55	mg/L		1 mg/L

The Rinsate sample identified in Column 1 was collected after the pump was used to purge the well identified as "Previous Well Sampled" in Column 4

D = Reporting limit raised due to dilution/sample matrix.

Tab I

Kriged Current Quarter Isoconcentration Maps



EXPLANATION

- NS = not sampled; ND = not detected
- 10 kriged nitrate isocon and label
- MW-4 ● 3.7 perched monitoring well showing concentration in mg/L
- TW4-1 ○ 4.8 temporary perched monitoring well showing concentration in mg/L
- TWN-1 ◇ 1.7 temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 ● 5.1 perched piezometer showing concentration in mg/L
- TW4-35 ☼ 0.2 temporary perched monitoring well installed May, 2014 showing concentration in mg/L



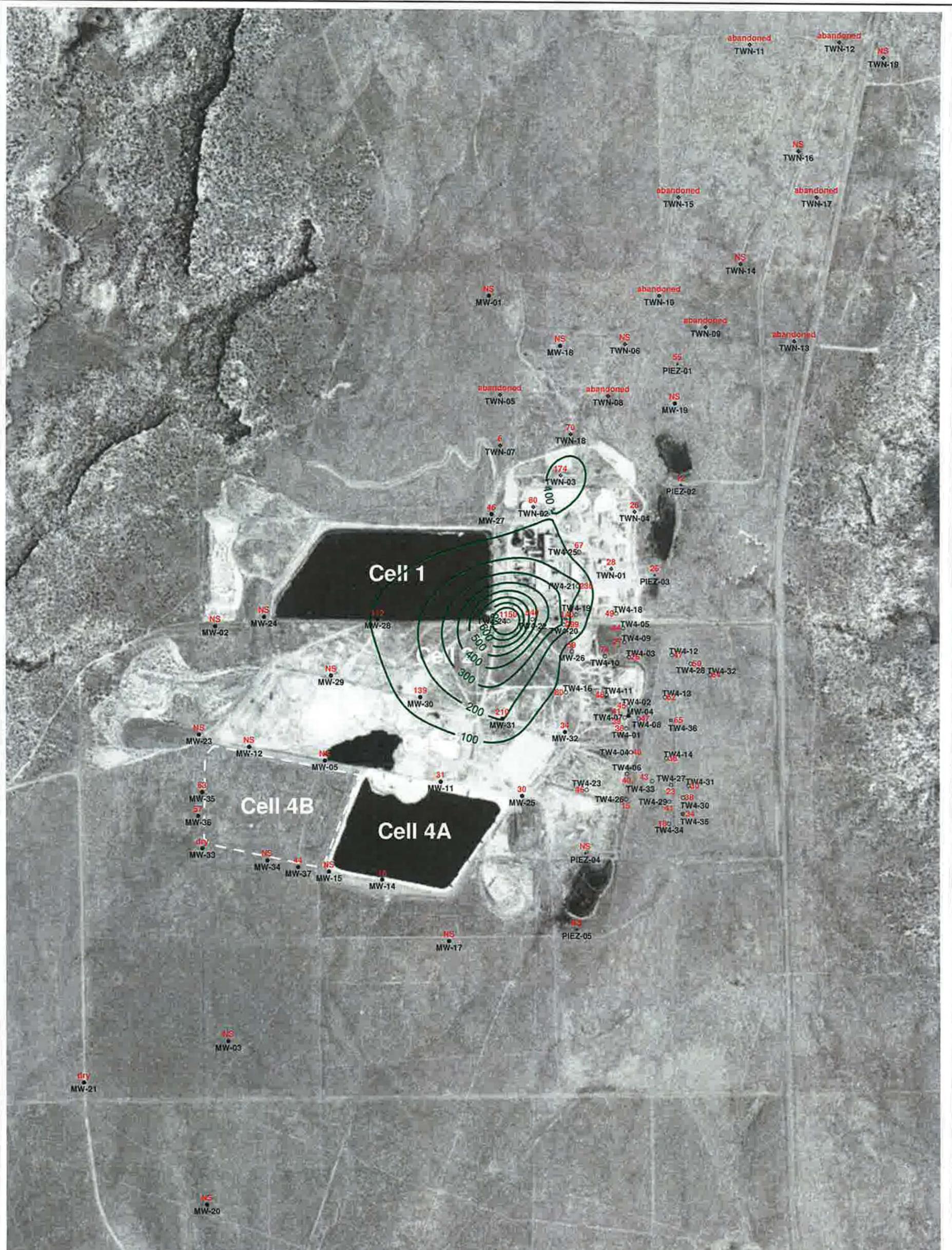
NOTE: MW-4, MW-26, TW4-4, TW4-19, and TW4-20 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells



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**KRIGED 3rd QUARTER, 2014 NITRATE (mg/L)
(NITRATE + NITRITE AS N)
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
	10/16/14	H:/718000/nov14/nitrate/Unt0914.srf	I-1



EXPLANATION

NS = not sampled; ND = not detected

- 100 kriged chloride isocon and label
- MW-4 perched monitoring well showing concentration in mg/L
- TW4-1 temporary perched monitoring well showing concentration in mg/L
- TWN-1 temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 perched piezometer showing concentration in mg/L
- TW4-36 temporary perched monitoring well installed May, 2014 showing concentration in mg/L

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



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**KRIGED 3rd QUARTER, 2014 CHLORIDE (mg/L)
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
	10/26/14	H:/718000/nov14/chloride/Ucl0914.srf	I-2

Tab J

Analyte Concentrations Over Time

Piezometer 1

Date	Nitrate (mg/l)	Chloride (mg/l)
2/19/2009	6.8	NA
7/14/2009	6.8	60
9/22/2009	7.3	78
10/27/2009	7.4	61
6/2/2010	7.2	52
7/19/2010	6.8	52
12/10/2010	6.5	60
1/31/2011	7	60
4/25/2011	6.8	58
7/25/2011	7	53
10/19/2011	6.6	55
1/11/2012	7.1	78
4/20/2012	6.6	58
7/27/2012	7.2	56
10/17/2012	7.66	55
2/18/2013	8.11	56.7
4/24/2013	8.88	53.3
8/28/2013	7.83	55.1
10/16/2013	6.68	54.1
1/13/2014	6.79	56.2
5/7/2014	7.57	52.1
8/6/2014	5.1	55

Piezometer 2

Date	Nitrate (mg/l)	Chloride (mg/l)
2/19/2009	0.5	NA
7/14/2009	0.5	7
9/22/2009	0.5	17
10/27/2009	0.6	7
6/2/2010	0.6	8
7/19/2010	0.6	8
12/10/2010	0.2	6
1/31/2011	0.3	9
4/25/2011	0.3	8
7/25/2011	0.1	9
10/19/2011	0.1	8
1/11/2012	0.1	9
4/20/2012	0.2	8
7/27/2012	0.2	9
10/17/2012	0.192	9.5
2/19/2013	0.218	9.67
4/24/2013	0.172	10.3
8/28/2013	0.198	9.66
10/16/2013	0.364	9.22
1/13/2014	0.169	11.4
5/7/2014	0.736	11.4
8/6/2014	0.8	12

Piezometer 3

Date	Nitrate (mg/l)	Chloride (mg/l)
2/19/2009	0.7	NA
7/14/2009	0.8	12
9/22/2009	0.8	24
10/27/2009	1.2	19
3/24/2010	1.7	116
6/2/2010	1.6	36
7/19/2010	1.6	35
12/10/2010	1.8	25
1/31/2011	1.8	40
4/25/2011	1.7	35
7/25/2011	1.8	61
10/19/2011	1.7	12
1/11/2012	1.8	20
4/20/2012	1.7	53
7/27/2012	1.8	21
10/17/2012	2.75	20.1
2/19/2013	1.85	21
4/24/2013	1.83	21.2
8/28/2013	1.81	22.4
10/16/2013	1.80	23.5
1/13/2014	1.70	26.0
5/7/2014	1.79	23.9
8/6/2014	1.7	26

TWN-1

Date	Nitrate (mg/l)	Chloride (mg/l)
2/6/2009	0.7	19
7/21/2009	0.4	17
9/21/2009	0.4	19
10/28/2009	0.5	18
3/17/2010	0.5	17
5/26/2010	0.6	20
9/27/2010	0.6	19
12/7/2010	0.6	14
1/26/2011	0.5	17
4/20/2011	0.5	19
7/26/2011	0.5	14
10/17/2011	0.5	10
1/9/2012	0.6	15
4/18/2012	0.6	17
7/24/2012	0.6	17
10/15/2012	0.432	17.5
2/18/2013	0.681	17.6
4/23/2013	0.84	17.4
8/27/2013	1.24	24.1
10/16/2013	1.61	26.8
1/14/2014	1.47	29.2
5/6/2014	1.63	31.1
8/5/2014	1.7	28

TWN-2

Date	Nitrate (mg/l)	Chloride (mg/l)
2/6/2009	25.4	29
7/21/2009	25	25
9/21/2009	22.6	17
11/2/2009	20.8	55
3/24/2010	62.1	85
6/2/2010	69	97
9/29/2010	69	104
12/9/2010	48	93
2/1/2011	43	93
4/28/2011	40	85
7/28/2011	33	74
10/20/2011	33	76
1/12/2012	31	86
4/20/2012	48	103
7/31/2012	54	93
10/17/2012	22.1	79
2/19/2013	57.3	80.5
4/24/2013	57.7	82.1
8/27/2013	80	75.9
10/16/2013	111	70.4
1/13/2014	42.6	72.4
5/7/2014	44.7	84.9
8/6/2014	42	80

TWN-3

Date	Nitrate (mg/l)	Chloride (mg/l)
2/6/2009	23.6	96
7/21/2009	25.3	96
9/21/2009	27.1	99
11/2/2009	29	106
3/25/2010	25.3	111
6/3/2010	26	118
7/15/2010	27	106
12/10/2010	24	117
2/1/2011	24	138
4/28/2011	26	128
7/29/2011	25	134
10/20/2011	25	129
1/12/2012	25	143
4/20/2012	24	152
7/31/2012	27	158
10/17/2012	12.1	149
2/19/2013	22.2	157
4/24/2013	27.2	158
8/28/2013	20.9	171
10/17/2013	23.5	163
1/15/2014	19.6	160
5/7/2014	23.6	168
8/6/2014	19.5	174

TWN-4

Date	Nitrate (mg/l)	Chloride (mg/l)
2/6/2009	1	13
7/21/2009	0.05	12
9/21/2009	0.4	13
10/28/2009	0.4	11
3/16/2010	0.9	22
5/27/2010	1.0	22
9/27/2010	0.9	19
12/8/2010	1	21
1/25/2011	0.9	21
4/20/2011	0.9	21
7/26/2011	1.1	35
10/18/2011	0.9	20
1/9/2012	0.9	20
4/18/2012	1.1	24
7/25/2012	1.4	25
10/15/2012	1.45	26.4
2/18/2013	1.51	25.3
4/23/2013	1.63	24.4
8/27/2013	1.58	27.2
10/16/2013	1.69	29.4
1/14/2014	1.41	28.4
5/6/2014	1.55	29.6
8/5/2014	2	28

TWN-7

Date	Nitrate (mg/l)	Chloride (mg/l)
8/25/2009	ND	11
9/21/2009	ND	7
11/10/2009	0.1	7
3/17/2010	0.8	6
5/28/2010	1.2	6
7/14/2010	1.6	7
12/10/2010	1	4
1/27/2011	1.3	6
4/21/2011	1.7	6
7/29/2011	0.7	5
10/19/2011	2.2	6
1/11/2012	2.3	5
4/20/2012	1.2	6
7/26/2012	0.9	6
10/16/2012	0.641	5.67
2/19/2013	0.591	5.68
4/24/2013	1.16	5.88
8/28/2013	0.835	6.96
10/16/2013	0.986	5.70
1/15/2014	0.882	5.75
5/7/2014	0.564	5.26
8/6/2014	0.9	6

TWN-18

Date	Nitrate (mg/l)	Chloride (mg/l)
11/2/2009	1.3	57
3/17/2010	1.6	42
6/1/2010	1.8	63
9/27/2010	1.8	64
12/9/2010	1.6	59
1/27/2011	1.4	61
4/26/2011	1.8	67
7/28/2011	1.8	65
10/18/2011	1.9	60
1/10/2012	1.9	64
4/19/2012	2.1	64
7/26/2012	2.3	67
10/16/2012	1.95	67.5
2/18/2013	2.27	68.7
4/23/2013	2.32	64.3
8/27/2013	2.04	70.4
10/16/2013	2.15	67.3
1/14/2014	2.33	68.4
5/6/2014	2.18	76.5
8/5/2014	1.8	70

TW4-19

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
7/22/2002	42.80	12/7/2005	81
9/12/2002	47.60	3/9/2006	86
3/28/2003	61.40	7/20/2006	123
6/23/2003	11.40	11/9/2006	134
7/15/2003	6.80	2/28/2007	133
8/15/2003	4.00	8/15/2007	129
9/12/2003	5.70	10/10/2007	132
9/25/2003	9.20	3/26/2008	131
10/29/2003	7.70	6/25/2008	128
11/9/2003	4.80	9/10/2008	113
8/16/2004	9.91	10/15/2008	124
9/17/2004	4.50	3/4/2009	127
3/16/2005	5.30	6/23/2009	132
6/7/2005	5.70	9/14/2009	43
8/31/2005	4.60	12/14/2009	124
12/1/2005	0.10	2/17/2010	144
3/9/2006	4.00	6/9/2010	132
6/14/2006	5.20	8/16/2010	142
7/20/2006	4.30	10/11/2010	146
11/9/2006	4.60	2/17/2011	135
2/28/2007	4.00	6/7/2011	148
8/15/2007	4.10	8/17/2011	148
10/10/2007	4.00	11/17/2011	148
3/26/2008	2.20	1/23/2012	138
6/25/2008	2.81	6/6/2012	149
9/10/2008	36.20	9/5/2012	149
10/15/2008	47.80	10/3/2012	150
3/4/2009	3.20	2/11/2013	164
6/23/2009	2.40	6/5/2013	148
9/14/2009	0.10	9/3/2013	179
12/14/2009	26.70	10/29/2013	206
2/17/2010	2.00	1/27/2014	134
6/9/2010	4.40	5/19/2014	152
8/16/2010	5.90	8/11/2014	140
10/11/2010	2.70		
2/17/2011	17.00		
6/7/2011	12.00		
8/17/2011	3.00		
11/17/2011	5.00		
1/23/2012	0.60		
6/6/2012	2.40		
9/5/2012	2.50		
10/3/2012	4.10		
2/11/2013	7.99		
6/5/2013	2.95		
9/3/2013	17.60		
10/29/2013	4.70		
1/27/2014	1.62		
5/19/2014	1.34		
8/11/2014	1.60		

The sampling program for TW4-19 was updated in the fourth quarter of 2005 to include analysis for chloride as well as nitrate. This change accounts for the different number of data points represented above.

TW4-21

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
5/25/2005	14.6	12/7/2005	353
8/31/2005	10.1	3/9/2006	347
11/30/2005	9.6	7/20/2006	357
3/9/2006	8.5	11/8/2006	296
6/14/2006	10.2	2/28/2007	306
7/20/2006	8.9	6/27/2007	327
11/8/2006	8.7	8/15/2007	300
2/28/2007	8.7	10/10/2007	288
6/27/2007	8.6	3/26/2008	331
8/15/2007	8.6	6/25/2008	271
10/10/2007	8.3	9/10/2008	244
3/26/2008	14.3	10/15/2008	284
6/25/2008	8.8	3/11/2009	279
9/10/2008	7.6	6/24/2009	291
10/15/2008	8.0	9/15/2009	281
3/11/2009	8.3	12/22/2009	256
6/24/2009	8.1	2/25/2010	228
9/15/2009	9.2	6/10/2010	266
12/22/2009	8.4	8/12/2010	278
2/25/2010	8.4	10/13/2010	210
6/10/2010	12.0	2/22/2011	303
8/12/2010	14.0	6/1/2011	297
10/13/2010	7.0	8/17/2011	287
2/22/2011	9.0	11/16/2011	276
6/1/2011	13.0	1/19/2012	228
8/17/2011	14.0	6/13/2012	285
11/16/2011	13.0	9/13/2012	142
1/19/2012	15.0	10/4/2012	270
6/13/2012	11.0	2/13/2013	221
9/13/2012	13.0	6/18/2013	243
10/4/2012	14.0	9/12/2013	207
2/13/2013	11.8	11/13/2013	206
6/18/2013	13.8	2/5/2014	200
9/12/2013	10.3	5/22/2014	243
11/13/2013	9.0	8/27/2014	230
2/5/2014	11.4		
5/22/2014	11.5		
8/27/2014	7.1		

The sampling program for TW4-21 was updated in the fourth quarter of 2005 to include analysis for chloride as well as nitrate. This change accounts for the different number of data points represented above.

TW4-22

Date	Nitrate (mg/l)	Chloride (mg/l)
2/28/2007	20.9	347
6/27/2007	19.3	273
8/15/2007	19.3	259
10/10/2007	18.8	238
3/26/2008	39.1	519
6/25/2008	41.9	271
9/10/2008	38.7	524
10/15/2008	36.3	539
3/11/2009	20.7	177
6/24/2009	20.6	177
9/15/2009	40.3	391
12/29/2009	17.8	175
3/3/2010	36.6	427
6/15/2010	19	134
8/12/2010	18	127
8/24/2010	15	130
10/13/2010	16	134
2/23/2011	18	114
6/1/2011	17	138
8/17/2011	15	120
11/16/2011	19	174
1/19/2012	14	36
6/13/2012	12.8	35
9/12/2012	7	121
10/4/2012	14	130
2/11/2013	58	635
6/5/2013	50.2	586
9/3/2013	29.7	487
10/29/2013	45.2	501
1/27/2014	54.6	598
5/19/2014	47.2	614
8/11/2014	41.5	540

TW4-24

Date	Nitrate (mg/l)	Chloride (mg/l)
6/27/2007	26.1	770
8/15/2007	29	791
10/10/2007	24.7	692
3/26/2008	24.4	740
6/25/2008	45.3	834
9/10/2008	38.4	1180
10/15/2008	44.6	1130
3/4/2009	30.5	1010
6/24/2009	30.4	759
9/15/2009	30.7	618
12/17/2009	28.3	1080
2/25/2010	33.1	896
6/9/2010	30	639
8/11/2010	32	556
8/24/2010	31	587
10/6/2010	31	522
2/17/2011	31	1100
5/26/2011	35	1110
8/17/2011	34	967
11/16/2011	35	608
1/18/2012	37	373
6/6/2012	37	355
8/30/2012	37	489
10/3/2012	38	405
2/11/2013	35.9	1260
6/5/2013	23.7	916
9/3/2013	32.6	998
10/29/2013	34.6	1030
1/27/2014	31.6	809
5/19/2014	35	1020
8/11/2014	31.5	1150

TW4-25

Date	Nitrate (mg/l)	Chloride (mg/l)
6/27/2007	17.1	395
8/15/2007	16.7	382
10/10/2007	17	356
3/26/2008	18.7	374
6/25/2008	22.1	344
9/10/2008	18.8	333
10/15/2008	21.3	366
3/4/2009	15.3	332
6/24/2009	15.3	328
9/15/2009	3.3	328
12/16/2009	14.2	371
2/23/2010	14.4	296
6/8/2010	16	306
8/10/2010	14	250
10/5/2010	15	312
2/16/2011	15	315
5/25/2011	16	321
8/16/2011	16	276
11/15/2011	16	294
1/18/2012	16	304
5/31/2012	16	287
9/11/2012	17	334
10/3/2012	17	338
2/11/2013	9.04	190
6/5/2013	5.24	136
9/3/2013	5.69	119
10/29/2013	6.10	88.6
1/27/2014	2.16	85.7
5/19/2014	1.21	51.1
8/11/2014	1.6	67

MW-30

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/22/2005	12.4	6/22/2005	125
9/22/2005	12.8	9/22/2005	125
12/14/2005	13.6	12/14/2005	128
3/22/2006	13.8	3/22/2006	125
6/21/2006	14.5	6/21/2006	124
9/13/2006	14.1	9/13/2006	118
10/25/2006	14.6	10/25/2006	124
3/15/2007	14.4	3/15/2007	125
8/22/2007	14.6	8/22/2007	126
10/24/2007	14.9	10/24/2007	122
3/19/2008	14.8	3/19/2008	118
6/3/2008	18.7	6/3/2008	125
8/4/2008	17.3	8/4/2008	121
11/5/2008	15.6	11/5/2008	162
2/3/2009	15.3	2/3/2009	113
5/13/2009	15.1	5/13/2009	122
8/24/2009	20.9	8/24/2009	118
10/14/2009	15.0	10/14/2009	129
1/20/2010	15.4	1/20/2010	106
2/9/2010	16.1	2/9/2010	127
4/27/2010	15.8	4/27/2010	97
5/24/2010	17.0	9/14/2010	111
6/15/2010	15.3	11/9/2010	126
8/24/2010	16.0	2/1/2011	134
9/14/2010	15.0	4/11/2011	134
10/19/2010	15.0	5/10/2011	128
11/9/2010	15.0	6/20/2011	127
12/14/2010	16.0	7/5/2011	127
1/10/2011	15.0	8/3/2011	126
2/1/2011	16.0	9/7/2011	145
3/14/2011	17.0	10/4/2011	129
4/11/2011	16.0	11/8/2011	122
5/10/2011	16.0	12/12/2011	124
6/20/2011	17.0	1/24/2012	124
7/5/2011	17.0	2/14/2012	126
8/3/2011	14.0	3/14/2012	128
9/7/2011	16.0	4/10/2012	128
10/4/2011	16.0	5/2/2012	124
11/8/2011	16.0	6/18/2012	131
12/12/2011	16.0	7/10/2012	128
1/24/2012	17.0	8/7/2012	139
2/14/2012	17.0	9/19/2012	130
3/14/2012	18.0	10/23/2012	135
4/10/2012	17.0	11/13/2012	114
5/2/2012	16.0	12/26/2012	122

MW-30

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/18/2012	15.0	1/23/2013	128
7/10/2012	17.0	2/26/2013	129
8/7/2012	18.0	3/20/2013	126
9/19/2012	16.0	4/17/2013	117
10/23/2012	16.2	5/15/2013	119
11/13/2012	18.5	6/25/2013	127
12/26/2012	17.2	7/10/2013	130
1/23/2013	19.2	8/20/2013	126
2/26/2013	21.4	9/18/2013	131
3/20/2013	14.3	10/22/2013	128
4/17/2013	16.8	11/20/2013	124
5/15/2013	18.8	12/18/2013	134
6/25/2013	16.1	1/8/2014	131
7/10/2013	17.6	2/25/2014	135
8/20/2013	16.4	3/11/2014	144
9/18/2013	16.9	6/3/2014	128
10/22/2013	19.7	9/9/2014	136
11/20/2013	19.5		
12/18/2013	20.7		
1/8/2014	24.0		
2/25/2014	18.4		
3/11/2014	21.3		
6/3/2014	19.4		
9/9/2014	16.8		

Under the groundwater sampling program, accelerated monitoring for nitrate began in MW-30 prior to when the accelerated monitoring for chloride began. This difference accounts for the different number of data points represented above.

MW-31

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/22/2005	24.2	6/22/2005	139
9/22/2005	22.4	9/22/2005	136
12/14/2005	23.8	12/14/2005	135
3/22/2006	24.1	3/22/2006	133
6/21/2006	25.3	6/21/2006	138
9/13/2006	24.6	9/13/2006	131
10/25/2006	25.1	10/25/2006	127
3/15/2007	23.2	3/15/2007	132
3/15/2007	22.0	3/15/2007	132
8/27/2007	23.3	8/27/2007	136
10/24/2007	24.6	10/24/2007	122
3/19/2008	25.0	3/19/2008	124
6/3/2008	29.3	6/3/2008	128
8/4/2008	28.7	8/4/2008	124
11/11/2008	29.9	11/11/2008	119
2/3/2009	23.4	2/3/2009	115
5/13/2009	22.4	5/13/2009	124
8/24/2009	15.4	8/24/2009	122
10/14/2009	22.6	10/14/2009	138
2/9/2010	21.7	2/9/2010	128
4/20/2010	22.5	4/20/2010	128
5/21/2010	23.0	9/13/2010	139
6/15/2010	21.1	11/9/2010	138
8/24/2010	22.0	2/1/2011	145
9/13/2010	21.0	4/1/2011	143
10/19/2010	20.0	5/10/2011	143
11/9/2010	20.0	6/20/2011	145
12/14/2010	20.0	7/5/2011	148
1/10/2011	19.0	8/2/2011	148
2/1/2011	21.0	9/6/2011	148
3/14/2011	22.0	10/3/2011	145
4/1/2011	21.0	11/8/2011	145
5/10/2011	20.0	12/12/2011	148
6/20/2011	22.0	1/24/2012	155
7/5/2011	22.0	2/13/2012	150
8/2/2011	20.0	3/13/2012	152
9/6/2011	21.0	4/9/2012	160
10/3/2011	21.0	5/2/2012	151
11/8/2011	21.0	6/18/2012	138
12/12/2011	21.0	7/9/2012	161
1/24/2012	21.0	8/6/2012	175
2/13/2012	21.0	9/18/2012	172
3/13/2012	22.0	10/22/2012	157
4/9/2012	21.0	11/6/2012	189
5/2/2012	20.0	12/18/2012	170

MW-31

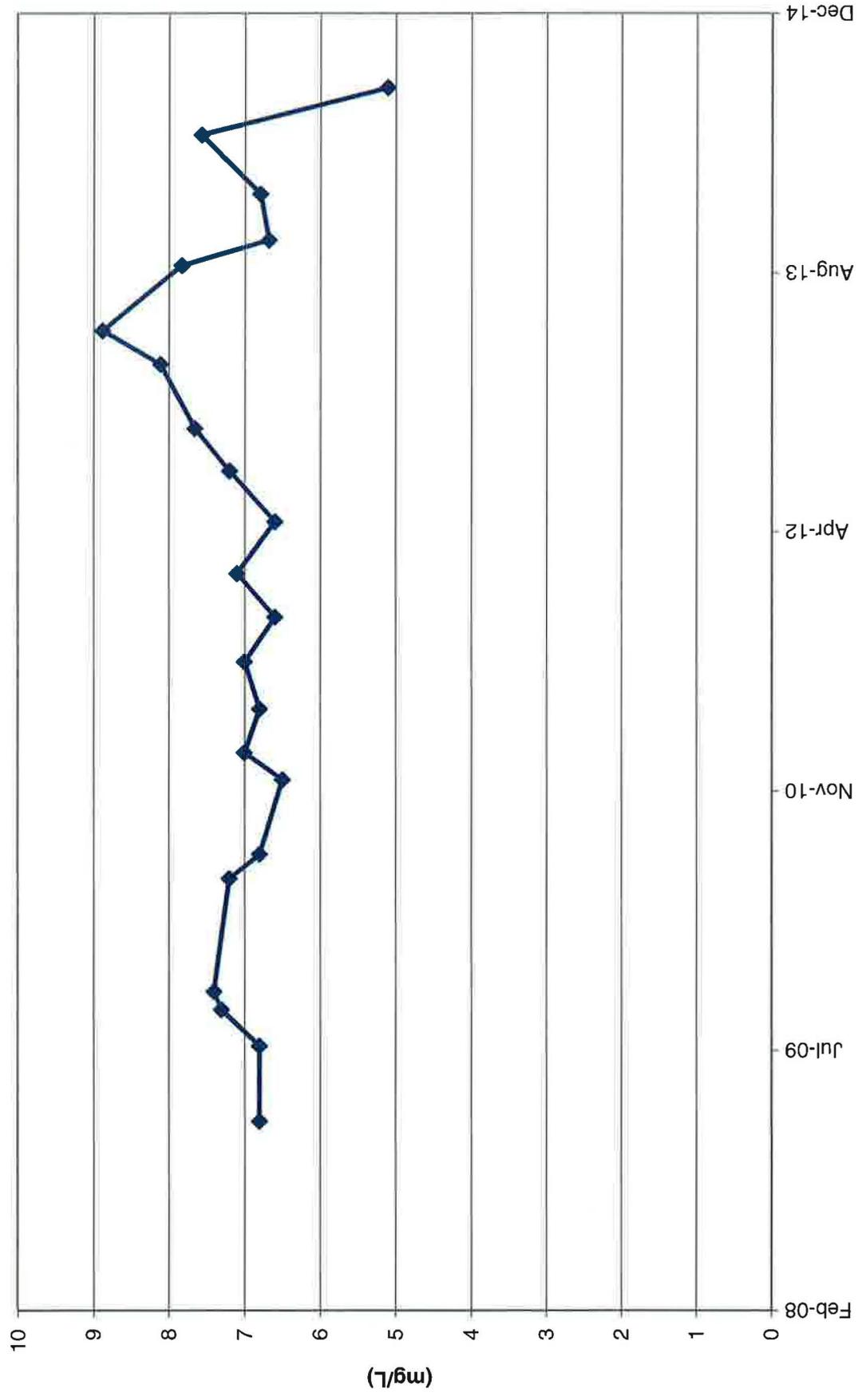
Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/18/2012	21.6	1/22/2013	176
7/9/2012	21.0	2/19/2013	174
8/6/2012	21.0	3/19/2013	168
9/18/2012	21.0	4/16/2013	171
10/22/2012	18.0	5/13/2013	169
11/6/2012	23.6	6/24/2013	179
12/18/2012	22.2	7/9/2013	182
1/22/2013	22.8	8/19/2013	183
2/19/2013	19.3	9/17/2013	193
3/19/2013	19.1	10/23/2013	188
4/16/2013	18.8	11/18/2013	174
5/13/2013	23.8	12/17/2013	203
6/24/2013	20.0	1/7/2014	194
7/9/2013	21.7	2/17/2014	197
8/19/2013	16.0	3/10/2014	230
9/17/2013	21.2	6/2/2014	173
10/23/2013	21.2	9/3/2014	210
11/18/2013	23.9		
12/17/2013	24.2		
1/7/2014	24.0		
2/17/2014	20.6		
3/10/2014	26.2		
6/2/2014	23.1		
9/3/2014	18.9		

Under the groundwater sampling program, accelerated monitoring for nitrate began in MW-31 prior to when the accelerated monitoring for chloride began. This difference accounts for the different number of data points represented above.

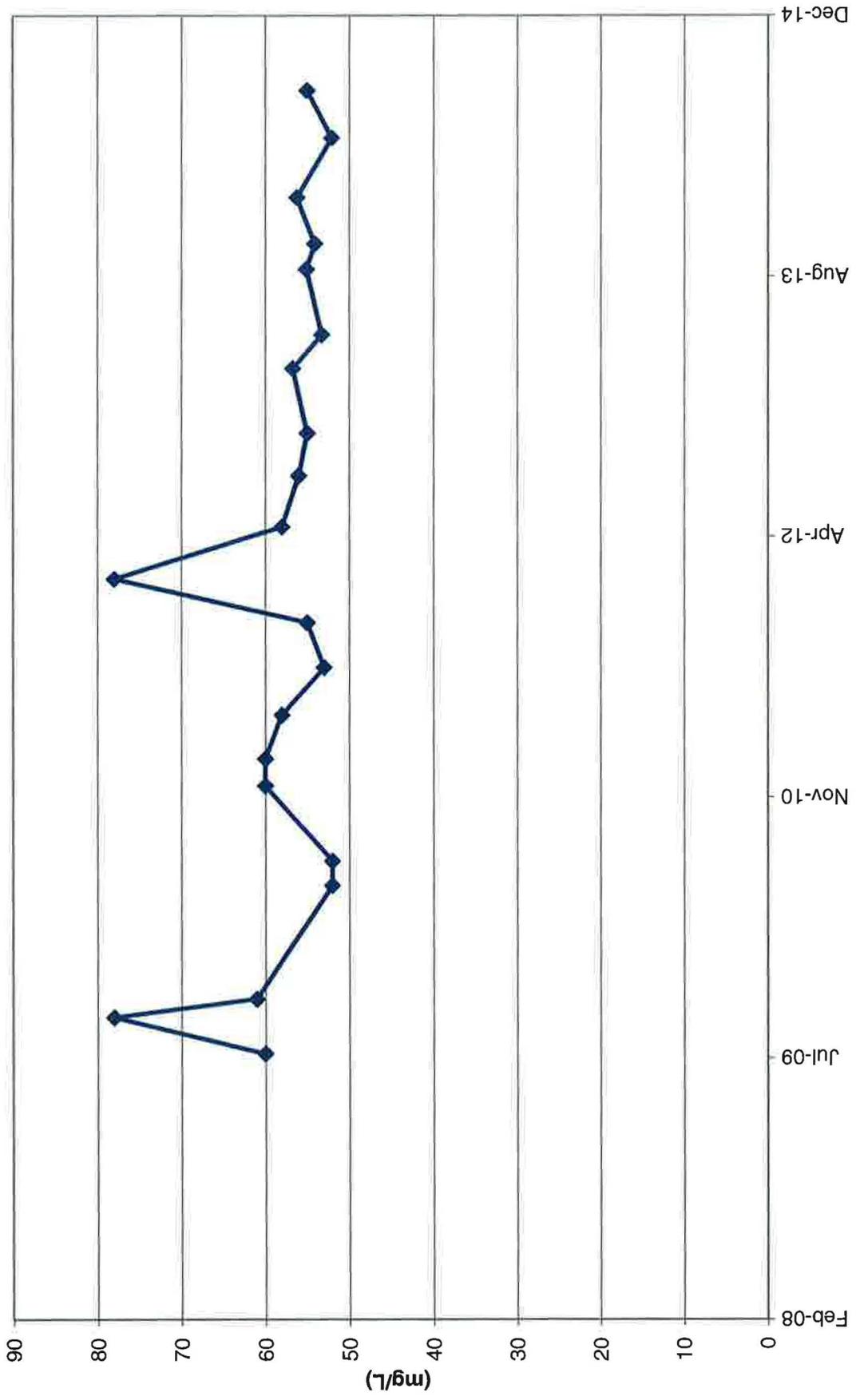
Tab K

Concentration Trend Graphs

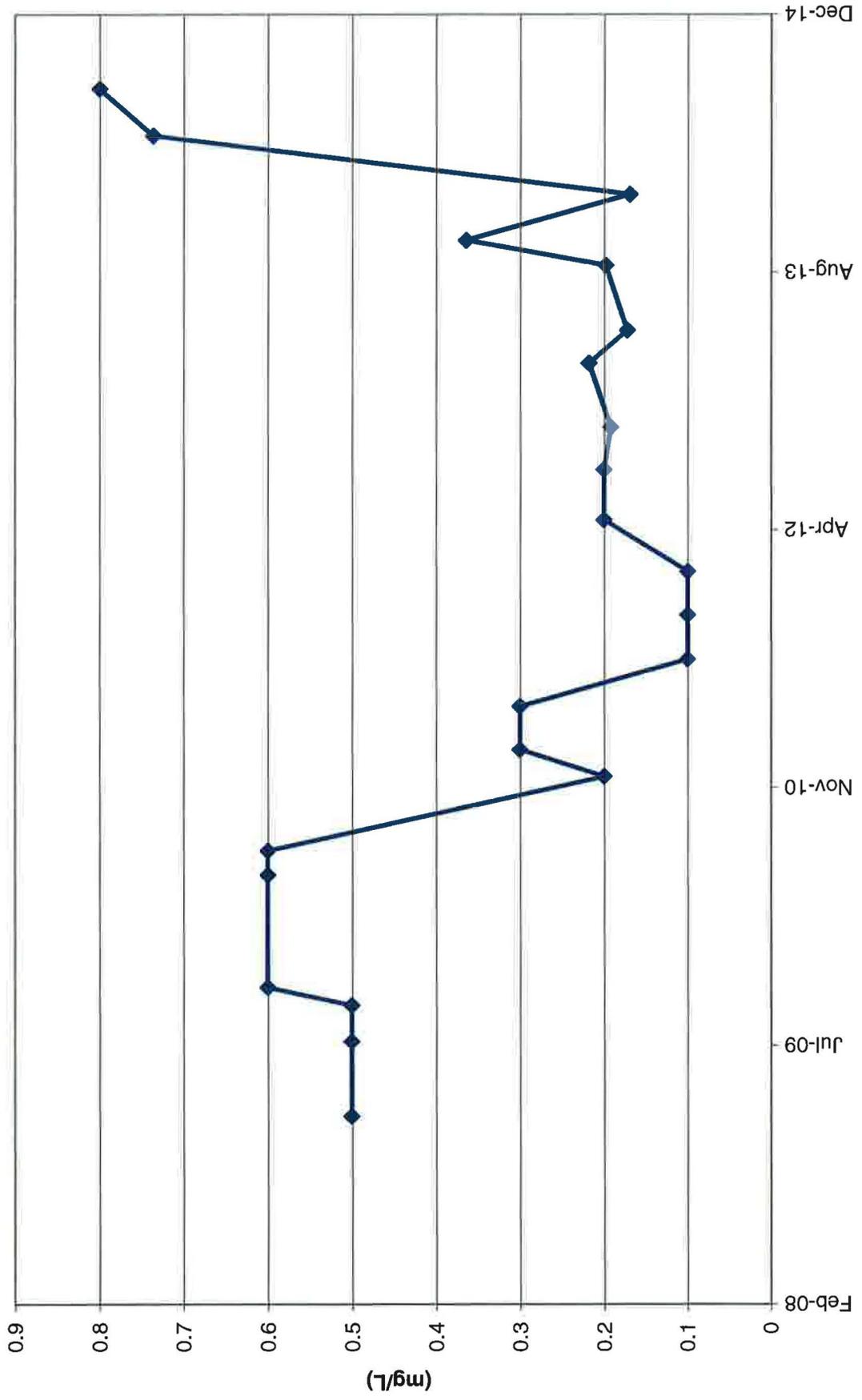
Piezometer 1 Nitrate Concentrations



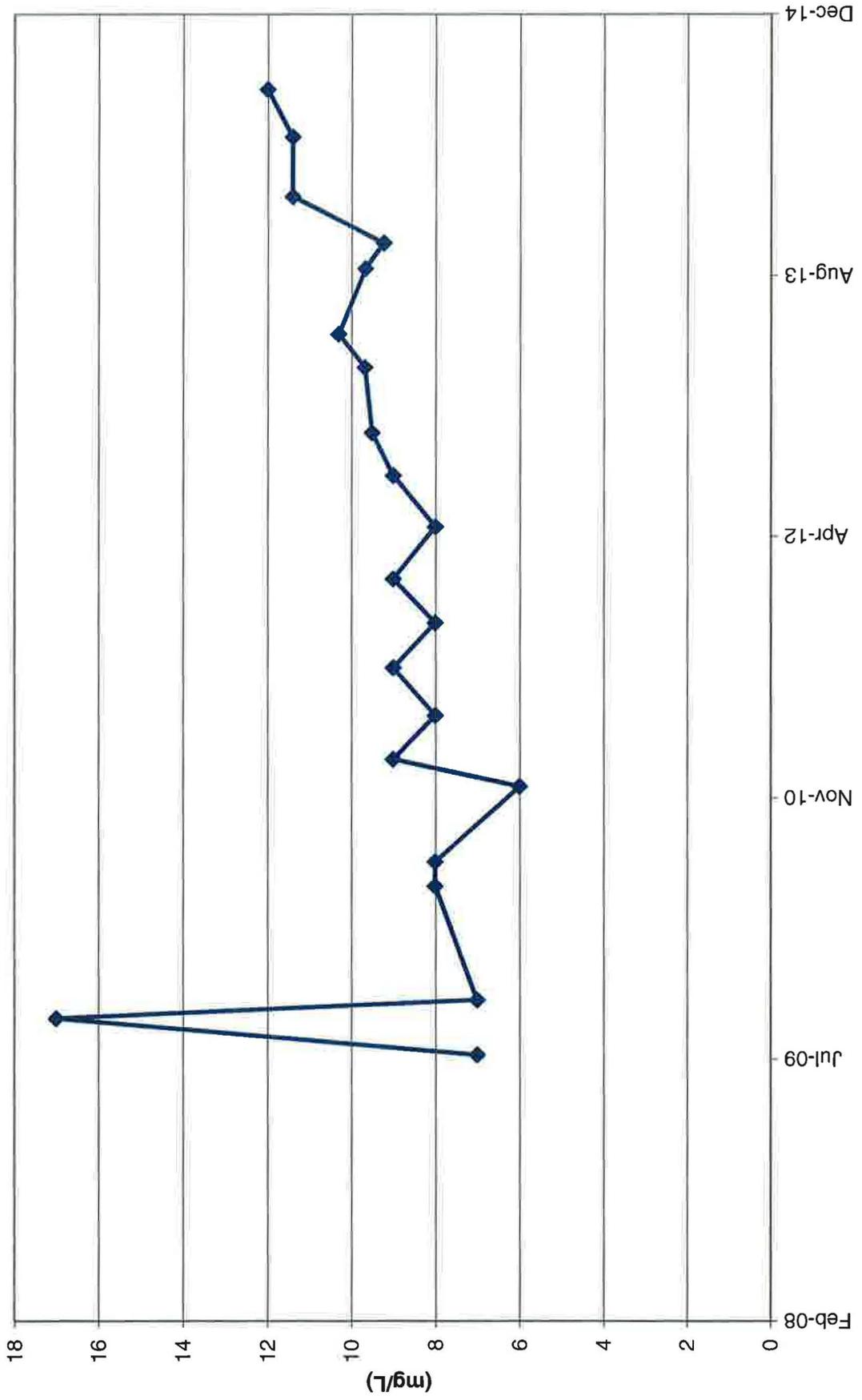
Piezometer 1 Chloride Concentrations



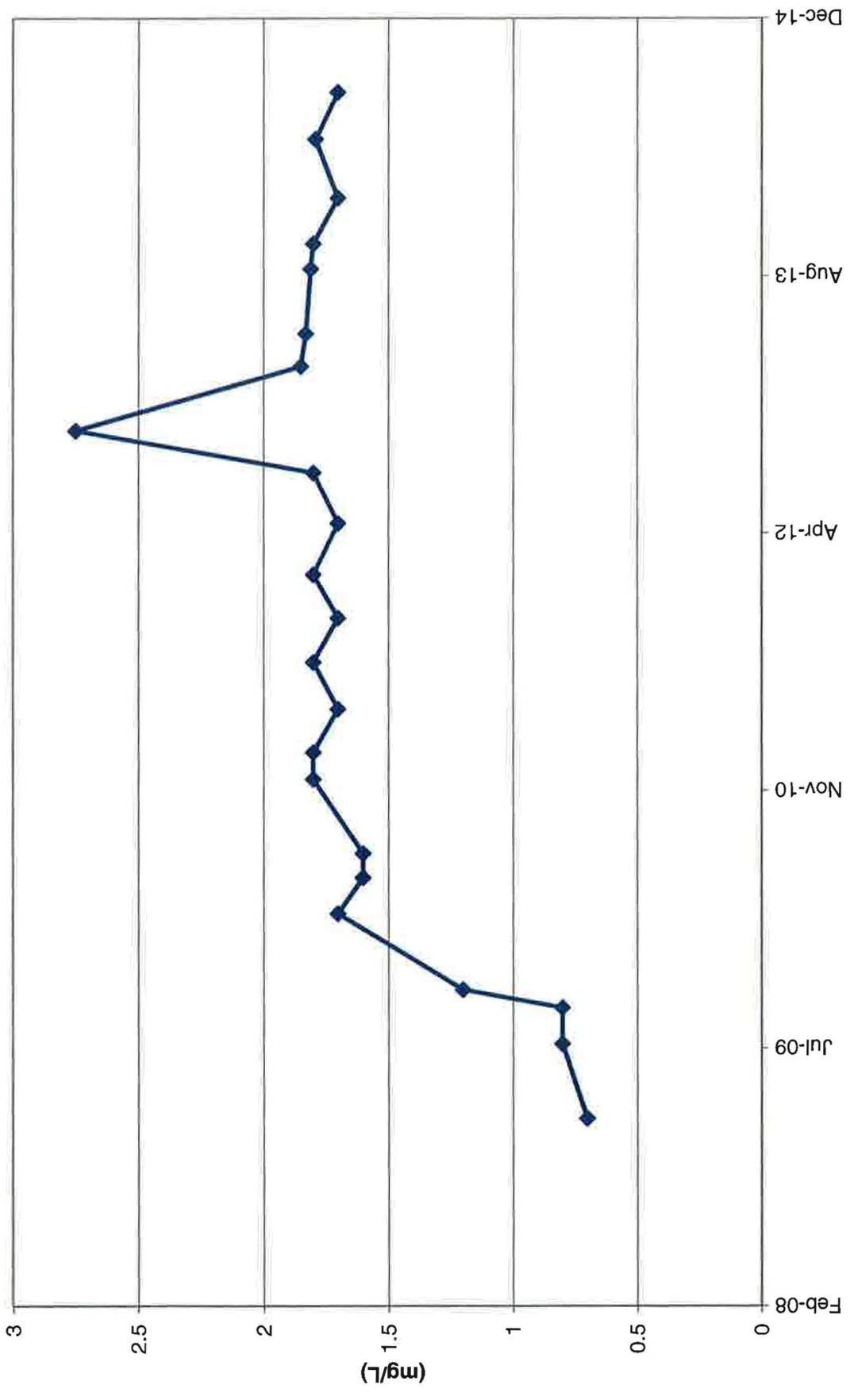
Piezometer 2 Nitrate Concentrations



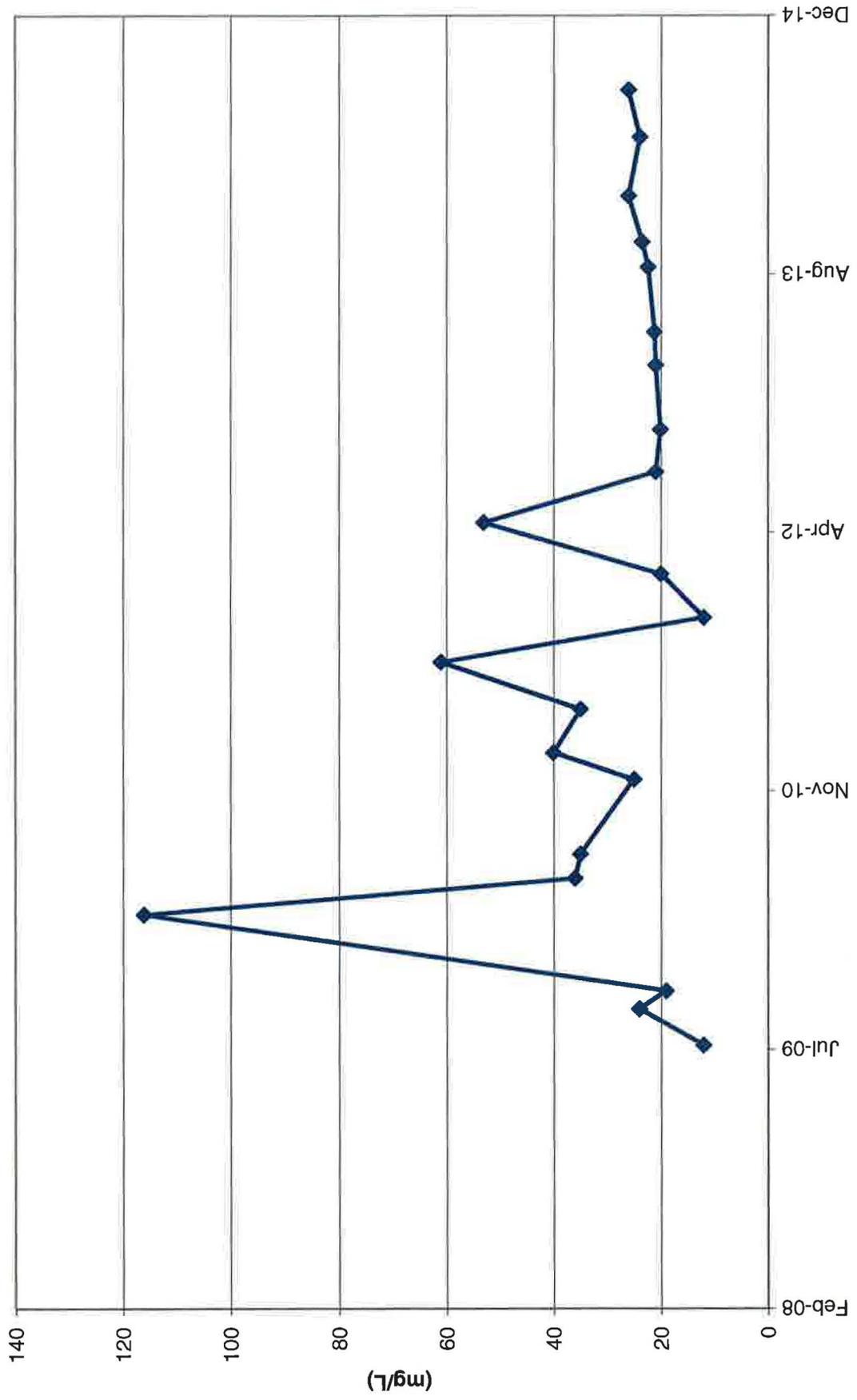
Piezometer 2 Chloride Concentrations



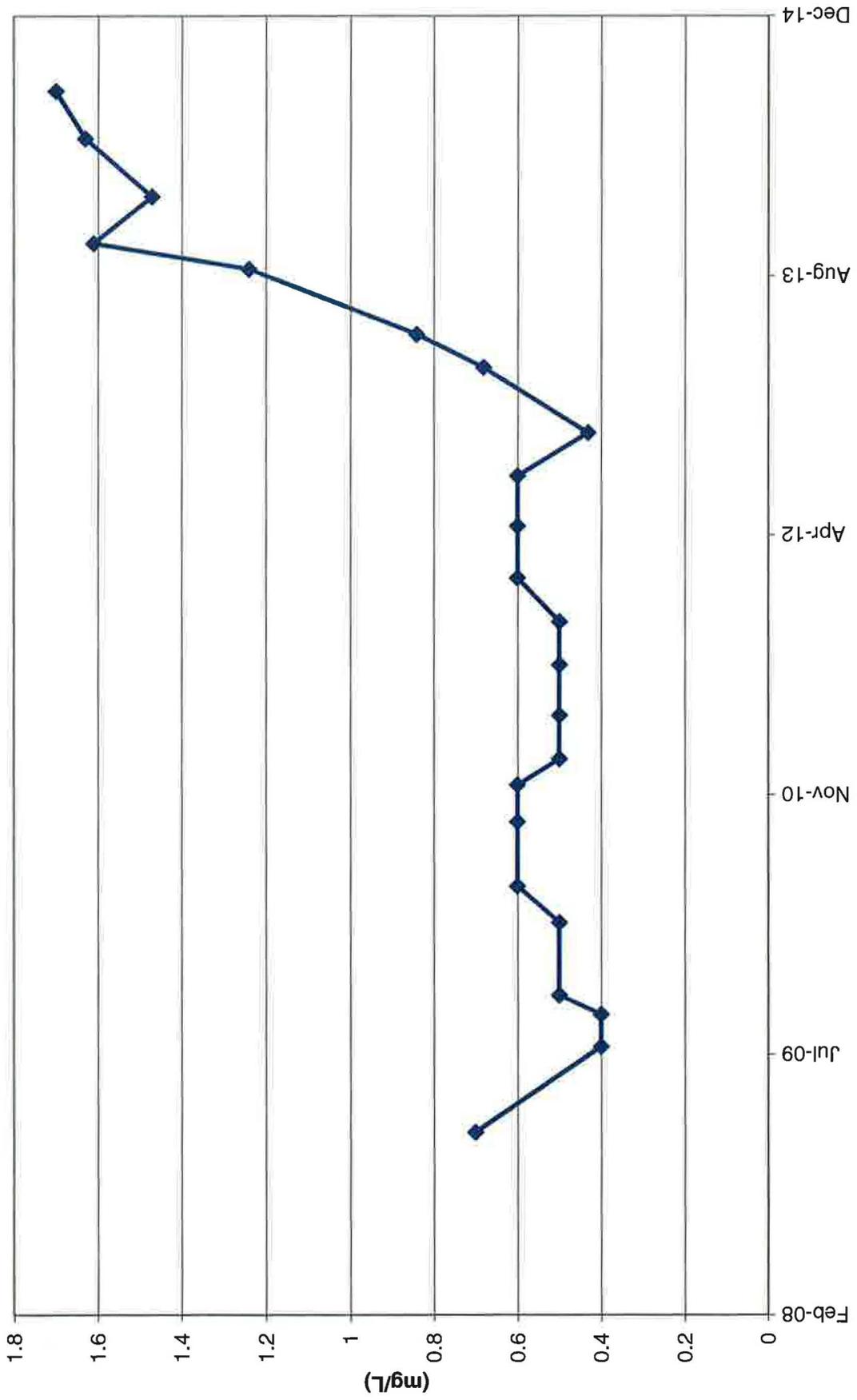
Piezometer 3 Nitrate Concentrations



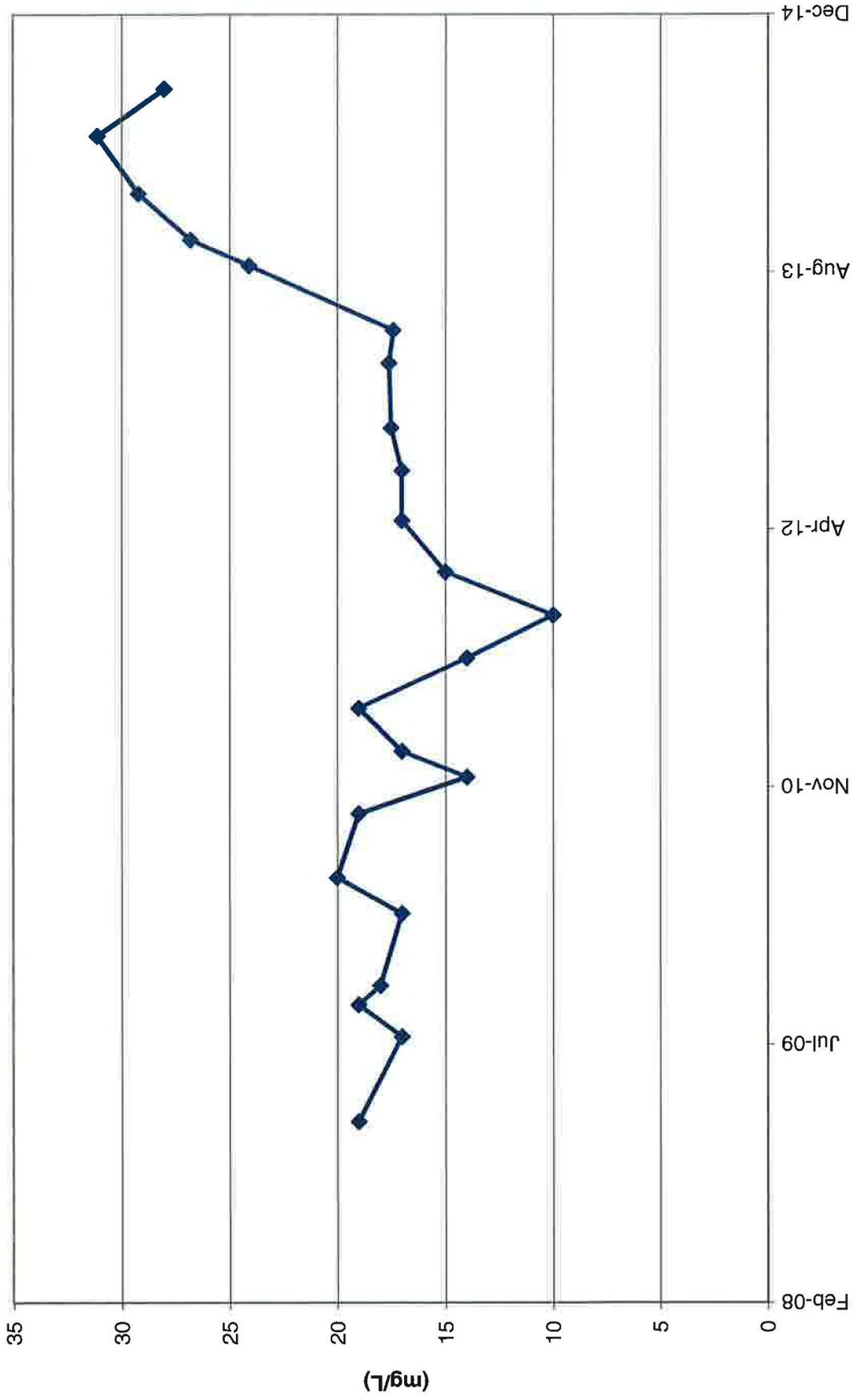
Piezometer 3 Chloride Concentrations



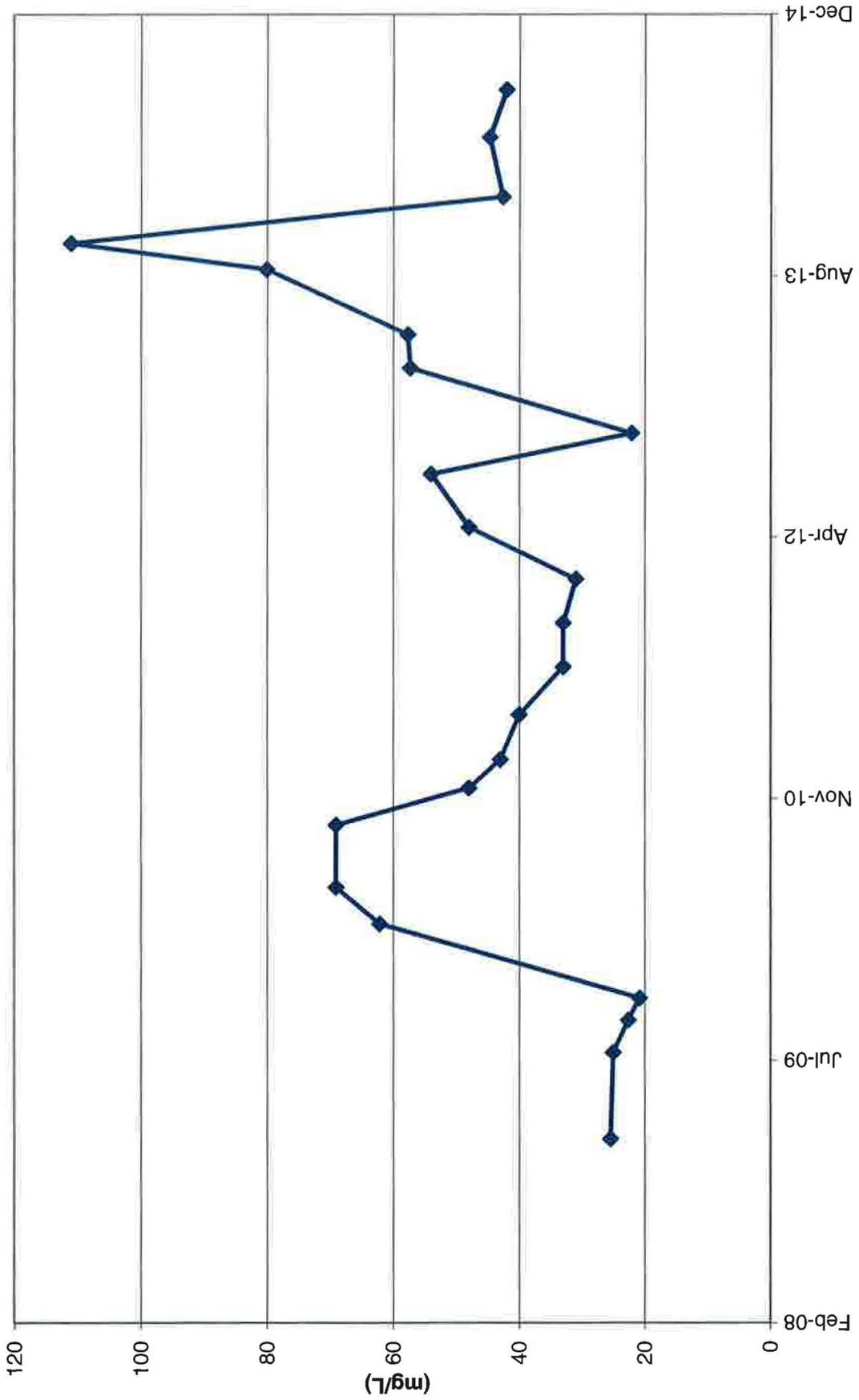
TWN-1 Nitrate Concentrations



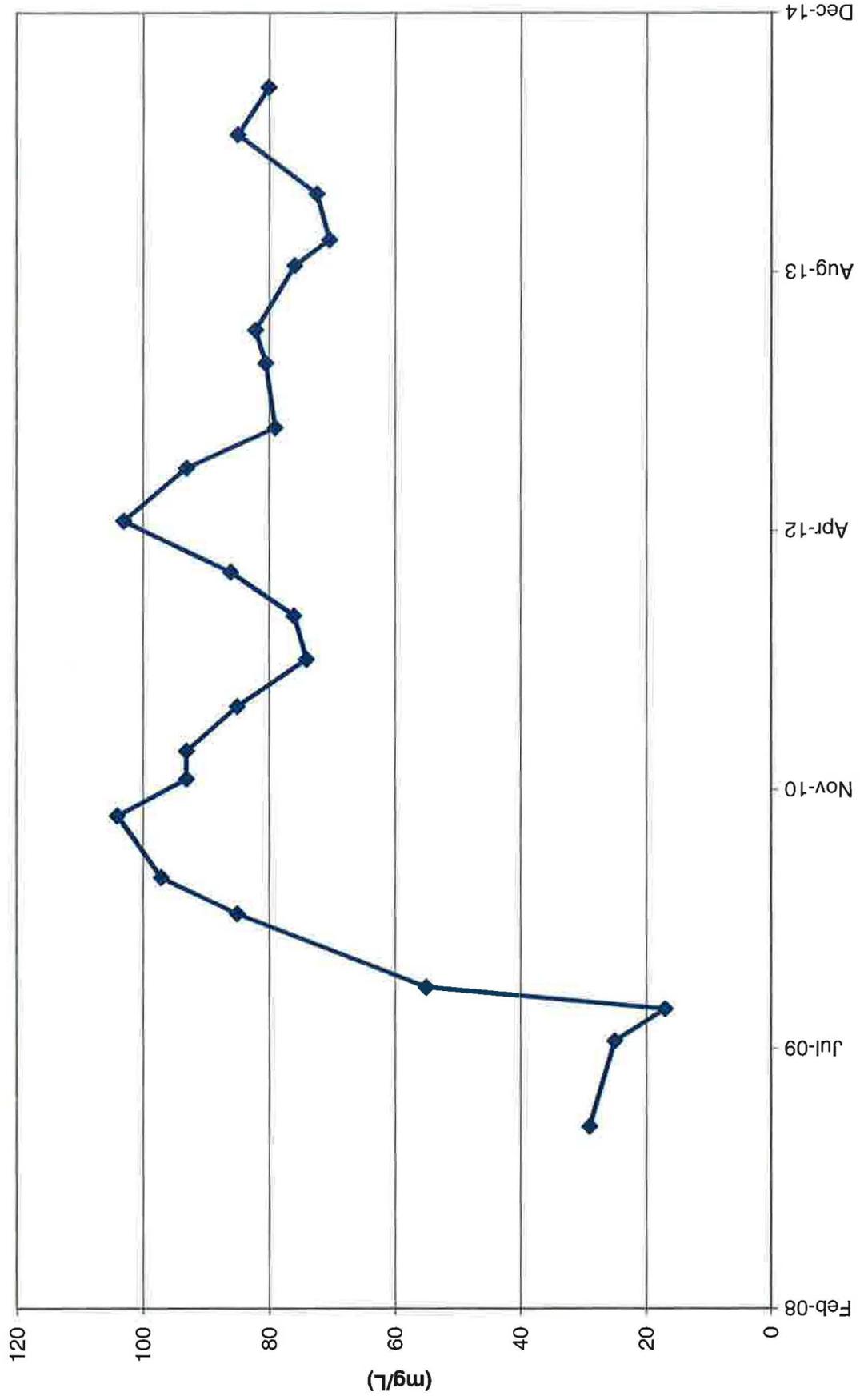
TWN-1 Chloride Concentrations



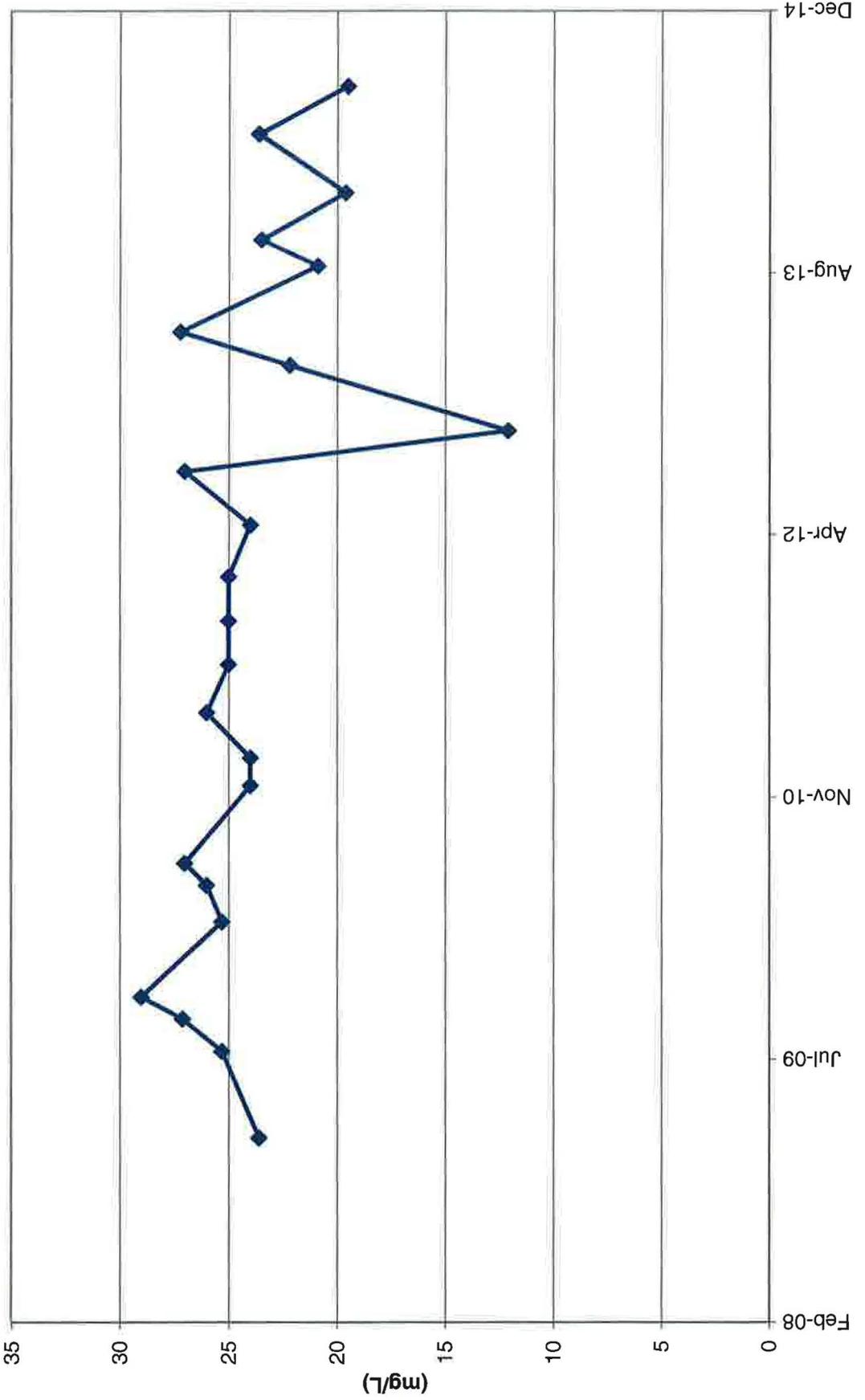
TWN-2 Nitrate Concentrations



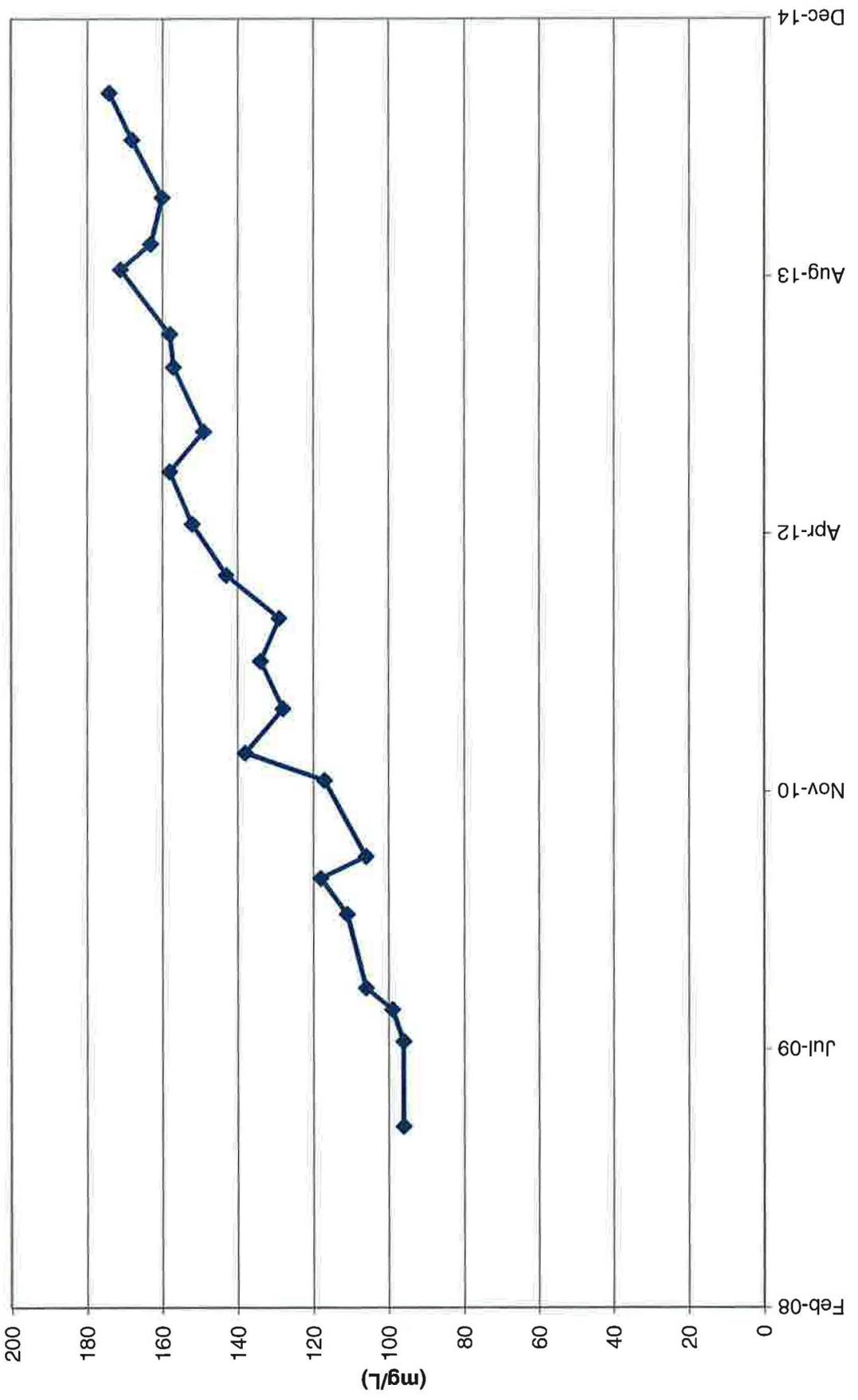
TWN-2 Chloride Concentrations



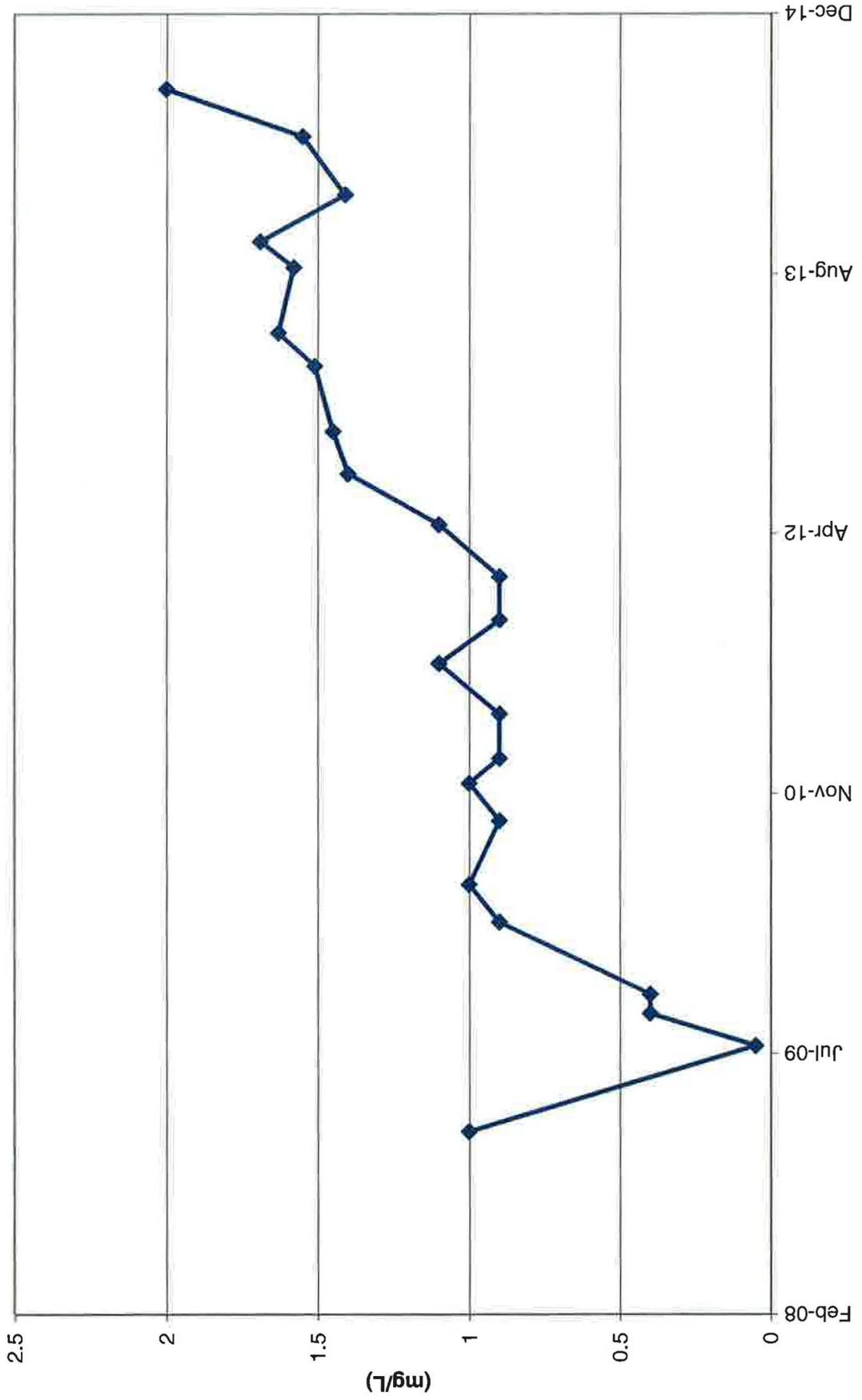
TWN-3 Nitrate Concentrations



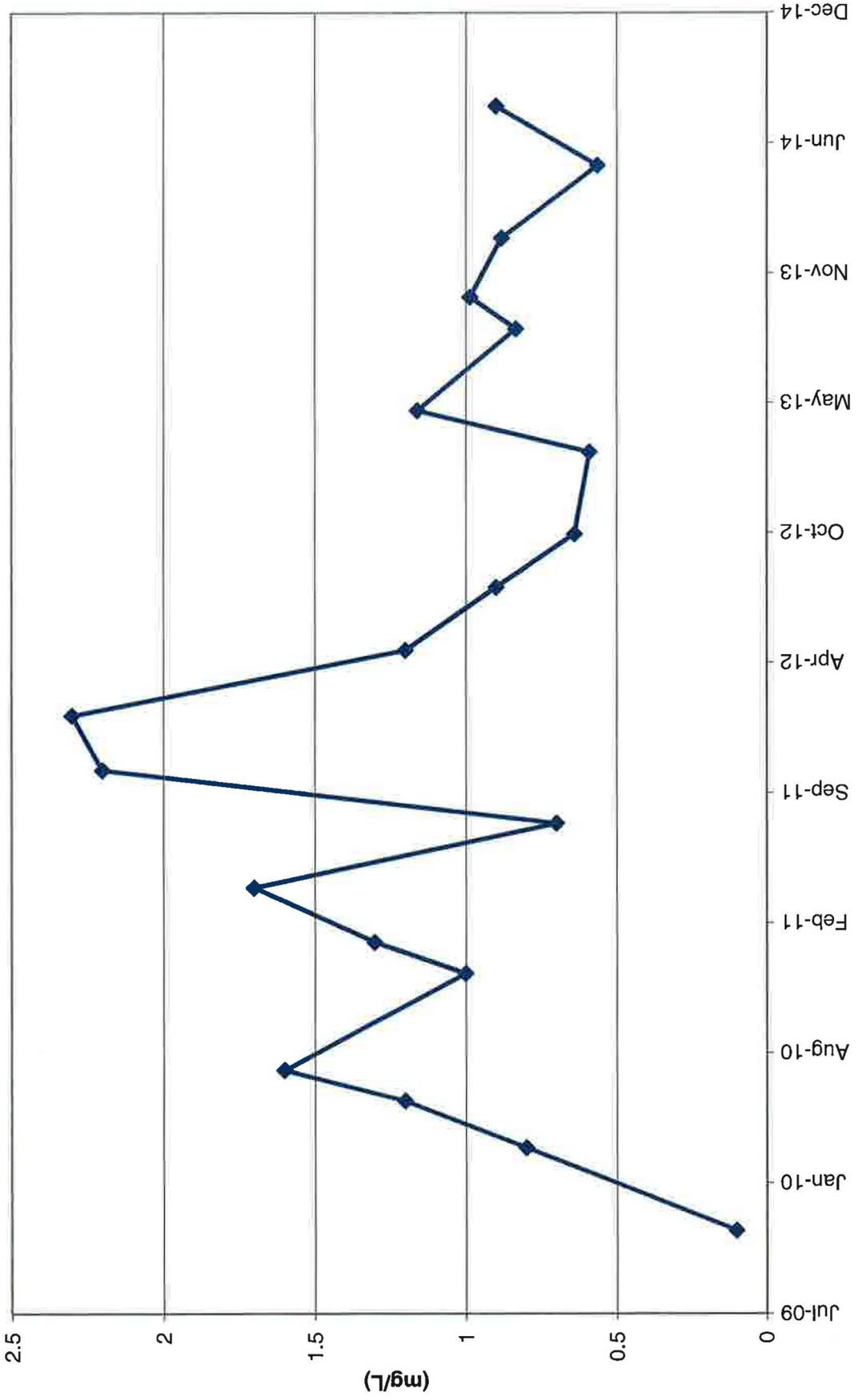
TWN-3 Chloride Concentrations



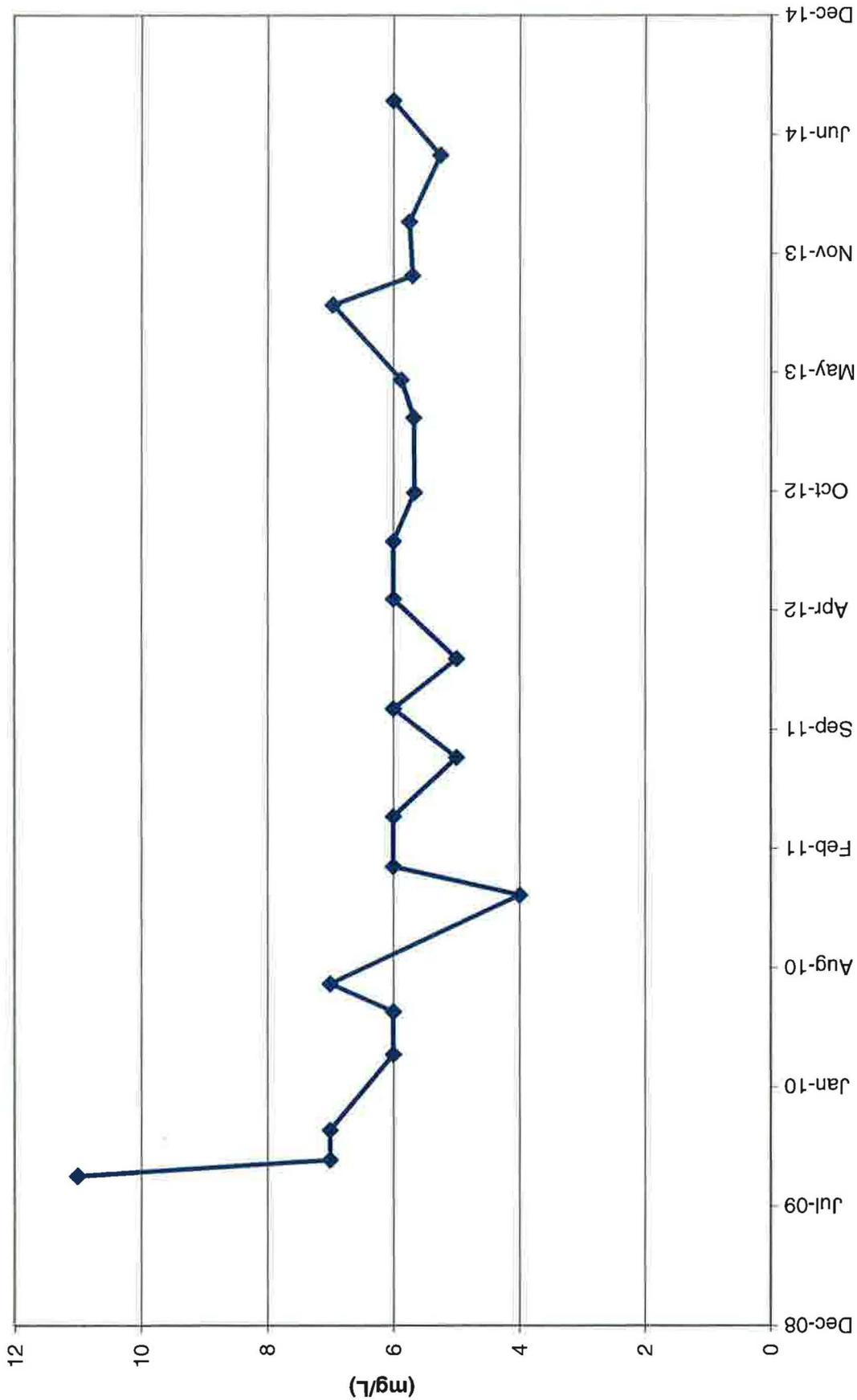
TWN-4 Nitrate Concentrations



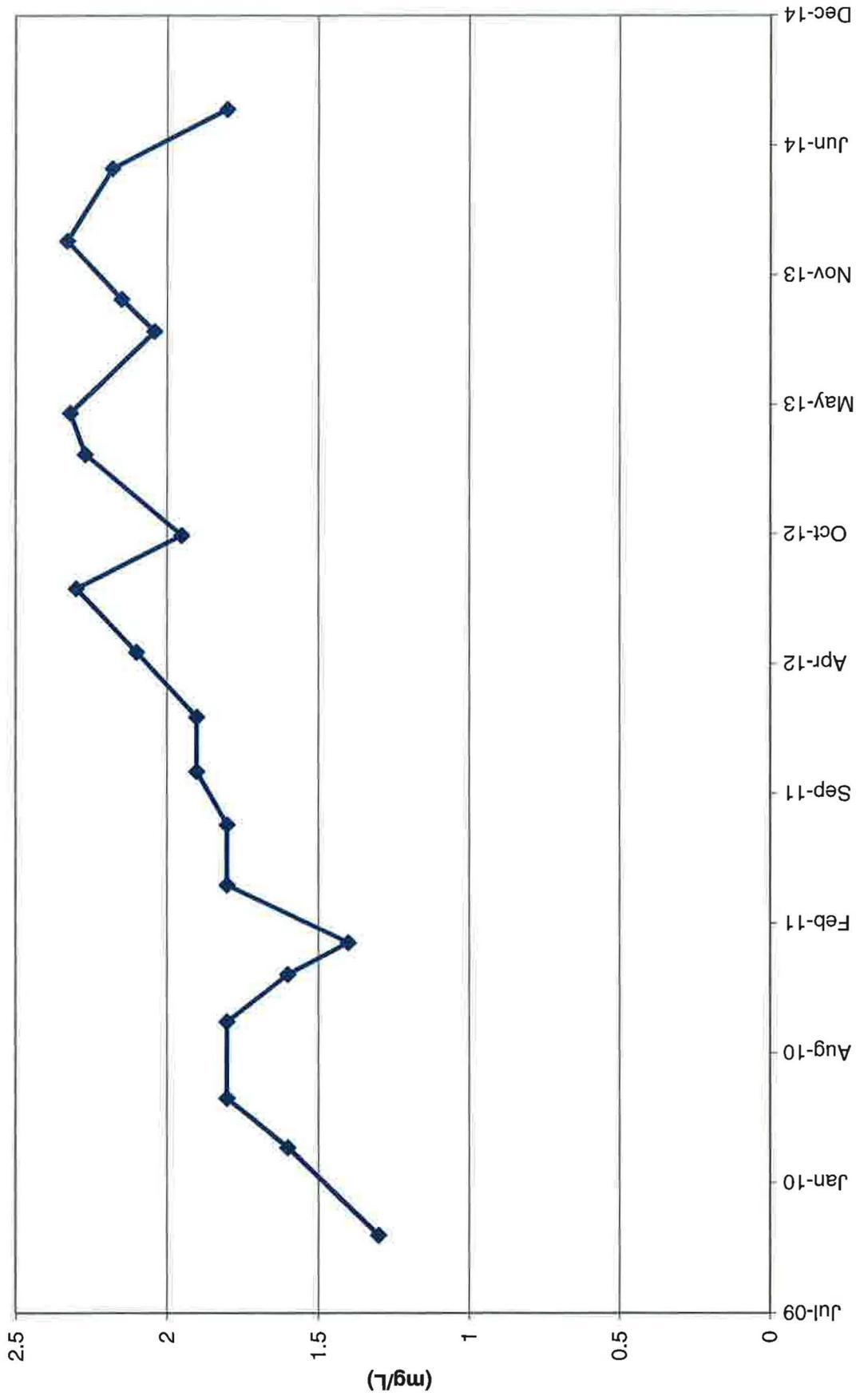
TWN-7 Nitrate Concentrations



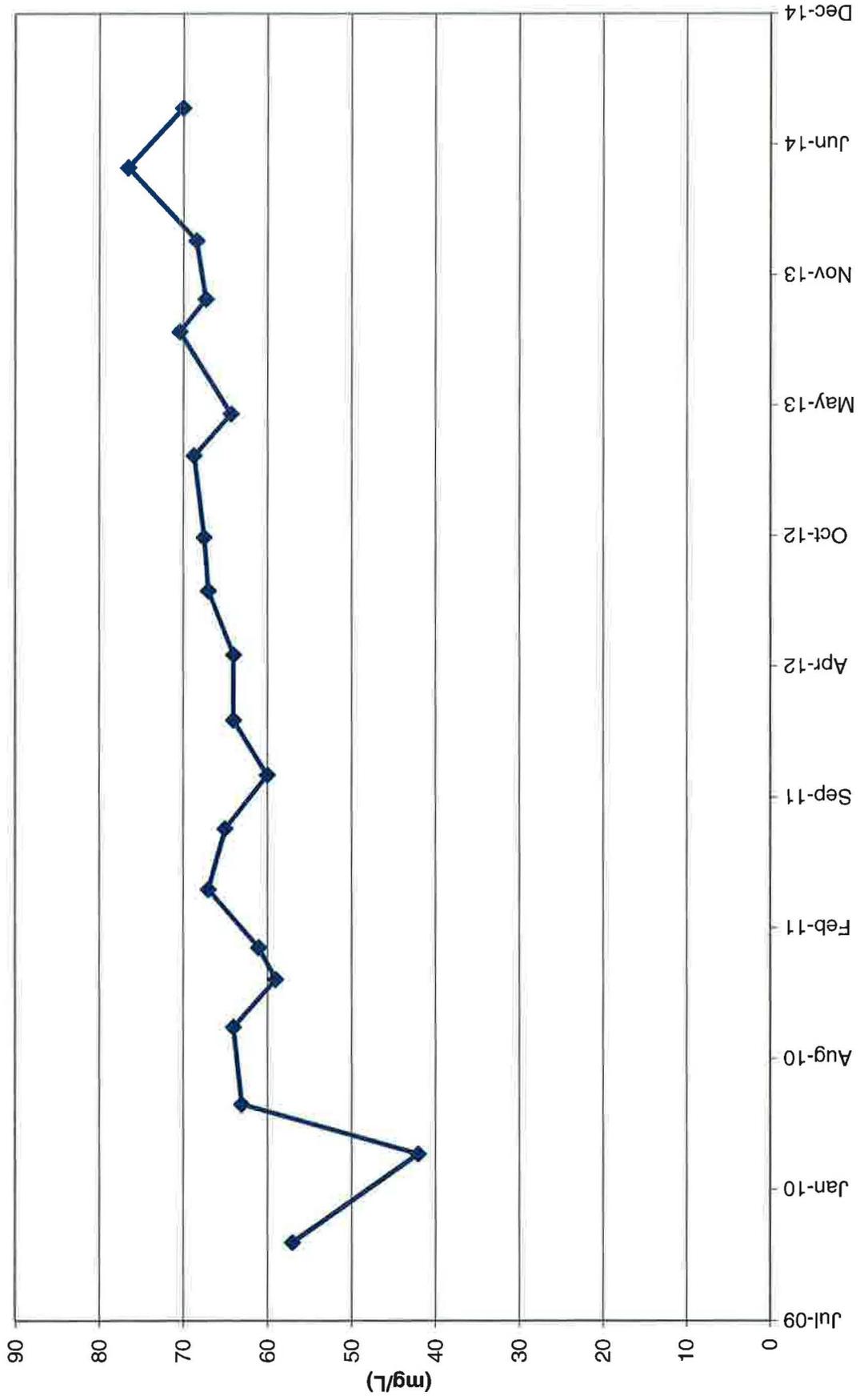
TWN-7 Chloride Concentrations



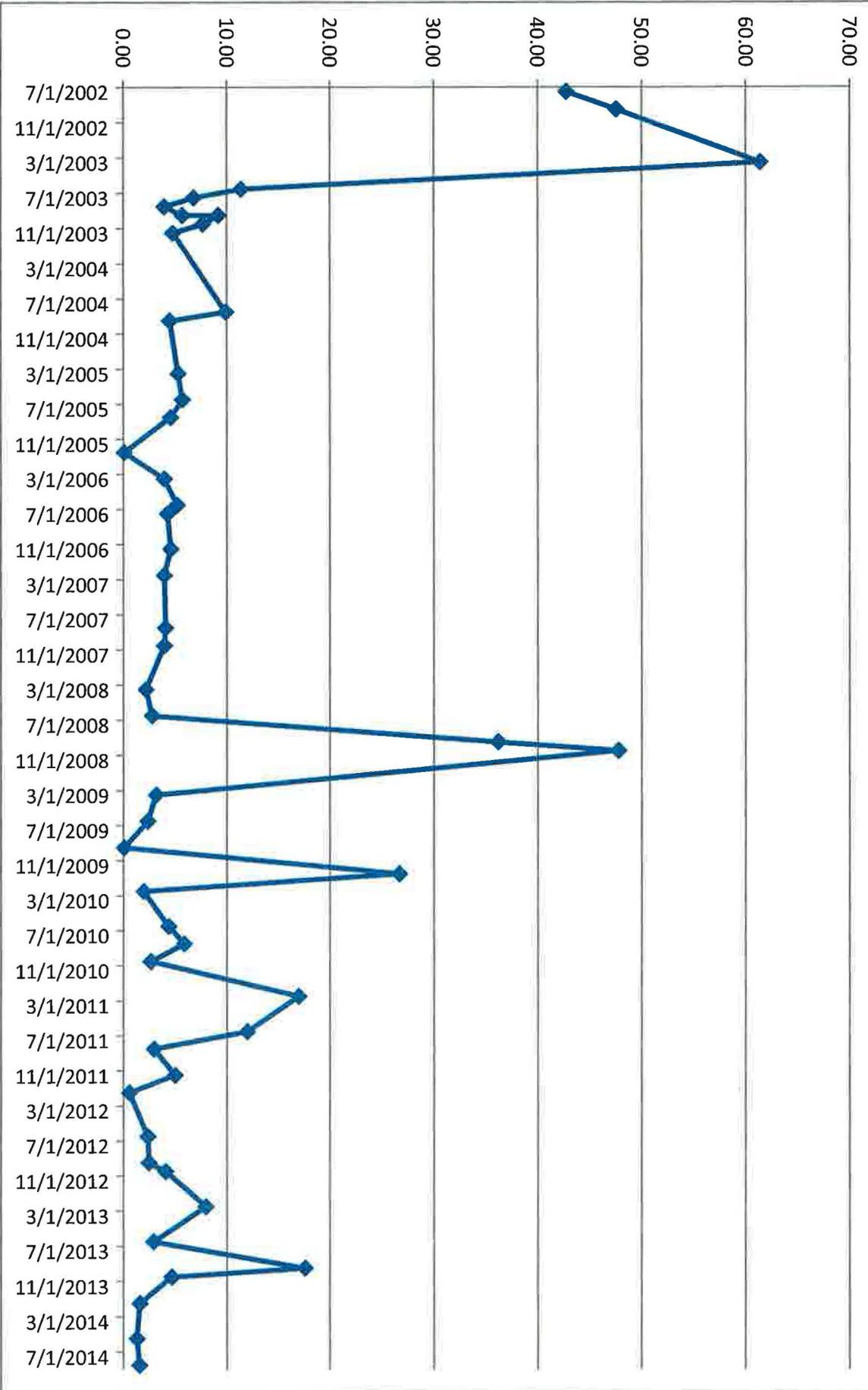
TWN-18 Nitrate Concentrations



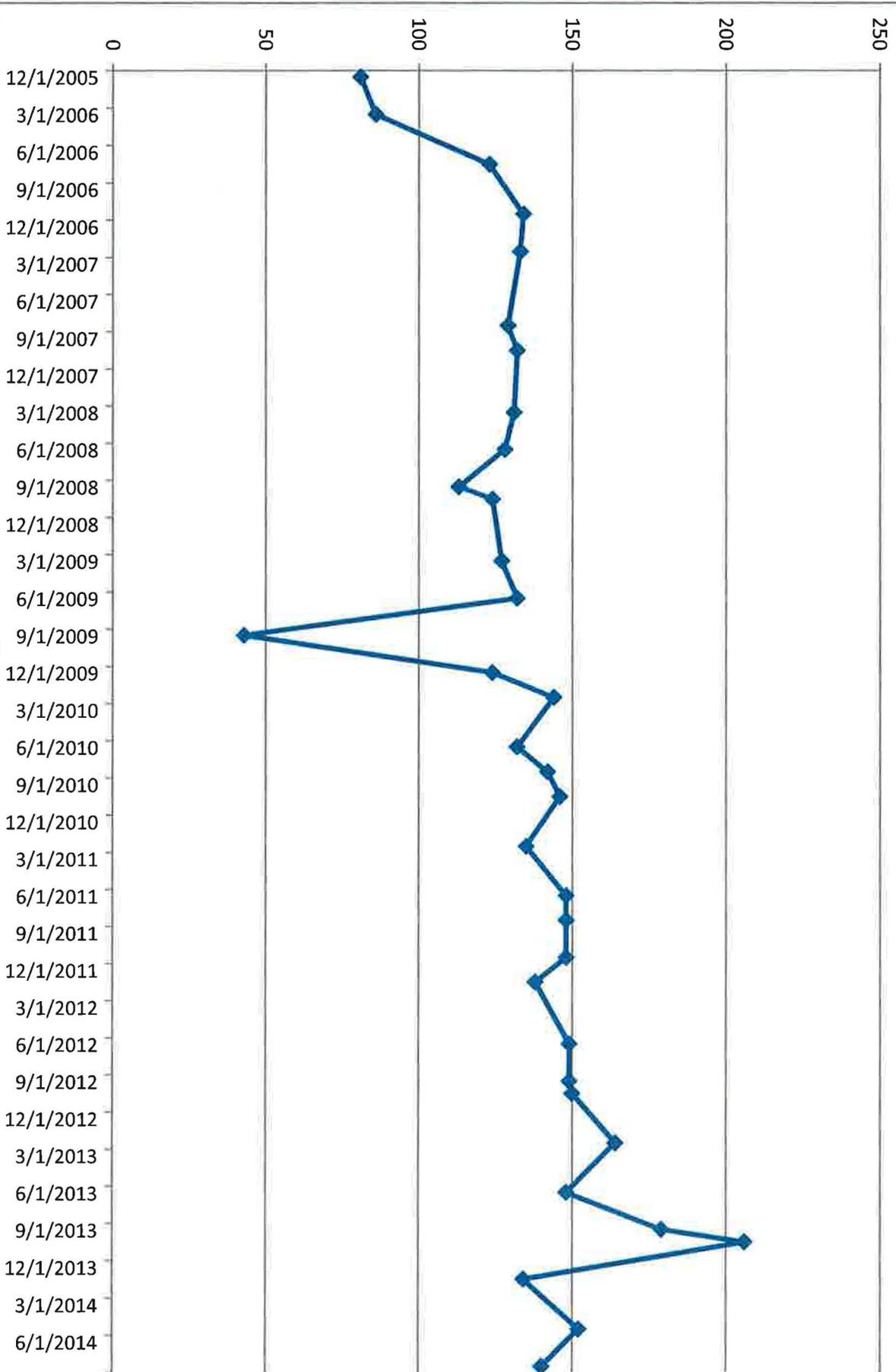
TWN-18 Chloride Concentrations



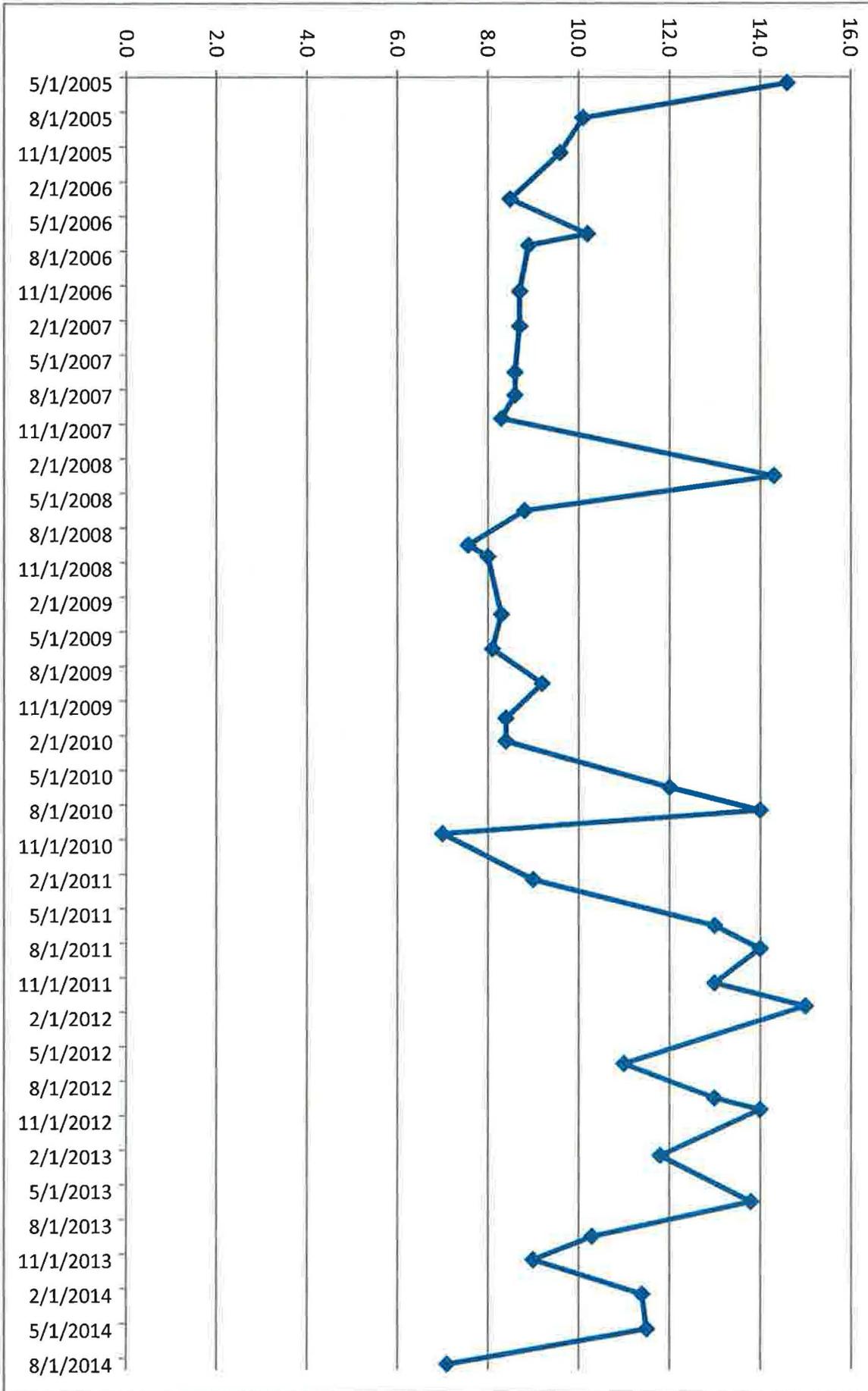
TW4-19 Nitrate Concentrations



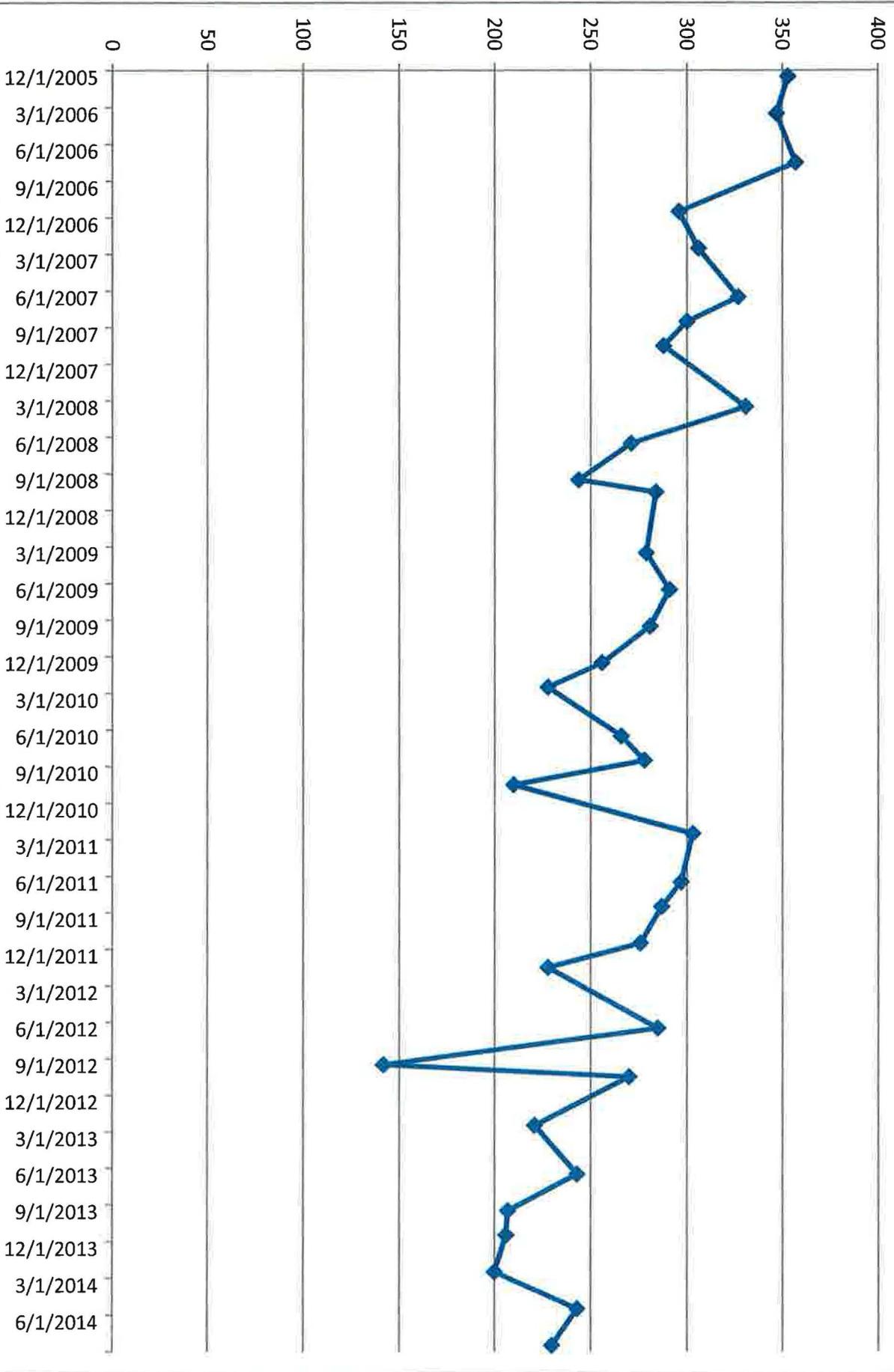
TW4-19 Chloride Concentrations



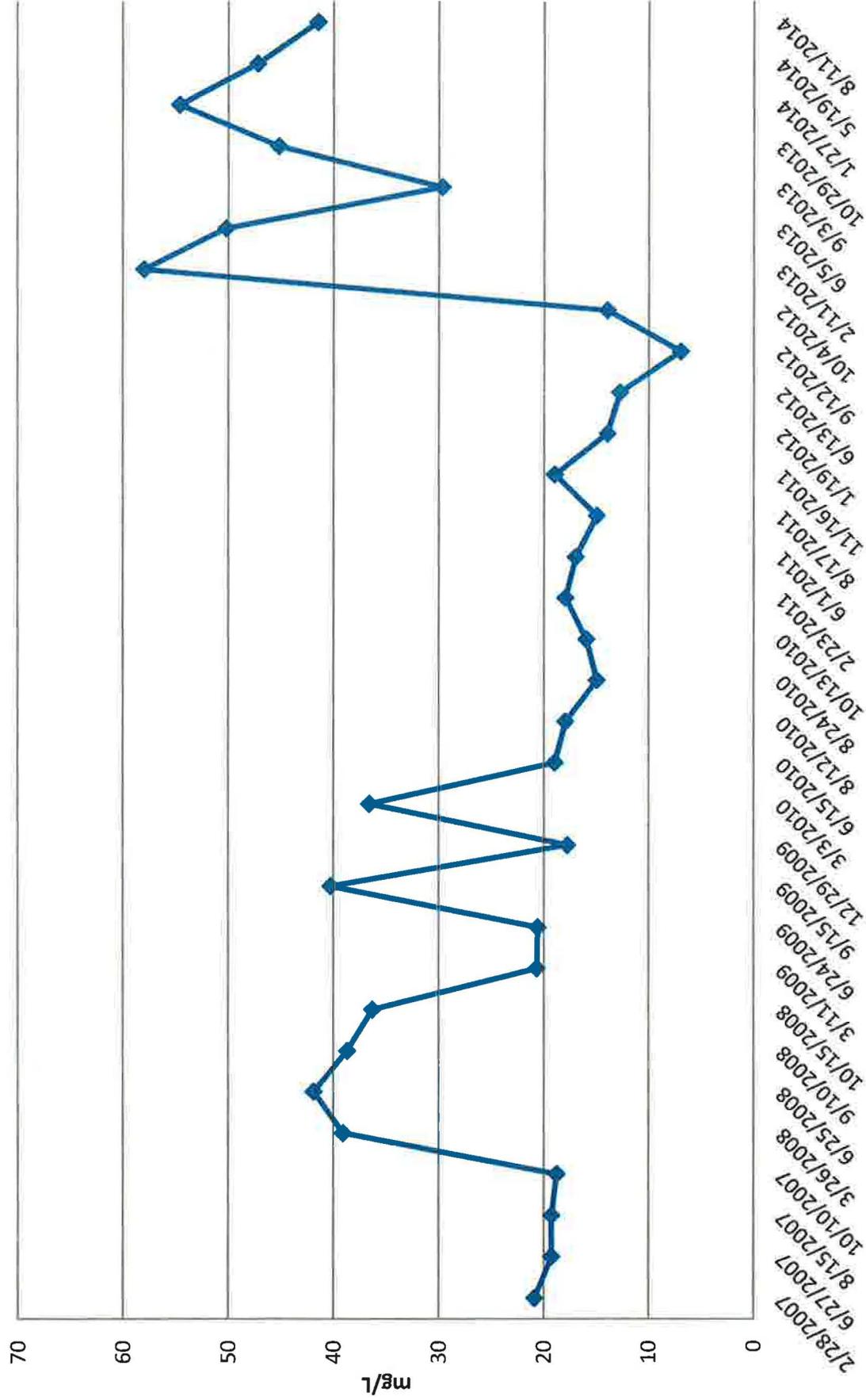
TW4-21 Nitrate Concentrations



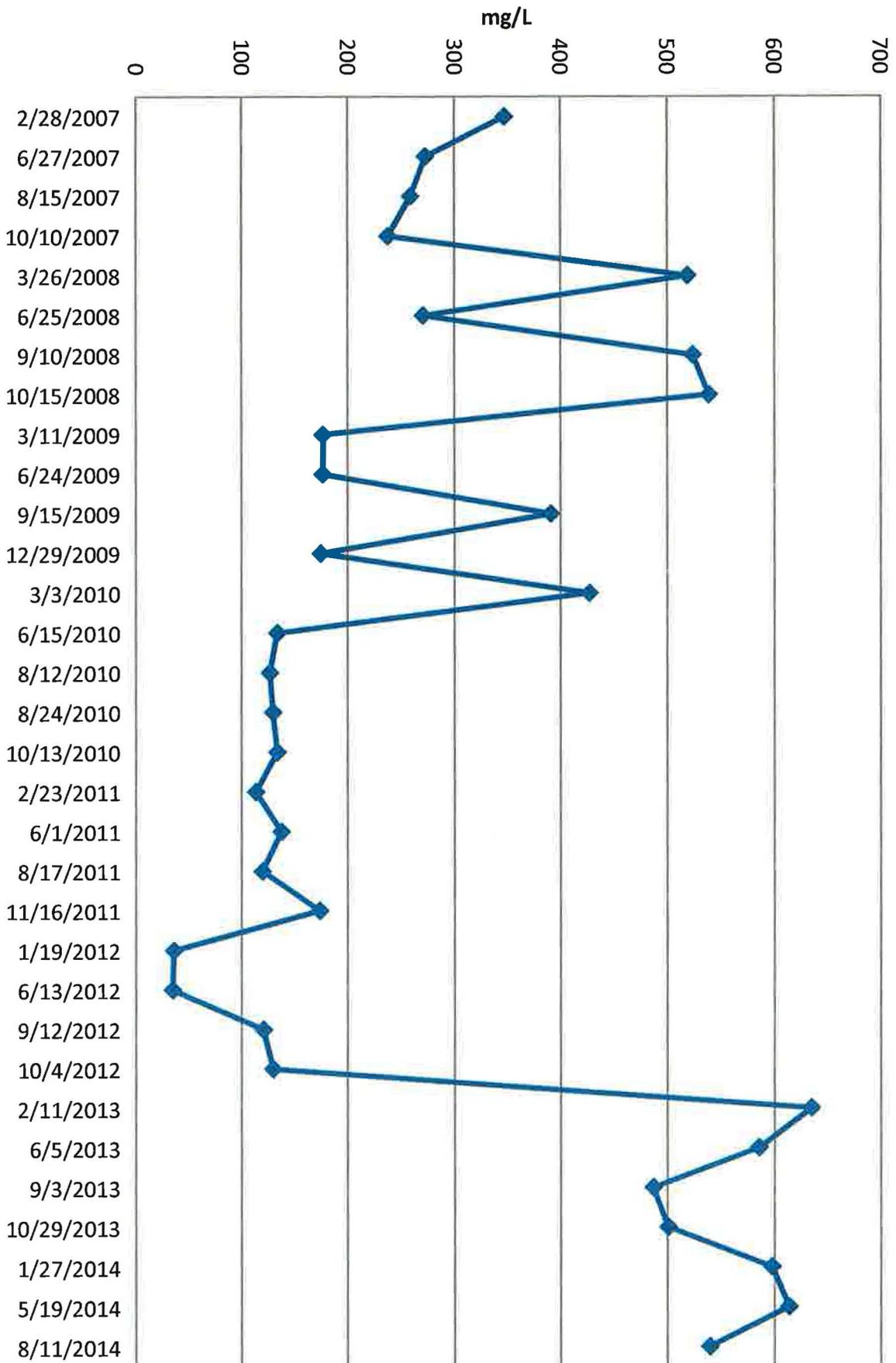
TW4-21 Chloride Concentrations



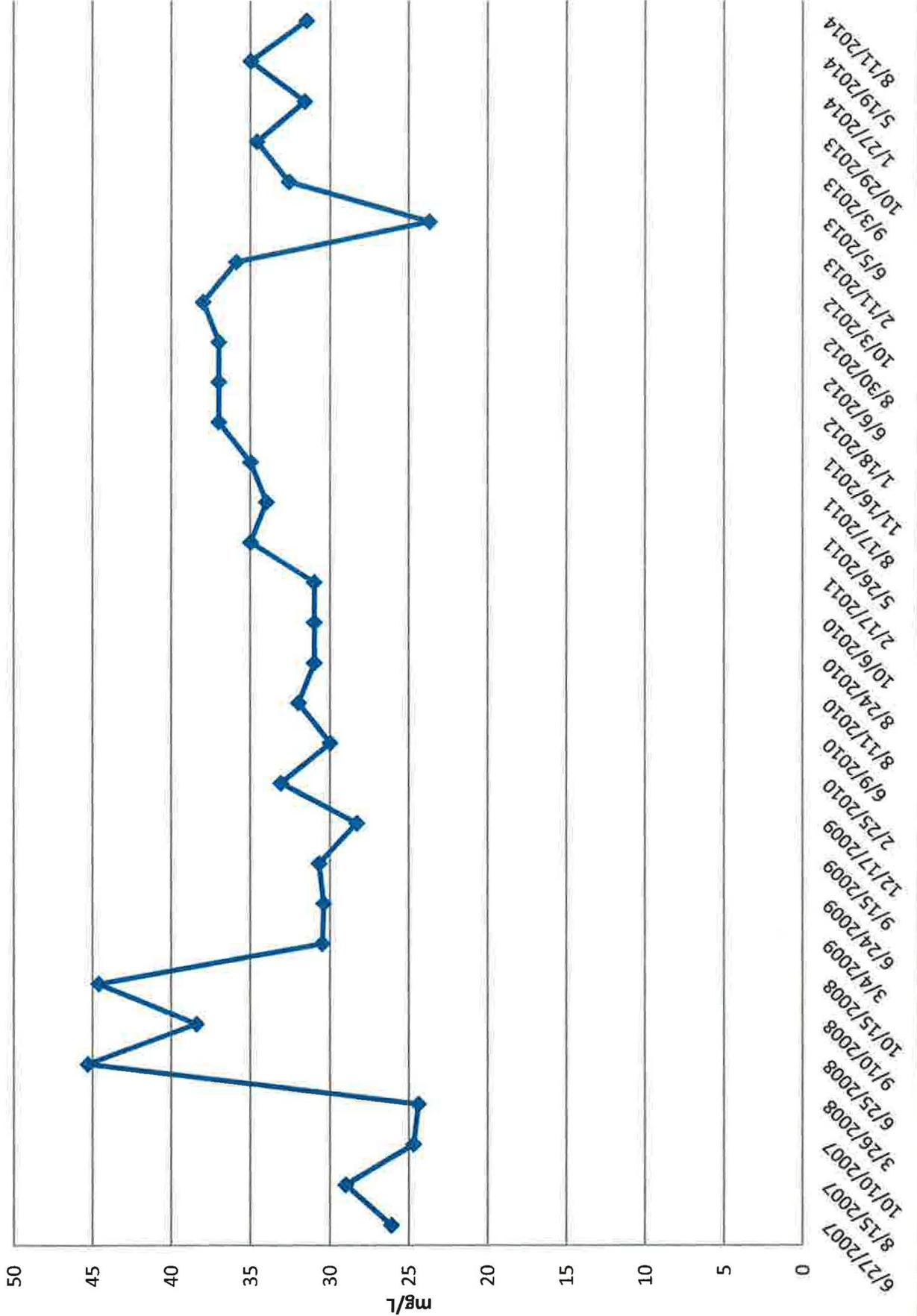
TW4-22 Nitrate Concentrations



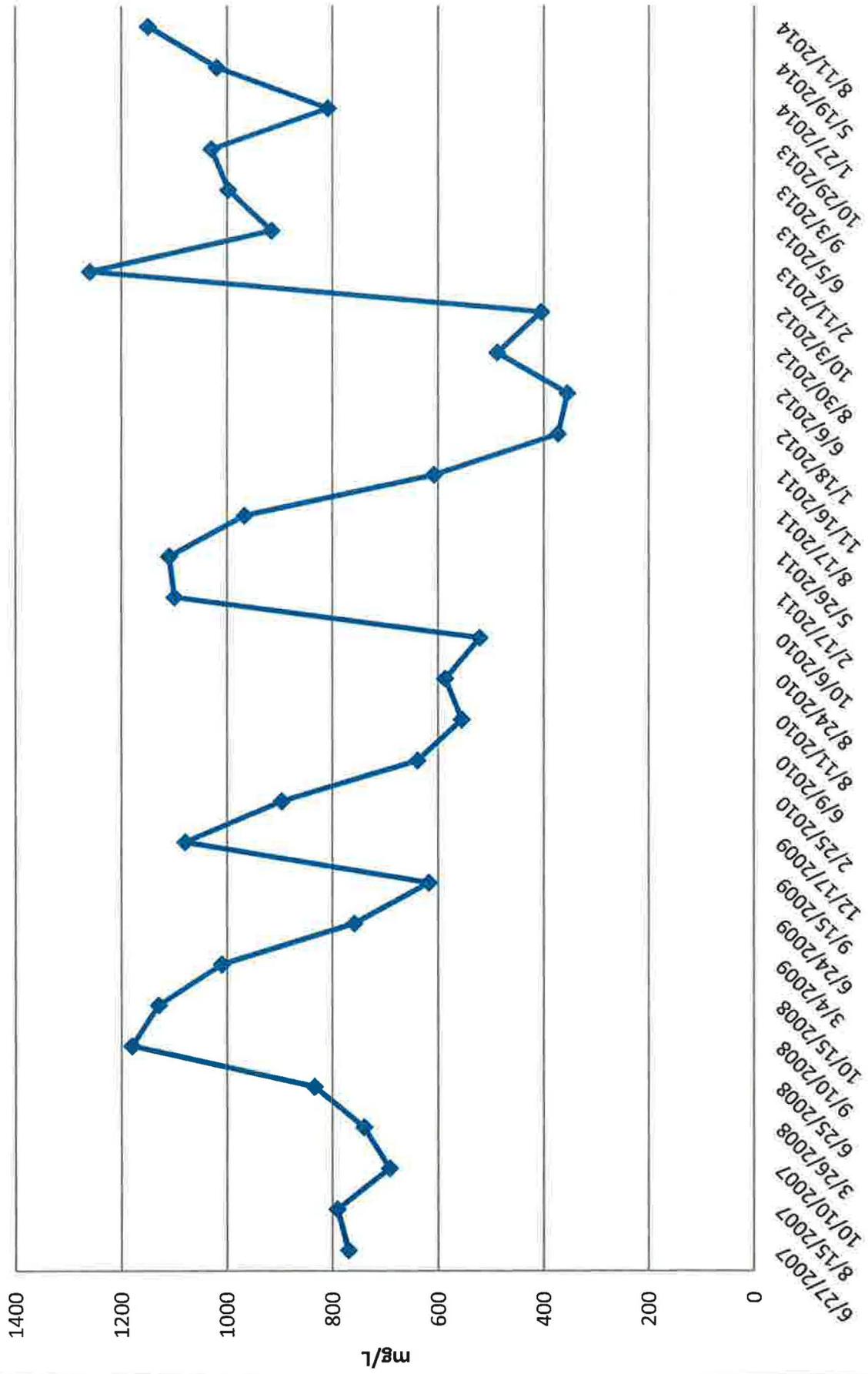
TW4-22 Chloride Concentrations



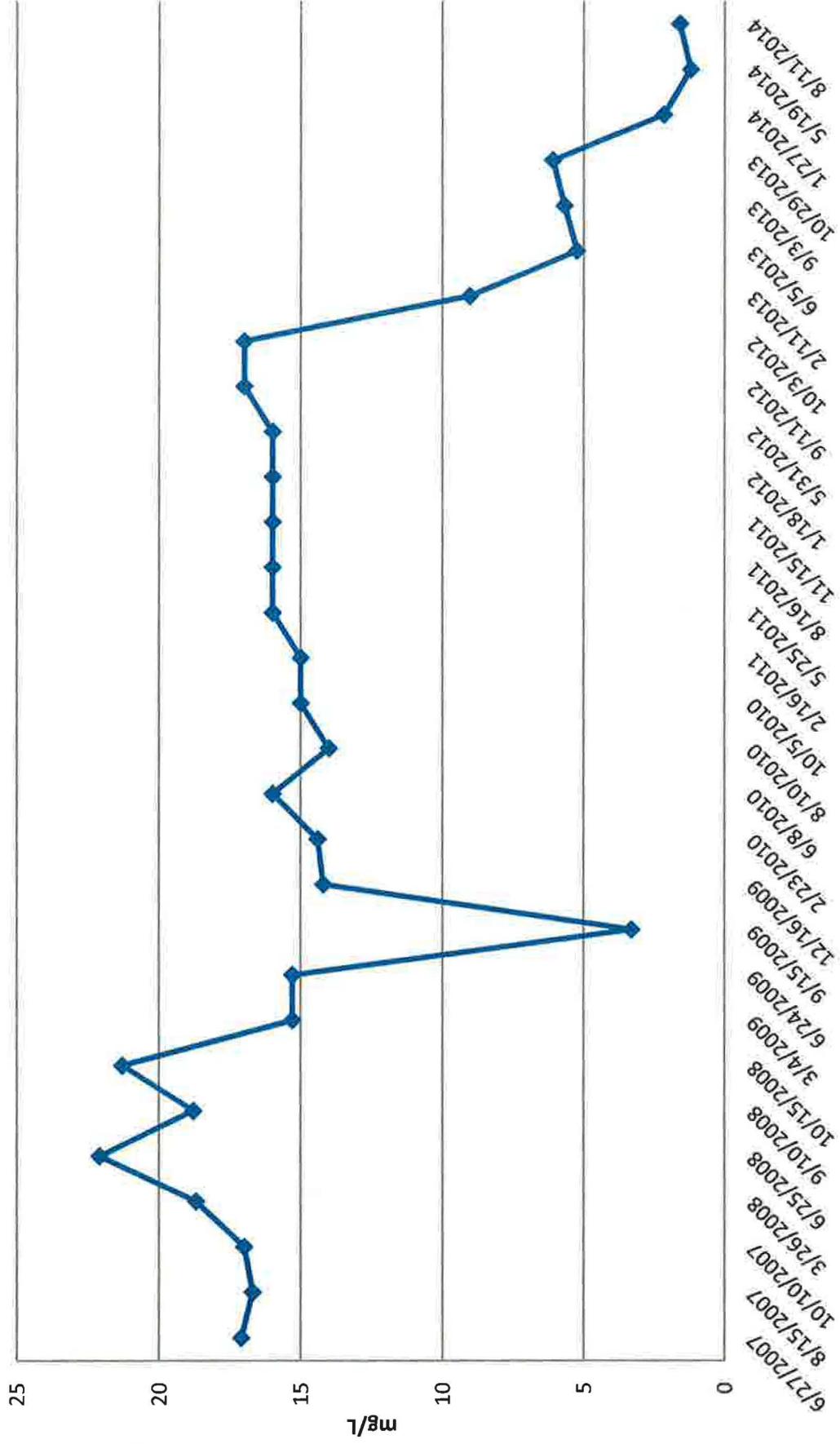
TW4-24 Nitrate Concentrations



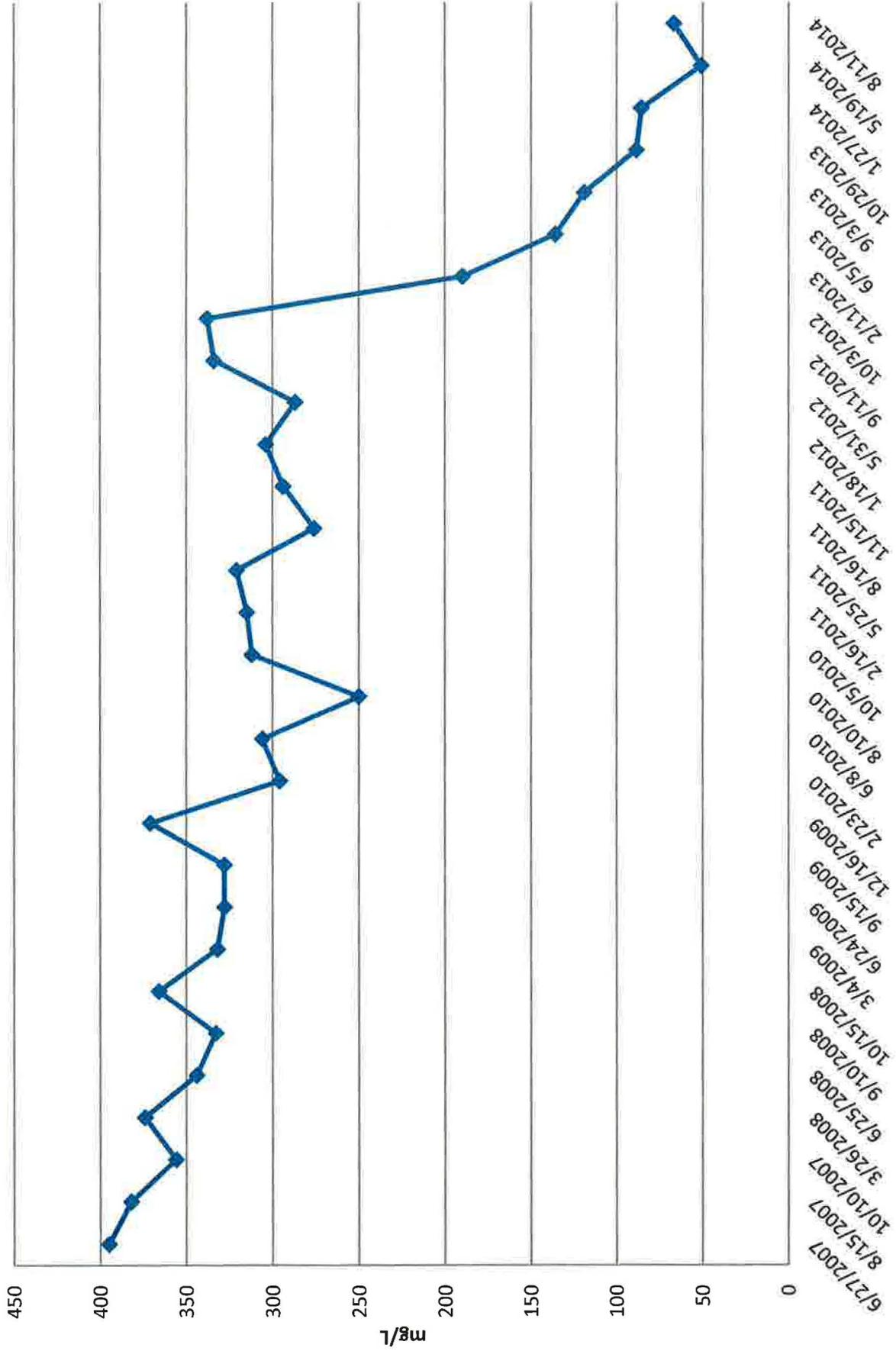
TW4-24 Chloride Concentrations



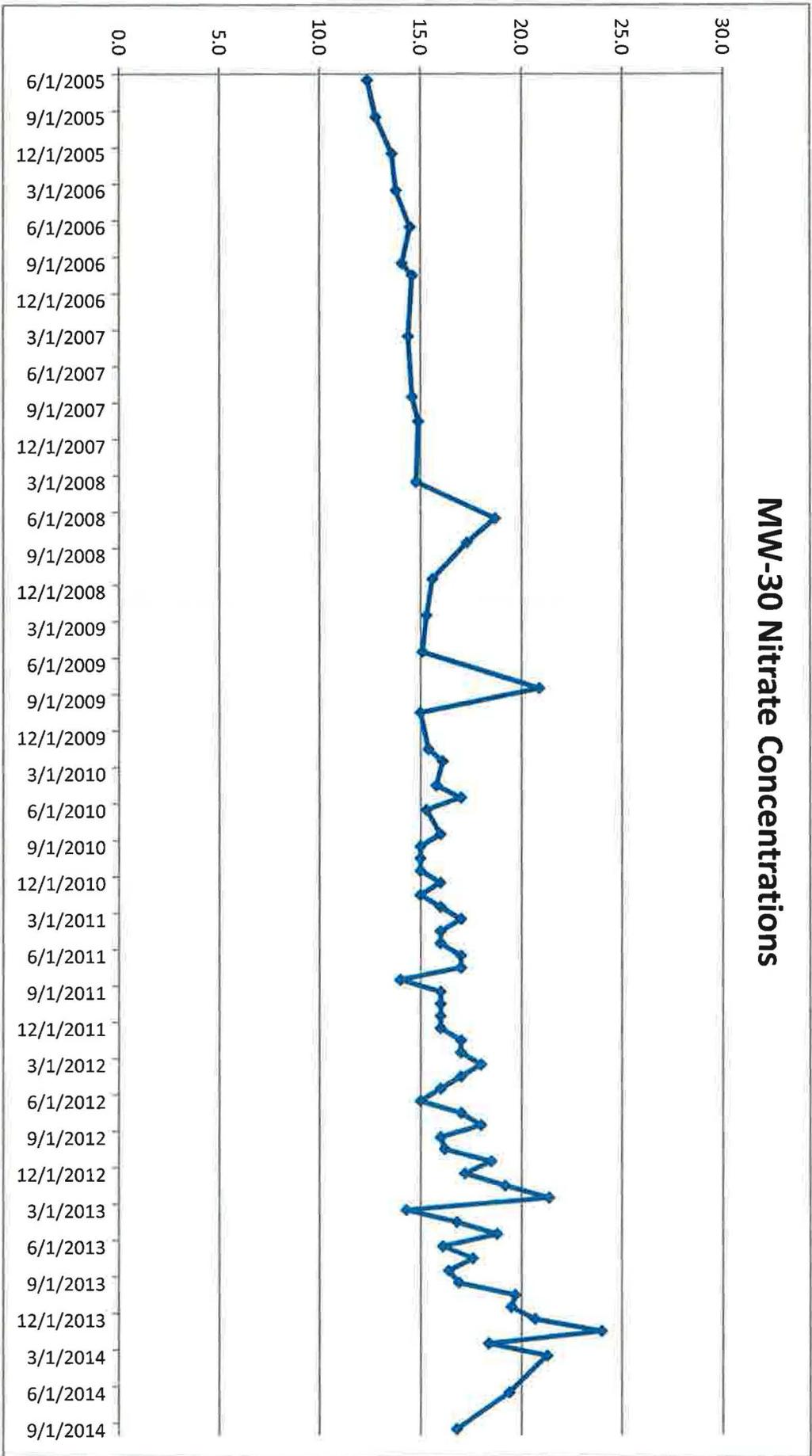
TW4-25 Nitrate Concentrations



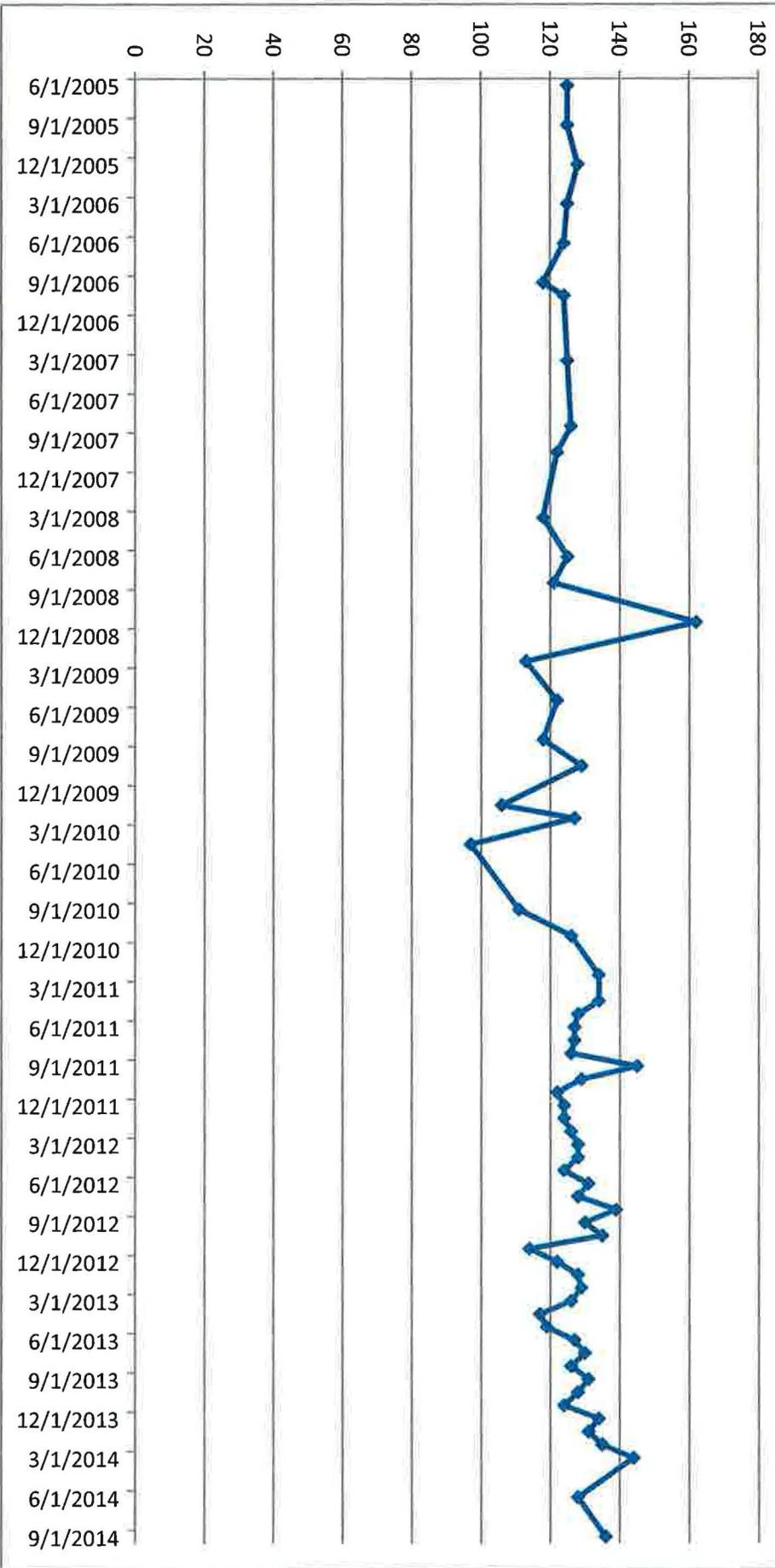
TW4-25 Chloride Concentrations



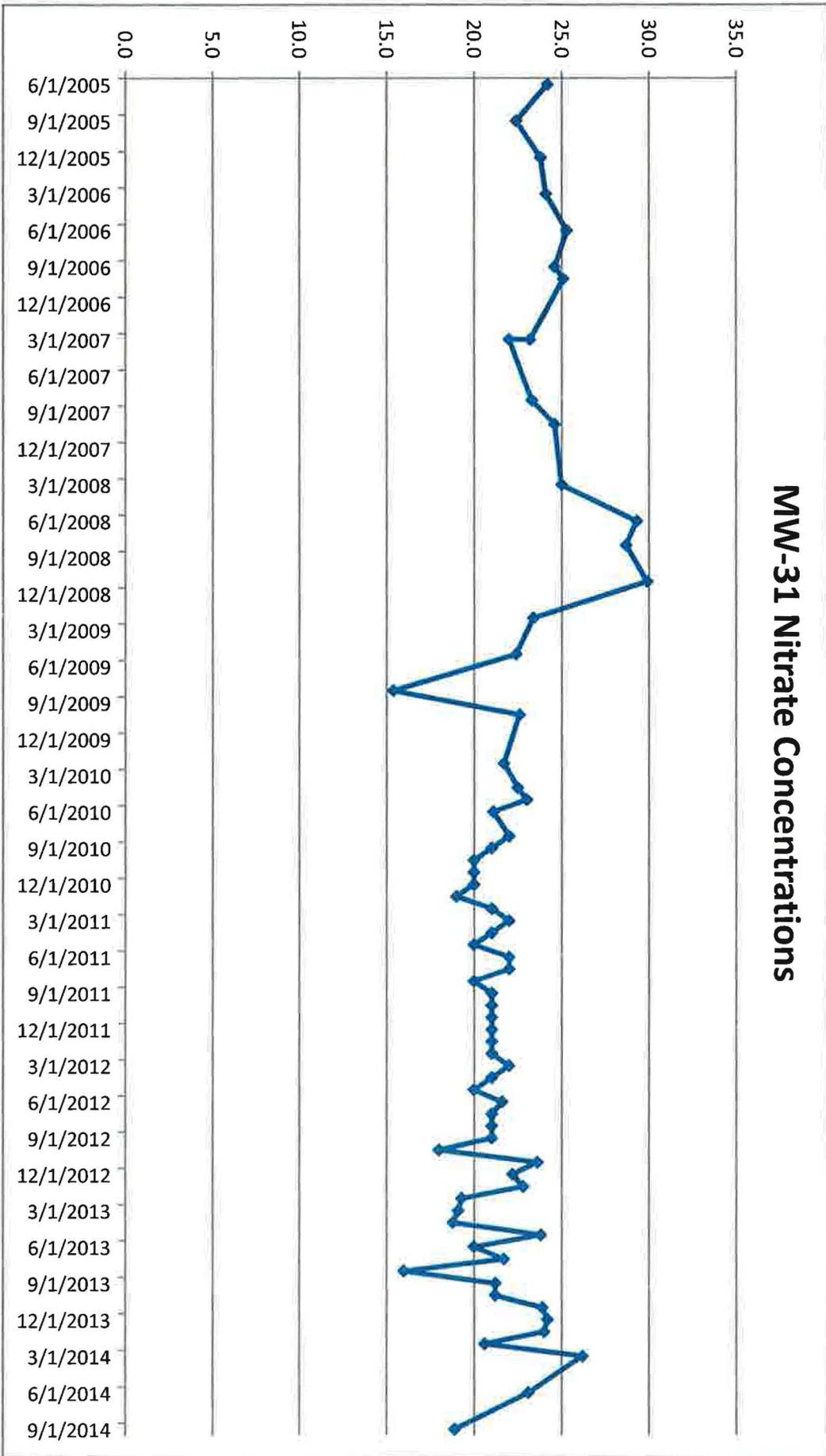
MW-30 Nitrate Concentrations



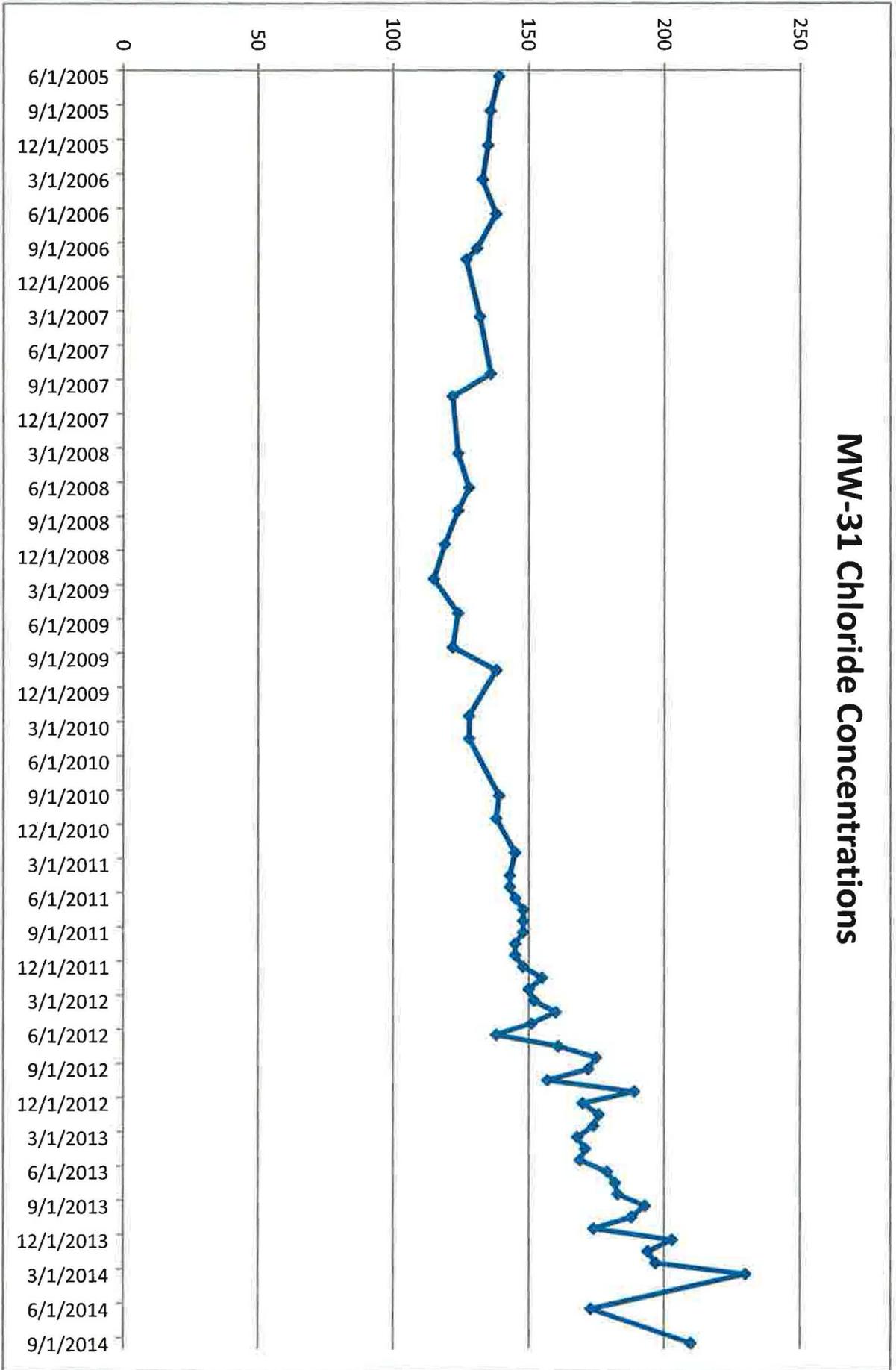
MW-30 Chloride Concentrations



MW-31 Nitrate Concentrations



MW-31 Chloride Concentrations



Tab L

CSV Transmittal Letter

Kathy Weinel

From: Kathy Weinel
Sent: Tuesday, November 11, 2014 8:33 AM
To: Rusty Lundberg
Cc: 'Phil Goble'; 'Dean Henderson'; Harold Roberts; David Frydenlund; Scott Bakken; David Turk; Jaime Massey; Dan Hillsten
Subject: Transmittal of CSV Files White Mesa Mill 2014 Q3 Nitrate Monitoring
Attachments: Q3 2014 Nitrate EDD.csv

Dear Mr. Lundberg,

Attached to this e-mail is an electronic copy of laboratory results for nitrate monitoring conducted at the White Mesa Mill during the third quarter of 2014, 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