



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

May 17, 2016

Sent VIA OVERNIGHT DELIVERY

Mr. Scott Anderson
Director
Division of Waste Management and Radiation Control
Utah Department of Environmental Quality
195 North 1950 West
P.O. Box 144880
Salt Lake City, UT 84114-4820

**Re: Transmittal of 1st Quarter 2016 Nitrate Monitoring Report
Stipulation and Consent Order Docket Number UGW12-04 White Mesa Uranium Mill**

Dear Mr. Anderson:

Enclosed are two copies of the White Mesa Uranium Mill Nitrate Monitoring Report for the 1st Quarter of 2016 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
Logan Shumway
Harold R. Roberts
David E. Turk
Scott Bakken

White Mesa Uranium Mill

Nitrate Monitoring Report

**State of Utah
Stipulated Consent Agreement, December 2014
Docket No. UGW12-04**

**1st Quarter
(January through March)
2016**

Prepared by:



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

May 17, 2016

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	GROUNDWATER NITRATE MONITORING.....	1
2.1	Samples and Measurements Taken During the Quarter	1
2.1.1	Nitrate Monitoring	1
2.1.2	Parameters Analyzed	2
2.1.3	Groundwater Head and Level Monitoring.....	3
2.2	Sampling Methodology and Equipment and Decontamination Procedures	3
2.2.1	Well Purging, Sampling and Depth to Groundwater	3
2.2.2	Piezometer Sampling	4
2.3	Field Data.....	5
2.4	Depth to Groundwater Data and Water Table Contour Map.....	5
2.5	Laboratory Results	5
2.5.1	Copy of Laboratory Results	5
2.5.2	Regulatory Framework	5
3.0	QUALITY ASSURANCE AND DATA VALIDATION	5
3.1	Field QC Samples	6
3.2	Adherence to Mill Sampling SOPs.....	6
3.3	Analyte Completeness Review	6
3.4	Data Validation	6
3.4.1	Field Data QA/QC Evaluation.....	7
3.4.2	Holding Time Evaluation.....	8
3.4.3	Analytical Method Checklist	8
3.4.4	Reporting Limit Evaluation	8
3.4.5	QA/QC Evaluation for Sample Duplicates	8
3.4.6	Other Laboratory QA/QC	8
3.4.7	Receipt Temperature Evaluation.....	9
3.4.8	Rinsate Check	9
4.0	INTERPRETATION OF DATA	10
4.1	Interpretation of Groundwater Levels, Gradients and Flow Directions.	10
4.1.1	Current Site Groundwater Contour Map.....	10
4.1.2	Comparison of Current Groundwater Contour Map to Groundwater Contour Map for Previous Quarter.....	13
4.1.3	Hydrographs.....	14
4.1.4	Depth to Groundwater Measured and Groundwater Elevation.....	15
4.2	Effectiveness of Hydraulic Containment and Capture.....	15
4.2.1	Hydraulic Containment and Control.....	15
4.2.2	Current Nitrate and Chloride Isoconcentration Maps.....	18
4.2.3	Comparison of Areal Extent	18
4.2.4	Nitrate and Chloride Concentration Trend Data and Graphs.....	19
4.2.5	Interpretation of Analytical Data	19
4.3	Estimation of Pumped Nitrate Mass and Residual Nitrate Mass within the Plume	21
5.0	LONG TERM PUMP TEST AT TWN-02, TW4-22, TW4-24, and TW4-25 OPERATIONS REPORT	23
5.1	Introduction.....	23

5.2	Pumping Well Data Collection	23
5.3	Water Level Measurements	24
5.4	Pumping Rates and Volumes	24
5.4.1	TW4-24	24
5.4.2	TW4-19 and MW-26.....	24
6.0	CORRECTIVE ACTION REPORT	25
6.1	Assessment of Previous Quarter's Corrective Actions.....	25
7.0	CONCLUSIONS AND RECOMMENDATIONS.....	25
8.0	ELECTRONIC DATA FILES AND FORMAT	28
9.0	SIGNATURE AND CERTIFICATION	29

LIST OF TABLES

Table 1	Summary of Well Sampling and Constituents for the Period
Table 2	Nitrate Mass Removal Per Well Per Quarter
Table 3	Nitrate Well Pumping Rates and Volumes
Table 4	Quarterly Calculation of Nitrate mass Removed and Total Volume of Water Pumped
Table 5	Nitrate Data Over Time for MW-30, MW-31, MW-5, and MW-11
Table 6	Slug Test Results
Table 7	Pre-Pumping Saturated Thickness
Table 8	Pre-Pumping Hydraulic Gradients and Flow Calculations
Table 9	Recalculated Background Flow

INDEX OF TABS

- Tab A Site Plan and Perched Well Locations White Mesa Site
- Tab B Order of Sampling and Field Data Worksheets
- Tab C Kriged Current Quarter Groundwater Contour Map and Weekly, Monthly and Quarterly Depth to Water Data
- Tab D Kriged Previous Quarter Groundwater Contour Map
- Tab E Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells
- Tab F Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells
- Tab G Laboratory Analytical Reports
- Tab H Quality Assurance and Data Validation Tables
 - H-1 Field Data QA/QC Evaluation
 - H-2 Holding Time Evaluation
 - H-3 Analytical Method Check
 - H-4 Reporting Limit Evaluation
 - H-5 QA/QC Evaluation for Sample Duplicates
 - H-6 QC Control limits for Analysis and Blanks
 - H-7 Receipt Temperature Evaluation
 - H-8 Rinsate Evaluation
- Tab I Kriged Current Quarter Nitrate and Chloride Isoconcentration Maps
- Tab J Analyte Concentration Data Over Time
- Tab K Nitrate and Chloride Concentration Trend Graphs
- Tab L CSV Transmittal Letter
- Tab M Residual Mass Estimate Analysis Figures and Tables

ACRONYM LIST

AWAL	American West Analytical Laboratory
CA	Consent Agreement
CAP	Corrective Action Plan
CIR	Contamination Investigation Report
DIFB	Deionized Field Blanks
DWMRC	Utah Division of Waste Management and Radiation Control
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 Compound

1.0 INTRODUCTION

The Utah Department of Environmental Quality (“UDEQ”) Division of Waste Management and Radiation Control (“DWMRC”) 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, DWMRC 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 Utah Docket No. UGW12-04 for the first quarter of 2016. 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 first quarter of 2016.

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

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 DWMRC-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, TW4-1, TW4-2, TW4-11, TW4-19, TW4-20, TW4-4, TW4-21, TW4-37, 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, 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, American West Analytical Laboratories (“AWAL”).

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 AWAL. 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 DWMRC in 2011. Pursuant to the CA, the CAP was submitted to the Director of the Division Waste Management and 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 was completed in compliance 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 field data collected during the quarter were in compliance with QAP requirements.

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%.

All duplicate results were within 20% RPD for the quarterly samples. The duplicate results are provided under 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 temperatures 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. All rinsate and DIFB blank samples were non-detect for the quarter.

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 maps indicate 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 south of the tailings cells. 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 disrupts the generally southwesterly flow pattern, to the extent that locally northerly flow occurs 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 DWMRC 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. Impacts are also expected to occur over time at wells added to the chloroform pumping network during the first quarter of 2015 (TW4-1, TW4-2, TW4-11), and at those added during the second quarter of 2015 (TW4-21 and TW4-37). 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, and TW4-37, which began pumping during the second quarter of 2015. 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. The lack of a well-defined cone of depression near TW4-37 likely results from recent start-up and close proximity to other pumping wells.

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 continue 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 is evolving, and changes will be reflected in data 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 and southeast (downgradient) 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 and southeast of TW4-4. As will be discussed below, the permeability of the perched zone at TW4-6 and TW4-26, and relatively recently installed wells TW4-29, TW4-30, TW4-31, TW4-33, TW4-34, and TW4-35 is one to two orders of magnitude lower than at TW4-4, and the permeability at TW4-27 is approximately three orders of magnitude lower than at TW4-4. Detecting water level drawdowns in wells immediately south and southeast of TW4-4 resulting from TW4-4 pumping has also been difficult because of the general, long-term increase in water levels in this area attributable to past wildlife pond recharge.

Between the fourth quarter of 2007 and the fourth quarter of 2009 (just prior to the start of TW4-4 pumping), water levels at TW4-4 and TW4-6 increased by nearly 2.7 and 2.9 feet 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 less than 0.5 feet/year suggesting that TW4-6 is within the hydraulic influence of TW4-4.

Since the fourth quarter of 2013, water levels in all wells currently within the chloroform plume south of TW4-4 (TW4-6, TW4-29, and TW4-33) have been trending downward. This downward trend is attributable to the cessation of water delivery to the northern wildlife ponds and pumping. However, water level trends have been upward in many wells located at the margin of the chloroform plume southeast of TW4-4 (TW4-14, TW4-27, TW4-30, and TW4-31). These wells appear as yet to be responding to past wildlife pond recharge and expansion of the groundwater mound. (note: hydrographs for these wells are provided in the quarterly Chloroform Monitoring Report.

These spatially variable water level trends likely result from pumping conditions, the permeability distribution, and distance from the wildlife ponds. Wells that are relatively hydraulically isolated (due to completion in lower permeability materials or due to intervening lower permeability materials) and that are more distant from pumping wells and the ponds, are expected to respond more slowly to pumping and reduced recharge than wells that are less hydraulically isolated and are closer to pumping wells and the ponds. Wells that are more hydraulically isolated will also respond more slowly to changes in pumping.

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 (approximately 5533.2 feet above mean sea level ["ft amsl"]), is more than 3 feet lower than the water level at TW4-6 (approximately 5536.8 ft amsl) and approximately 7 feet lower than the water level at TW4-4 (approximately 5540.4 ft amsl), even though TW4-4 is pumping. However, water level differences among these wells are diminishing.

The static water levels at wells TW4-14 and downgradient well TW4-27 (installed south of TW4-14 in the fourth quarter of 2011) were similar (within 1 to 2 feet) until the third quarter of 2014; both appeared anomalously low. The current quarterly water level at TW4-27 (approximately 5528.6 ft amsl) is 4.6 feet lower than the water level at TW4-14 (5533.2 ft amsl). Recent increases in the differences between water levels at TW4-14 and TW4-27 are due to more

rapid increases in water levels at TW4-14 resulting from past delivery of water to the northern wildlife ponds. The rate of water level increase at TW4-27 is smaller than at TW4-14 because TW4-27 is farther downgradient of the ponds.

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 all three wells TW4-4, TW4-6, and TW4-26, yet chloroform had not been 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 (5535.2 feet amsl) is, however, lower than water levels at adjacent wells TW4-6 (5536.8 feet amsl), and TW4-23 (5538.3 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). Past similarity of water levels at TW4-14 and TW4-27, and the low permeability estimate at TW4-27, suggested that both wells were 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 relatively recently installed wells TW4-29, TW4-30, TW4-31, TW4-33, TW4-34 and TW4-35, 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 (first quarter of 2015) to the water table contour maps for the previous quarter (fourth quarter of 2015) indicates similar patterns of drawdowns associated with pumping wells. Significant drawdown associated with relatively new chloroform pumping well TW4-37 is not yet evident.

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. Water levels in nitrate pumping wells TW4-22, TW4-24, and TW4-25

increased (decreased in drawdown) by 1 foot to nearly 3 feet, while the water level in nitrate pumping well TWN-2 decreased (increased in drawdown) by more than 3 feet 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 (<1 foot) changes in water levels were reported at the majority of site wells; water levels and water level contours for the site have not changed significantly since the last quarter except for a few locations. Reported decreases in water levels (increases in drawdown) of approximately 9.0, 2.0, and 3.6 feet occurred in chloroform pumping wells MW-4, TW4-1, and nitrate pumping well TWN-2, respectively. Increases in water level (decreases in drawdown) of approximately 3.9, 2.1, and 2.8 feet were reported for chloroform pumping well TW4-2 and nitrate pumping wells TW4-22 and TW4-24, respectively. The reported water level for TW4-11 is slightly below the depth of the Brushy Basin contact this quarter. Changes in water levels at other pumping wells (chloroform pumping wells MW-26, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21, and TW4-37, and nitrate pumping well TW4-25) were less than 2 feet. 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.

Although increases in water levels (decreases in drawdown) occurred in some pumping wells and decreases in water levels (increases in drawdown) occurred in others, the overall apparent capture of the combined pumping system is approximately the same as last quarter.

Reported water level decreases of up to 0.37 feet at Piezometers 1, 2, 4, and 5, TWN-1, and TWN-4 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. Reported water level decreases of approximately 0.2 feet and 0.3 feet at Piezometers 4 and 5, respectively, may also result from reduced recharge at the southern wildlife pond.

Reported water levels increased by approximately 3.9 feet, 3 feet, and 6 feet at MW-20, MW-23, and MW-37, respectively, approximately compensating for the decreases 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. Measurable water was again reported at DR-22. Although DR-22 is typically dry, measurable water has been reported in the bottom of its casing since the second quarter of 2015.

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 DWMRC and EFRI. 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 Surfer™. 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, both increases and decreases in water levels occurred at nitrate and chloroform pumping wells. The water levels in chloroform pumping wells MW-4, TW4-1, TW4-4, TW4-11, and TW4-19 decreased by approximately 9.0, 2.0, 1.3, 1.2, and 1.1 feet respectively, while the water levels in chloroform pumping wells MW-26, TW4-2, TW4-20, TW4-21 and TW4-37 increased by approximately 0.8, 3.9, 0.4, 1.9, and 1.6 feet, respectively. The water level

in nitrate pumping well TWN-2 decreased by approximately 3.6 feet while the water levels in nitrate pumping wells TW4-22, TW4-24, and TW4-25 increased by approximately 2.1, 2.8, and 1.0 feet, respectively. Overall, the apparent capture of the combined pumping systems is about the same as 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 presented from the fourth quarter of 2013 through the second quarter of 2015 was assumed to represent a steady state 'background' condition that included constant recharge, hydraulic gradients, and saturated thicknesses; the calculation did not account for reduced recharge and saturated thickness caused by cessation of water delivery to the northern wildlife ponds since March, 2012. Because significant water level declines have occurred in upgradient portions of the nitrate plume due to reduced recharge, hydraulic gradients within the plume have been reduced independent of pumping. Changes related to reduced wildlife pond recharge have also resulted in reduced well productivity. Generally reduced productivities of nitrate pumping well TW4-24 and chloroform pumping well TW4-19 since the third quarter of 2014 are at least partly the result of reduced recharge.

The pre-pumping flow through the nitrate plume near TW4-22 and TW4-24 that was presented from the fourth quarter of 2013 through the second quarter of 2015 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 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.

As discussed above the hydraulic gradient and saturated thickness used in the pre-pumping calculations were assumed to represent a steady state 'background' condition that was 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 have declined since nitrate pumping began as a result of two factors: reduced recharge from the ponds, and the effects of nitrate pumping. A more representative 'background' flow condition that accounts for reduced wildlife pond recharge was presented in Attachment N (Tab N) of the third quarter 2015 Nitrate Monitoring report. The original pre-pumping 'background' flow range of 1.31 gpm to 2.79 gpm has been recalculated to range from 0.79 gpm to 1.67 gpm, as presented in Table 9. This calculation is still considered conservative because the high end of the range assumed an arithmetic average hydraulic conductivity of a subset of plume wells having the highest conductivities.

The cumulative volume of water removed by TW4-22, TW4-24, TW4-25, and TWN-2 during the current quarter was approximately 287,734 gallons. This equates to an average total extraction rate of approximately 2.2 gpm over the 91 day quarter. This average is similar to last quarter's average of approximately 2.3 gpm and accounts for time periods when pumps were off due to insufficient water columns in the wells. The current quarter's pumping (2.2 gpm) exceeds the high end of the recalculated 'background' flow range by a factor of 1.3.

Because the arithmetic average hydraulic conductivity of a subset of plume wells having the highest conductivities was used to calculate the high end of the 'background' flow range, the high end is considered less representative of actual conditions than using the geometric average conductivity of all of the plume wells. Therefore, nitrate pumping likely exceeds flow through the plume by a factor greater than 1.3 times the high end of the recalculated range. Nitrate pumping is likely adequate at the present time even with reduced productivity at TW4-24.

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 nitrate plume has not migrated downgradient to MW-5 or MW-11 because nitrate was not detected at MW-11 and was detected at MW-5 at a concentration of only 0.12 mg/L last quarter. Between the previous and current quarters, nitrate concentrations increased in both MW-30 and MW-31. Nitrate in MW-30 increased from 16.3 mg/L to 20 mg/L and nitrate in MW-31 increased slightly from 18.4 mg/L to 18.8 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 generally 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

The area of the nitrate plume is approximately the same as last quarter except for a slight expansion to the east in the vicinity of chloroform pumping wells TW4-19 and TW4-20, caused by increases in concentration at these wells from approximately 11 mg/L to 16 mg/L and from approximately 6 mg/L to 10 mg/L, respectively. TW4-18 remained outside the plume with a concentration of approximately 6 mg/L. TW4-18 was encompassed by an eastward-extending 'spur' in the plume during the third quarter of 2015, similar to an occurrence during the third quarter of 2013.

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, decreasing to relatively stable nitrate concentrations at most wells in the vicinity of TW4-18 between the first quarter of 2014 and the second quarter of 2015 after previous increases suggested that conditions in this area had stabilized. Since the second quarter of 2015, concentrations at TW4-18 have fluctuated above and below 10 mg/L, and were below 10 mg/L during the current and previous quarters. Over this same time period, concentrations at nearby wells TW4-3 and TW4-9 remained below 10 mg/L, concentrations at TW4-5 exceeded 10 mg/L only once (during the current quarter), and concentrations at TW4-10 remained above 10 mg/L.

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. 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 nitrate plume migration is minimal or absent. As discussed in Section 4.2.1, stable nitrate at MW-30 and MW-31 is consistent with a natural attenuation process affecting nitrate but not chloride, as elevated chloride associated with the nitrate plume continues to migrate downgradient.

With regard to chloroform, changes in the boundary of the chloroform plume are attributable in part to the initiation of nitrate pumping. Once nitrate pumping started, the boundary of the chloroform plume migrated to the west toward nitrate pumping well TW4-24, and then to the southwest to reincorporate chloroform monitoring wells TW4-6 and TW4-16. Concentration increases leading to the reincorporation of these wells occurred first at TW4-24, then at TW4-16 and TW4-6. Subsequent contraction of the plume eastward away from TW4-24 and TW4-16 is attributable in part to the start-up of additional chloroform pumping wells during the first half of 2015, and reduced productivity at TW4-24. 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: MW-26, MW-30, TW4-5, TW4-19, TW4-20, TWN-2, and TWN-4;
- b) Nitrate concentrations have decreased by more than 20% in the following wells compared to last quarter: TW4-22, TW4-25, and TWN-7;

- c) Nitrate concentrations have remained within 20% in the following wells compared to last quarter: MW-27, MW-31, TW4-16, TW4-18, TW4-21, TW4-24, TWN-1, TWN-3, and TWN-18;
- d) MW-11, MW-25, and MW-32 remained non-detect.

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, TW4-19, and TW4-20; nitrate pumping wells TW4-22, TW4-25, and TWN-2; and non-pumping wells MW-30, TW4-5, TWN-4, and TWN-7. Wells MW-26, TWN-4, and TWN-7, are outside the nitrate plume and concentrations at MW-26 and TWN-7, are less than 2 mg/L.

MW-30 is located at the downgradient edge of the plume; TW4-5 is located near chloroform pumping wells TW4-19 and TW4-20; TWN-4 is located near nitrate pumping wells TW4-25 and TWN-2; and TWN-7 is located near 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. In addition, concentrations at TWN-4 are expected to be influenced by the adjacent wildlife ponds and concentrations at TWN-7 are expected to be influenced by its location near the margin of the nitrate plume.

The nitrate concentrations in chloroform pumping wells TW4-19 and TW4-20 increased from approximately 10.6 mg/L and 6.2 mg/L to approximately 15.7 mg/L and 10.3 mg/L, respectively, causing slight expansion of the plume to the east. 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, TW4-9, TW4-16, TW4-18, TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

Nitrate concentrations outside the nitrate plume are greater than 10 mg/L at a few locations: TW4-5 (10.2 mg/L), TW4-10 (17.3 mg/L), TW4-12 (34.8 mg/L), TW4-26 (16.9 mg/L), TW4-27 (25 mg/L), and TW4-28 (34 mg/L). Concentrations at TW4-18 are also occasionally above 10 mg/L. Each of these wells is located southeast of the nitrate plume as defined in the CAP and (except for TW4-5 this quarter) is separated from the plume by a well or wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. The concentration at TW4-27 is within 20% of last quarter's; however, concentrations at TW4-5, TW4-10, TW4-12, TW4-26, and TW4-28 have increased by more than 20% since last quarter.

Since 2010, nitrate concentrations at TW4-10 and TW4-18 have been above and below 10 mg/L. Concentrations were below 10 mg/L between the first quarter of 2011 and second quarter of 2013, and mostly close to or above 10 mg/L since then. However, concentrations at TW4-18 were below 10 mg/L during the current and previous quarters. Since 2010, concentrations at nearby well TW4-5 have exceeded 10 mg/L only twice, and concentrations at nearby wells TW4-3 and TW4-9 have remained below 10 mg/L. Elevated nitrate concentrations at TW4-5,

TW4-10, and TW4-18 are associated with the chloroform plume, and 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 at all sampled locations this quarter are within 20% of their respective concentrations during the previous quarter except at TW4-3 and TW4-25 (both located outside the nitrate plume). These changes likely result from reduced wildlife pond recharge and changes in pumping.

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 1,700 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 133 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 133 lb removed during the current quarter, approximately 66 lb, (or 50 %), was removed by the nitrate pumping wells.

The calculated nitrate mass removed was approximately 6% higher than last quarter.

As discussed in Section 4.3.1, achievable pumping rates are expected to diminish over time as saturated thicknesses are reduced by pumping and by cessation of water delivery to the northern wildlife ponds. Attachment N (Tab N) of the third quarter 2015 Nitrate Monitoring report provides an evaluation of reduced productivity at chloroform pumping well TW4-19 and nitrate pumping well TW4-24.

Baseline mass and current quarter mass estimates (nitrate + nitrite as N) for the nitrate plume are approximately 43,700 lb and 33,080 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 approximately 10,620 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 (33,080 lb) was larger than the mass estimate during the previous quarter (30,980 lb) by 2,100 lb or approximately 7 %. This difference is attributable to 1) slightly higher average nitrate concentrations within the plume and 2) slightly increased plume area resulting from concentration increases at TW4-19 and TW4-20 this 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 are collected (starting with the first quarter of 2013), a regression trend line is to be applied to the quarterly mass estimates and evaluated. The trend line is then to 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.

As the fourth quarter of 2014 constituted the eighth quarter as specified in the CAP, the mass estimates were plotted, and a regression line was fitted to the data and evaluated. The regression line has been updated each quarter since the fourth quarter of 2014 as shown in Figure M.1 of Tab M. The fitted line shows a decreasing trend in the mass estimates.

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. In anticipation of the final approval of the GCAP, beginning on January 14, 2015, EFRI began long term pumping of TW4-1, TW4-2, and TW4-11 and began long term pumping of TW4-21 and TW4-37 on June 9, 2015. 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, TW4-20, TW4-01, TW4-02, TW4-11, TW4-21, and TW4-37 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,
- Measurement of water levels weekly at TW4-22, TW4-24, TW4-25, and TWN-02 commencing January 28, 2013,
- Measurement of water levels weekly at TW4-01, TW4-02, and TW4-11 commencing on January 14, 2015,
- Measurement of water levels weekly at TW4-21 and TW4-37 commencing on June 9, 2015, and on a monthly basis selected temporary wells and permanent monitoring wells.
- 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

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, TWN-02, TW4-01, TW4-02, TW4-11, TW4-21, and TW4-37 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, 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.

Specific operational problems observed with the well or pumping equipment which occurred during the quarter are noted for each well below in Sections 5.4.1 through 5.4.4.

Unless specifically noted below, no operational problems were observed with the well or pumping equipment during the quarter.

5.4.1 TW4-24

On January 5, 2016, Mill Field Personnel noted during the routine weekly inspection that the flow meter on TW4-24 was malfunctioning. The well continued to pump. The flow meter was replaced. No official notifications to DWMRC were required as the issue was rectified within 24-hours and there was no loss of pumping.

5.4.2 TW4-19 and MW-26

On January 11, 2016, Mill Field Personnel replaced the heat lamps in the TW4-19 and MW-26 enclosures.

The heat lamp replacements noted above did not result in any adverse issues. Pumping continued uninterrupted.

6.0 CORRECTIVE ACTION REPORT

There are no corrective actions required during the current monitoring period.

6.1 Assessment of Previous Quarter's Corrective Actions

There were no corrective actions required during the previous quarters' monitoring period.

7.0 CONCLUSIONS AND RECOMMENDATIONS

As per the CAP, the current quarter is the tenth quarter that hydraulic capture associated with nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 was evaluated. The apparent combined capture of the nitrate and chloroform pumping systems is approximately the same as last quarter. Capture associated with nitrate pumping wells 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.

Nitrate pumping is likely sufficient to eventually capture the entire nitrate plume upgradient of TW4-22 and TW4-24 even with reduced productivity at TW4-24. Hydraulic gradients and saturated thicknesses within the plume have declined since nitrate pumping began as a result of two factors: reduced recharge from the ponds, and the effects of nitrate pumping. A more representative 'background' flow condition that accounts for reduced wildlife pond recharge was presented in Attachment N (Tab N) of the third quarter, 2015 Nitrate Monitoring report. The original pre-pumping 'background' flow range of 1.31 gpm to 2.79 gpm was recalculated to range from 0.79 gpm to 1.67 gpm. This calculation is still considered conservative because the high end of the calculated range assumed an arithmetic average hydraulic conductivity of a subset of plume wells having the highest conductivities. The current nitrate pumping of approximately 2.2 gpm exceeds the high end of the recalculated 'background' range by a factor of 1.3.

In addition, because the arithmetic average hydraulic conductivity of a subset of plume wells having the highest conductivities was used in recalculating the high end of the 'background' flow range, the high end is considered less representative of actual conditions than using the geometric average conductivity of all of the plume wells. Therefore, nitrate pumping likely exceeds flow through the plume by a factor greater than 1.3 times the high end of the recalculated range. Nitrate pumping is likely adequate at the present time even with reduced productivity at TW4-24. Furthermore, as the groundwater mound associated with former water delivery to the northern wildlife ponds continues to decay, hydraulic gradients and saturated thicknesses will continue to decrease, and 'background' flow will be proportionally reduced, thereby reducing the amount of pumping needed.

First quarter, 2016 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 chloroform pumping wells MW-26, TW4-19, and TW4-20; nitrate pumping wells TW4-22, TW4-25, and TWN-2; and non-pumping wells MW-30, TW4-5, TWN-4, and TWN-7. Wells MW-26, TWN-4, and TWN-7, are outside the nitrate plume and concentrations at MW-26 and TWN-7 are less than 2 mg/L.

MW-30 is located at the downgradient edge of the plume; TW4-5 is located near chloroform pumping wells TW4-19 and TW4-20; TWN-4 is located near nitrate pumping wells TW4-25 and TWN-2; and TWN-7 is located near 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. In addition, concentrations at TWN-4 are expected to be influenced by the adjacent wildlife ponds and concentrations at TWN-7 are expected to be influenced by its location near the margin of the nitrate plume. The nitrate concentrations in wells MW-11, MW-25, and MW-32 remained non-detect.

As discussed in Section 4.2.3, the nitrate concentrations in chloroform pumping wells TW4-19 and TW4-20 increased from approximately 10.6 mg/L and 6.2 mg/L to approximately 15.7 mg/L and 10.3 mg/L, respectively, causing slight expansion of the plume to the east. 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, TW4-9, TW4-16, TW4-18, TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

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. Nitrate in MW-30 increased from 16.3 mg/L to 20 mg/L and nitrate in MW-31 increased slightly from 18.4 mg/L to 18.8 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 generally 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. Increases in chloride at MW-30 are also expected to eventually occur as the nitrate/chloride plume continues to move downgradient.

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. Longer-term analyses of the mass estimates that minimize the impact of these quarter to quarter variations are expected to 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 are collected (starting with the first quarter of 2013), a regression trend line is to be applied to the quarterly mass estimates and evaluated. The trend line is then to be updated quarterly and reevaluated as additional quarters of data are collected. As the fourth quarter of 2014 constituted the eighth quarter as specified in the CAP, the mass estimates were plotted, and a regression line was fitted to the data and evaluated. The regression line was updated this quarter as shown in Figure M.1 of Tab M. The fitted line shows a decreasing trend in the mass estimates.

During the current quarter, a total of approximately 133 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 133 lb removed during the current quarter, approximately 66 lb, (or 50%), 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 33,080 lb which was larger than the mass estimate during the previous quarter (30,980 lb) by 2,100 lb or approximately 7 %. This difference is attributable to 1) slightly higher average nitrate concentrations within the plume and 2) slightly increased plume area resulting from concentration increases at TW4-19 and TW4-20 this quarter.

Nitrate concentrations outside the nitrate plume are greater than 10 mg/L at a few locations: TW4-5 (10.2 mg/L), TW4-10 (17.3 mg/L), TW4-12 (34.8 mg/L), TW4-26 (16.9 mg/L), TW4-27 (25 mg/L), and TW4-28 (34 mg/L). Concentrations at TW4-18 are also occasionally above 10 mg/L. Each of these wells is located southeast of the nitrate plume as defined in the CAP and (except for TW4-5 this quarter) is separated from the plume by a well or wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. The concentration at TW4-27 is within 20% of last quarter's; however, concentrations at TW4-5, TW4-10, TW4-12, TW4-26, and TW4-28 have increased by more than 20% since last quarter.

Since 2010, nitrate concentrations at TW4-10 and TW4-18 have been above and below 10 mg/L. Concentrations were below 10 mg/L between the first quarter of 2011 and second quarter of 2013, and mostly close to or above 10 mg/L since then. However, concentrations at TW4-18 were below 10 mg/L during the current and previous quarters. Since 2010, concentrations at nearby well TW4-5 have exceeded 10 mg/L only twice, and concentrations at nearby wells TW4-3 and TW4-9 have remained below 10 mg/L. Elevated nitrate concentrations at TW4-5, TW4-10, and TW4-18 are associated with the chloroform plume, and 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. However, decreasing nitrate concentrations at TW4-10 and TW4-18 from the first through third quarters of 2014 after previously increasing trends (interrupted in the first quarter of 2014) suggested that conditions in this area had stabilized. The temporary increase in nitrate concentration at TW4-18 in the third quarter of 2015 and the generally increasing nitrate at TW4-5 and TW4-10 since the second quarter of 2015 suggest that reduced wildlife pond recharge is still impacting concentrations in downgradient wells.

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 DWMRC 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.

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.

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 May 17, 2016.

Energy Fuels Resources (USA) Inc.

By:



Scott Bakken
Senior Director Regulatory 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
Senior Director Regulatory 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	2/23/2016	3/9/2016
Piezometer 02	2/23/2016	3/9/2016
Piezometer 03	2/23/2016	3/9/2016
TWN-01	2/23/2016	3/9/2016
TWN-02	2/23/2016	3/9/2016
TWN-03	2/24/2016	3/9/2016
TWN-04	2/23/2016	3/9/2016
TWN-07	2/23/2016	3/9/2016
TWN-18	2/23/2016	3/9/2016
TWN-18R	2/23/2016	3/9/2016
TW4-22	3/9/2016	3/28/2016
TW4-24	3/9/2016	3/28/2016
TW4-25	3/9/2016	3/28/2016
TWN-60	2/24/2016	3/9/2016
TW4-60	3/22/2016	3/30/2016
TWN-65	2/23/2016	3/9/2016

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.)	TW4-01 (lbs.)	TW4-02 (lbs.)	TW4-11 (lbs.)	TW4-21 (lbs.)	TW4-37 (lbs.)	Quarter Totals (lbs.)
Q3 2010	3.2	0.3	5.8	1.7	4.7	NA	15.69								
Q4 2010	3.8	0.4	17.3	1.4	5.1	NA	27.97								
Q1 2011	2.9	0.2	64.5	1.4	4.3	NA	73.30								
Q2 2011	3.5	0.1	15.9	2.7	4.7	NA	27.01								
Q3 2011	3.5	0.5	3.5	3.9	5.4	NA	16.82								
Q4 2011	3.8	0.8	6.2	2.5	6.4	NA	19.71								
Q1 2012	3.6	0.4	0.7	5.0	6.0	NA	15.86								
Q2 2012	3.7	0.6	3.4	2.1	5.2	NA	15.03								
Q3 2012	3.8	0.5	3.6	2.0	4.7	NA	14.67								
Q4 2012	3.2	0.4	5.4	1.8	4.2	NA	14.92								
Q1 2013	2.5	0.4	14.1	1.4	3.6	8.1	43.4	7.5	14.8	NA	NA	NA	NA	NA	95.73
Q2 2013	2.5	0.4	5.6	1.6	3.4	10.7	37.1	6.4	23.9	NA	NA	NA	NA	NA	91.71
Q3 2013	3.0	0.4	48.4	1.4	3.8	6.3	72.8	6.9	33.4	NA	NA	NA	NA	NA	176.53
Q4 2013	3.1	0.3	15.8	1.6	3.9	9.4	75.2	6.4	46.3	NA	NA	NA	NA	NA	162.07
Q1 2014	2.7	0.4	4.1	1.2	3.6	11.2	60.4	2.3	17.2	NA	NA	NA	NA	NA	103.14
Q2 2014	2.4	0.3	3.3	0.9	3.0	9.5	63.4	1.3	17.8	NA	NA	NA	NA	NA	101.87
Q3 2014	2.3	0.1	4.1	0.6	3.1	8.5	56.2	1.6	16.4	NA	NA	NA	NA	NA	92.99
Q4 2014	2.7	0.2	7.8	1.0	3.8	11.0	53.2	0.9	28.0	NA	NA	NA	NA	NA	108.57
Q1 2015	3.7	0.5	4.3	1.3	2.4	12.7	26.7	8.6	19.2	1.45	1.07	0.72	NA	NA	82.61
Q2 2015	1.3	0.2	0.6	0.9	3.6	9.1	16.6	0.9	21.4	1.22	0.79	0.37	3.4	8.6	68.86
Q3 2015	3.6	0.3	11.3	1.4	3.5	13.3	14.0	1.7	20.2	1.24	0.68	0.29	15.4	31.9	118.63
Q4 2015	3.7	0.2	10.0	0.8	3.1	11.1	26.6	1.7	17.5	0.3	0.9	0.3	16.1	32.3	124.50
Q1 2016	3.9	0.23	15.28	1.23	3.21	6.36	24.30	0.81	34.33	0.02	0.93	0.22	15.29	26.45	132.55
Well Totals (pounds)	72.37	8.33	271.00	40.01	94.65	127.30	569.87	47.08	310.35	4.19	4.41	1.85	50.10	99.20	1700.72

Table 3 Well Pumping Rates and Volumes

Pumping Well Name	Volume of Water Pumped During the Quarter (gals)	Average Pump Rate (gpm)
MW-4	90,882.1	4.5
MW-26	19,150.8	8.2
TW4-4	57,274.0	11.1
TW4-19	116,597.0	18.1
TW4-20	14,353.5	6.2
TW4-22	24,517.8	17.5
TW4-24	100,063.2	15.9
TW4-25	115,483.2	14.8
TWN-2	47,670.2	18.6
TW4-01	19,255.6	15.8
TW4-02	20,944.6	16.8
TW4-11	3,676.2	16.3
TW4-21	125,513.3	16.3
TW4-37	111,591.0	17.0

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	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	4.80	4800	302266.7	1450880129	1450.9	3.20	63850.0	0.60	600	241672.3	145003350	145	0.32
Q4 2010	90042.2	5.00	5000	340809.7	1704048635	1704.0	3.76	60180.0	0.70	700	227781.3	159446910	159	0.35
Q1 2011	76247.6	4.60	4600	288597.2	1327546964	1327.5	2.93	55130.0	0.50	500	208667.1	104333525	104	0.23
Q2 2011	85849.3	4.90	4900	324939.6	1592204042	1592.2	3.51	55800.6	0.30	300	211205.3	63361581	63	0.14
Q3 2011	85327.7	4.90	4900	322965.3	1582530188	1582.5	3.49	65618.0	0.90	900	248364.1	223527717	224	0.49
Q4 2011	89735.0	5.10	5100	339647.0	1732199573	1732.2	3.82	50191.3	2.00	2000	189974.1	379948141	380	0.84
Q1 2012	90376.4	4.80	4800	342074.7	1641958435	1642.0	3.62	31440.1	1.70	1700	119000.8	202301323	202	0.45
Q2 2012	90916.5	4.90	4900	344118.8	1686181940	1686.2	3.72	26701.2	2.50	2500	101064.1	252660294	253	0.56
Q3 2012	91607.0	5.00	5000	346732.5	1733662475	1733.7	3.82	25246.0	2.60	2600	95556.1	248445886	248	0.55
Q4 2012	78840.0	4.80	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	4.70	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	3.70	3700	283073.3	1047371347	1047.4	2.31	24062.4	0.70	700	91076.2	63753329	64	0.14
Q4 2014	63093.0	5.07	5070	238807.0	1210751515	1210.8	2.67	21875.8	0.93	934	82799.9	77335109	77	0.17
Q1 2015	76454.3	5.75	5750	289379.5	1663932272	1663.9	3.67	24004.9	2.68	2680	90858.5	243500905	244	0.54
Q2 2015	60714.7	2.53	2530	229805.1	581407002.9	581.4	1.28	27804.6	0.85	845	105240.4	88928147	89	0.20
Q3 2015	89520.8	4.79	4790	338836.2	1623025532	1623.0	3.58	21042.0	1.75	1750	79644.0	139376948	139	0.31
Q4 2015	99633.4	4.43	4430	377112.4	1670608016	1670.6	3.68	19355.6	1.11	1110	73260.9	81319650	81	0.18
Q1 2016	90882.1	5.15	5150	343988.7	1771542055	1771.5	3.91	19150.8	1.45	1450	72485.8	105104378	105	0.23

Totals Since Q3

2010

1833026.15

72.37

767235.6

8.33

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	5.90	5900	442463.5	2.611E+09	2611	5.76	39098.3	5.30	5300	147987.1	784331447	784	1.73
Q4 2010	767970.5	2.70	2700	2906768.3	7.848E+09	7848	17.30	36752.5	4.60	4600	139108.2	639897778	640	1.41
Q1 2011	454607.9	17.00	17000	1720690.9	2.925E+10	29252	64.49	37187.5	4.40	4400	140754.7	619320625	619	1.37
Q2 2011	159238.9	12.00	12000	602719.2	7.233E+09	7233	15.95	67907.7	4.80	4800	257030.6	1.234E+09	1234	2.72
Q3 2011	141542.6	3.00	3000	535738.7	1.607E+09	1607	3.54	72311.2	6.50	6500	273697.9	1.779E+09	1779	3.92
Q4 2011	147647.2	5.00	5000	558844.7	2.794E+09	2794	6.16	72089.3	4.20	4200	272858.0	1.146E+09	1146	2.53
Q1 2012	148747.0	0.60	600	563007.4	337804437	338	0.74	76306.0	7.90	7900	288818.2	2.282E+09	2282	5.03
Q2 2012	172082.0	2.40	2400	651330.5	1.563E+09	1563	3.45	22956.4	11.00	11000	86890.1	955790963	956	2.11
Q3 2012	171345.0	2.50	2500	648540.8	1.621E+09	1621	3.57	22025.0	10.80	10800	83364.6	900337950	900	1.98
Q4 2012	156653.0	4.10	4100	592931.6	2.431E+09	2431	5.36	20114.0	11.00	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	17.60	17600	1247006.5	2.195E+10	21947	48.39	19731.0	8.65	8650	74681.8	645997873	646	1.42
Q4 2013	403974.0	4.70	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	1.60	1600	1172373.5	1.876E+09	1876	4.14	17237.9	4.30	4300	65245.5	280555441	281	0.62
Q4 2014	198331.0	4.72	4720	750682.8	3.543E+09	3543	7.81	16341.8	7.67	7670	61853.7	474417979	474	1.05
Q1 2015	60553.0	8.56	8560	229193.1	1.962E+09	1962	4.33	15744.7	9.80	9800	59593.7	584018157	584	1.29
Q2 2015	75102.8	0.92	916	284264.1	260385914	260	0.57	18754.1	5.76	5760	70984.3	408869387	409	0.90
Q3 2015	116503.9	11.60	11600	440967.3	5.115E+09	5115	11.28	17657.3	9.27	9270	66832.9	619540802	620	1.37
Q4 2015	112767.7	10.6	10600	426825.7	4.524E+09	4524	9.97	15547.4	6.23	6230	58846.9	366616243	367	0.81
Q1 2016	116597.0	15.7	15700	441319.6	6.929E+09	6929	15.28	14353.5	10.3	10300	54328.0	559578374	560	1.23

Totals Since Q3

2010

5199407.8

271.00

697069.2

40.01

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	58.00	58000.0	63124.0	3.7E+09	3661.2	8.07	8.07
Q2 2013	65603.4	6.30	6300.00	248308.9	1.6E+09	1564.35	3.45	25523.2	50.20	50200.0	96605.3	4.8E+09	4849.6	10.69	10.69
Q3 2013	63515.4	7.22	7220.00	240405.8	1.7E+09	1735.73	3.83	25592.9	29.70	29700.0	96869.1	2.9E+09	2877.0	6.34	6.34
Q4 2013	60233.6	7.84	7840.00	227984.2	1.8E+09	1787.40	3.94	24952.2	45.20	45200.0	94444.1	4.3E+09	4268.9	9.41	9.41
Q1 2014	58992.9	7.28	7280.00	223288.1	1.6E+09	1625.54	3.58	24532.0	54.60	54600.0	92853.6	5.1E+09	5069.8	11.18	11.18
Q2 2014	60235.3	5.91	5910.00	227990.6	1.3E+09	1347.42	2.97	24193.9	47.20	47200.0	91573.9	4.3E+09	4322.3	9.53	9.53
Q3 2014	69229.4	5.30	5300.00	262033.3	1.4E+09	1388.78	3.06	24610.9	41.50	41500.0	93152.3	3.9E+09	3865.8	8.52	8.52
Q4 2014	64422.6	7.02	7020.00	243839.5	1.7E+09	1711.75	3.77	23956.9	54.90	54900.0	90676.9	5.0E+09	4978.2	10.97	10.97
Q1 2015	36941.3	7.70	7700.00	139822.8	1.1E+09	1076.64	2.37	22046.9	69.20	69200.0	83447.5	5.8E+09	5774.6	12.73	12.73
Q2 2015	68162.8	6.33	6330.00	257996.2	1.6E+09	1633.12	3.60	23191.6	47.10	47100.0	87780.2	4.1E+09	4134.4	9.11	9.11
Q3 2015	64333.0	6.45	6450.00	243500.4	1.6E+09	1570.58	3.46	24619.9	64.70	64700.0	93186.3	6.0E+09	6029.2	13.29	13.29
Q4 2015	59235.1	6.27	6270.00	224204.9	1.4E+09	1405.76	3.10	23657.6	56.10	56100.0	89544.0	5.0E+09	5023.4	11.07	11.07
Q1 2016	57274.0	6.71	6710.00	216782.1	1.5E+09	1454.61	3.21	24517.8	31.10	31100.0	92799.9	2.9E+09	2886.1	6.36	6.36

Totals Since Q3

2010

1651935.5

94.65

308073.2

127.30

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	35.90	35900.0	548229.2	2.0E+10	19681.4	43.39	99369.9	9.00	9000.0	376115.1	3.4E+09	3385.0	7.46
Q2 2013	187509.3	23.70	23700.0	709722.7	1.7E+10	16820.4	37.08	147310.4	5.24	5240.0	557569.9	2.9E+09	2921.7	6.44
Q3 2013	267703.5	32.60	32600.0	1013257.7	3.3E+10	33032.2	72.82	145840.9	5.69	5690.0	552007.8	3.1E+09	3140.9	6.92
Q4 2013	260555.3	34.60	34600.0	986201.8	3.4E+10	34122.6	75.23	126576.5	6.10	6100.0	479092.1	2.9E+09	2922.5	6.44
Q1 2014	229063.9	31.60	31600.0	867006.9	2.7E+10	27397.4	60.40	129979.2	2.16	2160.0	491971.3	1.1E+09	1062.7	2.34
Q2 2014	216984.1	35.00	35000.0	821284.8	2.9E+10	28745.0	63.37	124829.8	1.21	1210.0	472480.8	5.7E+08	571.7	1.26
Q3 2014	213652.5	31.50	31500.0	808674.7	2.5E+10	25473.3	56.16	119663.9	1.60	1600.0	452927.9	7.2E+08	724.7	1.60
Q4 2014	178468.7	35.70	35700.0	675504.0	2.4E+10	24115.5	53.17	107416.1	1.03	1030.0	406569.9	4.2E+08	418.8	0.92
Q1 2015	92449.3	34.60	34600.0	349920.6	1.2E+10	12107.3	26.69	71452.4	14.40	14400.0	270447.3	3.9E+09	3894.4	8.59
Q2 2015	62664.2	31.80	31800.0	237184.0	7.5E+09	7542.5	16.63	91985.3	1.14	1140.0	348164.4	4.0E+08	396.9	0.88
Q3 2015	66313.2	25.30	25300.0	250995.5	6.4E+09	6350.2	14.00	124137.1	1.63	1630.0	469858.9	7.7E+08	765.9	1.69
Q4 2015	107799.1	29.60	29600.0	408019.6	1.2E+10	12077.4	26.63	116420.1	1.78	1780.0	440650.1	7.8E+08	784.4	1.73
Q1 2016	100063.2	29.10	29100.0	378739.2	1.1E+10	11021.3	24.30	115483.2	0.84	837.0	437103.9	3.7E+08	365.9	0.81

Totals Since Q3

2010

2128068.9

569.87

1520464.8

47.08

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

Quarter	TWN-02							TW4-01						
	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	31009.4	57.30	57300.0	117370.6	6.7E+09	6725.3	14.83	NA	NA	NA	NA	NA	NA	NA
Q2 2013	49579.3	57.70	57700.0	187657.7	1.1E+10	10827.8	23.87	NA	NA	NA	NA	NA	NA	NA
Q3 2013	50036.5	80.00	80000.0	189388.2	1.5E+10	15151.1	33.40	NA	NA	NA	NA	NA	NA	NA
Q4 2013	49979.9	111.00	111000.0	189173.9	2.1E+10	20998.3	46.29	NA	NA	NA	NA	NA	NA	NA
Q1 2014	48320.4	42.60	42600.0	182892.7	7.8E+09	7791.2	17.18	NA	NA	NA	NA	NA	NA	NA
Q2 2014	47611.9	44.70	44700.0	180211.0	8.1E+09	8055.4	17.76	NA	NA	NA	NA	NA	NA	NA
Q3 2014	46927.2	42.00	42000.0	177619.5	7.5E+09	7460.0	16.45	NA	NA	NA	NA	NA	NA	NA
Q4 2014	47585.6	70.60	70600.0	180111.5	1.3E+10	12715.9	28.03	NA	NA	NA	NA	NA	NA	NA
Q1 2015	47262.2	48.60	48600.0	178887.4	8.7E+09	8693.9	19.17	24569.2	7.06	7060.0	92994.4	6.6E+08	656.5	1.45
Q2 2015	48497.3	52.80	52800.0	183562.3	9.7E+09	9692.1	21.37	23989.9	6.07	6070.0	90801.8	5.5E+08	551.2	1.22
Q3 2015	48617.4	49.70	49700.0	184016.9	9.1E+09	9145.6	20.16	23652.0	6.3	6280.0	89522.8	562203309.6	562.2	1.2
Q4 2015	46754.1	44.90	44900.0	176964.3	7.9E+09	7945.7	17.52	20764.3	1.55	1550.0	78592.9	1.2E+08	121.8	0.27
Q1 2016	47670.2	86.30	86300.0	180431.7	1.6E+10	15571.3	34.33	19255.6	0.15	148.0	72882.4	1.1E+07	10.8	0.02

Totals Since Q3

2010

609851.4

310.35

112231.0

4.19

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

Quarter	TW4-02							TW4-11						
	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2015	24156.7	5.32	5320.0	91433.1	4.9E+08	486.4	1.07	9898.7	8.72	8720.0	37466.6	3.3E+08	326.7	0.72
Q2 2015	22029.9	4.30	4300.0	83383.2	3.6E+08	358.5	0.79	5243.3	8.48	8480.0	19845.9	1.7E+08	168.3	0.37
Q3 2015	21586.9	3.8	3760.0	81706.4	307216126.0	307.2	0.7	3584.4	9.6	9610.0	13567.0	130378427.9	130.4	0.3
Q4 2015	21769.8	5.18	5180.0	82398.7	4.3E+08	426.8	0.94	4110.3	7.50	7500.0	15557.5	1.2E+08	116.7	0.26
Q1 2016	20944.6	5.30	5300.0	79275.3	4.2E+08	420.2	0.93	3676.2	7.13	7130.0	13914.4	9.9E+07	99.2	0.22

Totals Since Q3

2010

110487.9

4.41

26512.9

1.85

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

Quarter	TW4-21							TW4-37							Removed by All Wells
	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	15.69
Q4 2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.97
Q1 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73.30
Q2 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.01
Q3 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.82
Q4 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.71
Q1 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.86
Q2 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.03
Q3 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.67
Q4 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.92
Q1 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	95.73
Q2 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91.71
Q3 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	176.53
Q4 2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	162.07
Q1 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	103.14
Q2 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	101.87
Q3 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92.99
Q4 2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	108.57
Q1 2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82.61
Q2 2015	30743.7	13.1	13100.0	116364.9	1.5E+09	1524.4	3.4	29206.0	35.2	35200.0	110544.7	3.9E+09	3891.2	8.6	68.86
Q3 2015	125285.4	14.7	14700.0	474205.2	6970817013.3	6970.8	15.4	118063.9	32.4	32400.0	446871.9	14478648312.6	14478.6	31.9	118.63
Q4 2015	134774.9	14.30	14300.0	510123.0	7.3E+09	7294.8	16.08	111737.5	34.60	34600.0	422926.4	1.5E+10	14633.3	32.26	124.50
Q1 2016	125513.3	14.60	14600.0	475067.8	6.9E+09	6936.0	15.29	111591.0	28.40	28400.0	422371.9	1.2E+10	11995.4	26.45	132.55

Totals Since Q3

2010

416317.3

50.10

370598.4

99.20

1700.72

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	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016
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	16.2	14.9	17.0	17.9	16.3	20.0
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	20.9	18.7	19.0	19.9	18.4	18.8
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	0.21	NS	0.142	NS	0.118	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

Table 9
***Recalculated Background Flow**

	Background Flow (gpm)	*Recalculated Background Flow (gpm)
minimum	1.31	0.79
maximum	2.79	1.67

** recalculated based on reduced wildlife pond recharge as presented in the third quarter, 2015 Nitrate Monitoring Report*

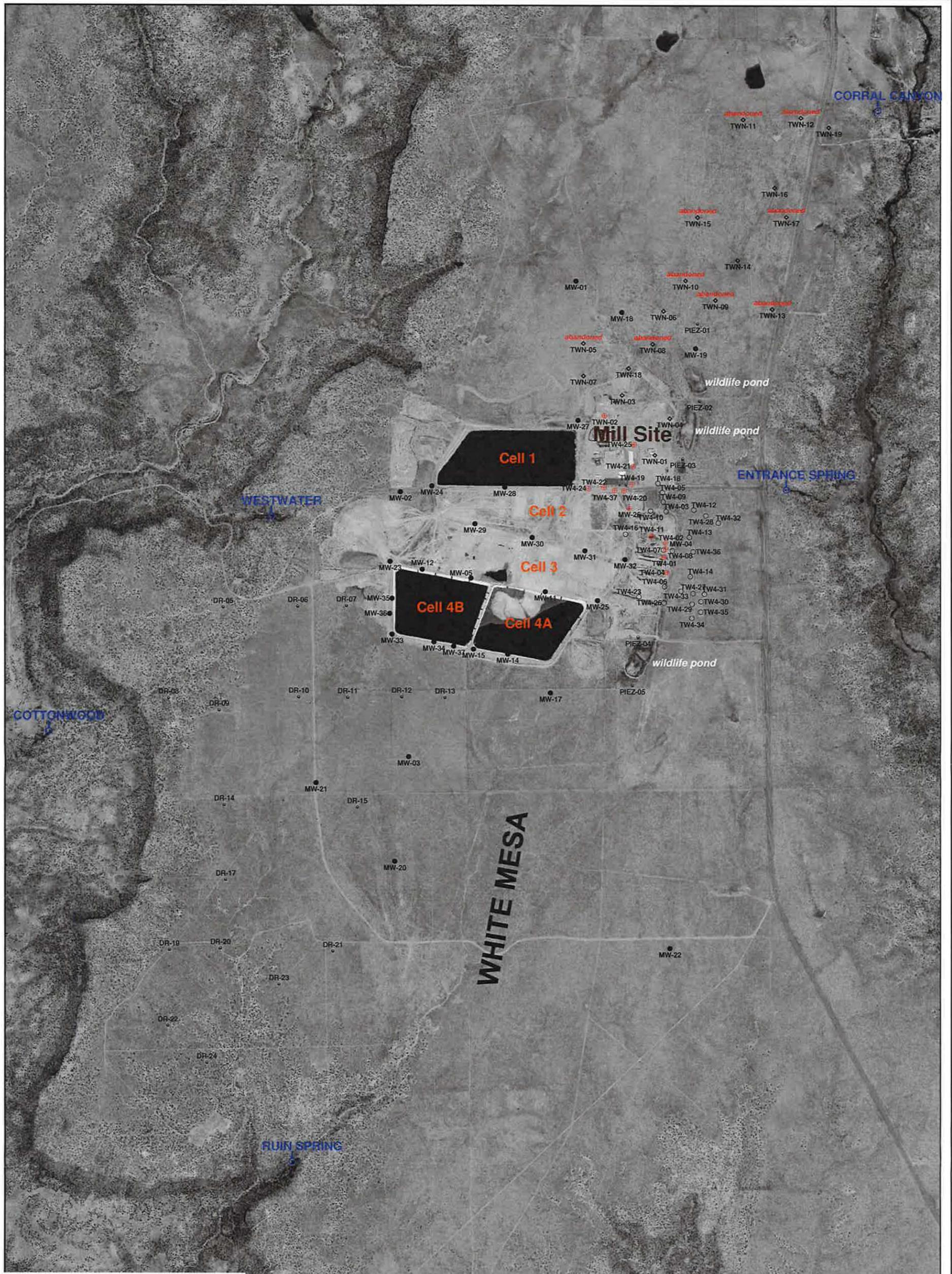
gpm = gallons per minute

INDEX OF TABS

- Tab A Site Plan and Perched Well Locations White Mesa Site
- Tab B Order of Sampling and Field Data Worksheets
- Tab C Kriged Current Quarter Groundwater Contour Map, Capture Zone Map, Capture Zone Details Map, and Weekly, Monthly and Quarterly Depth to Water Data
- Tab D Kriged Previous Quarter Groundwater Contour Map
- Tab E Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells
- Tab F Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells
- Tab G Laboratory Analytical Reports
- Tab H Quality Assurance and Data Validation Tables
 - H-1 Field Data QA/QC Evaluation
 - H-2 Holding Time Evaluation
 - H-3 Analytical Method Check
 - H-4 Reporting Limit Evaluation
 - H-5 QA/QC Evaluation for Sample Duplicates
 - H-6 QC Control Limits for Analyses and Blanks
 - H-7 Receipt Temperature Evaluation
 - H-8 Rinsate Evaluation
- Tab I Kriged Current Quarter Isoconcentration Maps
- Tab J Analyte Concentration Data Over Time
- Tab K Concentration Trend Graphs
- Tab L CSV Transmittal Letter
- Tab M Residual Mass Estimate Analysis Figure

Tab A

Site Plan and Perched Well Locations White Mesa Site

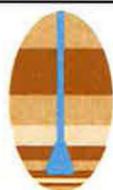


EXPLANATION

- 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
- RUIN SPRING  seep or spring



1 mile



**HYDRO
GEO
CHEM, INC.**

**WHITE MESA SITE PLAN SHOWING LOCATIONS OF
PERCHED WELLS AND PIEZOMETERS**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/may16/Uwelloc0316.srf	A - 1

Tab B

Order of Sampling and Field Data Worksheets

Nitrate Order 1st Quarter 2016

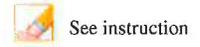
Nitrate Samples					
Name	Nitrate Mg/L Previous Qrt.	Date/Purge	sample	Depth	Total Depth
TWN-18	0.668	2/23/16	0806		145
TWN-7	0.672	2/24/16	0755		105
TWN-1	1.35	2/23/16	0909		112.5
TWN-4	1.58	2/23/16	0945		125.7
TWN-3	16.3	2/24/16	0806		96
TWN-2	44.9	2/23/16	1250		96
Duplicate of	TWN-1	2/23/16	0909		
Rinsate	TWN-18R	2/23/16	0742		
DI Sample	TWN-60	2/24/16	1015		
Piez 1	6.17	2/23/16	1329		
Piez 2	0.692	2/23/16	1302		
Piez 3	2.24	2/23/16	1315		

Rinsate Samples		
Name	Date	Sample
TWN-18R	2/23/16	0742
TWN-7R		
TWN-1R		
TWN-4R		
TWN-3R		
TWN-2R		

Samplers: _____



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



Description of Sampling Event:

Location (well name): Sampler Name and initials:

Field Sample ID

Date and Time for Purging and Sampling (if different)

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

Purging Method Used: 2 casings 3 casings

Sampling Event Prev. Well Sampled in Sampling Event

pH Buffer 7.0 pH Buffer 4.0

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

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

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

Time	<input type="text" value="1328"/> <small>1328</small>	Gal. Purged	<input type="text" value="0"/>
Conductance	<input type="text" value="2134"/>	pH	<input type="text" value="9.28"/>
Temp. °C	<input type="text" value="14.03"/>		
Redox Potential Eh (mV)	<input type="text" value="302"/>		
Turbidity (NTU)	<input type="text" value="0.4"/>		

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 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

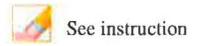
Comment

Arrived on site at 1324 Tanner and Garrin present to collect samples.
 Samples bailed at 1329 water was mostly clear
 Left site at 1334

Piez-01 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): Piez-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID Piez-02_02232016

Date and Time for Purging 2/23/2016

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-02

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 1000 μ MHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging 38.96

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

Weather Cond. Sunny

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

Time	<u>1301</u>	Gal. Purged	<u>0</u>
Conductance	<u>848</u>	pH	<u>6.81</u>
Temp. °C	<u>13.70</u>		
Redox Potential Eh (mV)	<u>386</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

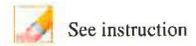
Comment

Arrived on site at 1258 Tanner and Garrin present to collect samples.
 Samples bailed at 1302 water was mostly clear
 Left site at 1307

Piez-02 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): Piez-03 Sampler Name and initials: Tanner Holliday AH

Field Sample ID: Piez-03_02232016

Date and Time for Purging: 2/23/2016 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-02

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 1000 μ MHOS/ cm Well Depth(0.01ft): 0

Depth to Water Before Purging: 48.84 Casing Volume (V) 4" Well: 0 (.653h)
 3" Well: 0 (.367h)

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

Time	<u>1314</u>	Gal. Purged	<u>0</u>
Conductance	<u>2293</u>	pH	<u>12.06</u>
Temp. °C	<u>13.96</u>		
Redox Potential Eh (mV)	<u>234</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

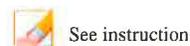
 See instruction

Comment
 Arrived on site at 1310 Tanner and Garrin present to collect samples,
 samples bailed at 1315 to. Water was mostly clear
 left site at 1319

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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): TWN-01

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TWN-01-02232016

Date and Time for Purging 2/23/2016

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 1000 μ MHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging 62.25

Casing Volume (V) 4" Well: 32.81 (.653h)
 3" Well: 0 (.367h)

Weather Cond. Partly Cloudy

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

Time	<u>0906</u>	Gal. Purged	<u>50</u>
Conductance	<u>874</u>	pH	<u>6.88</u>
Temp. °C	<u>14.69</u>		
Redox Potential Eh (mV)	<u>444</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0907</u>	Gal. Purged	<u>60</u>
Conductance	<u>872</u>	pH	<u>6.95</u>
Temp. °C	<u>14.72</u>		
Redox Potential Eh (mV)	<u>443</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0908</u>	Gal. Purged	<u>70</u>
Conductance	<u>864</u>	pH	<u>6.97</u>
Temp. °C	<u>14.73</u>		
Redox Potential Eh (mV)	<u>443</u>		
Turbidity (NTU)	<u>0</u>		

Time	<u>0909</u>	Gal. Purged	<u>80</u>
Conductance	<u>861</u>	pH	<u>6.99</u>
Temp. °C	<u>14.74</u>		
Redox Potential Eh (mV)	<u>442</u>		
Turbidity (NTU)	<u>0</u>		

Volume of Water Purged gallon(s)

Pumping Rate Calculation

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

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

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input 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

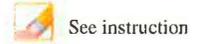
Comment

Arrived on site at 0859 Tanner and Garrin present for purge and sampling event.
 Purge began at 0901 Purged well for a total of 8 minutes
 Purge ended and samples collected at 0909 water was clear
 Left site at 0911

TWN-01 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

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

Field Sample ID TWN-02-02232016

Date and Time for Purging 2/23/2016 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 Nitrate Prev. Well Sampled in Sampling Event TWN-03

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 1000 μ MHOS/ cm Well Depth(0.01ft): 96.00

Depth to Water Before Purging 32.96 Casing Volume (V) 4" Well: 9 41.16 (.653h) 41.16
 3" Well: 0 (.367h)

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

Time	<u>1249</u>	Gal. Purged	<u>0</u>
Conductance	<u>3266</u>	pH	<u>5.99</u>
Temp. °C	<u>13.92</u>		
Redox Potential Eh (mV)	<u>421</u>		
Turbidity (NTU)	<u>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 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

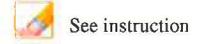
Comment

Arrived on site at 1245 Tanner and Garrin present to collect samples
 Samples collected at 1250 Water was clear
 Left site at 1253
 Continuous Pumping Well

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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): TWN-03 Sampler Name and initials: Tanner Holliday/TTH

Field Sample ID: TWN-03_02242016

Date and Time for Purging: 2/23/2016 and Sampling (if different): 2/24/2016

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: 1000 μ MHOS/ cm Well Depth(0.01ft): 96.00

Depth to Water Before Purging: 39.12 Casing Volume (V) 4" Well: 37.14 (.653h)
 3" Well: 0 (.367h)

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

Time	<u>1018</u>	Gal. Purged	<u>65</u>
Conductance	<u>2248</u>	pH	<u>6.80</u>
Temp. °C	<u>14.49</u>		
Redox Potential Eh (mV)	<u>392</u>		
Turbidity (NTU)	<u>36</u>		

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

Time	<u>0805</u>	Gal. Purged	<u>0</u>
Conductance	<u>2233</u>	pH	<u>6.97</u>
Temp. °C	<u>13.59</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>0807</u>	Gal. Purged	<u>0</u>
Conductance	<u>2239</u>	pH	<u>6.94</u>
Temp. °C	<u>13.65</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"/>

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

Final Depth

Sample Time

 See instruction

Comment

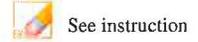
Arrived on site at 1009 Tanner and Garrin present for purge, Purge began at 1012 Purged well for a total of 6 minutes 30 seconds. Purged well dry! Purge ended at 1018. Water was a little murky. Left site at 1021.

Arrived on site at 0803 Tanner and Garrin present to collect samples. Depth to water was 39.80 samples bailed at 0806 Left site at 0808

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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): TWN-04 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-04_02232016

Date and Time for Purging: 2/23/2016 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: 1000 μ MHOS/ cm Well Depth(0.01ft): 125.70

Depth to Water Before Purging: 55.10 Casing Volume (V) 4" Well: 46.10 (.653h)
 3" Well: 0 (.367h)

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

Time 0932 Gal. Purged 80
0942
 Conductance 1062 pH 6.46
 Temp. °C 14.61
 Redox Potential Eh (mV) 414
 Turbidity (NTU) 0

Time 0933 Gal. Purged 90
0943
 Conductance 1061 pH 6.57
 Temp. °C 14.62
 Redox Potential Eh (mV) 414
 Turbidity (NTU) 0

Time 0934 Gal. Purged 100
0944
 Conductance 1061 pH 6.60
 Temp. °C 14.61
 Redox Potential Eh (mV) 413
 Turbidity (NTU) 0

Time 0935 Gal. Purged 110
0945
 Conductance 1060 pH 6.63
 Temp. °C 14.62
 Redox Potential Eh (mV) 413
 Turbidity (NTU) 0

Volume of Water Purged gallon(s)

Pumping Rate Calculation

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

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

Number of casing volumes evacuated (if other than two)

If well evacuated to dryness, number of gallons evacuated

Name of Certified Analytical Laboratory if Other Than Energy Labs

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	<input type="checkbox"/>	<input type="checkbox"/>	3x40 ml	<input type="checkbox"/>	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100 ml	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H2SO4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy Metals	<input 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
 0945

 See instruction

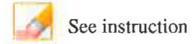
Comment

Arrived on site at 0931 Tanner and Garrin present for purge and sampling event
 Purge began at 0934 Purged well for a total of 11 minutes. Purge ended
 and samples collected at 0935 water was clear
 Left site at 0948 0945

TWN-04 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

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

Field Sample ID: TWN-07_02242016

Date and Time for Purging: 2/23/2016 and Sampling (if different): 2/24/2016

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: 1000 μ MHOS/ cm Well Depth(0.01ft): 105.00

Depth to Water Before Purging: 85.16 Casing Volume (V) 4" Well: 12.95 (.653h)
3" Well: 0 (.367h)

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

Time	<u>0835</u>	Gal. Purged	<u>20</u>
Conductance	<u>1249</u>	pH	<u>7.04</u>
Temp. °C	<u>13.97</u>		
Redox Potential Eh (mV)	<u>462</u>		
Turbidity (NTU)	<u>2.7</u>		

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

Time	<u>0754</u>	Gal. Purged	<u>0</u>
Conductance	<u>1354</u>	pH	<u>7.34</u>
Temp. °C	<u>14.39</u>		
Redox Potential Eh (mV)			
Turbidity (NTU)			

Time	<u>0756</u>	Gal. Purged	<u>0</u>
Conductance	<u>1301</u>	pH	<u>7.27</u>
Temp. °C	<u>14.35</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

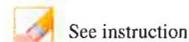
Arrived on site at 0831 Tanner and Garrin present for purge. Purge began at 0833 Purged well for a total of 2 minutes. Purged well dry! Purge ended at 0835 Water was clear. Left site at 0837

Arrived on site at 0752 Tanner and Garrin present to collect samples. Depth to water was 95.35 samples collected at 0755 Left site at 0757

TWN-07 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

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

Field Sample ID: TWN-18_02232016

Date and Time for Purging: 2/23/2016 and Sampling (if different): N/A

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

Purging Method Used: 2 casings 3 casings

Sampling Event: Quarterly Nitrate Prev. Well Sampled in Sampling Event: TWN-18R

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 1006 μ MHOS/ cm Well Depth(0.01ft): 145.00

Depth to Water Before Purging: 60.24 Casing Volume (V) 4" Well: 55.34 (.653h)
 3" Well: 0 (.367h)

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

Time	<u>0803</u>	Gal. Purged	<u>100</u>
Conductance	<u>2299</u>	pH	<u>6.63</u>
Temp. °C	<u>14.20</u>		
Redox Potential Eh (mV)	<u>501</u>		
Turbidity (NTU)	<u>0.3</u>		

Time	<u>0804</u>	Gal. Purged	<u>110</u>
Conductance	<u>2296</u>	pH	<u>6.63</u>
Temp. °C	<u>14.20</u>		
Redox Potential Eh (mV)	<u>501</u>		
Turbidity (NTU)	<u>0.3</u>		

Time	<u>0805</u>	Gal. Purged	<u>120</u>
Conductance	<u>2295</u>	pH	<u>6.64</u>
Temp. °C	<u>14.21</u>		
Redox Potential Eh (mV)	<u>501</u>		
Turbidity (NTU)	<u>0.3</u>		

Time	<u>0806</u>	Gal. Purged	<u>130</u>
Conductance	<u>2295</u>	pH	<u>6.64</u>
Temp. °C	<u>14.20</u>		
Redox Potential Eh (mV)	<u>501</u>		
Turbidity (NTU)	<u>0.3</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

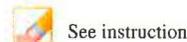
Comment

Arrived on site at 0748 Tanner and Garrin present for purge and sampling event
 Purge began at 0753 Purged well for a total of 13 minutes.
 Purge ended and samples were collected at 0806 water was clear
 Left site at 0810

TWN-18 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Nitrate 2016

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

Field Sample ID TWN-18R_02232016

Date and Time for Purging 2/23/2016 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 1000 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) -4°

Time	<u>0741</u>	Gal. Purged	<u>130</u>
Conductance	<u>1.0</u>	pH	<u>7.33</u> <u>6.85</u>
Temp. °C	<u>7.33</u>		
Redox Potential Eh (mV)	<u>497</u>		
Turbidity (NTU)	<u>0.2</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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Final Depth

Sample Time

 See instruction

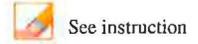
Comment

Arrived on site at 0725 Rinsate began at 0728
 Pumped 50 Gallons of soap water, 100 Gallons of DI water.
 Samples collected at 0742 Left site at 0744

TWN-18R 02-23-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Chloroform 2016

Location (well name): TW4-22 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TW4-22_03092016

Date and Time for Purging 3/9/2016 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 1006 μ MHOS/ cm Well Depth(0.01ft): 113.50

Depth to Water Before Purging 58.75 Casing Volume (V) 4" Well: 35.75 (.653h)
3" Well: 0 (.367h)

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

Time	<u>1018</u>	Gal. Purged	<u>0</u>
Conductance	<u>5570</u>	pH	<u>7.05</u>
Temp. °C	<u>15.32</u>		
Redox Potential Eh (mV)	<u>317</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

Sample Time

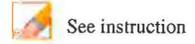
 See instruction

Comment
 Arrived on site at 1015 Tanner and Garrin present to collect samples
 Samples collected at 1018 Water was clear
 Left site at 1021

TW4-22 03-09-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Chloroform 2016

Location (well name): TW4-24 Sampler Name and initials: Tanner Holliday/TH

Field Sample ID TW4-24_03092016

Date and Time for Purging 3/9/2016 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 TW4-25

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 1000 μ MHOS/ cm Well Depth(0.01ft): 112.50

Depth to Water Before Purging 63.70 Casing Volume (V) 4" Well: 31.86 (.653h)
3" Well: 0 (.367h)

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

Time	<u>1008</u>	Gal. Purged	<u>0</u>
Conductance	<u>7462</u>	pH	<u>6.92</u>
Temp. °C	<u>15.04</u>		
Redox Potential Eh (mV)	<u>334</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

Sample Time

 See instruction

Comment

Arrived on site at 1006 Tanner and Garrin present to collect samples.
 Samples collected at 1009 Water was clear
 Left site at 1011

TW4-24 03-09-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event: 1st Quarter Chloroform 2016

Location (well name): TW4-25 Sampler Name and initials: Tanner Holliday TH

Field Sample ID: TW4-25_03092016

Date and Time for Purging: 3/9/2016 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: TW4-21

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 1000 μ MHOS/cm Well Depth(0.01ft): 134.80

Depth to Water Before Purging: 66.20 Casing Volume (V) 4" Well: 44.79 (.653h)
 3" Well: 0 (.367h)

Weather Cond.: Sunny Ext'l Amb. Temp. °C (prior sampling event): 5°

Time	<u>0956</u>	Gal. Purged	<u>0</u>
Conductance	<u>2739</u>	pH	<u>7.14</u>
Temp. °C	<u>14.63</u>		
Redox Potential Eh (mV)	<u>314</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

Sample Time

 See instruction

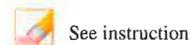
Comment

Arrived on site at 0953 Tanner and Garrin present to collect samples
 Samples collected at 0956 Water was clear
 Left site at 0958

TW4-25 03-09-2016 Do not touch this cell (SheetName)



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



Description of Sampling Event:

Location (well name): Sampler Name and initials:

Field Sample ID

Date and Time for Purging and Sampling (if different)

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

Purging Method Used: 2 casings 3 casings

Sampling Event Prev. Well Sampled in Sampling Event

pH Buffer 7.0 pH Buffer 4.0

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

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

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

Time	<input type="text" value="1015"/>	Gal. Purged	<input type="text" value="0"/>
Conductance	<input type="text" value="30.4"/>	pH	<input type="text" value="8.39"/>
Temp. °C	<input type="text" value="16.50"/>		
Redox Potential Eh (mV)	<input type="text" value="377"/>		
Turbidity (NTU)	<input type="text" value="0"/>		

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 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 1010. Garmin present for sampling. Parameters were taken and samples collected at 1015. Left site at 1018.
 DI sample.

TWN-60 02-24-2016 Do not touch this cell (SheetName)



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



See instruction

Description of Sampling Event: 1st Quarter Chloroform 2016

Location (well name): TW4-60

Sampler Name and initials: Tanner Holliday/JH

Field Sample ID TW4-60_03222016

Date and Time for Purging 3/22/2016

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 MW-32

pH Buffer 7.0 7.0

pH Buffer 4.0 4.0

Specific Conductance 1000 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/windy

Ext'l Amb. Temp. °C (prior sampling event) 15°

Time	<u>1459</u>	Gal. Purged	<u>0</u>
Conductance	<u>0.8</u>	pH	<u>7.90</u>
Temp. °C	<u>18.80</u>		
Redox Potential Eh (mV)	<u>310</u>		
Turbidity (NTU)	<u>1.1</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

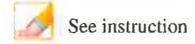
Comment

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



Description of Sampling Event: 1st Quarter Nitrate 2016

Location (well name): TWN-65_02232016 TWN-65 Sampler Name and initials: Tanner Holliday / TH

Field Sample ID: 2/23/2016
TWN-65_02232016

Date and Time for Purging: 2/23/2016 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: 1000 μ MHOS/cm Well Depth(0.01ft): 112.50

Depth to Water Before Purging: 62.25 Casing Volume (V) 4" Well: 32.81 (.653h)
 3" Well: 0 (.367h)

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

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 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

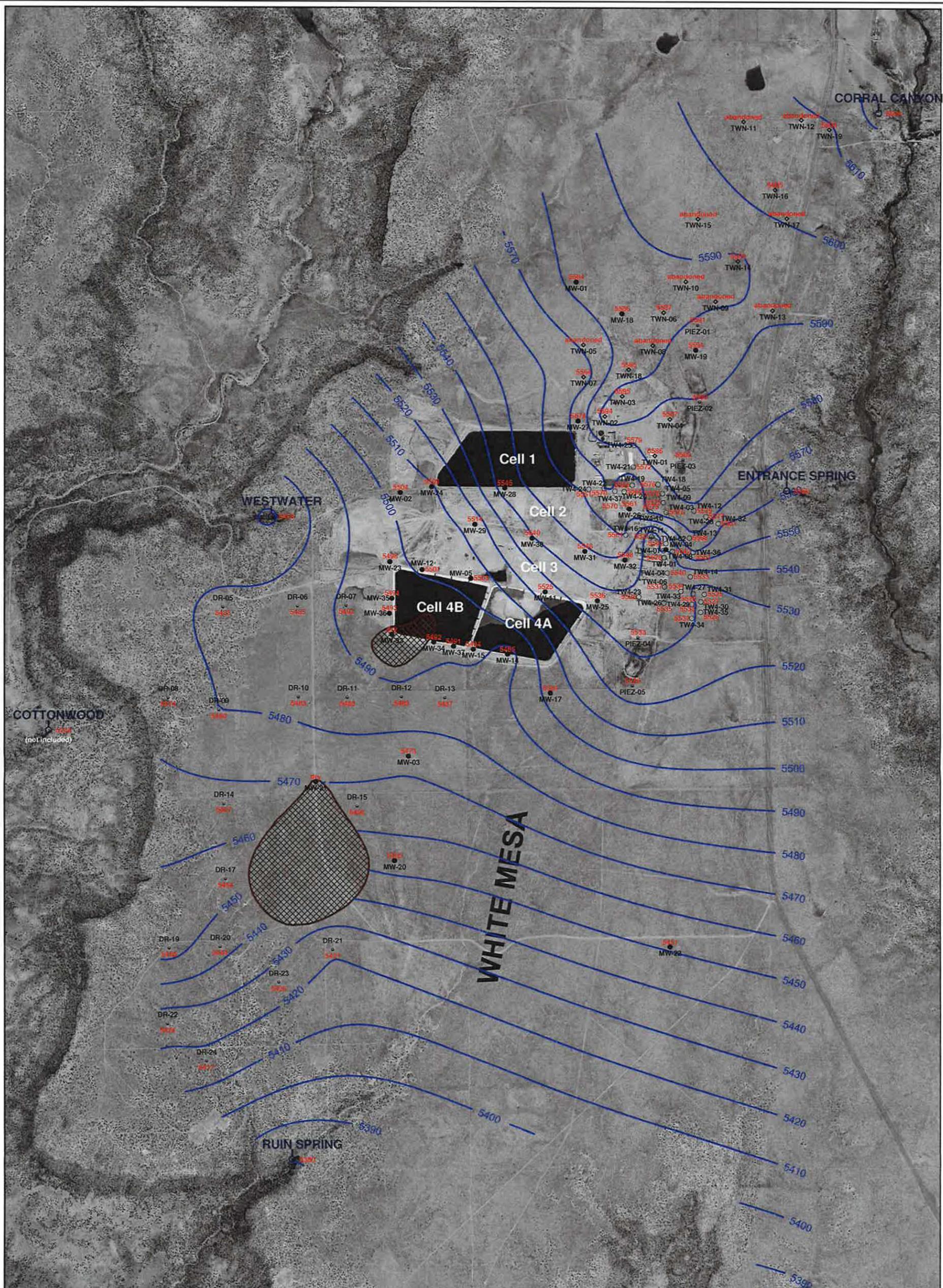
TWN-65 02-23-2016 Do not touch this cell (SheetName)

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
3/30/2016

TIME	WELL	DEPTH TO WATER (ft.)	TIME	WELL	DEPTH TO WATER (ft.)	TIME	WELL	DEPTH TO WATER (ft.)	TIME	WELL	DEPTH TO WATER (ft.)
1350	MW-1	64.00	754	MW-4	80.23	1339	PIEZ-1	64.89	NA	DR-1	Abandoned
1553	MW-2	109.50	806	TW4-1	91.03	1344	PIEZ-2	38.97	NA	DR-2	Abandoned
923	MW-3	82.16	803	TW4-2	82.50	728	PIEZ-3	48.57	823	DR-5	82.81
923	MW-3A	84.16	1511	TW4-3	56.61	1522	PIEZ-4	58.45	826	DR-6	94.11
1549	MW-5	105.77	808	TW4-4	73.11	1519	PIEZ-5	58.00	1539	DR-7	91.94
1606	MW-11	85.65	1508	TW4-5	64.40	735	TWN-1	62.20	835	DR-8	51.16
1547	MW-12	108.00	1516	TW4-6	72.02	731	TWN-2	32.44	832	DR-9	86.22
1527	MW-14	112.65	1515	TW4-7	75.99	718	TWN-3	39.21	830	DR-10	77.96
1530	MW-15	105.72	1513	TW4-8	79.40	724	TWN-4	54.97	916	DR-11	97.95
928	MW-17	71.55	1510	TW4-9	62.21		TWN-5	Abandoned	918	DR-12	90.95
1347	MW-18	71.70	1507	TW4-10	61.60	1356	TWN-6	78.02	926	DR-13	69.55
1342	MW-19	61.46	759	TW4-11	92.18	1352	TWN-7	85.07	845	DR-14	76.00
817	MW-20	85.81	1318	TW4-12	45.70		TWN-8	Abandoned	840	DR-15	92.56
812	MW-22	66.31	1316	TW4-13	51.55		TWN-9	Abandoned	NA	DR-16	Abandoned
1545	MW-23	113.78	1312	TW4-14	79.65		TWN-10	Abandoned	848	DR-17	64.55
1556	MW-24	112.75	740	TW4-15	64.38		TWN-11	Abandoned	NA	DR-18	Abandoned
1525	MW-25	76.51	701	TW4-16	63.10		TWN-12	Abandoned	851	DR-19	62.92
740	MW-26	64.38	1408	TW4-17	77.00		TWN-13	Abandoned	904	DR-20	55.11
715	MW-27	53.85	733	TW4-18	65.23	1336	TWN-14	60.83	909	DR-21	100.74
1557	MW-28	74.95	822	TW4-19	65.01		TWN-15	Abandoned	855	DR-22	60.58
1603	MW-29	100.42	806	TW4-20	63.66	1334	TWN-16	47.45	907	DR-23	70.22
1600	MW-30	74.97	734	TW4-21	67.54		TWN-17	Abandoned	858	DR-24	44.00
1610	MW-31	68.05	810	TW4-22	58.72	721	TWN-18	60.07	NA	DR-25	Abandoned
1408	MW-32	77.00	710	TW4-23	69.08	936	TWN-19	52.95			
1537	MW-33	DRY	808	TW4-24	64.14						
1534	MW-34	107.59	736	TW4-25	65.49						
1543	MW-35	112.11	1517	TW4-26	66.53						
1541	MW-36	110.30	1302	TW4-27	79.35						
1532	MW-37	108.64	1319	TW4-28	39.75						
			1310	TW4-29	73.50						
			1305	TW4-30	75.55						
			1304	TW4-31	79.26						
			1320	TW4-32	50.99						
			1301	TW4-33	72.40						
			1309	TW4-34	71.54						
			1307	TW4-35	73.86						
			1314	TW4-36	56.06						
			809	TW4-37	62.05						



EXPLANATION

-  estimated dry area
- MW-5**
 perched monitoring well showing elevation in feet amsl
- TW4-12**
 temporary perched monitoring well showing elevation in feet amsl
- TWN-7**
 temporary perched nitrate monitoring well showing elevation in feet amsl
- PIEZ-1**
 perched piezometer showing elevation in feet amsl
- RUIN SPRING**
 seep or spring showing elevation in feet amsl

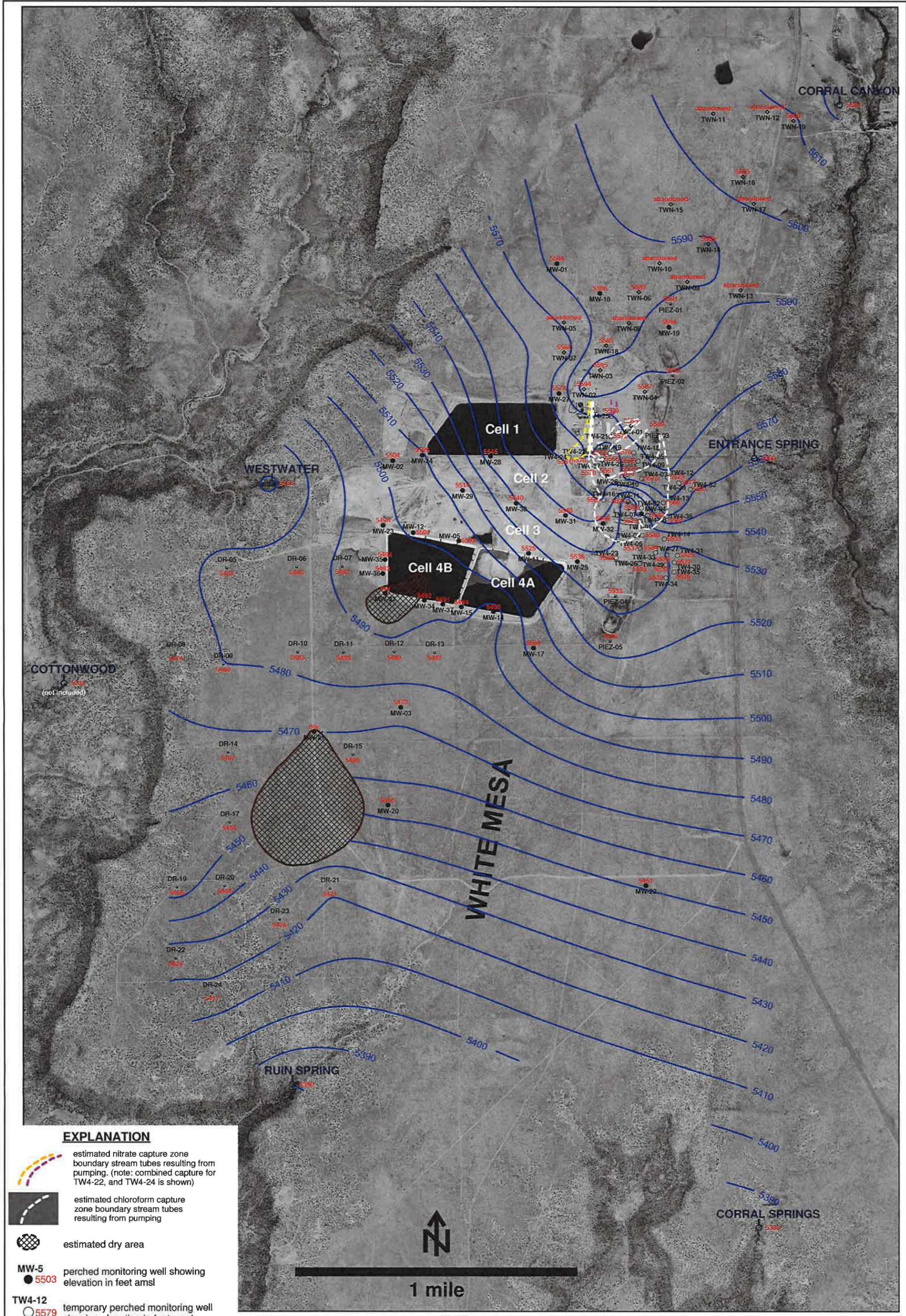
NOTES: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21 and TW4-37 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells
TW4-11 water level is below the base of the Burro Canyon Formation



**HYDRO
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CHEM, INC.**

**KRIGED 1st QUARTER, 2016 WATER LEVELS
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/may16/WL/Uwl0316.srf	C-1



EXPLANATION

-  estimated nitrate capture zone boundary stream tubes resulting from pumping. (note: combined capture for TW4-22, and TW4-24 is shown)
-  estimated chloroform capture zone boundary stream tubes resulting from pumping
-  estimated dry area
- MW-5**
 perched monitoring well showing elevation in feet amsl
- TW4-12**
 temporary perched monitoring well showing elevation in feet amsl
- TWN-7**
 temporary perched nitrate monitoring well showing elevation in feet amsl
- PIEZ-1**
 perched piezometer showing elevation in feet amsl
- RUIN SPRING**
 seep or spring showing elevation in feet amsl

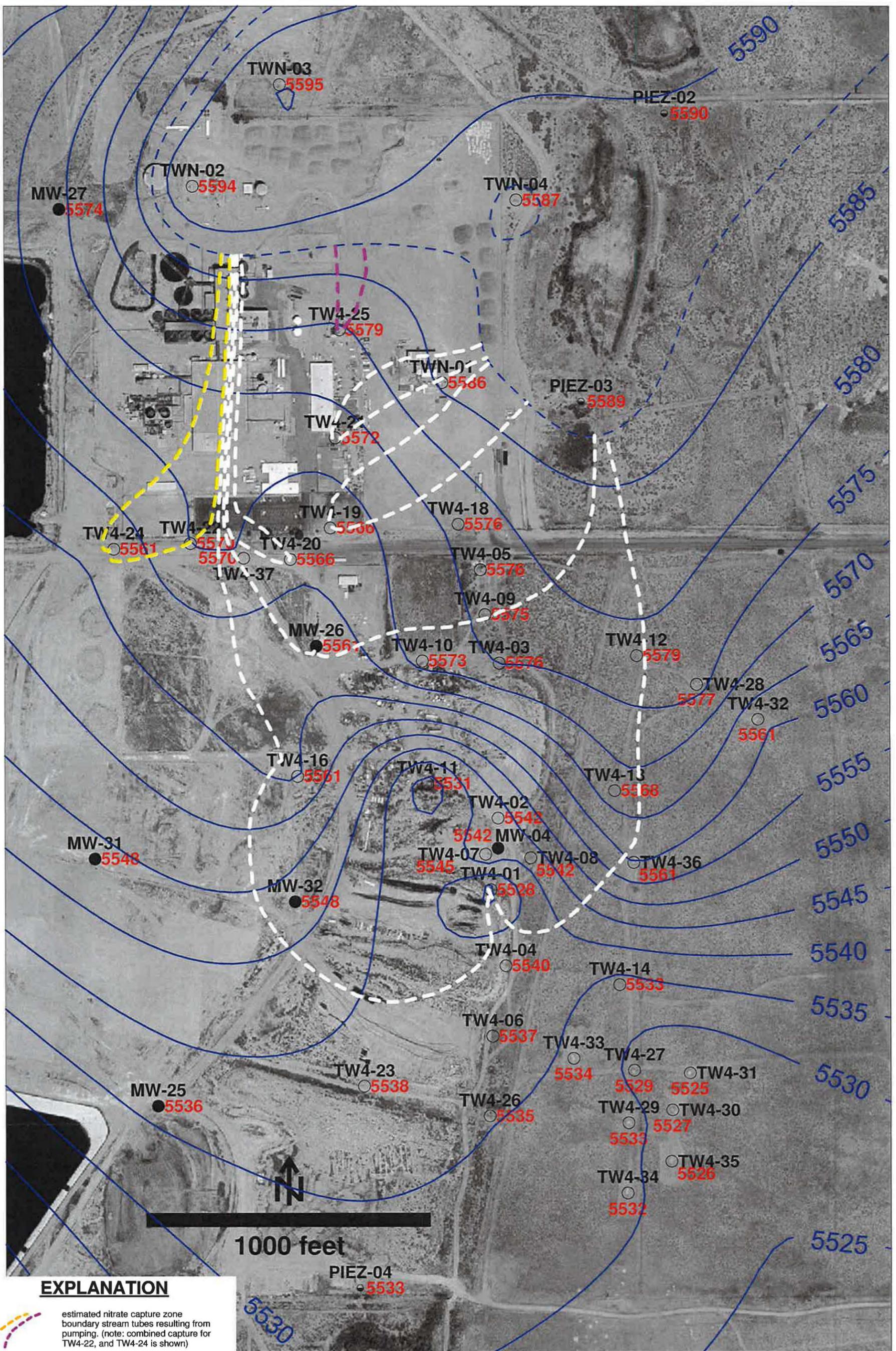
NOTES: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21 and TW4-37 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells
TW4-11 water level is below the base of the Burro Canyon Formation



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GEO
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**KRIGED 1st QUARTER, 2016 WATER LEVELS
AND ESTIMATED CAPTURE ZONES
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/may16/WL/Uw0316ntcz2_rev.srf	C-2



EXPLANATION

-  estimated nitrate capture zone boundary stream tubes resulting from pumping. (note: combined capture for TW4-22, and TW4-24 is shown)
-  estimated chloroform capture zone boundary stream tubes resulting from pumping
-  MW-25 5537 perched monitoring well showing elevation in feet amsl
-  TW4-7 5545 temporary perched monitoring well showing elevation in feet amsl
-  PIEZ-2 5590 perched piezometer showing elevation in feet amsl

NOTES: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21 and TW4-37 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells; TW4-11 water level is below the base of the Burro Canyon Formation



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CHEM, INC.**

**KRIGED 1st QUARTER, 2016 WATER LEVELS
AND ESTIMATED CAPTURE ZONES
WHITE MESA SITE
(detail map)**

APPROVED	DATE	REFERENCE	H:/718000/may16/ WL/Uwl0316ntcz_rev.srf	FIGURE	C-3
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Weekly Inspection Form

Date 1-5-2016

Name Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1427	MW-4	78.45	Flow 4.4 Meter 887058.79	<input checked="" type="radio"/>	<input type="radio"/>
1417	MW-26	64.83	Flow 8.5 Meter 56971.9	<input checked="" type="radio"/>	<input type="radio"/>
1423	TW4-19	64.38	Flow 18.0 Meter 273924.3	<input checked="" type="radio"/>	<input type="radio"/>
1413	TW4-20	64.76	Flow 7.0 Meter 114271.90	<input checked="" type="radio"/>	<input type="radio"/>
1435	TW4-4	72.89	Flow 11.0 Meter 258277.0	<input checked="" type="radio"/>	<input type="radio"/>
1400	TWN-2	28.94	Flow 18.5 Meter 566230.7	<input checked="" type="radio"/>	<input type="radio"/>
1407	TW4-22	58.97	Flow 18.0 Meter 285711.4	<input checked="" type="radio"/>	<input type="radio"/>
1404	TW4-24	64.11	Flow 16.5 Meter 2037552.9	<input checked="" type="radio"/>	<input checked="" type="radio"/>
1356	TW4-25	64.43	Flow 15.0 Meter 1415112.9	<input checked="" type="radio"/>	<input type="radio"/>
1431	TW4-1	80.45	Flow 15.0 Meter 94656.0	<input checked="" type="radio"/>	<input type="radio"/>
1424	TW4-2	80.02	Flow 17.0 Meter 91551.2	<input checked="" type="radio"/>	<input type="radio"/>
1421	TW4-11	91.32	Flow 16.5 Meter 23166.8	<input checked="" type="radio"/>	<input type="radio"/>
1352	TW4-21	68.06	Flow 16.5 Meter 303298.78	<input checked="" type="radio"/>	<input type="radio"/>
1410	TW4-37	62.73	Flow 17.0 Meter 269190.8	<input checked="" type="radio"/>	<input type="radio"/>

Operational Problems (Please list well number):

TW4-24 Meter needs Replaced

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

TW4-24 Meter was replaced

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 1/11/16

Name Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1415	MW-4	80.32	Flow 4.4 Meter 893910.04	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1025	MW-26	65.68	Flow 8.0 Meter 58235.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1145	TW4-19	63.48	Flow 18.2 Meter 281458.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1019	TW4-20	76.80	Flow 5.2 Meter 115250.79	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1423	TW4-4	76.48	Flow 11.0 Meter 262035.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0947	TWN-2	32.85	Flow 18.4 Meter 589394.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1012	TW4-22	58.96	Flow 17.6 Meter 287064.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0958	TW4-24	64.89	Flow 16.0 Meter 8861.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0943	TW4-25	67.55	Flow 15.0 Meter 1422622.96	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1418	TW4-1	92.00	Flow 15.0 Meter 96012.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1412	TW4-2	81.15	Flow 18.4 Meter 93149.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1409	TW4-11	91.69	Flow 17.0 Meter 23424.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0939	TW4-21	68.03	Flow 16.6 Meter 311735.12	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1015	TW4-37	62.18	Flow 16.4 Meter 276236.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Operational Problems (Please list well number):

MW-26.

Heat lamps were out on TW4-19,

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

Replaced bulbs in lamps. (TW4-19, MW-26)

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 1/18/16

Name Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1414	MW-4	81.23	Flow 4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 900201.74	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1422	MW-26	63.45	Flow 8.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 59732.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1340	TW4-19	64.28	Flow 18.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 290345.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1424	TW4-20	63.80	Flow 6.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 116285.38	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1408	TW4-4	76.21	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 266500.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1440	TWN-2	32.40	Flow 18.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 572058.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1429	TW4-22	61.35	Flow 17.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 289296.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1431	TW4-24	64.06	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 19025.58	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1446	TW4-25	63.23	Flow 15.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1431788.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1417	TW4-1	92.38	Flow 15.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 97552.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1411	TW4-2	80.81	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 94752.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1420	TW4-11	91.40	Flow 16.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 23710.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1442	TW4-21	68.41	Flow 16.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 321734.13	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1426	TW4-37	64.29	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 285298.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 1/25/16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1248	MW-4	80.75	Flow 4.5 Meter 907422.60	(Yes) No (Yes) No
1355	MW-26	65.50	Flow 8.0 Meter 61129.90	(Yes) No (Yes) No
1359	TW4-19	63.82	Flow 18.1 Meter 299260.00	(Yes) No (Yes) No
1550	TW4-20	63.35	Flow 7.0 Meter 117221.42	(Yes) No (Yes) No
1242	TW4-4	73.80	Flow 11.5 Meter 271053.60	(Yes) No (Yes) No
1520	TWN-2	33.34	Flow 18.8 Meter 576248.20	(Yes) No (Yes) No
1505	TW4-22	58.81	Flow 18.0 Meter 291147.40	(Yes) No (Yes) No
1503	TW4-24	64.07	Flow 16.2 Meter 28518.80	(Yes) No (Yes) No
1511	TW4-25	64.55	Flow 14.4 Meter 1440684.30	(Yes) No (Yes) No
1244	TW4-1	80.90	Flow 16.0 Meter 99049.60	(Yes) No (Yes) No
1251	TW4-2	99.69	Flow 16.4 Meter 96436.40	(Yes) No (Yes) No
1253	TW4-11	91.56	Flow 16.0 Meter 24091.70	(Yes) No (Yes) No
1514	TW4-21	67.88	Flow 16.2 Meter 331195.91	(Yes) No (Yes) No
1502	TW4-37	62.20	Flow 18.0 Meter 293701.90	(Yes) No (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.

11972

Monthly Depth Check Form

Date 1/27/16

Name Garrin Palmer, Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Time</u>	<u>Well</u>	<u>Depth*</u>
<u>1223</u>	<u>MW-4</u>	<u>80.12</u>	<u>1250</u>	<u>TWN-1</u>	<u>62.40</u>
<u>1224</u>	<u>TW4-1</u>	<u>81.44</u>	<u>1251</u>	<u>TWN-2</u>	<u>629.98</u>
<u>1222</u>	<u>TW4-2</u>	<u>90.68</u>	<u>1253</u>	<u>TWN-3</u>	<u>39.30</u>
<u>1325</u>	<u>TW4-3</u>	<u>56.96</u>	<u>1306</u>	<u>TWN-4</u>	<u>55.22</u>
<u>1226</u>	<u>TW4-4</u>	<u>76.88</u>	<u>1314</u>	<u>TWN-7</u>	<u>85.40</u>
<u>1322</u>	<u>TW4-5</u>	<u>64.60</u>	<u>1304</u>	<u>TWN-18</u>	<u>60.50</u>
<u>1331</u>	<u>TW4-6</u>	<u>72.30</u>	<u>1310</u>	<u>MW-27</u>	<u>54.36</u>
<u>1329</u>	<u>TW4-7</u>	<u>77.20</u>	<u>1432</u>	<u>MW-30</u>	<u>75.56</u>
<u>1327</u>	<u>TW4-8</u>	<u>81.15</u>	<u>1422</u>	<u>MW-31</u>	<u>68.56</u>
<u>1323</u>	<u>TW4-9</u>	<u>62.49</u>			
<u>1319</u>	<u>TW4-10</u>	<u>62.10</u>			
<u>1220</u>	<u>TW4-11</u>	<u>91.40</u>			
<u>1407</u>	<u>TW4-12</u>	<u>45.76</u>			
<u>1401</u>	<u>TW4-13</u>	<u>52.12</u>	<u>1404</u>	<u>TW4-28</u>	<u>39.84</u>
<u>1357</u>	<u>TW4-14</u>	<u>80.42</u>	<u>1356</u>	<u>TW4-29</u>	<u>73.85</u>
<u>1218</u>	<u>TW4-15</u>	<u>67.92</u>	<u>1349</u>	<u>TW4-30</u>	<u>76.17</u>
<u>1241</u>	<u>TW4-16</u>	<u>64.00</u>	<u>1348</u>	<u>TW4-31</u>	<u>80.05</u>
<u>1419</u>	<u>TW4-17</u>	<u>77.35</u>	<u>1405</u>	<u>TW4-32</u>	<u>51.35</u>
<u>1247</u>	<u>TW4-18</u>	<u>65.51</u>	<u>1342</u>	<u>TW4-33</u>	<u>72.55</u>
<u>1201</u>	<u>TW4-19</u>	<u>64.02</u>	<u>1354</u>	<u>TW4-34</u>	<u>71.85</u>
<u>1216</u>	<u>TW4-20</u>	<u>63.52</u>	<u>1351</u>	<u>TW4-35</u>	<u>74.30</u>
<u>1245</u>	<u>TW4-21</u>	<u>69.10</u>	<u>1359</u>	<u>TW4-36</u>	<u>56.68</u>
<u>1214</u>	<u>TW4-22</u>	<u>59.48</u>			
<u>1337</u>	<u>TW4-23</u>	<u>69.35</u>	<u>1215</u>	<u>TW4-37</u>	<u>64.02</u>
<u>1212</u>	<u>TW4-24</u>	<u>64.00</u>			
<u>1210</u>	<u>TW4-25</u>	<u>65.22</u>			
<u>1334</u>	<u>TW4-26</u>	<u>66.67</u>			
<u>1344</u>	<u>TW4-27</u>	<u>80.03</u>			

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

* Depth is measured to the nearest 0.01 feet

563930

Weekly Inspection Form

Date 2/3/16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
0845	MW-4	82.42	Flow 4.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 916431.66	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0835	MW-26	67.81	Flow 7.9	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 62921.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0745	TW4-19	66.82	Flow 18.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 310328.14	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0831	TW4-20	63.14	Flow 7.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 118675.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0853	TW4-4	75.80	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 276562.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0814	TWN-2	34.80	Flow 18.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 581173.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0824	TW4-22	60.70	Flow 18.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 293541.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0820	TW4-24	64.01	Flow 8.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 39960.33	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0809	TW4-25	64.62	Flow 15.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1451715.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0849	TW4-1	80.40	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 101086.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0842	TW4-2	97.46	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 98512.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0839	TW4-11	99.79	Flow 16.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 24371.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0805	TW4-21	68.88	Flow 16.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 343043.92	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0828	TW4-37	63.40	Flow 16.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 304652.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 2/10/16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
0832	MW-4	81.03	Flow 4.4 Meter 923691.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0823	MW-26	63.62	Flow 8.0 Meter 64488.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0740	TW4-19	65.28	Flow 18.2 Meter 319366.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0820	TW4-20	64.18	Flow 7.2 Meter 119785.27	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0839	TW4-4	74.26	Flow 11.2 Meter 280827.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0804	TWN-2	33.71	Flow 18.6 Meter 594750.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0813	TW4-22	68.39	Flow 17.0 Meter 295330.90	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0809	TW4-24	64.36	Flow 17.0 Meter 48315.71	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0758	TW4-25	64.00	Flow 15.0 Meter 1460067.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0837	TW4-1	91.29	Flow 16.0 Meter 102440.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0829	TW4-2	80.85	Flow 15.0 Meter 100117.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0826	TW4-11	98.62	Flow 16.0 Meter 24620.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0755	TW4-21	67.60	Flow 14.8 Meter 352686.18	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0817	TW4-37	67.04	Flow 17.1 Meter 313130.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 2/16/16

Name Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1411	MW-4	80.23	Flow 4.5 Meter 929911.53	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1400	MW-26	63.60	Flow 8.5 Meter 65767.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1320	TW4-19	63.19	Flow 18.4 Meter 328624.50	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1430	TW4-20	64.10	Flow 4.2 Meter 120706.08	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1419	TW4-4	74.82	Flow 11.1 Meter 284733.20	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1347	TWN-2	37.83	Flow 18.8 Meter 587804.60	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1438	TW4-22	60.31	Flow 17.1 Meter 297014.20	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1441	TW4-24	63.62	Flow 16.6 Meter 55339.29	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1343	TW4-25	63.85	Flow 15.0 Meter 1468569.20	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1415	TW4-1	92.59	Flow 16.0 Meter 103747.11	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1408	TW4-2	81.34	Flow 16.6 Meter 101537.80	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1404	TW4-11	91.48	Flow 17.0 Meter 24878.20	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1337	TW4-21	67.11	Flow 16.4 Meter 361187.93	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1434	TW4-37	63.75	Flow 17.4 Meter 320809.10	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 2/22/16

Name Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1305	MW-4	74.29	Flow 4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 9359985.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1257	MW-26	63.98	Flow 7.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 66952.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1222	TW4-19	64.22	Flow 18.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 336291.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1253	TW4-20	70.11	Flow 4.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 121750.52	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1308	TW4-4	72.85	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 288502.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1236	TWN-2	60.04	Flow 18.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 590991.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1246	TW4-22	87.59	Flow 18.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 298691.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1243	TW4-24	76.23	Flow 17.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 61724.06	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1240	TW4-25	98.57	Flow 14.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1476168.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1307	TW4-1	90.22	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 105017.60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1304 85.14	TW4-2	85.14 85.14	Flow 16.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 102989.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1259	TW4-11	91.91	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 25112.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1230	TW4-21	57.45	Flow 16.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 369372.97	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1249	TW4-37	74.28	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 328021.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 2/24/16

Name Garrin Palmer, Tanner Holliday

<u>Time</u>	<u>Well</u>	<u>Depth*</u>	<u>Time</u>	<u>Well</u>	<u>Depth*</u>
<u>1339</u>	<u>MW-4</u>	<u>72.11</u>	<u>1426</u>	<u>TWN-1</u>	<u>62.45</u>
<u>1319</u>	<u>TW4-1</u>	<u>88.33</u>	<u>1424</u>	<u>TWN-2</u>	<u>30.02</u>
<u>1321</u>	<u>TW4-2</u>	<u>85.05</u>	<u>0803</u>	<u>TWN-3</u>	<u>39.80</u>
<u>1334</u>	<u>TW4-3</u>	<u>56.99</u>	<u>1434</u>	<u>TWN-4</u>	<u>55.25</u>
<u>1359</u>	<u>TW4-4</u>	<u>73.04</u>	<u>0752</u>	<u>TWN-7</u>	<u>95.35</u>
<u>1332</u>	<u>TW4-5</u>	<u>64.65</u>	<u>1431</u>	<u>TWN-18</u>	<u>60.45</u>
<u>1340</u>	<u>TW4-6</u>	<u>72.34</u>	<u>1437</u>	<u>MW-27</u>	<u>54.28</u>
<u>1339</u>	<u>TW4-7</u>	<u>77.00</u>	<u>1417</u>	<u>MW-30</u>	<u>75.50</u>
<u>1337</u>	<u>TW4-8</u>	<u>80.78 80.78</u>	<u>1414</u>	<u>MW-31</u>	<u>68.50</u>
<u>1334</u>	<u>TW4-9</u>	<u>62.55</u>			
<u>1336</u>	<u>TW4-10</u>	<u>62.14</u>			
<u>1317</u>	<u>TW4-11</u>	<u>92.02</u>			
<u>1405</u>	<u>TW4-12</u>	<u>45.85</u>			
<u>1402</u>	<u>TW4-13</u>	<u>52.10</u>	<u>1406</u>	<u>TW4-28</u>	<u>39.90</u>
<u>1400</u>	<u>TW4-14</u>	<u>80.14</u>	<u>1358</u>	<u>TW4-29</u>	<u>73.81</u>
<u>1316</u>	<u>TW4-15</u>	<u>64.18</u>	<u>1352</u>	<u>TW4-30</u>	<u>76.05</u>
<u>1422</u>	<u>TW4-16</u>	<u>64.00</u>	<u>1351</u>	<u>TW4-31</u>	<u>79.87</u>
<u>1412</u>	<u>TW4-17</u>	<u>77.36</u>	<u>1407</u>	<u>TW4-32</u>	<u>51.34</u>
<u>1427</u>	<u>TW4-18</u>	<u>65.52</u>	<u>1347</u>	<u>TW4-33</u>	<u>72.60</u>
<u>1300</u>	<u>TW4-19</u>	<u>64.71</u>	<u>1357</u>	<u>TW4-34</u>	<u>71.85</u>
<u>1318</u>	<u>TW4-20</u>	<u>70.02</u>	<u>1354</u>	<u>TW4-35</u>	<u>74.24</u>
<u>1432</u>	<u>TW4-21</u>	<u>67.70</u>	<u>1401</u>	<u>TW4-36</u>	<u>56.62</u>
<u>1316</u>	<u>TW4-22</u>	<u>68.41</u>	<u>1317</u>	<u>TW4-37</u>	<u>64.22</u>
<u>1344</u>	<u>TW4-23</u>	<u>69.39</u>			
<u>1344</u>	<u>TW4-24</u>	<u>75.40</u>			
<u>1425</u>	<u>TW4-25</u>	<u>63.66</u>			
<u>1342</u>	<u>TW4-26</u>	<u>66.75</u>			
<u>1349</u>	<u>TW4-27</u>	<u>79.89</u>			

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

Quarterly nitrate sampling was done on the 23rd-24th.

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 2/29/16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1434	MW-4	72.02	Flow 4.5 Meter 942861.36	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1459	MW-26	71.40	Flow 7.0 Meter 68266.50	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1527	TW4-19	65.75	Flow 18.0 Meter 345373.60	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1457	TW4-20	63.60	Flow 4.2 Meter 122824.02	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1425	TW4-4	74.88	Flow 11.0 Meter 292882.20	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1356	TWN-2	29.80	Flow 18.8 Meter 594679.60	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1447	TW4-22	59.50	Flow 17.0 Meter 300222.00	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1442	TW4-24	74.62	Flow 16.2 Meter 68852.74	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1352	TW4-25	70.75	Flow 15.0 Meter 1494903.60	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1429	TW4-1	88.12	Flow 16.0 Meter 106589.00	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1507	TW4-2	79.50	Flow 16.6 Meter 104435.50	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1504	TW4-11	91.22	Flow 16.0 Meter 25499.60	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1347	TW4-21	67.36	Flow 16.6 Meter 378811.96	<input checked="" type="radio"/> Yes No <input checked="" type="radio"/> Yes No
1452	TW4-37	63.15	Flow 17.5 Meter 336837.90	<input checked="" type="radio"/> Yes No <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 3-7-16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1434	MW-4	80.05	Flow 4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 949874.39	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1427	MW-26	62.31	Flow 9.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 69505.70	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1347	TW4-19	64.86	Flow 18.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 354014.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1425	TW4-20	63.66	Flow 7.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 124095.16	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1440	TW4-4	73.96	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 297267.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1412	TWN-2	29.04	Flow 18.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 598265.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1420	TW4-22	65.19	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 302422.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1415	TW4-24	63.10	Flow 16.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 75429.75	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1408	TW4-25	63.25	Flow 15.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1493969	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1437	TW4-1	89.70	Flow 15.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 107938.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1431	TW4-2	79.70	Flow 16.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 106087.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1429	TW4-11	91.06	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 25775.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1423	TW4-21	66.65	Flow 16.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 388459.35 e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1404	TW4-37	66.90	Flow 16.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 345301.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 3/14/16

Name Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1216	MW-4	80.04	Flow 4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 966475.09	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1207	MW-26	63.30	Flow 9.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 71052.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1028	TW4-19	64.04	Flow 18.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 362796.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1203	TW4-20	64.60	Flow 7.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 125106.63	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1223	TW4-4	75.32	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 301520.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1050	TWN-2	29.55	Flow 18.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 601817.80	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1156	TW4-22	59.02	Flow 17.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 304398.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1055	TW4-24	64.86	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 812156.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1046	TW4-25	63.88	Flow 15.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1502506.80	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1219	TW4-1	84.40	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 109476.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1213	TW4-2	79.15	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 107570.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1211	TW4-11	92.64	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 25957.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1042	TW4-21	67.15	Flow 16.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 397421.95	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1200	TW4-37	62.93	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 353651.80	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 3/21/16

Name Garcia Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
0930	MW-4	79.86	Flow 4.5 Meter 962900.33	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0922	MW-26	63.63	Flow 8.6 Meter 72527.60	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0950	TW4-19	67.44	Flow 18.0 Meter 371303.10	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0919	TW4-20	64.29	Flow 6.0 Meter 126208.43	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0936	TW4-4	72.36	Flow 11.0 Meter 305815.50	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0908	TWN-2	71.35	Flow 18.4 Meter 605571.60	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0914	TW4-22	58.90	Flow 17.0 Meter 306179.70	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0912	TW4-24	62.65	Flow 16.6 Meter 85731.61	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0905	TW4-25	92.12	Flow 14.4 Meter 1511422.40	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0933	TW4-1	83.55	Flow 16.0 Meter 110867.00	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0928	TW4-2	79.00	Flow 17.0 Meter 108980.10	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0925	TW4-11	96.65	Flow 16.0 Meter 26220.50	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0900	TW4-21	67.85	Flow 16.2 Meter 406891.88	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
0916	TW4-37	62.80	Flow 17.2 Meter 361979.70	<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 3/28/16

Name Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)	
				Yes	No
1345	MW-4	82.11	Flow 4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 969787.86	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1337	MW-26	67.36	Flow 8.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
133			Meter 74285.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1100	TW4-19	64.10	Flow 17.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 380216.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1334	TW4-20	63.35	Flow 7.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 127458.93	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1351	TW4-4	74.22	Flow 11.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 310470.80	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1321	TWN-2	29.70	Flow 18.7	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 609851.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1325	TW4-22	58.20	Flow 17.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 308063.20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1324	TW4-24	62.28	Flow 16.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 90515.95	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1316	TW4-25	64.34	Flow 15.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 1520464.80	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1348	TW4-1	95.61	Flow 16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 112231.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1342	TW4-2	82.00	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 110487.96	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1339	TW4-11	92.40	Flow 16.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 26512.96	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1312	TW4-21	67.04	Flow 16.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 416319.24	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1331	TW4-37	61.97	Flow 17.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Meter 370598.40	<input checked="" type="checkbox"/>	<input type="checkbox"/>

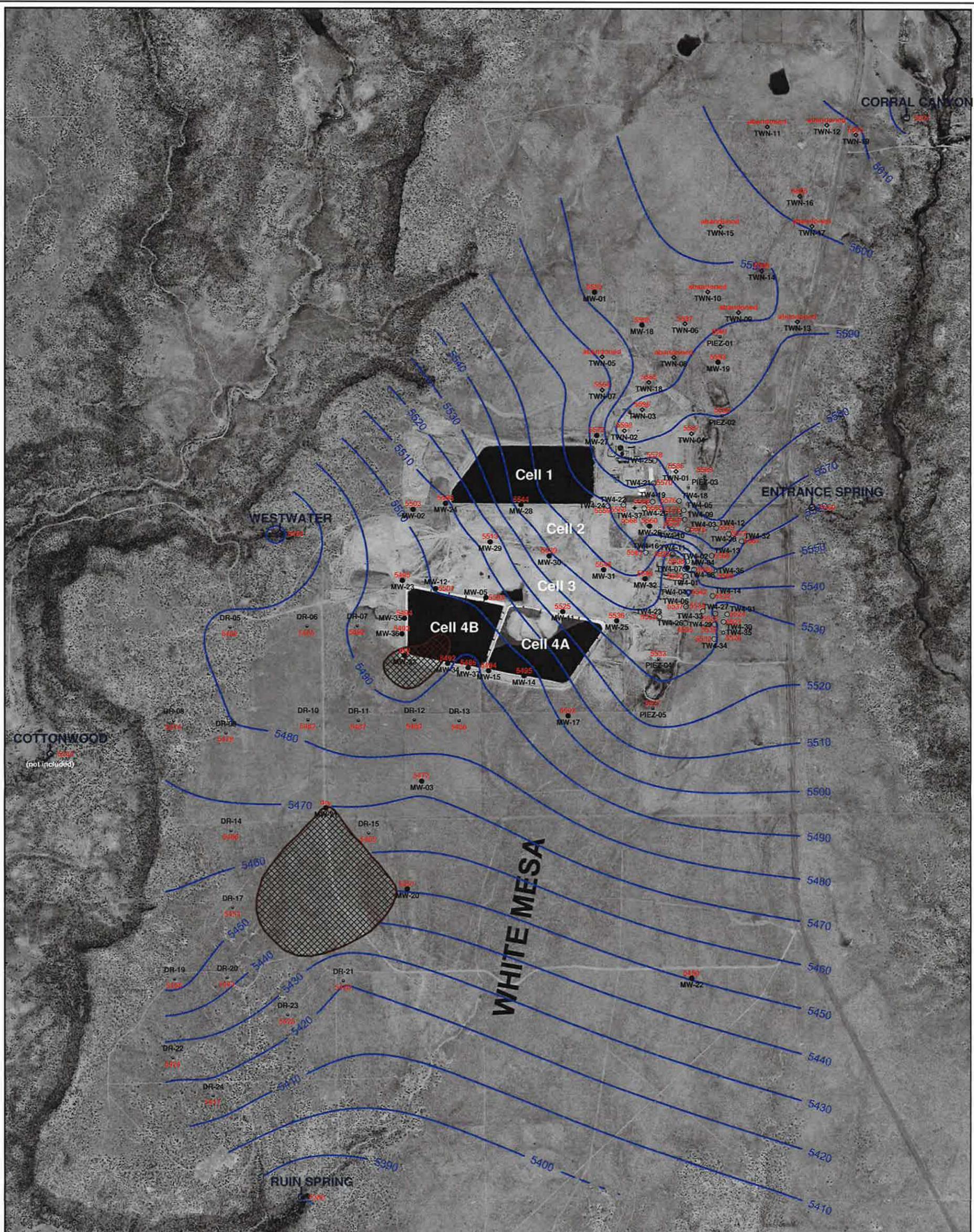
Operational Problems (Please list well number): _____

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
-  TW4-37 perched pumping well installed March, 2015 showing elevation in feet amsl
-  MW-5 perched monitoring well showing elevation in feet amsl
-  TW4-12 temporary perched monitoring well showing elevation in feet amsl
-  TWN-7 temporary perched nitrate monitoring well showing elevation in feet amsl
-  PIEZ-1 perched piezometer showing elevation in feet amsl
-  TW4-35 temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
-  RUIN SPRING seep or spring showing elevation in feet amsl

NOTES: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21 and TW4-37 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells
 TW4-11 water level is below the base of the Burro Canyon Formation



**HYDRO
GEO
CHEM, INC.**

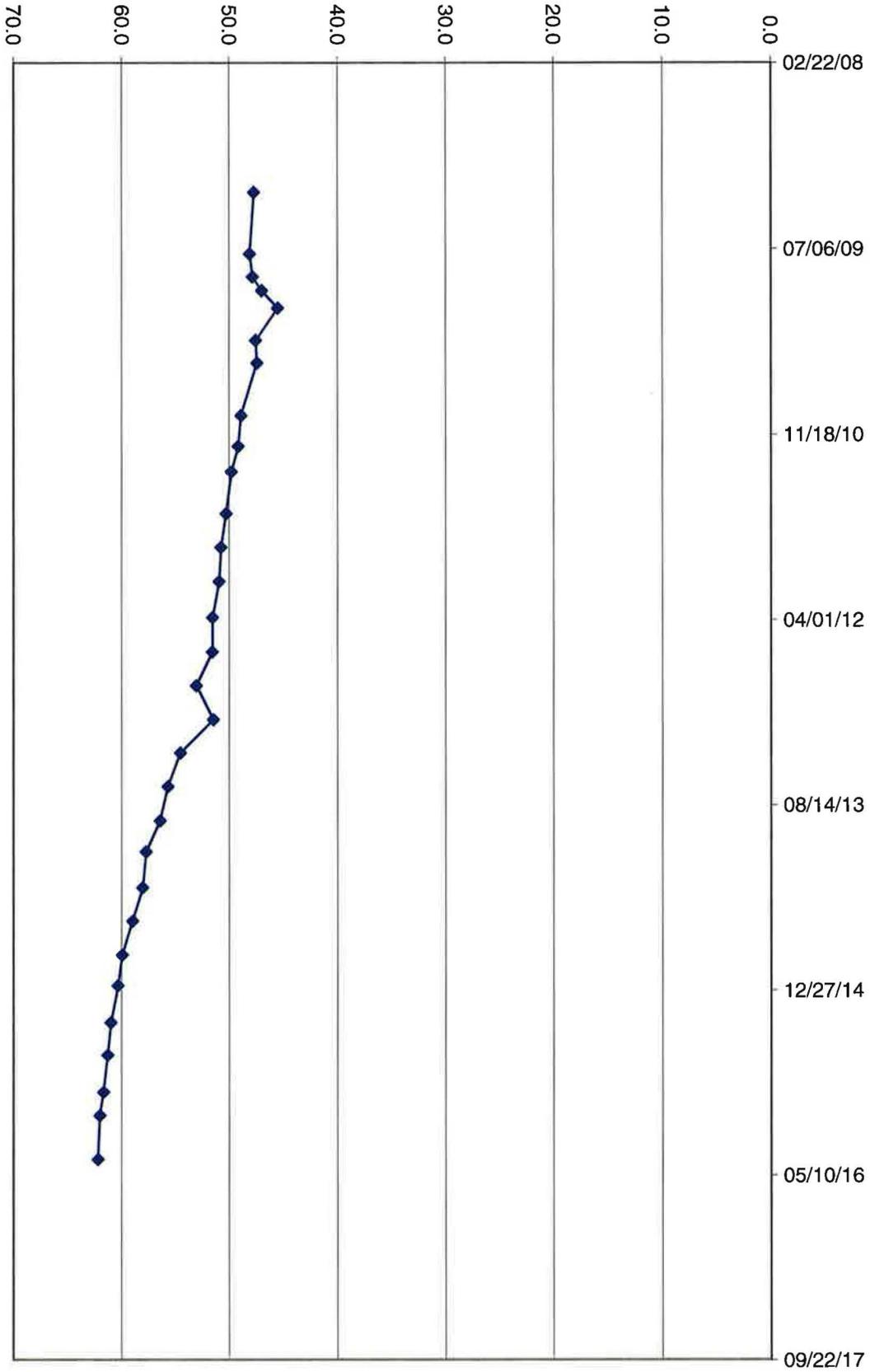
**KRIGED 4th QUARTER, 2015 WATER LEVELS
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/feb16/WL/Uw1215.srf	D-1

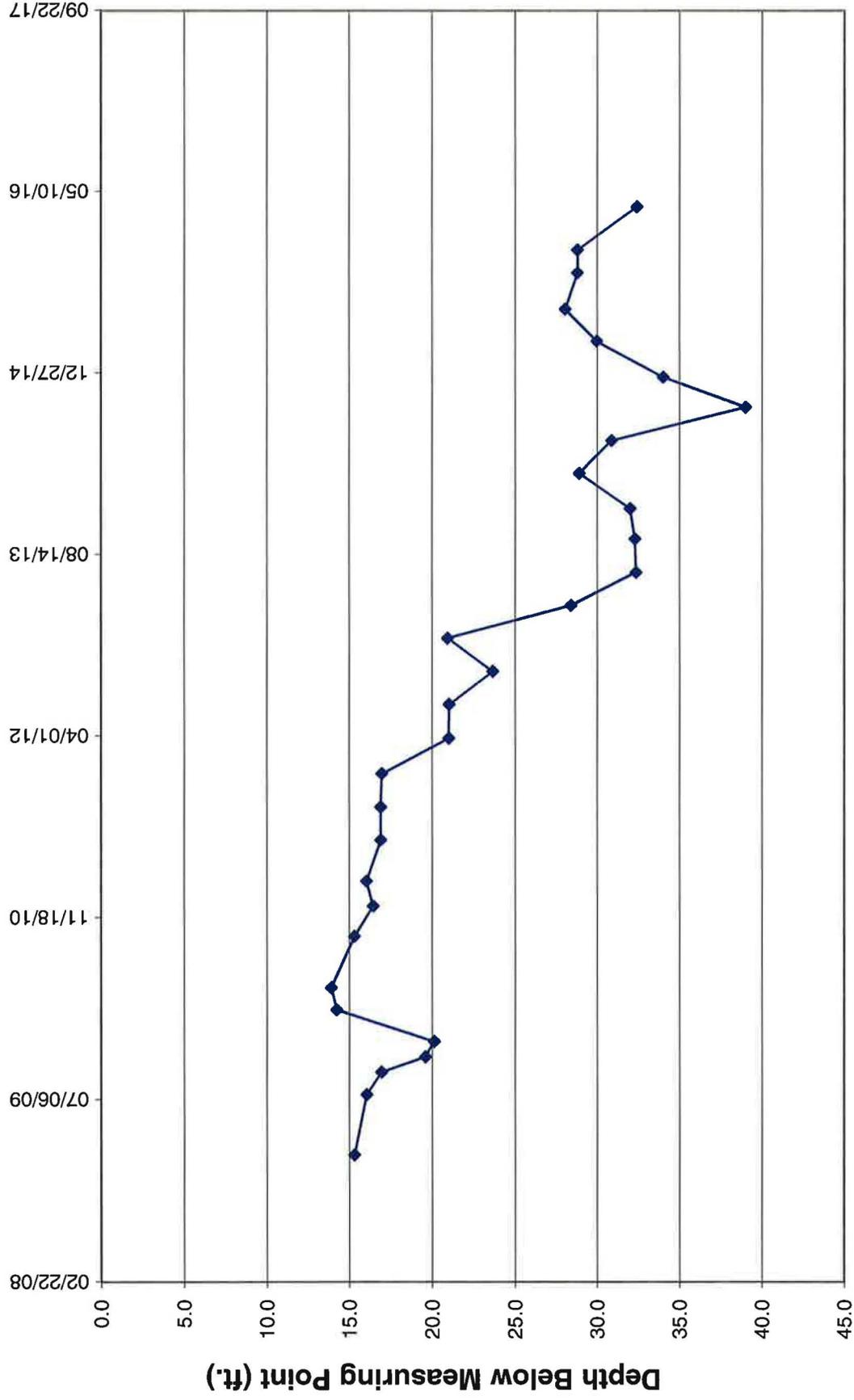
Tab E

Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

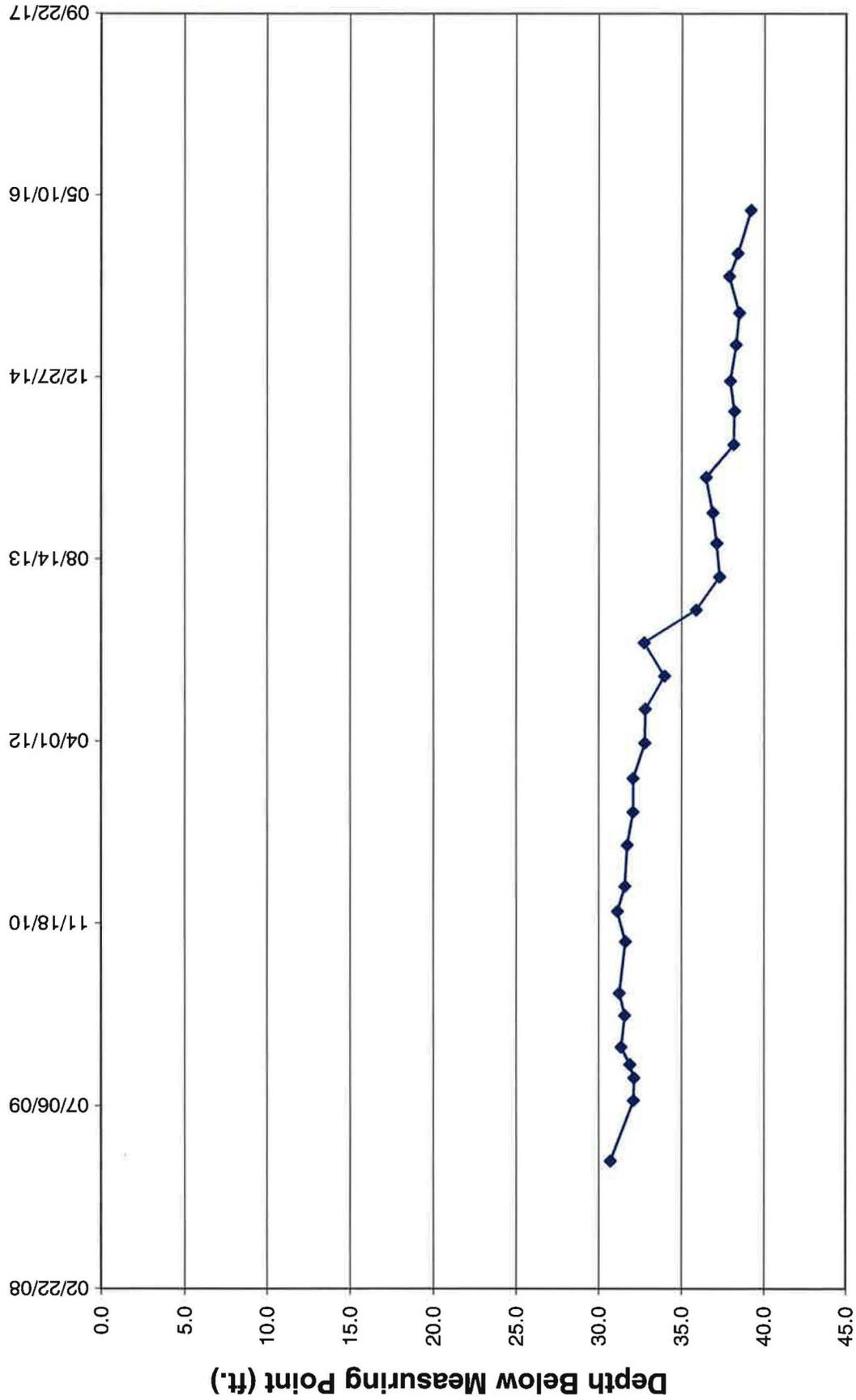
Depth Below Measuring Point (ft.)

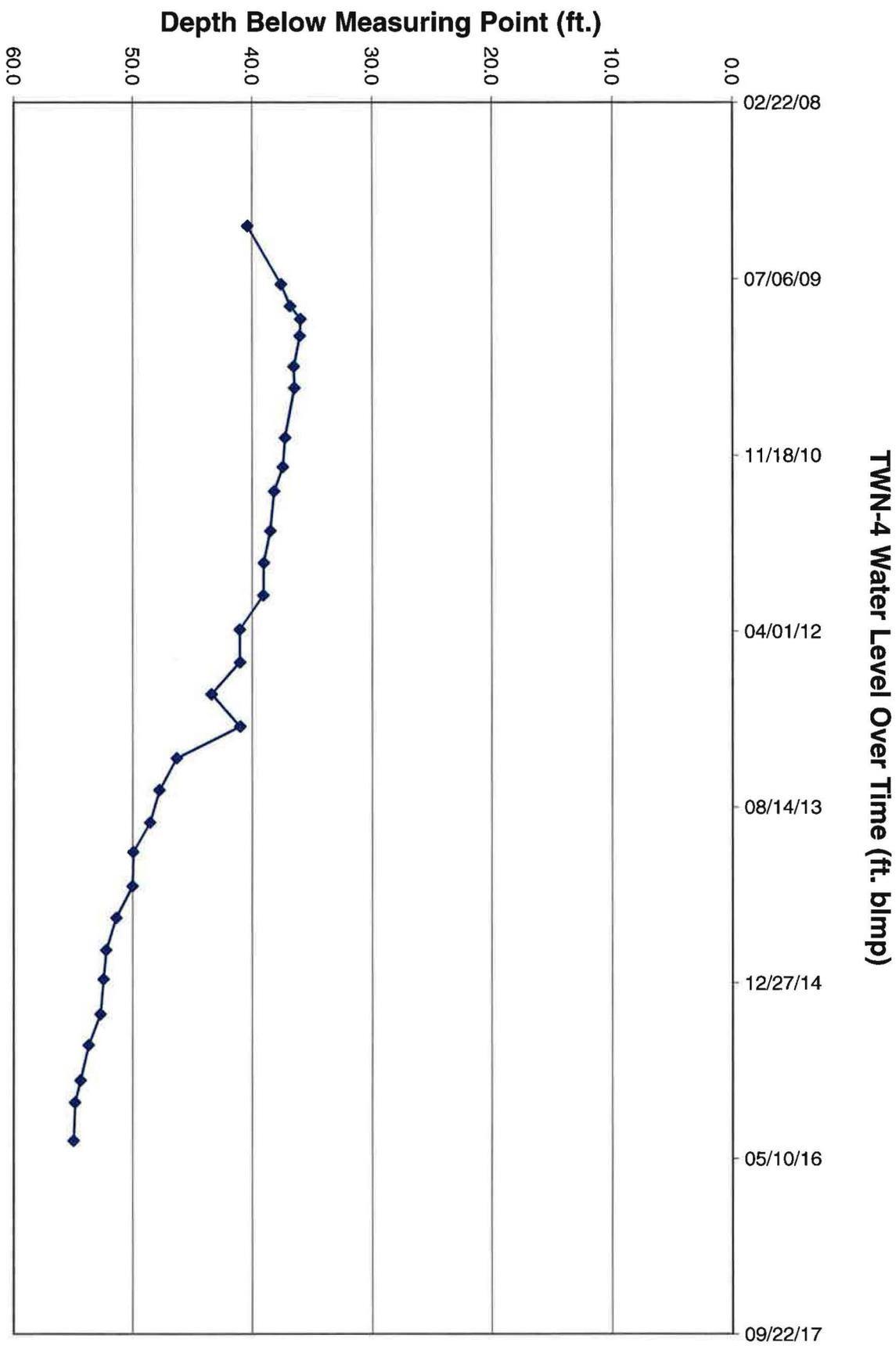


TWN-2 Water Level Over Time (ft. blmp)

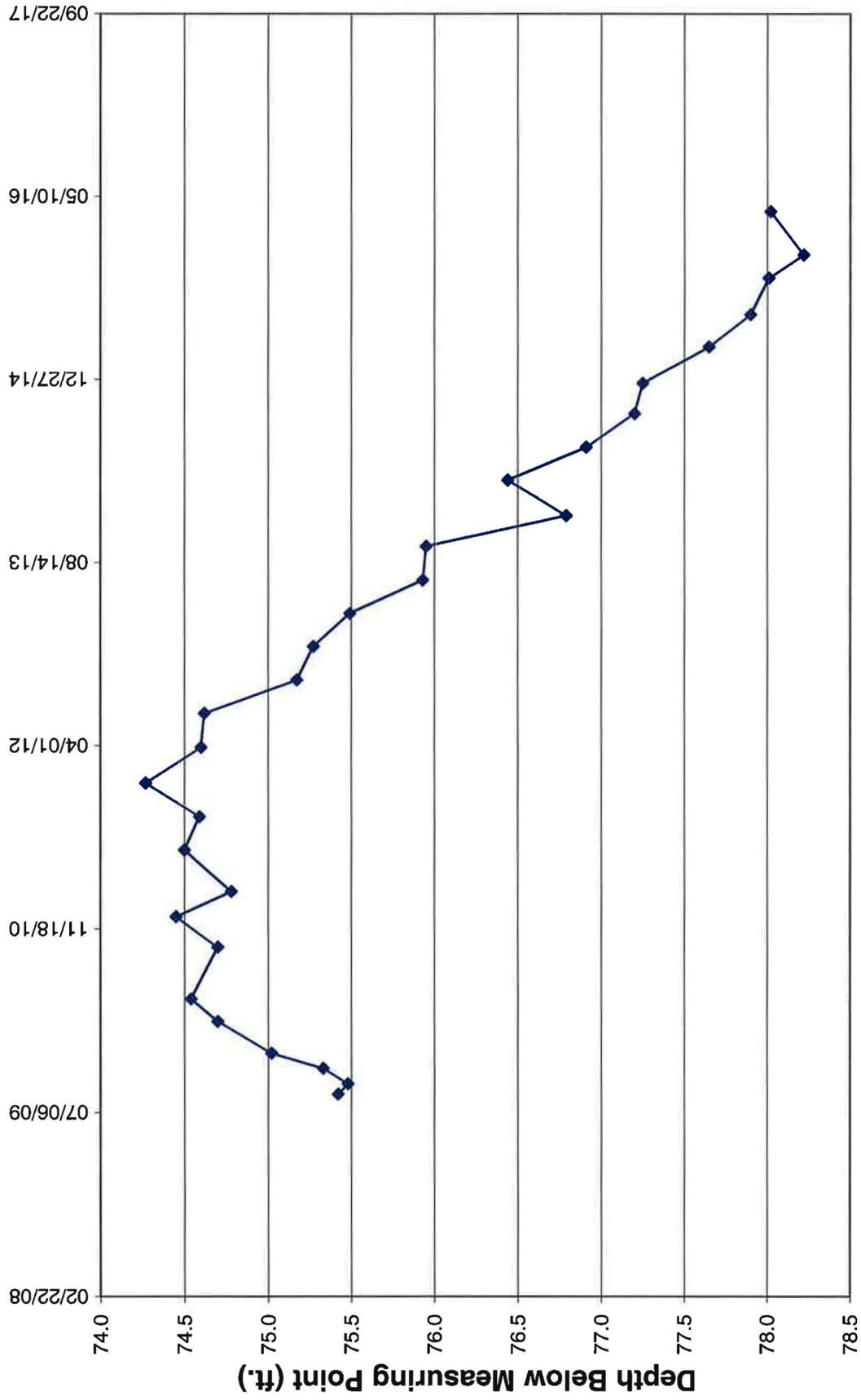


TWN-3 Water Level Over Time (ft. blmp)

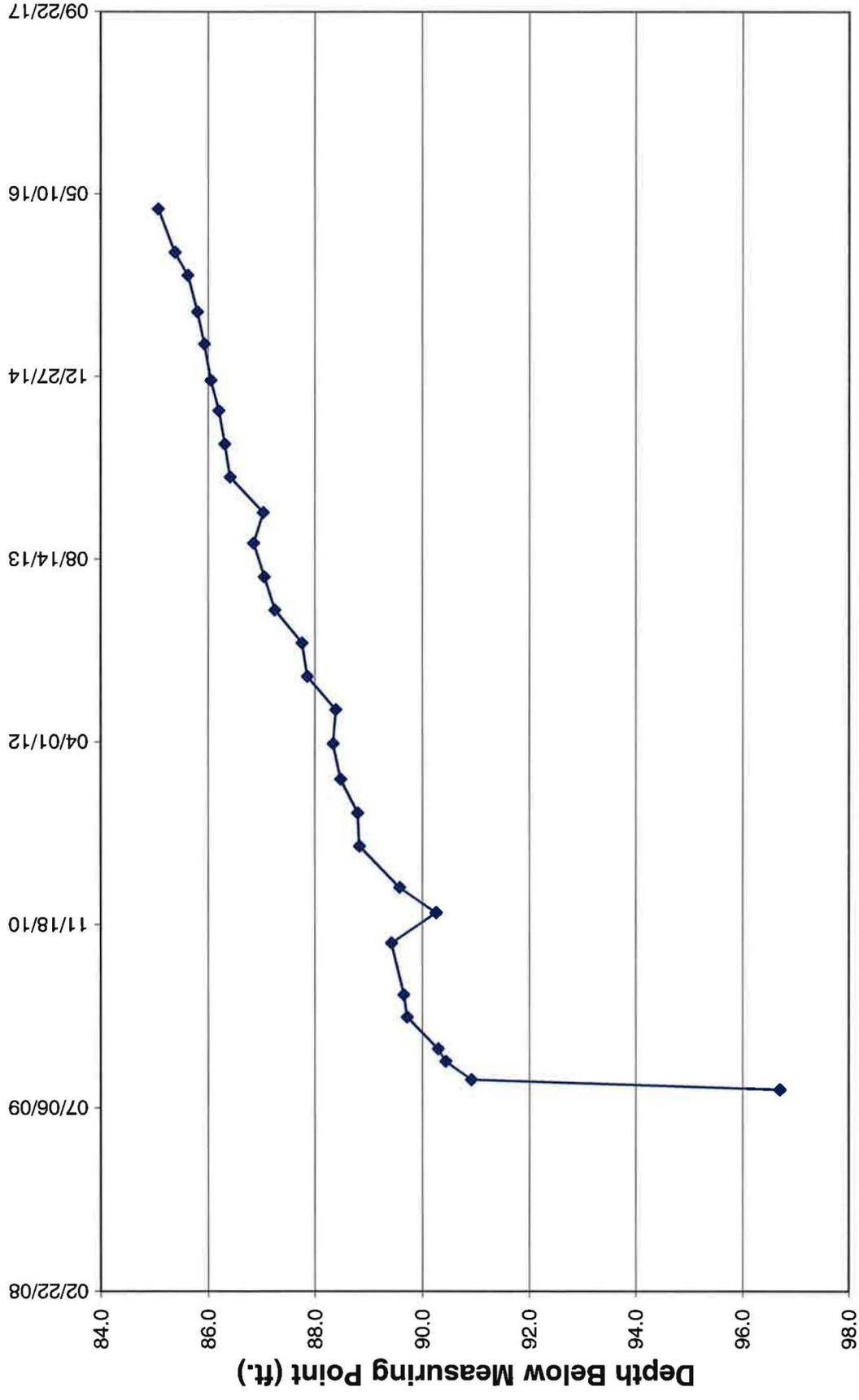




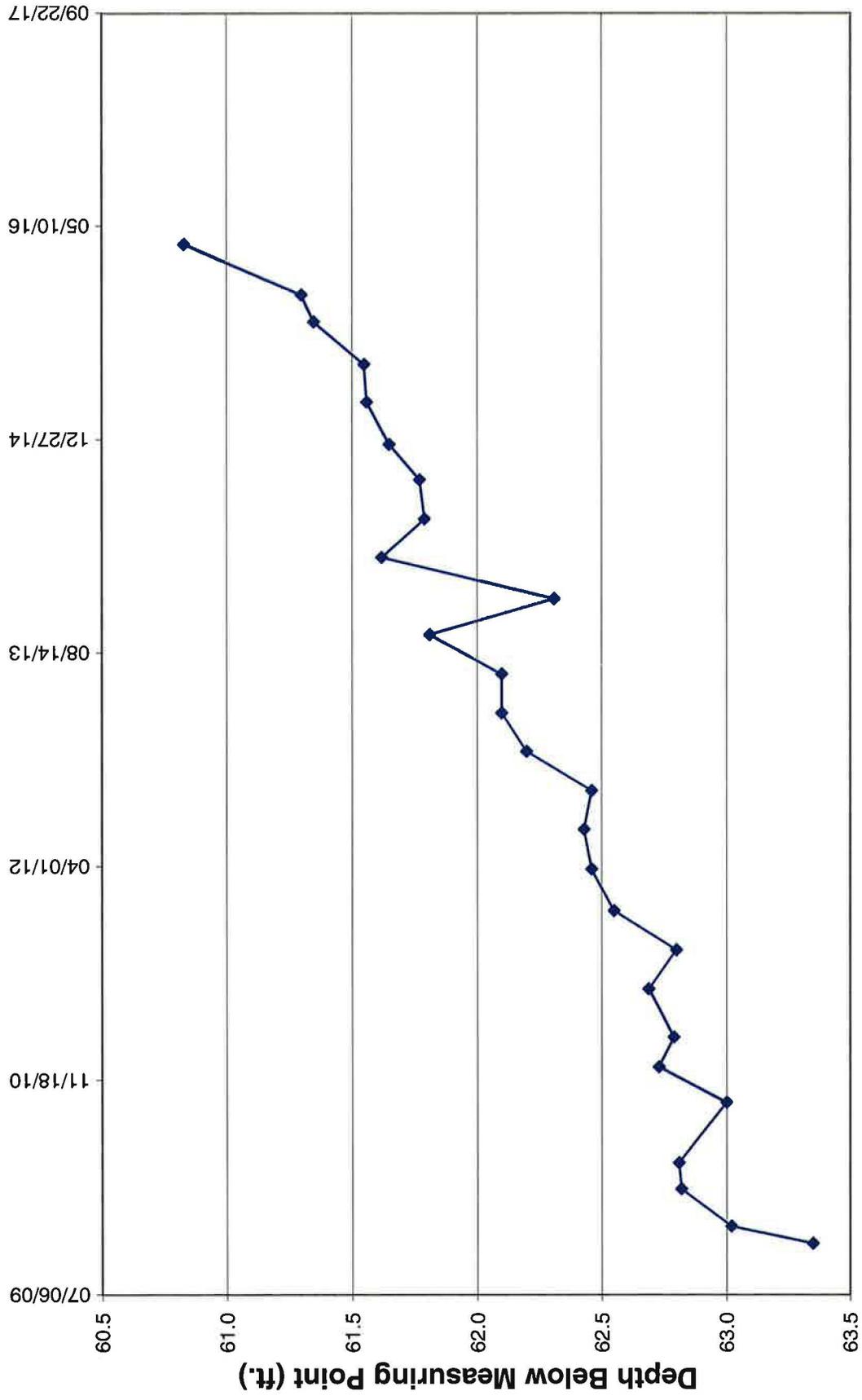
TWN-6 Water Level Over Time (ft. blmp)



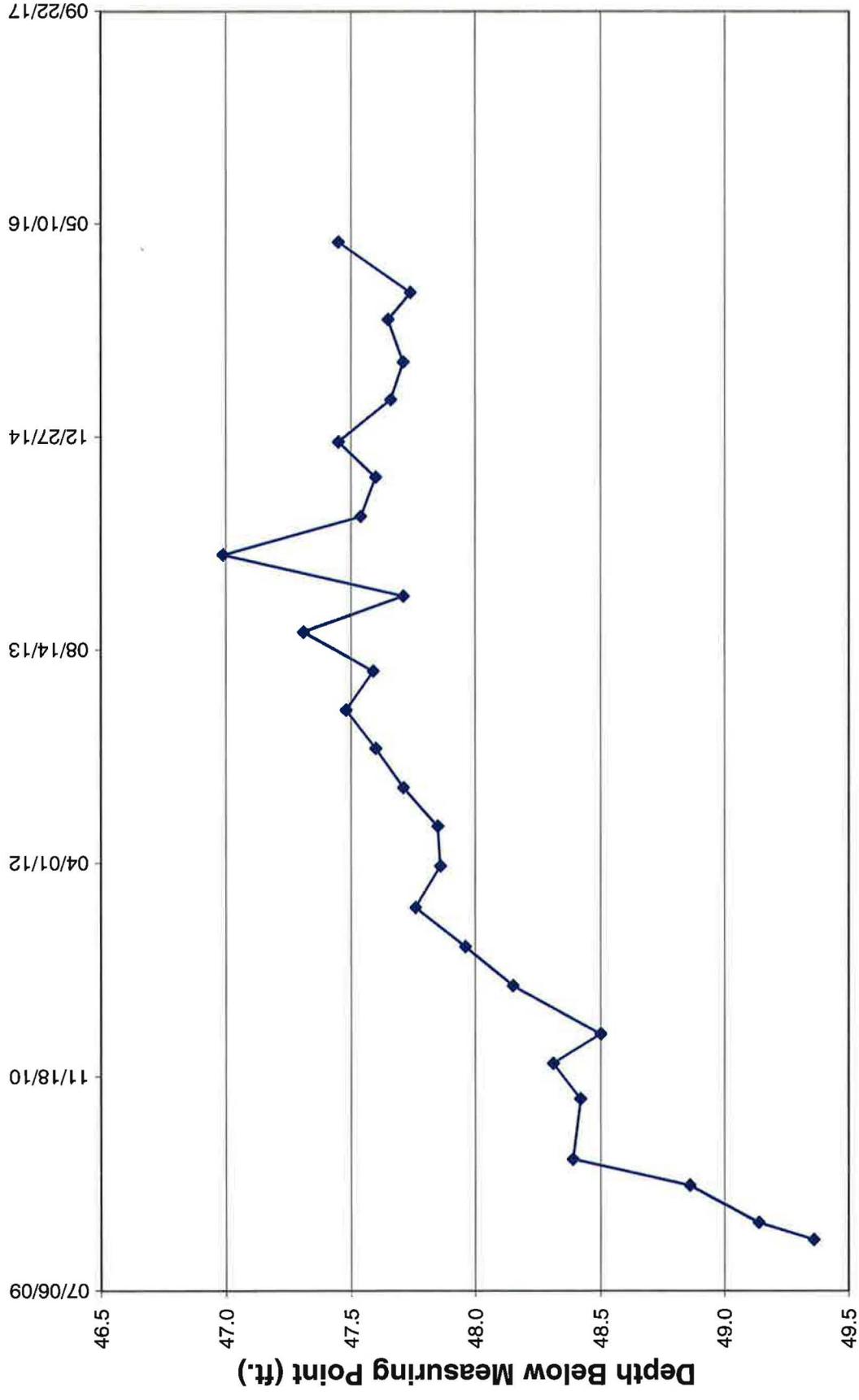
TWN-7 Water Level Over Time (ft. blmp)



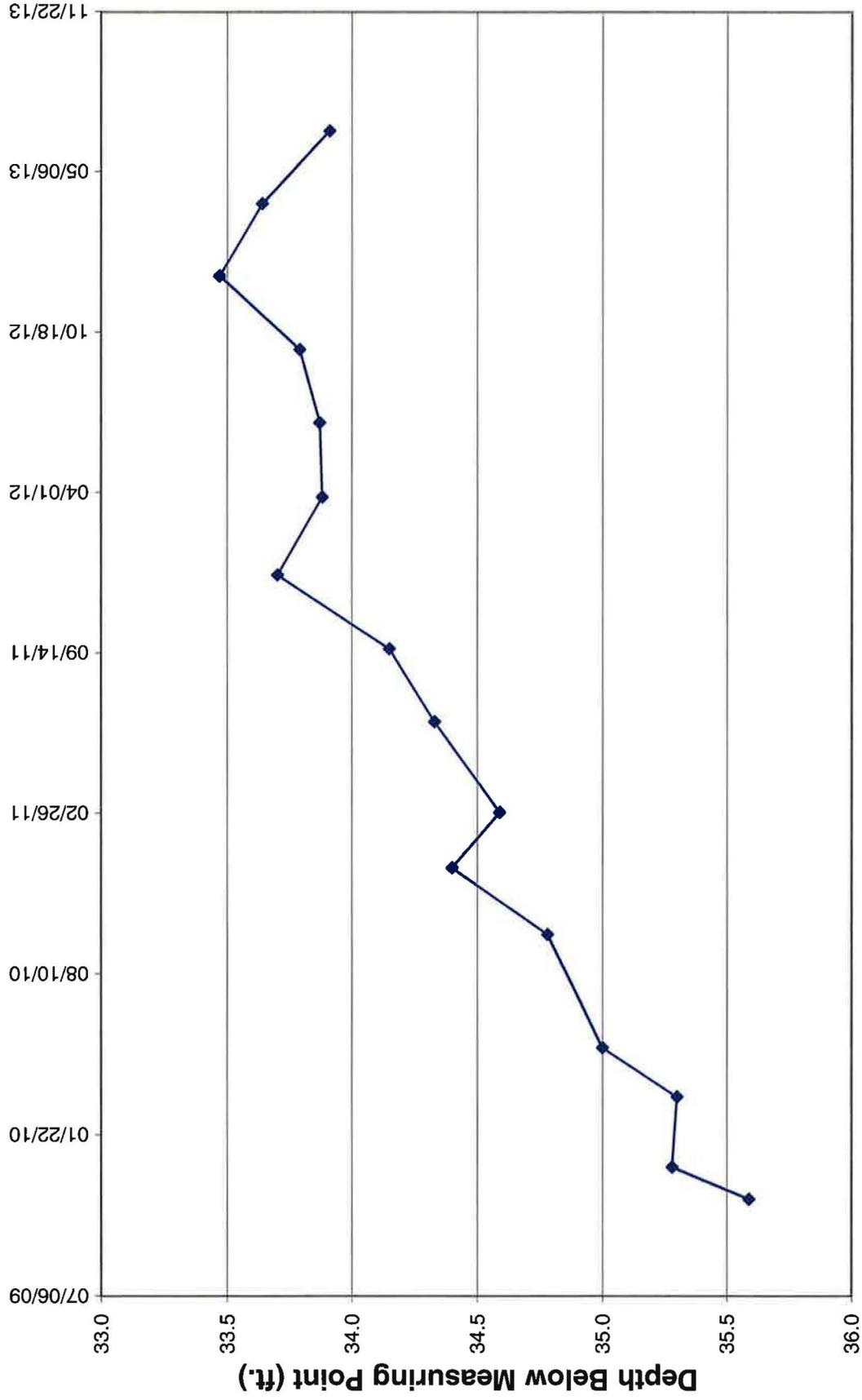
TWN-14 Water Level Over Time (ft. blmp)



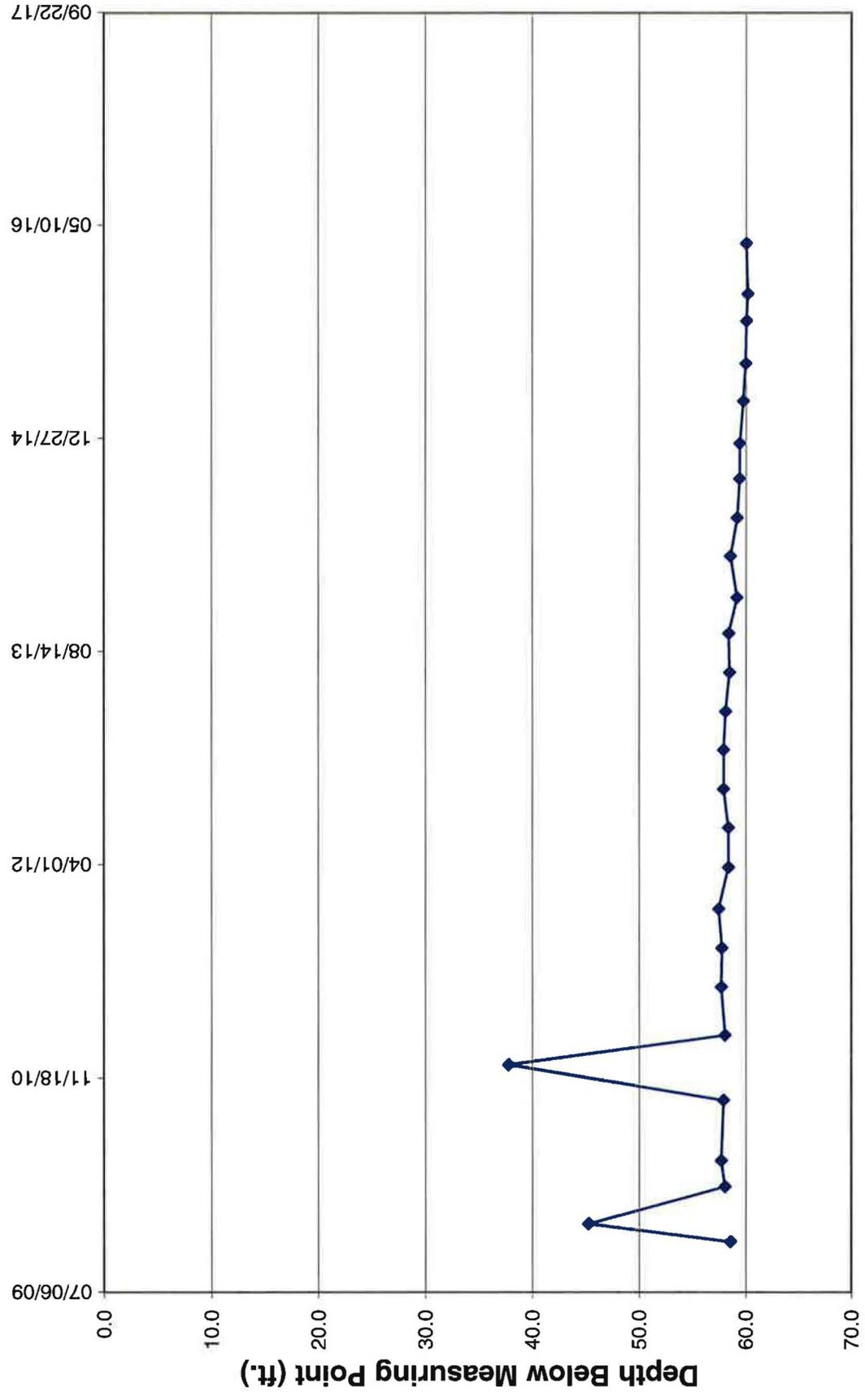
TWN-16 Water Level Over Time (ft. blmp)



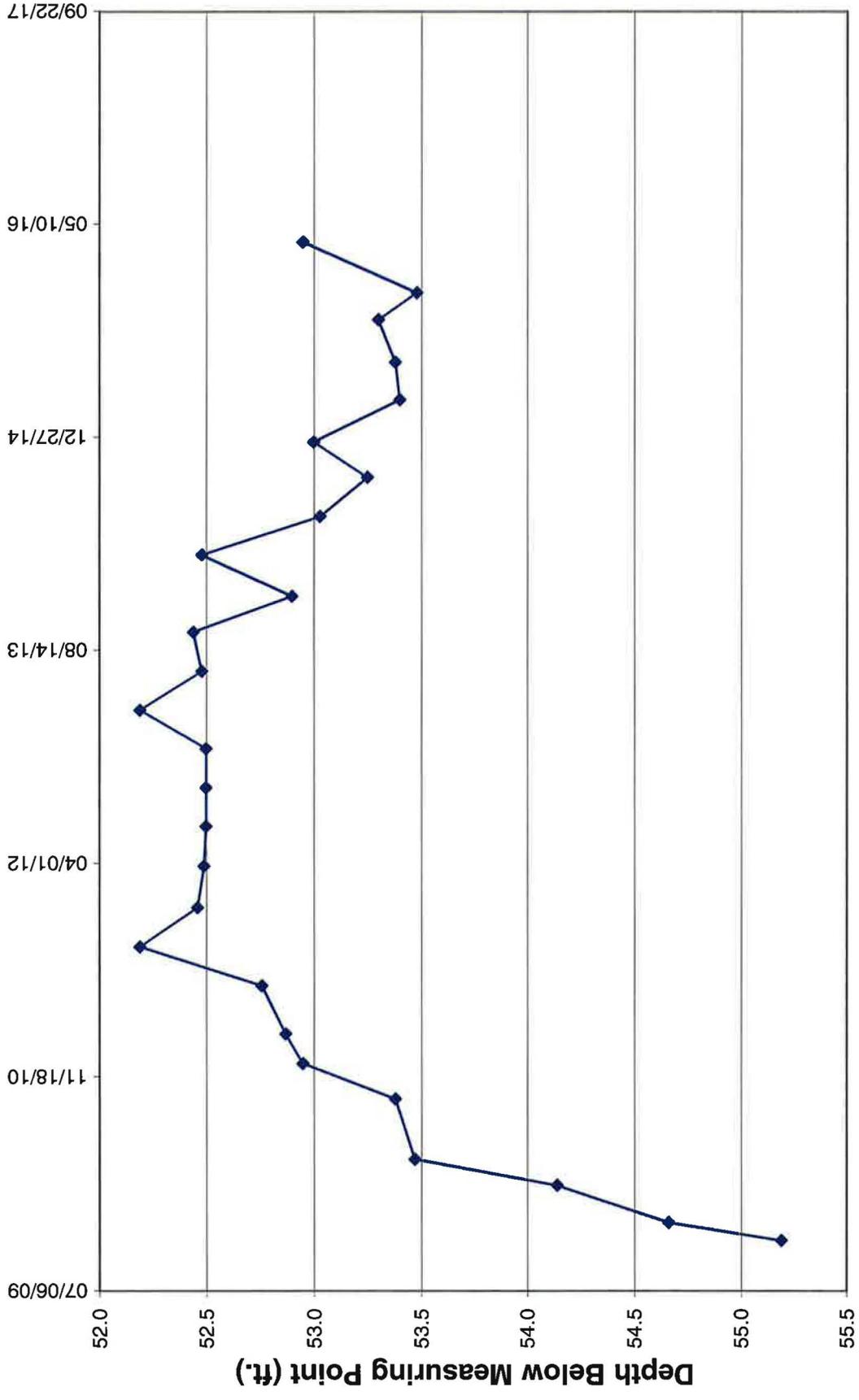
TWN-17 Water Level Over Time (ft. blmp)

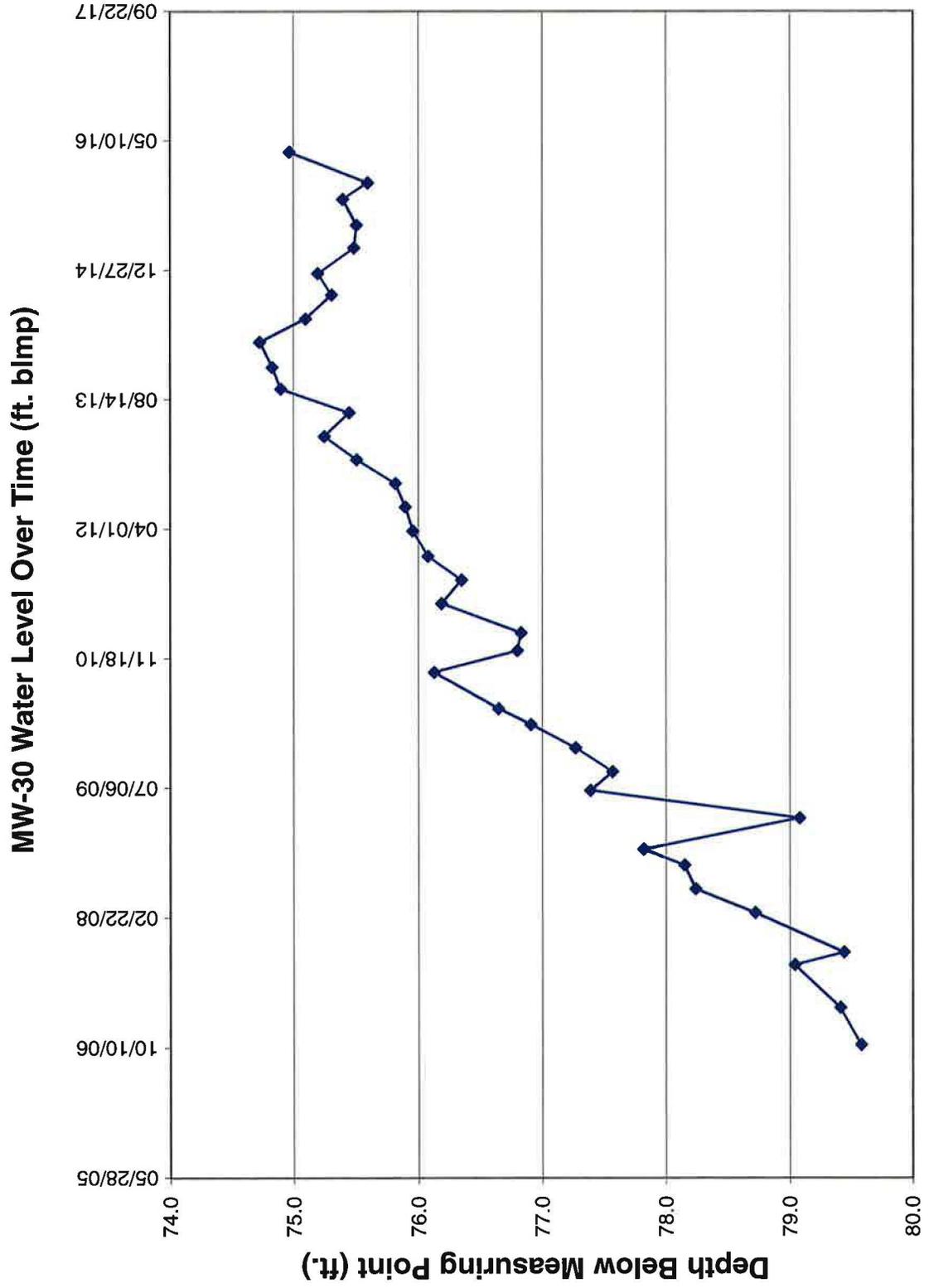


TWN-18 Water Level Over Time (ft. blmp)

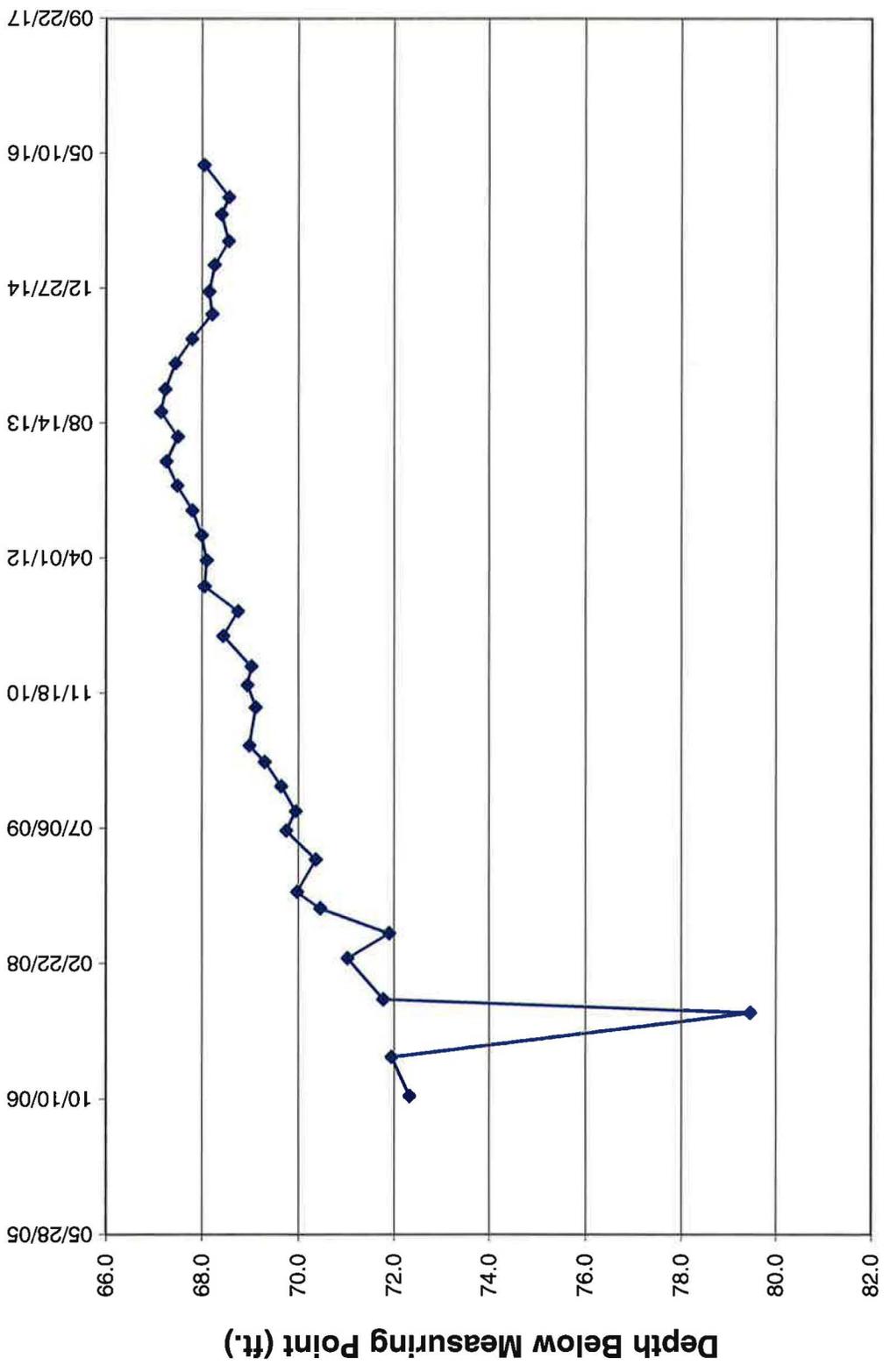


TWN-19 Water Level Over Time (ft. blmp)





MW-31 Water Level Over Time (ft. blmp)



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	
5,587.74				12/17/14	60.35	59.22	
5,587.09				03/26/15	61.00	59.87	
5,586.79				06/22/15	61.30	60.17	
5,586.39				09/30/15	61.70	60.57	
5,586.05				12/02/15	62.04	60.91	
5,585.89				03/30/16	62.20	61.07	

**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	28.90	27.96	
5,595.80				06/25/14	30.89	29.95	
5,587.67				09/25/14	39.02	38.08	
5,592.66				12/17/14	34.03	33.09	
5,596.71				03/26/15	29.98	29.04	
5,598.64				06/22/15	28.05	27.11	
5,597.89				09/30/15	28.80	27.86	
5,597.89				12/02/15	28.80	27.86	
5,594.25				03/30/16	32.44	31.50	

**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	
5,596.55				12/17/14	37.95	37.09	
5,596.20				03/26/15	38.30	37.44	
5,596.00				06/22/15	38.50	37.64	
5,596.61				09/30/15	37.89	37.03	
5,596.09				12/02/15	38.41	37.55	
5,595.29				03/30/16	39.21	38.35	

**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	
5,589.42				12/17/14	52.45	51.62	
5,589.17				03/26/15	52.70	51.87	
5,588.17				06/22/15	53.70	52.87	
5,587.48				09/30/15	54.39	53.56	
5,587.02				12/02/15	54.85	54.02	
5,586.90				03/20/16	54.97	54.14	

**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	
5,587.69				12/17/14	77.25	75.34	
5,587.29				03/26/15	77.65	75.74	
5,587.04				06/22/15	77.90	75.99	
5,586.93				09/30/15	78.01	76.10	
5,586.72				12/02/15	78.22	76.31	
5,586.92				03/30/16	78.02	76.11	

**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	
5,563.21				12/17/14	86.05	84.18	
5,563.33				03/26/15	85.93	84.06	
5,563.46				06/22/15	85.80	83.93	
5,563.64				09/30/15	85.62	83.75	
5,563.88				12/02/15	85.38	83.51	
5,564.19				03/30/16	85.07	83.20	

**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	
5,587.88				12/17/14	61.65	59.92	
5,587.97				03/26/15	61.56	59.83	
5,587.98				06/22/15	61.55	59.82	
5,588.18				09/30/15	61.35	59.62	
5,588.23				12/02/15	61.30	59.57	
5,588.70				03/30/16	60.83	59.10	

**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	
5,605.25				12/17/14	47.45	45.82	
5,605.04				03/26/15	47.66	46.03	
5,604.99				06/22/15	47.71	46.08	
5,605.05				09/30/15	47.65	46.02	
5,604.96				12/02/15	47.74	46.11	
5,605.25				03/30/16	47.45	45.82	

**Water Levels and Data over Time
White Mesa Mill - Well TWN-17**

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
	5,639.73	5,641.55	1.82				100
5,605.96				11/04/09	35.59	33.77	
5,606.27				12/14/09	35.28	33.46	
5,606.25				03/11/10	35.30	33.48	
5,606.55				05/11/10	35.00	33.18	
5,606.77				09/29/10	34.78	32.96	
5,607.15				12/21/10	34.40	32.58	
5,606.96				02/28/11	34.59	32.77	
5,607.22				06/21/11	34.33	32.51	
5,607.40				09/20/11	34.15	32.33	
5,607.85				12/21/11	33.70	31.88	
5,607.67				03/27/12	33.88	32.06	
5,607.68				06/28/12	33.87	32.05	
5,607.76				09/27/12	33.79	31.97	
5,608.08				12/28/12	33.47	31.65	
5,607.91				03/28/13	33.64	31.82	
5,607.64				06/27/13	33.91	32.09	

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	
5,585.99				12/17/14	59.46	57.96	
5,585.66				03/26/15	59.79	58.29	
5,585.45				06/22/15	60.00	58.50	
5,585.37				09/30/15	60.08	58.58	
5,585.24				12/02/15	60.21	58.71	
5,585.38				03/30/16	60.07	58.57	

**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	
5,608.36				12/17/14	53.00	51.23	
5,607.96				03/26/15	53.40	51.63	
5,607.98				06/22/15	53.38	51.61	
5,608.06				09/30/15	53.30	51.53	
5,607.88				12/02/15	53.48	51.71	
5,608.41				03/30/16	52.95	51.18	

**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	
5539.30				12/17/2014	75.20	74.04	
5539.01				3/26/2015	75.49	74.33	
5538.99				6/22/2015	75.51	74.35	
5539.10				9/30/2015	75.40	74.24	
5538.90				12/2/2015	75.60	74.44	
5539.53				3/30/2016	74.97	73.81	

**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	
5548.25				12/17/2014	68.15	67.01	
5548.14				3/26/2015	68.26	67.12	
5547.85				6/22/2015	68.55	67.41	
5548.00				9/30/2015	68.40	67.26	
5547.84				12/2/2015	68.56	67.42	
5548.35				3/30/2016	68.05	66.91	

Tab G

Laboratory Analytical Reports



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.

Contact: Garrin Palmer

Project: 1st Quarter Nitrate 2016

Lab Sample ID: 1602419-005

Client Sample ID: Piez-01_02232016

Collection Date: 2/23/2016 1329h

Received Date: 2/25/2016 1010h

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1717h	E300.0	10.0	56.5	
Nitrate/Nitrite (as N)	mg/L		3/3/2016 2036h	E353.2	0.100	8.31	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.

Contact: Garrin Palmer

Project: 1st Quarter Nitrate 2016

Lab Sample ID: 1602419-006

Client Sample ID: Piez-02_02232016

Collection Date: 2/23/2016 1302h

Received Date: 2/25/2016 1010h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1734h	E300.0	10.0	13.4	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1030h	E353.2	0.100	0.615	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-007
Client Sample ID: Piez-03_02232016
Collection Date: 2/23/2016 1315h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1751h	E300.0	10.0	32.9	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1031h	E353.2	0.100	2.24	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-003
Client Sample ID: TWN-01_02232016
Collection Date: 2/23/2016 909h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1644h	E300.0	10.0	30.3	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1029h	E353.2	0.100	1.51	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-004
Client Sample ID: TWN-02_02232016
Collection Date: 2/23/2016 1250h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1700h	E300.0	10.0	73.9	
Nitrate/Nitrite (as N)	mg/L		3/3/2016 2035h	E353.2	1.00	86.3	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.

Contact: Garrin Palmer

Project: 1st Quarter Nitrate 2016

Lab Sample ID: 1602419-010

Client Sample ID: TWN-03_02242016

Collection Date: 2/24/2016 806h

Received Date: 2/25/2016 1010h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1443h	E300.0	100	128	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1033h	E353.2	0.100	16.8	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-002
Client Sample ID: TWN-04_02232016
Collection Date: 2/23/2016 945h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1627h	E300.0	10.0	30.7	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1025h	E353.2	0.100	2.02	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-009
Client Sample ID: TWN-07_02242016
Collection Date: 2/24/2016 755h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1915h	E300.0	1.00	6.06	
Nitrate/Nitrite (as N)	mg/L		3/7/2016 1230h	E353.2	0.100	0.240	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-001
Client Sample ID: TWN-18_02232016
Collection Date: 2/23/2016 806h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1610h	E300.0	10.0	67.6	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1013h	E353.2	0.100	0.648	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-012
Client Sample ID: TWN-18R_02232016
Collection Date: 2/23/2016 742h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1949h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		3/7/2016 1231h	E353.2	0.100	< 0.100	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 1st Quarter Chloroform 2016
Lab Sample ID: 1603259-010
Client Sample ID: TW4-22_03092016
Collection Date: 3/9/2016 1018h
Received Date: 3/11/2016 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		3/16/2016 1850h	E300.0	100	583	
Nitrate/Nitrite (as N)	mg/L		3/21/2016 1539h	E353.2	0.500	31.1	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Chloroform 2016
Lab Sample ID: 1603259-002
Client Sample ID: TW4-24_03092016
Collection Date: 3/9/2016 1009h
Received Date: 3/11/2016 1030h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		3/16/2016 1709h	E300.0	100	989	
Nitrate/Nitrite (as N)	mg/L		3/23/2016 1639h	E353.2	0.200	29.1	³

³ - Matrix spike recoveries and/or high RPDs indicate suspected sample non-homogeneity. The method is in control as indicated by the LCS.

3440 South 700 West

Salt Lake City, UT 84119

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E-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 1st Quarter Chloroform 2016
Lab Sample ID: 1603259-001
Client Sample ID: TW4-25_03092016
Collection Date: 3/9/2016 956h
Received Date: 3/11/2016 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		3/16/2016 2031h	E300.0	10.0	62.7	
Nitrate/Nitrite (as N)	mg/L		3/12/2016 1103h	E353.2	0.100	0.837	1@

@ - High RPD due to suspected sample non-homogeneity or matrix interference.

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

3440 South 700 West

Salt Lake City, UT 84119

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web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-011
Client Sample ID: TWN-60_02242016
Collection Date: 2/24/2016 1015h
Received Date: 2/25/2016 1010h

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		2/25/2016 1932h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1043h	E353.2	0.100	< 0.100	

3440 South 700 West

Salt Lake City, UT 84119

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Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Chloroform 2016
Lab Sample ID: 1603479-006
Client Sample ID: TW4-60_03222016
Collection Date: 3/22/2016 1500h
Received Date: 3/23/2016 930h

Contact: Garrin Palmer

Analytical Results

<u>Compound</u>	<u>Units</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Method Used</u>	<u>Reporting Limit</u>	<u>Analytical Result</u>	<u>Qual</u>
Chloride	mg/L		3/25/2016 1129h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		3/24/2016 1733h	E353.2	0.100	< 0.100	

3440 South 700 West

Salt Lake City, UT 84119

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Fax: (801) 263-8687

E-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Sample ID: 1602419-008
Client Sample ID: TWN-65_02232016
Collection Date: 2/23/2016 909h
Received Date: 2/25/2016 1010h

Contact: Garrin Palmer

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		2/25/2016 1808h	E300.0	10.0	30.3	
Nitrate/Nitrite (as N)	mg/L		3/5/2016 1032h	E353.2	0.100	1.67	

3440 South 700 West

Salt Lake City, UT 84119

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



Garrin Palmer
Energy Fuels Resources, Inc.
6425 South Hwy 191
Blanding, UT 84511
TEL: (303) 389-4134

RE: 1st Quarter Nitrate 2016

Dear Garrin Palmer:

Lab Set ID: 1602419

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

American West Analytical Laboratories received sample(s) on 2/25/2016 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Thank You,

Approved by:

**Jose G.
Rocha**

Digitally signed by Jose G. Rocha
DN: cn=Jose G. Rocha,
o=American West Analytical
Laboratories, ou,
email=jose@awal-labs.com,
c=US
Date: 2016.03.09 14:15:20
-07'00'

Laboratory Director or designee



SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Nitrate 2016
Lab Set ID: 1602419
Date Received: 2/25/2016 1010h

Contact: Garrin Palmer

3440 South 700 West
 Salt Lake City, UT 84119

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Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1602419-001A	TWN-18_02232016	2/23/2016 806h	Aqueous	Anions, E300.0
1602419-001B	TWN-18_02232016	2/23/2016 806h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-002A	TWN-04_02232016	2/23/2016 945h	Aqueous	Anions, E300.0
1602419-002B	TWN-04_02232016	2/23/2016 945h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-003A	TWN-01_02232016	2/23/2016 909h	Aqueous	Anions, E300.0
1602419-003B	TWN-01_02232016	2/23/2016 909h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-004A	TWN-02_02232016	2/23/2016 1250h	Aqueous	Anions, E300.0
1602419-004B	TWN-02_02232016	2/23/2016 1250h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-005A	Piez-01_02232016	2/23/2016 1329h	Aqueous	Anions, E300.0
1602419-005B	Piez-01_02232016	2/23/2016 1329h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-006A	Piez-02_02232016	2/23/2016 1302h	Aqueous	Anions, E300.0
1602419-006B	Piez-02_02232016	2/23/2016 1302h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-007A	Piez-03_02232016	2/23/2016 1315h	Aqueous	Anions, E300.0
1602419-007B	Piez-03_02232016	2/23/2016 1315h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-008A	TWN-65_02232016	2/23/2016 909h	Aqueous	Anions, E300.0
1602419-008B	TWN-65_02232016	2/23/2016 909h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-009A	TWN-07_02242016	2/24/2016 755h	Aqueous	Anions, E300.0
1602419-009B	TWN-07_02242016	2/24/2016 755h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-010A	TWN-03_02242016	2/24/2016 806h	Aqueous	Anions, E300.0
1602419-010B	TWN-03_02242016	2/24/2016 806h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-011A	TWN-60_02242016	2/24/2016 1015h	Aqueous	Anions, E300.0
1602419-011B	TWN-60_02242016	2/24/2016 1015h	Aqueous	Nitrite/Nitrate (as N), E353.2
1602419-012A	TWN-18R_02232016	2/23/2016 742h	Aqueous	Anions, E300.0
1602419-012B	TWN-18R_02232016	2/23/2016 742h	Aqueous	Nitrite/Nitrate (as N), E353.2



Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Garrin Palmer
Project: 1st Quarter Nitrate 2016
Lab Set ID: 1602419

Sample Receipt Information:

Date of Receipt: 2/25/2016
Date(s) of Collection: 2/23 & 2/24/2016
Sample Condition: Intact
C-O-C Discrepancies: None

Holding Time and Preservation Requirements: The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD:

Method Blanks (MB): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Samples (LCS): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicates (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1602428-001A	Nitrate/Nitrite	MS/MSD	Sample matrix interference
1602429-001A	Nitrate/Nitrite	MSD/RPD	Sample matrix interference and suspected sample non-homogeneity or matrix interference

Corrective Action: None required.

3440 South 700 West
 Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer



3440 South 700 West
Salt Lake City, UT 84119

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

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1602419
Project: 1st Quarter Nitrate 2016

Contact: Garrin Palmer
Dept: WC
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-R87805 Date Analyzed: 02/25/2016 1014h													
Test Code: 300.0-W													
Chloride	5.03	mg/L	E300.0	0.00516	0.100	5.000	0	101	90 - 110				
Lab Sample ID: LCS-R87952 Date Analyzed: 03/03/2016 2011h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.05	mg/L	E353.2	0.00833	0.0100	1.000	0	105	90 - 110				
Lab Sample ID: LCS-R87975 Date Analyzed: 03/05/2016 1010h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.990	mg/L	E353.2	0.00833	0.0100	1.000	0	99.0	90 - 110				
Lab Sample ID: LCS-R88002 Date Analyzed: 03/07/2016 1229h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.993	mg/L	E353.2	0.00833	0.0100	1.000	0	99.3	90 - 110				



American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

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

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1602419
Project: 1st Quarter Nitrate 2016

Contact: Garrin Palmer
Dept: WC
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-R87805 Date Analyzed: 02/25/2016 957h													
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00516	0.100								
Lab Sample ID: MB-R87952 Date Analyzed: 03/03/2016 2009h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								
Lab Sample ID: MB-R87975 Date Analyzed: 03/05/2016 1008h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								
Lab Sample ID: MB-R88002 Date Analyzed: 03/07/2016 1228h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								



3440 South 700 West
Salt Lake City, UT 84119

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1602419

Project: 1st Quarter Nitrate 2016

Contact: Garrin Palmer

Dept: WC

QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1602419-010AMS Date Analyzed: 02/25/2016 1502h													
Test Code: 300.0-W													
Chloride	1,140	mg/L	E300.0	1.03	20.0	1,000	128	101	90 - 110				
Lab Sample ID: 1602475-001AMS Date Analyzed: 03/03/2016 2054h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.56	mg/L	E353.2	0.00833	0.0100	1.000	0.573	99.2	90 - 110				
Lab Sample ID: 1602419-002BMS Date Analyzed: 03/05/2016 1026h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	12.0	mg/L	E353.2	0.0833	0.100	10.00	2.02	100	90 - 110				
Lab Sample ID: 1602428-001AMS Date Analyzed: 03/07/2016 1234h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	15.4	mg/L	E353.2	0.0833	0.100	10.00	4.4	110	90 - 110				
Lab Sample ID: 1602429-001AMS Date Analyzed: 03/07/2016 1242h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	12.2	mg/L	E353.2	0.0833	0.100	10.00	2.56	96.6	90 - 110				

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



3440 South 700 West
Salt Lake City, UT 84119

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1602419

Project: 1st Quarter Nitrate 2016

Contact: Garrin Palmer

Dept: WC

QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1602419-010AMSD Date Analyzed: 02/25/2016 1519h													
Test Code: 300.0-W													
Chloride	1,130	mg/L	E300.0	1.03	20.0	1,000	128	100	90 - 110	1140	0.559	20	
Lab Sample ID: 1602475-001AMSD Date Analyzed: 03/03/2016 2055h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.57	mg/L	E353.2	0.00833	0.0100	1,000	0.573	99.4	90 - 110	1.57	0.128	10	
Lab Sample ID: 1602419-002BMSD Date Analyzed: 03/05/2016 1027h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.9	mg/L	E353.2	0.0833	0.100	10.00	2.02	98.6	90 - 110	12	1.17	10	
Lab Sample ID: 1602428-001AMSD Date Analyzed: 03/07/2016 1235h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	16.5	mg/L	E353.2	0.0833	0.100	10.00	4.4	121	90 - 110	15.5	6.45	10	
Lab Sample ID: 1602429-001AMSD Date Analyzed: 03/07/2016 1243h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	15.9	mg/L	E353.2	0.0833	0.100	10.00	2.56	134	90 - 110	12.2	26.2	10	@

@ - High RPD due to suspected sample non-homogeneity or matrix interference.

' - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

WORK ORDER Summary

Work Order: **1602419**

Page 1 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 3/7/2016

Client ID: DEN100

Contact: Garrin Palmer

Project: 1st Quarter Nitrate 2016

QC Level: III

WO Type: Project

Comments: PA Rush. QC 3 (Summary/No chromatograms). MUST report project specific DL's: Cl @ 1 mg/L, NO2/NO3 @ 0.1 mg/L. Run NO2/NO3 at 10X dilution. EDD-Denison & LOCUS. Email Group;

eh

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1602419-001A	TWN-18_02232016	2/23/2016 0806h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-001B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-002A	TWN-04_02232016	2/23/2016 0945h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-002B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-003A	TWN-01_02232016	2/23/2016 0909h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-003B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-004A	TWN-02_02232016	2/23/2016 1250h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-004B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-005A	Piez-01_02232016	2/23/2016 1329h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-005B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-006A	Piez-02_02232016	2/23/2016 1302h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-006B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-007A	Piez-03_02232016	2/23/2016 1315h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-007B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-008A	TWN-65_02232016	2/23/2016 0909h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1

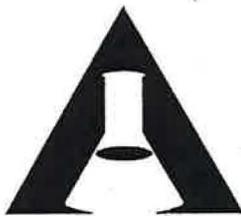
WORK ORDER Summary

Work Order: **1602419** Page 2 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 3/7/2016

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1602419-008B	TWN-65_02232016	2/23/2016 0909h	2/25/2016 1010h	NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>	Aqueous	<input checked="" type="checkbox"/>	df - no2/no3	1
1602419-009A	TWN-07_02242016	2/24/2016 0755h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-009B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-010A	TWN-03_02242016	2/24/2016 0806h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-010B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-011A	TWN-60_02242016	2/24/2016 1015h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-011B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	
1602419-012A	TWN-18R_02232016	2/23/2016 0742h	2/25/2016 1010h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	<input checked="" type="checkbox"/>	df - cl	1
1602419-012B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		<input checked="" type="checkbox"/>	df - no2/no3	



American West Analytical Laboratories

463 W. 3600 S. Salt Lake City, UT 84115
 Phone # (801) 263-8686 Toll Free # (888) 263-8686
 Fax # (801) 263-8687 Email awal@awal-habs.com
 www.awal-labs.com

CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

1602419
 AWAL Lab Sample Set #
 Page 1 of 1

Client: **Energy Fuels Resources, Inc.**
 Address: **6425 S. Hwy. 191**
Blanding, UT 84511
 Contact: **Garrin Palmer**
 Phone #: **(435) 678-2221** Cell #: 435 459 9463
 Email: **gpalmer@energyfuels.com; KWeinel@energyfuels.com; dturk@energyfuels.com**
 Project Name: **1st Quarter Nitrate 2016**
 Project #: _____
 PO #: _____
 Sampler Name: **Tanner Holliday**

QC Level:		Turn Around Time:		Unless other arrangements have been made, signed reports will be emailed by 5:00 pm on the day they are due.		Due Date:		
3		Standard				3/10		
Sample ID	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	CI (4500 or 300.0)	Field Filtered For:	Laboratory Use Only
1 TWN-18_02232016	2/23/2016	806	2	W	X	X	X	Samples Were: <i>CLPS</i> 1 Shipped or hand delivered <i>on ice</i> 2 Ambient or Chilled 3 Temperature <i>1.9°C</i> 4 Received Broken/Leaking (Improperly Sealed) Y <i>N</i> 5 Properly Preserved Y <i>N</i> Checked at bench Y <i>N</i> 6 Received Within Holding Times Y <i>N</i>
2 TWN-04_02232016	2/23/2016	945	2	W	XX	X		COC Tape Was: 1 Present on Outer Package Y <i>N NA</i> 2 Unbroken on Outer Package Y <i>N NA</i> 3 Present on Sample Y <i>N NA</i> 4 Unbroken on Sample Y <i>N NA</i>
3 TWN-01_02232016	2/23/2016	909	2	W	X	X		
4 TWN-02_02232016	2/23/2016	1250	2	W	X	X		Discrepancies Between Sample Labels and COC Record? Y <i>N</i>
5 Piez-01_02232015- <i>1G</i>	2/23/2016	1329	2	W	X	X		
6 Piez-02_02232015- <i>1G</i>	2/23/2016	1302	2	W	X	X		
7 Piez-03_02232016	2/23/2016	1315	2	W	X	X		
8 TWN-65_02232016	2/23/2016	909	2	W	X	X		
9 TWN-07_02242016	2/24/2016	755	2	W	X	X		
10 TWN-03_02242016	2/24/2016	806	2	W	X	X		
11 TWN-60_02242016	2/24/2016	1015	2	W	X	X		
12 TWN-18R_02232016	2/23/2016	742	2	W	X	X		
Temp Blank								

Relinquished by: Signature <i>Garrin Palmer</i>	Date: 2/24/2016	Received by: Signature <i>Elena Hayes</i>	Date: 2/25/16	Special Instructions:
Print Name: Garrin Palmer	Time: 1230	Print Name: Elena Hayes	Time: 1010	
Relinquished by: Signature	Date:	Received by: Signature	Date:	
Print Name:	Time:	Print Name:	Time:	
Relinquished by: Signature	Date:	Received by: Signature	Date:	
Print Name:	Time:	Print Name:	Time:	

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative	1	2	3	4	5	6	7	8	9	10	11	12						
Ammonia	pH <2 H ₂ SO ₄																		
COD	pH <2 H ₂ SO ₄																		
Cyanide	pH >12 NaOH																		
Metals	pH <2 HNO ₃																		
NO ₂ & NO ₃	pH <2 H ₂ SO ₄	Yes																	
O & G	pH <2 HCL																		
Phenols	pH <2 H ₂ SO ₄																		
Sulfide	pH > 9NaOH, Zn Acetate																		
TKN	pH <2 H ₂ SO ₄																		
T PO ₄	pH <2 H ₂ SO ₄																		

- Procedure:
- 1) Pour a small amount of sample in the sample lid
 - 2) Pour sample from Lid gently over wide range pH paper
 - 3) **Do Not** dip the pH paper in the sample bottle or lid
 - 4) If sample is not preserved, properly list its extension and receiving pH in the appropriate column above
 - 5) Flag COC, notify client if requested
 - 6) Place client conversation on COC
 - 7) Samples may be adjusted

Frequency: All samples requiring preservation

- * The sample required additional preservative upon receipt.
- + The sample was received unpreserved.
- ▲ The sample was received unpreserved and therefore preserved upon receipt.
- # The sample pH was unadjustable to a pH < 2 due to the sample matrix.
- The sample pH was unadjustable to a pH > ____ due to the sample matrix interference.



Garrin Palmer
 Energy Fuels Resources, Inc.
 6425 South Hwy 191
 Blanding, UT 84511
 TEL: (303) 389-4134

RE: 1st Quarter Chloroform 2016

Dear Garrin Palmer:

Lab Set ID: 1603259

3440 South 700 West
 Salt Lake City, UT 84119

American West Analytical Laboratories received sample(s) on 3/11/2016 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer

Thank You,

Approved by:

Jose G. Rocha	Digitally signed by Jose G. Rocha
	DN: cn=Jose G. Rocha, o=American West Analytical Laboratories, ou, email=jose@awal-labs.com, c=US Date: 2016.03.28 13:36:58 -06'00'

Laboratory Director or designee



SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603259
Date Received: 3/11/2016 1030h

Contact: Garrin Palmer

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1603259-001A	TW4-25_03092016	3/9/2016 956h	Aqueous	Anions, E300.0
1603259-001B	TW4-25_03092016	3/9/2016 956h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-001C	TW4-25_03092016	3/9/2016 956h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-002A	TW4-24_03092016	3/9/2016 1009h	Aqueous	Anions, E300.0
1603259-002B	TW4-24_03092016	3/9/2016 1009h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-002C	TW4-24_03092016	3/9/2016 1009h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-003A	TW4-21_03092016	3/9/2016 947h	Aqueous	Anions, E300.0
1603259-003B	TW4-21_03092016	3/9/2016 947h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-003C	TW4-21_03092016	3/9/2016 947h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-004A	TW4-01_03092016	3/9/2016 1217h	Aqueous	Anions, E300.0
1603259-004B	TW4-01_03092016	3/9/2016 1217h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-004C	TW4-01_03092016	3/9/2016 1217h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-005A	TW4-04_03092016	3/9/2016 1225h	Aqueous	Anions, E300.0
1603259-005B	TW4-04_03092016	3/9/2016 1225h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-005C	TW4-04_03092016	3/9/2016 1225h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-006A	MW-04_03092016	3/9/2016 1210h	Aqueous	Anions, E300.0
1603259-006B	MW-04_03092016	3/9/2016 1210h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-006C	MW-04_03092016	3/9/2016 1210h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-007A	TW4-02_03092016	3/9/2016 1201h	Aqueous	Anions, E300.0
1603259-007B	TW4-02_03092016	3/9/2016 1201h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-007C	TW4-02_03092016	3/9/2016 1201h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-008A	MW-26_03092016	3/9/2016 1044h	Aqueous	Anions, E300.0
1603259-008B	MW-26_03092016	3/9/2016 1044h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-008C	MW-26_03092016	3/9/2016 1044h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-009A	TW4-11_03092016	3/9/2016 1153h	Aqueous	Anions, E300.0
1603259-009B	TW4-11_03092016	3/9/2016 1153h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-009C	TW4-11_03092016	3/9/2016 1153h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-010A	TW4-22_03092016	3/9/2016 1018h	Aqueous	Anions, E300.0
1603259-010B	TW4-22_03092016	3/9/2016 1018h	Aqueous	Nitrite/Nitrate (as N), E353.2



Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603259
Date Received: 3/11/2016 1030h

Contact: Garrin Palmer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1603259-010C	TW4-22_03092016	3/9/2016 1018h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-011A	TW4-19_03092016	3/9/2016 1430h	Aqueous	Anions, E300.0
1603259-011B	TW4-19_03092016	3/9/2016 1430h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-011C	TW4-19_03092016	3/9/2016 1430h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-012A	TW4-20_03092016	3/9/2016 1031h	Aqueous	Anions, E300.0
1603259-012B	TW4-20_03092016	3/9/2016 1031h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-012C	TW4-20_03092016	3/9/2016 1031h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-013A	TW4-37_03092016	3/9/2016 1025h	Aqueous	Anions, E300.0
1603259-013B	TW4-37_03092016	3/9/2016 1025h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603259-013C	TW4-37_03092016	3/9/2016 1025h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603259-014A	Trip Blank	3/9/2016	Aqueous	VOA by GC/MS Method 8260C/5030C

3440 South 700 West
Salt Lake City, UT 84119

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Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Garrin Palmer
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603259

3440 South 700 West
Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 3/11/2016
Date of Collection: 3/9/2016
Sample Condition: Intact
C-O-C Discrepancies: None

Holding Time and Preservation Requirements: The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD, DUP:

Method Blanks (MB): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Samples (LCS): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicates (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1603259-001B	Nitrate/Nitrite	MS/RPD	Sample matrix interference and suspected sample non-homogeneity or matrix interference.
1603259-002B	Nitrate/Nitrite	MS/MSD	Suspected sample non-homogeneity.

Corrective Action: None required.



American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

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

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603259
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-R88289 Date Analyzed: 03/16/2016 957h													
Test Code: 300.0-W													
Chloride	4.80	mg/L	E300.0	0.00516	0.100	5.000	0	96.0	90 - 110				
Lab Sample ID: LCS-R88185 Date Analyzed: 03/12/2016 1102h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.01	mg/L	E353.2	0.00833	0.0100	1.000	0	101	90 - 110				
Lab Sample ID: LCS-R88439 Date Analyzed: 03/21/2016 1454h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.916	mg/L	E353.2	0.00833	0.0100	1.000	0	91.6	90 - 110				
Lab Sample ID: LCS-R88521 Date Analyzed: 03/23/2016 1629h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.901	mg/L	E353.2	0.00833	0.0100	1.000	0	90.1	90 - 110				



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1603259

Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer

Dept: WC

QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-R88289	Date Analyzed: 03/16/2016 940h												
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00516	0.100								
Lab Sample ID: MB-R88185	Date Analyzed: 03/12/2016 1101h												
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								
Lab Sample ID: MB-R88439	Date Analyzed: 03/21/2016 1453h												
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								
Lab Sample ID: MB-R88521	Date Analyzed: 03/23/2016 1628h												
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1603259

Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer

Dept: WC

QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1603259-002AMS Date Analyzed: 03/16/2016 1726h													
Test Code: 300.0-W													
Chloride	2,000	mg/L	E300.0	1.03	20.0	1,000	989	102	90 - 110				
Lab Sample ID: 1603259-003AMS Date Analyzed: 03/16/2016 1816h													
Test Code: 300.0-W													
Chloride	1,440	mg/L	E300.0	1.03	20.0	1,000	452	99.2	90 - 110				
Lab Sample ID: 1603259-001BMS Date Analyzed: 03/12/2016 1104h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	12.7	mg/L	E353.2	0.0833	0.100	10.00	0.837	119	90 - 110				1
Lab Sample ID: 1603290-001CMS Date Analyzed: 03/21/2016 1535h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	15.6	mg/L	E353.2	0.0833	0.100	10.00	1.48	141	90 - 110				1
Lab Sample ID: 1603259-002BMS Date Analyzed: 03/23/2016 1640h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	73.7	mg/L	E353.2	0.417	0.500	50.00	29.1	89.2	90 - 110				3

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

³ - Matrix spike recoveries and/or high RPDs indicate suspected sample non-homogeneity. The method is in control as indicated by the LCS.



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603259
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1603259-002AMSD Date Analyzed: 03/16/2016 1743h													
Test Code: 300.0-W													
Chloride	2,010	mg/L	E300.0	1.03	20.0	1,000	989	102	90 - 110	2000	0.241	20	
Lab Sample ID: 1603259-003AMSD Date Analyzed: 03/16/2016 1833h													
Test Code: 300.0-W													
Chloride	1,450	mg/L	E300.0	1.03	20.0	1,000	452	100	90 - 110	1440	0.669	20	
Lab Sample ID: 1603259-001BMSD Date Analyzed: 03/12/2016 1105h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.3	mg/L	E353.2	0.0833	0.100	10.00	0.837	105	90 - 110	12.7	11.5	10	@
Lab Sample ID: 1603290-001CMSD Date Analyzed: 03/21/2016 1536h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	14.3	mg/L	E353.2	0.0833	0.100	10.00	1.48	128	90 - 110	15.6	8.83	10	¹
Lab Sample ID: 1603259-002BMSD Date Analyzed: 03/23/2016 1641h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	73.2	mg/L	E353.2	0.417	0.500	50.00	29.1	88.1	90 - 110	73.7	0.735	10	³

@ - High RPD due to suspected sample non-homogeneity or matrix interference.

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

³ - Matrix spike recoveries and/or high RPDs indicate suspected sample non-homogeneity. The method is in control as indicated by the LCS.

WORK ORDER Summary

Work Order: **1603259** Page 1 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 3/22/2016

Client ID: DEN100

Contact: Garrin Palmer

Project: 1st Quarter Chloroform 2016

QC Level: III

WO Type: Project

Comments: PA Rush. QC 3 (Summary/No chromatograms). RL of 1 ppm for Chloride and VOC and 0.1 ppm for NO2/NO3 - Run NO2/NO3 at a 10X dilution. Expected levels provided by client - see Jenn. J-flag what we can't meet. EIM Locus and EDD-Denison. Email Group.; *eh*

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1603259-001A	TW4-25_03092016	3/9/2016 0956h	3/11/2016 1030h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603259-001B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603259-001C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603259-002A	TW4-24_03092016	3/9/2016 1009h	3/11/2016 1030h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603259-002B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603259-002C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603259-003A	TW4-21_03092016	3/9/2016 0947h	3/11/2016 1030h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603259-003B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603259-003C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603259-004A	TW4-01_03092016	3/9/2016 1217h	3/11/2016 1030h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603259-004B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603259-004C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603259-005A	TW4-04_03092016	3/9/2016 1225h	3/11/2016 1030h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603259-005B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603259-005C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3

WORK ORDER Summary

Work Order: **1603259** Page 2 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 3/22/2016

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage
1603259-006A	MW-04_03092016	3/9/2016 1210h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-006B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-006C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-007A	TW4-02_03092016	3/9/2016 1201h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-007B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-007C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-008A	MW-26_03092016	3/9/2016 1044h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-008B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-008C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-009A	TW4-11_03092016	3/9/2016 1153h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-009B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-009C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-010A	TW4-22_03092016	3/9/2016 1018h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-010B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-010C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-011A	TW4-19_03092016	3/9/2016 1430h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			
1603259-011B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603259-011C				8260-W-DEN100			VOCFridge 3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603259-012A	TW4-20_03092016	3/9/2016 1031h	3/11/2016 1030h	300.0-W	Aqueous		df - wc 1
				1 SEL Analytes: CL			

WORK ORDER Summary

Work Order: **1603259** Page 3 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 3/22/2016

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1603259-012B	TW4-20_03092016	3/9/2016 1031h	3/11/2016 1030h	NO2/NO3-W-353.2	Aqueous		df - no2/no3	1
				1 SEL Analytes: NO3NO2N				
1603259-012C				8260-W-DEN100			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1603259-013A	TW4-37_03092016	3/9/2016 1025h	3/11/2016 1030h	300.0-W	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1603259-013B				NO2/NO3-W-353.2			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1603259-013C				8260-W-DEN100			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1603259-014A	Trip Blank	3/9/2016	3/11/2016 1030h	8260-W-DEN100	Aqueous		VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				



**American West
Analytical Laboratories**

463 W. 3600 S. Salt Lake City, UT 84115
 Phone # (801) 263-8686 Toll Free # (888) 263-8686
 Fax # (801) 263-8687 Email awal@awal-labs.com
 www.awal-labs.com

CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

1603259

AWAL Lab Sample Set #
 Page 1 of 2

Client: **Energy Fuels Resources, Inc.**
 Address: **6425 S. Hwy. 191**
Blanding, UT 84511
 Contact: **Garrin Palmer**
 Phone #: **(435) 678-2221** Cell #: _____
 Email: **gpalmer@energyfuels.com; KWeinel@energyfuels.com;**
dturk@energyfuels.com
 Project Name: **TANNER HOLLIDAY**
 Project #: **1ST QUARTER CHLOROFORM 2016**
 PO #: _____
 Sampler Name: **TANNER HOLLIDAY**

QC Level:		Turn Around Time:		Unless other arrangements have been made, signed reports will be emailed by 5:00 pm on the day they are due.						
3		Standard								
Sample ID	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)	Field Filtered For:	For Compliance With:	Known Hazards & Sample Comments
1 TW4-25_03092016	3/9/2016	956	5	W	X	X	X		<input checked="" type="checkbox"/> Include EDD: LOCUS UPLOAD EXCEL	
2 TW4-24_03092016	3/9/2016	1009	5	W	X	X	X		<input type="checkbox"/> NELAP <input type="checkbox"/> RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/> ELAP / A2LA <input type="checkbox"/> NLLAP <input type="checkbox"/> Non-Compliance <input type="checkbox"/> Other:	
3 TW4-21_03092016	3/9/2016	947	5	W	X	X	X			
4 TW4-01_03092016	3/9/2016	1217	5	W	X	X	X			
5 TW4-04_03092016	3/9/2016	1225	5	W	X	X	X			
6 MW-04_03092016	3/9/2016	1210	5	W	X	X	X			
7 TW4-02_03092016	3/9/2016	1201	5	W	X	X	X			
8 MW-26_03092016	3/9/2016	1044	5	W	X	X	X			
9 TW4-11_03092016	3/9/2016	1153	5	W	X	X	X			
10 TW4-22_03092016	3/9/2016	1018	5	W	X	X	X			
TW4-19_03092016	3/9/2016	1430	5	W	X	X	X			
11 TW4-20_03092016	3/9/2016	1031	5	W	X	X	X			
12 TW4-37_03092016	3/9/2016	1025	5	W	X	X	X			

Due Date: 3/22/16

Laboratory Use Only

Samples Were: *WES*

- Shipped or hand delivered:
- Ambient or Chilled:
- Temperature: *3.6* °C
- Received Broken/Leaking (Improperly Sealed): Y N
- Properly Preserved: Y N
- Checked at bench: Y N
- Received Within Holding Times: Y N

COC Tape Was:

- Present on Outer Package: Y N NA
- Unbroken on Outer Package: Y N NA
- Present on Sample: Y N NA
- Unbroken on Sample: Y N NA

Discrepancies Between Sample Labels and COC Record? Y N

Sample ID	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)
1 TW4-25_03092016	3/9/2016	956	5	W	X	X	X
2 TW4-24_03092016	3/9/2016	1009	5	W	X	X	X
3 TW4-21_03092016	3/9/2016	947	5	W	X	X	X
4 TW4-01_03092016	3/9/2016	1217	5	W	X	X	X
5 TW4-04_03092016	3/9/2016	1225	5	W	X	X	X
6 MW-04_03092016	3/9/2016	1210	5	W	X	X	X
7 TW4-02_03092016	3/9/2016	1201	5	W	X	X	X
8 MW-26_03092016	3/9/2016	1044	5	W	X	X	X
9 TW4-11_03092016	3/9/2016	1153	5	W	X	X	X
10 TW4-22_03092016	3/9/2016	1018	5	W	X	X	X
TW4-19_03092016	3/9/2016	1430	5	W	X	X	X
11 TW4-20_03092016	3/9/2016	1031	5	W	X	X	X
12 TW4-37_03092016	3/9/2016	1025	5	W	X	X	X

Relinquished by: <i>Tanner Holliday</i> Signature	Date: 3/10/2016 Time: 1300	Received by: <i>Elaine Hayes</i> Signature	Date: 3-11-16 Time: 1030	Special Instructions: See the Analytical Scope of Work for Reporting Limits and VOC analyte list.
Print Name: TANNER HOLLIDAY		Print Name: Elaine Hayes		
Relinquished by: _____ Signature	Date: _____ Time: _____	Received by: _____ Signature	Date: _____ Time: _____	
Print Name: _____		Print Name: _____		

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
General Inorganics					
Chloride	A4500-Cl B or A4500-Cl E or E300.0	1 mg/L	28 days	None	≤ 6°C
Sulfate	A4500-SO ₄ E or E300.0	1 mg/L	28 days	None	≤ 6°C
Carbonate as CO ₃	A2320 B	1 mg/L	14 days	None	≤ 6°C
Bicarbonate as HCO ₃	A2320 B	1 mg/L	14 days	None	
Volatile Organic Compounds – Chloroform Program					
Carbon Tetrachloride	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Chloroform	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Dichloromethane (Methylene Chloride)	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Chloromethane	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
SVOCs – Tailings Impoundment Samples Only					
1,2,4-Trichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,2-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,3-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,4-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1-Methylnaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4,5-Trichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4,6-Trichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dimethylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dinitrophenol	SW8270D	<20 ug/L	7/40 days	None	≤ 6°C
2,4-Dinitrotoluene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,6-Dinitrotoluene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Chloronaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Chlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Methylnaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Nitrophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
3&4-Methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
3,3'-Dichlorobenzidine	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
4,6-Dinitro-2-methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C



Garrin Palmer
Energy Fuels Resources, Inc.
6425 South Hwy 191
Blanding, UT 84511
TEL: (303) 389-4134

RE: 1st Quarter Chloroform 2016

Dear Garrin Palmer:

Lab Set ID: 1603479

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

American West Analytical Laboratories received sample(s) on 3/23/2016 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Thank You,

Approved by:

Jose G. Rocha	Digitally signed by Jose G. Rocha
	DN: cn=Jose G. Rocha, o=American West Analytical Laboratories, ou, email=jose@awal-labs.com, c=US Date: 2016.03.30 12:56:39 -06'00'

Laboratory Director or designee



SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc.
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603479
Date Received: 3/23/2016 930h

Contact: Garrin Palmer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1603479-001A	TW4-06R_03212016	3/21/2016 1034h	Aqueous	Anions, E300.0
1603479-001B	TW4-06R_03212016	3/21/2016 1034h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-001C	TW4-06R_03212016	3/21/2016 1034h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-002A	MW-32_03222016	3/22/2016 1230h	Aqueous	Anions, E300.0
1603479-002B	MW-32_03222016	3/22/2016 1230h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-002C	MW-32_03222016	3/22/2016 1230h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-003A	TW4-06_03222016	3/22/2016 851h	Aqueous	Anions, E300.0
1603479-003B	TW4-06_03222016	3/22/2016 851h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-003C	TW4-06_03222016	3/22/2016 851h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-004A	TW4-07_03222016	3/22/2016 858h	Aqueous	Anions, E300.0
1603479-004B	TW4-07_03222016	3/22/2016 858h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-004C	TW4-07_03222016	3/22/2016 858h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-005A	TW4-10_03222016	3/22/2016 906h	Aqueous	Anions, E300.0
1603479-005B	TW4-10_03222016	3/22/2016 906h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-005C	TW4-10_03222016	3/22/2016 906h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-006A	TW4-60_03222016	3/22/2016 1500h	Aqueous	Anions, E300.0
1603479-006B	TW4-60_03222016	3/22/2016 1500h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-006C	TW4-60_03222016	3/22/2016 1500h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-007A	TW4-70_03222016	3/22/2016 1230h	Aqueous	Anions, E300.0
1603479-007B	TW4-70_03222016	3/22/2016 1230h	Aqueous	Nitrite/Nitrate (as N), E353.2
1603479-007C	TW4-70_03222016	3/22/2016 1230h	Aqueous	VOA by GC/MS Method 8260C/5030C
1603479-008A	Trip Blank	3/21/2016	Aqueous	VOA by GC/MS Method 8260C/5030C



Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Garrin Palmer
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603479

3440 South 700 West
 Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 3/23/2016
Date(s) of Collection: 3/21 & 3/22/2016
Sample Condition: Intact
C-O-C Discrepancies: None

Holding Time and Preservation Requirements: The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD:

Method Blanks (MB): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Samples (LCS): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicates (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1603400-021B	Nitrate/Nitrite	MS/MSD	Sample matrix interference
1603479-001B	Nitrate/Nitrite	MS/MSD	Sample matrix interference

Corrective Action: None required.



Volatile Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Garrin Palmer
Project: 1st Quarter Chloroform 2016
Lab Set ID: 1603479

3440 South 700 West
Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 3/23/2016
Date(s) of Collection: 3/21 & 3/22/2016
Sample Condition: Intact
C-O-C Discrepancies: None
Method: SW-846 8260C/5030C
Analysis: Volatile Organic Compounds

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

General Set Comments: Multiple target analytes were observed above reporting limits.

Holding Time and Preservation Requirements: All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

Kyle F. Gross
Laboratory Director

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Jose Rocha
QA Officer

Batch QC Requirements: MB, LCS, MS, MSD, RPD, and Surrogates:

Method Blanks (MBs): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Sample (LCSs): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicate (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.



3440 South 700 West
Salt Lake City, UT 84119

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603479
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-R88598 Date Analyzed: 03/25/2016 806h													
Test Code: 300.0-W													
Chloride	4.80	mg/L	E300.0	0.00516	0.100	5.000	0	95.9	90 - 110				
Lab Sample ID: LCS-R88554 Date Analyzed: 03/24/2016 1659h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.09	mg/L	E353.2	0.00833	0.0100	1.000	0	109	90 - 110				



3440 South 700 West
 Salt Lake City, UT 84119

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Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603479
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-R88598	Date Analyzed: 03/25/2016 749h												
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00516	0.100								
Lab Sample ID: MB-R88554	Date Analyzed: 03/24/2016 1658h												
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								



3440 South 700 West
Salt Lake City, UT 84119

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603479
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1603479-002AMS Date Analyzed: 03/25/2016 857h													
Test Code: 300.0-W													
Chloride	134	mg/L	E300.0	0.103	2.00	100.0	36.7	96.9	90 - 110				
Lab Sample ID: 1603400-021BMS Date Analyzed: 03/24/2016 1701h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	25.9	mg/L	E353.2	0.167	0.200	20.00	2.92	115	90 - 110				'
Lab Sample ID: 1603479-001BMS Date Analyzed: 03/24/2016 1720h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.5	mg/L	E353.2	0.0833	0.100	10.00	0	115	90 - 110				'

' - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1603479
Project: 1st Quarter Chloroform 2016

Contact: Garrin Palmer
Dept: WC
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1603479-002AMSD Date Analyzed: 03/25/2016 914h													
Test Code: 300.0-W													
Chloride	133	mg/L	E300.0	0.103	2.00	100.0	36.7	96.7	90 - 110	134	0.161	20	
Lab Sample ID: 1603400-021BMSD Date Analyzed: 03/24/2016 1702h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	25.2	mg/L	E353.2	0.167	0.200	20.00	2.92	111	90 - 110	25.9	2.86	10	1
Lab Sample ID: 1603479-001BMSD Date Analyzed: 03/24/2016 1721h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.5	mg/L	E353.2	0.0833	0.100	10.00	0	115	90 - 110	11.5	0.261	10	1

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

WORK ORDER Summary

Work Order: **1603479** Page 1 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 4/1/2016

Client ID: DEN100

Contact: Garrin Palmer

Project: 1st Quarter Chloroform 2016

QC Level: III

WO Type: Project

Comments: PA Rush. QC 3 (Summary/No chromatograms). RL of 1 ppm for Chloride and VOC and 0.1 ppm for NO2/NO3 - Run NO2/NO3 at a 10X dilution. Expected levels provided by client - see Jenn. J-flag what we can't meet. EIM Locus and EDD-Denison. Email Group.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1603479-001A	TW4-06R_03212016	3/21/2016 1034h	3/23/2016 0930h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603479-001B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603479-001C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603479-002A	MW-32_03222016	3/22/2016 1230h	3/23/2016 0930h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603479-002B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603479-002C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603479-003A	TW4-06_03222016	3/22/2016 0851h	3/23/2016 0930h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603479-003B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603479-003C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603479-004A	TW4-07_03222016	3/22/2016 0858h	3/23/2016 0930h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603479-004B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603479-004C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3
1603479-005A	TW4-10_03222016	3/22/2016 0906h	3/23/2016 0930h	300.0-W <i>1 SEL Analytes: CL</i>	Aqueous	df - wc		1
1603479-005B				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3		
1603479-005C				8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4</i>		VOCFridge		3

WORK ORDER Summary

Work Order: **1603479**

Page 2 of 2

Client: Energy Fuels Resources, Inc.

Due Date: 4/1/2016

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel Storage	
1603479-006A	TW4-60_03222016	3/22/2016 1500h	3/23/2016 0930h	300.0-W	Aqueous	df - wc	1
				1 SEL Analytes: CL			
1603479-006B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603479-006C				8260-W-DEN100		VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603479-007A	TW4-70_03222016	3/22/2016 1230h	3/23/2016 0930h	300.0-W	Aqueous	df - wc	1
				1 SEL Analytes: CL			
1603479-007B				NO2/NO3-W-353.2			df - no2/no3
				1 SEL Analytes: NO3NO2N			
1603479-007C				8260-W-DEN100		VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			
1603479-008A	Trip Blank	3/21/2016	3/23/2016 0930h	8260-W-DEN100	Aqueous	VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4			



American West Analytical Laboratories

463 W. 3600 S. Salt Lake City, UT 84115
 Phone # (801) 263-8686 Toll Free # (888) 263-8686
 Fax # (801) 263-8687 Email awal@awal-labs.com
 www.awal-labs.com

CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

1603479
 AWAL Lab Sample Set #
 Page 1 of 1

QC Level:		Turn Around Time:		Unless other arrangements have been made, signed reports will be emailed by 5:00 pm on the day they are due.		Due Date:	
3		Standard				4/16	
X Include EDD: LOCUS UPLOAD EXCEL Field Filtered For:		For Compliance With:		Known Hazards & Sample Comments		Laboratory Use Only	
		<input type="checkbox"/> NELAP <input type="checkbox"/> RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/> ELAP / A2LA <input type="checkbox"/> NLLAP <input type="checkbox"/> Non-Compliance <input type="checkbox"/> Other:				Samples Were: 1 Shipped or hand delivered 2 Ambient or Chilled 3 Temperature 28 °C 4 Received Broken/Leaking (Improperly Sealed) Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Checked at bench Y <input type="checkbox"/> N <input type="checkbox"/> 5 Properly Preserved Y <input checked="" type="checkbox"/> N <input type="checkbox"/> 6 Received Within Holding Times Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)			
5	W	X	X	X			
5	W	X	X	X			
5	W	X	X	X			
5	W	X	X	X			
5	W	X	X	X			
5	W	X	X	X			
5	W	X	X	X			
3	W			X			
1	W						

Client: **Energy Fuels Resources, Inc.**
 Address: **6425 S. Hwy. 191**
Blanding, UT 84511
 Contact: **Garrin Palmer**
 Phone #: **(435) 678-2221** Cell #:
gpalmer@energyfuels.com; KWeinl@energyfuels.com;
dturk@energyfuels.com
 Project Name: **1ST QUARTER CHLOROFORM 2016**
 Project #:
 PO #:
 Sampler Name: **TANNER HOLLIDAY**

Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)
1 TW4-06R_03212016	3/21/2016	1034	5	W	X	X	X
2 MW-32_03222016	3/22/2016	1230	5	W	X	X	X
3 TW4-06_03222016	3/22/2016	851	5	W	X	X	X
4 TW4-07_03222016	3/22/2016	858	5	W	X	X	X
5 TW4-10_03222016	3/22/2016	906	5	W	X	X	X
6 TW4-60_03222016	3/22/2016	1500	5	W	X	X	X
7 TW4-70_03222016	3/22/2016	1230	5	W	X	X	X
8 TRIP BLANK	3/21/2016		3	W			X
9 TEMP BLANK	3/22/2016		1	W			
10							
11							
12							

COC Tape Was:
 1 Present on Outer Package
 Y N NA
 2 Unbroken on Outer Package
 Y N NA
 3 Present on Sample
 Y N NA
 4 Unbroken on Sample
 Y N NA

Discrepancies Between Sample Labels and COC Record?
 Y N

Relinquished by: Signature <i>Garrin Palmer</i>	Date: 3/23/2016	Received by: Signature <i>Elan Haywood</i>	Date: 3/23/16
Print Name: GARRIN PALMER	Time: 0930	Print Name: Elan Haywood	Time: 930
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name:	Time:	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name:	Time:	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name:	Time:	Print Name:	Time:

Special Instructions:
 See the Analytical Scope of Work for Reporting Limits and VOC analyte list.

Contaminant	Analytical Methods to be Used	Reporting Limit	Maximum Holding Times	Sample Preservation Requirements	Sample Temperature Requirements
General Inorganics					
Chloride	A4500-Cl B or A4500-Cl E or E300.0	1 mg/L	28 days	None	≤ 6°C
Sulfate	A4500-SO ₄ E or E300.0	1 mg/L	28 days	None	≤ 6°C
Carbonate as CO ₃	A2320 B	1 mg/L	14 days	None	≤ 6°C
Bicarbonate as HCO ₃	A2320 B	1 mg/L	14 days	None	
Volatile Organic Compounds – Chloroform Program					
Carbon Tetrachloride	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Chloroform	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Dichloromethane (Methylene Chloride)	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
Chloromethane	SW8260B or SW8260C	1.0 µg/L	14 days	HCl to pH<2	≤ 6°C
SVOCs – Tailings Impoundment Samples Only					
1,2,4-Trichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,2-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,3-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1,4-Dichlorobenzene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
1-Methylnaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4,5-Trichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4,6-Trichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dichlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dimethylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,4-Dinitrophenol	SW8270D	<20 ug/L	7/40 days	None	≤ 6°C
2,4-Dinitrotoluene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2,6-Dinitrotoluene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Chloronaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Chlorophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Methylnaphthalene	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
2-Nitrophenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
3&4-Methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
3,3'-Dichlorobenzidine	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C
4,6-Dinitro-2-methylphenol	SW8270D	<10 ug/L	7/40 days	None	≤ 6°C

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	NA		--		2134		NC	9.28		NC	14.03		NC	302		NC	0.4		NC
Piezometer 2	NA		--		848		NC	6.81		NC	13.70		NC	386		NC	0.0		NC
Piezometer 3	NA		--		2293		NC	12.06		NC	13.96		NC	234		NC	0.0		NC
TWN-1	32.81	65.62	80.00	OK	864	861	0.35	6.97	6.99	0.29	14.73	14.74	0.07	443	442	0.23	0.0	0.0	0.00
TWN-2	41.16	Continuously Pumped Well			3266		NC	5.99		NC	13.92		NC	421		NC	0.0		NC
TWN-3	37.14	74.28	65.00	Pumped Dry	2233	2239	0.27	6.97	6.94	0.43	13.59	13.65	0.44	NM		NC	NM		NC
TWN-4	46.10	92.20	110.00	OK	1061	1060	0.09	6.60	6.63	0.45	14.61	14.62	0.07	413	413	0.00	0.0	0.0	0.00
TWN-7	12.95	25.90	20.00	Pumped Dry	1354	1301	3.99	7.34	7.27	0.96	14.39	14.35	0.28	NM		NC	NM		NC
TWN-18	55.34	110.68	130.00	OK	2295	2295	0.00	6.64	6.64	0.00	14.21	14.20	0.07	501	501	0.00	0.3	0.3	0.00
TW4-22	35.765	Continuously pumped well			5570		NC	7.05		NC	15.32		NC	317		NC	0.0		NC
TW4-24	31.86	Continuously pumped well			7462		NC	6.92		NC	15.04		NC	334		NC	0.0		NC
TW4-25	44.79	Continuously pumped well			2739		NC	7.14		NC	14.63		NC	314		NC	0.0		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	02/23/2016	02/25/2016	2	28	OK
PIEZ-01	Nitrate/Nitrite (as N)	02/23/2016	03/03/2016	9	28	OK
PIEZ-02	Chloride	02/23/2016	02/25/2016	2	28	OK
PIEZ-02	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	28	OK
PIEZ-03	Chloride	02/23/2016	02/25/2016	2	28	OK
PIEZ-03	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	28	OK
TWN-01	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-01	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	28	OK
TWN-02	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-02	Nitrate/Nitrite (as N)	02/23/2016	03/03/2016	9	28	OK
TWN-03	Chloride	02/24/2016	02/25/2016	1	28	OK
TWN-03	Nitrate/Nitrite (as N)	02/24/2016	03/05/2016	10	28	OK
TWN-04	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-04	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	28	OK
TWN-07	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-07	Nitrate/Nitrite (as N)	02/23/2016	03/07/2016	13	28	OK
TWN-18	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-18	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	28	OK
TWN-18R	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-18R	Nitrate/Nitrite (as N)	02/23/2016	03/07/2016	13	28	OK
TW4-22	Chloride	03/09/2016	03/16/2016	7	28	OK
TW4-22	Nitrate/Nitrite (as N)	03/09/2016	03/21/2016	12	28	OK
TW4-24	Chloride	03/09/2016	03/16/2016	7	28	OK
TW4-24	Nitrate/Nitrite (as N)	03/09/2016	03/23/2016	14	28	OK
TW4-25	Chloride	03/09/2016	03/16/2016	7	28	OK
TW4-25	Nitrate/Nitrite (as N)	03/09/2016	03/12/2016	3	28	OK
TW4-60	Chloride	03/22/2016	03/25/2016	3	28	OK
TW4-60	Nitrate/Nitrite (as N)	03/22/2016	03/24/2016	2	28	OK
TWN-60	Chloride	02/24/2016	02/25/2016	1	28	OK
TWN-60	Nitrate/Nitrite (as N)	02/24/2016	03/05/2016	10	28	OK
TWN-65	Chloride	02/23/2016	02/25/2016	2	28	OK
TWN-65	Nitrate/Nitrite (as N)	02/23/2016	03/05/2016	11	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	Dilution Factor
PIEZ-01	Chloride	10	mg/L		1	mg/L	OK	10
PIEZ-01	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
PIEZ-02	Chloride	10	mg/L		1	mg/L	OK	10
PIEZ-02	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
PIEZ-03	Chloride	10	mg/L		1	mg/L	OK	10
PIEZ-03	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-01	Chloride	10	mg/L		1	mg/L	OK	10
TWN-01	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-02	Chloride	10	mg/L		1	mg/L	OK	10
TWN-02	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK	10
TWN-03	Chloride	100	mg/L		1	mg/L	OK	100
TWN-03	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-04	Chloride	10	mg/L		1	mg/L	OK	10
TWN-04	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-07	Chloride	1	mg/L		1	mg/L	OK	1
TWN-07	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-18	Chloride	10	mg/L		1	mg/L	OK	10
TWN-18	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TWN-18R	Chloride	1	mg/L	U	1	mg/L	OK	1
TWN-18R	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK	1
TW4-22	Chloride	100	mg/L		1	mg/L	OK	100
TW4-22	Nitrate/Nitrite (as N)	0.5	mg/L		0.1	mg/L	OK	5
TW4-24	Chloride	100	mg/L		1	mg/L	OK	100
TW4-24	Nitrate/Nitrite (as N)	0.2	mg/L		0.1	mg/L	OK	2
TW4-25	Chloride	10	mg/L		1	mg/L	OK	10
TW4-25	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1
TW4-60	Chloride	1	mg/L	U	1	mg/L	OK	1
TW4-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK	1
TWN-60	Chloride	1.0	mg/L	U	1	mg/L	OK	1
TWN-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK	1
TWN-65	Chloride	10	mg/L		1	mg/L	OK	10
TWN-65	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK	1

U = Value was reported by the laboratory as nondetect.

H-5 QA/QC Evaluation for Sample Duplicates

Constituent	TWN-01	TWN-65	%RPD
Chloride	30.3	30.3	0.00
Nitrogen	1.51	1.67	10.06

ND - non-detect

NC - not calculated. The RPD was not calculated, because the duplicate sample was reported as non-detect.

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
1602419	1602428-001	N/A	Nitrate	110	121	90-110	6.45
1602419	1602429-001	N/A	Nitrate	96.6	134	90-110	26.2

* - 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

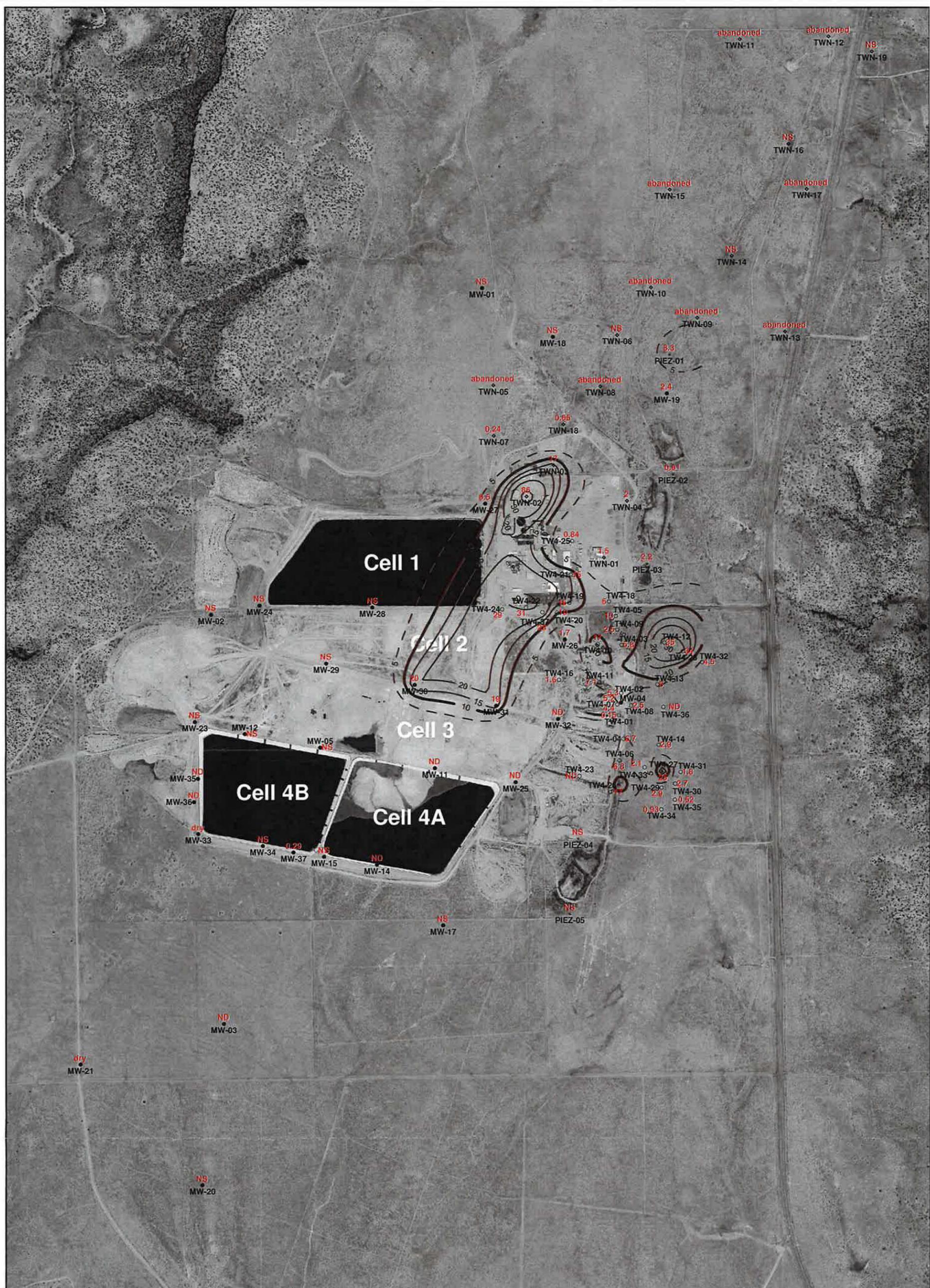
Sample Batch	Wells in Batch	Temperature
1602419	Piezometer 1, Piezometer 2, Piezometer 3, TWN-1, TWN-2, TWN-3, TWN-4, TWN-7, TWN-07R, TWN-18, TWN-60, TWN-65	1.9 °C
1603259	TW4-22, TW4-24, TW4-25	3.6 °C
1603479	TW4-60	2.8 °C

H-8 Rinsate Evaluation

All rinsate and DI blank samples were non-detect for the quarter.

Tab I

Kriged Current Quarter Isoconcentration Maps

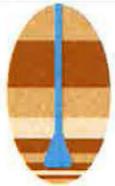


EXPLANATION

NS = not sampled; ND = not detected

- 10 kriged nitrate isocon and label
- MW-32 perched monitoring well showing concentration in mg/L
- ND
- TW4-7 4.4 temporary perched monitoring well showing concentration in mg/L
- TWN-1 1.5 temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 8.3 perched piezometer showing concentration in mg/L

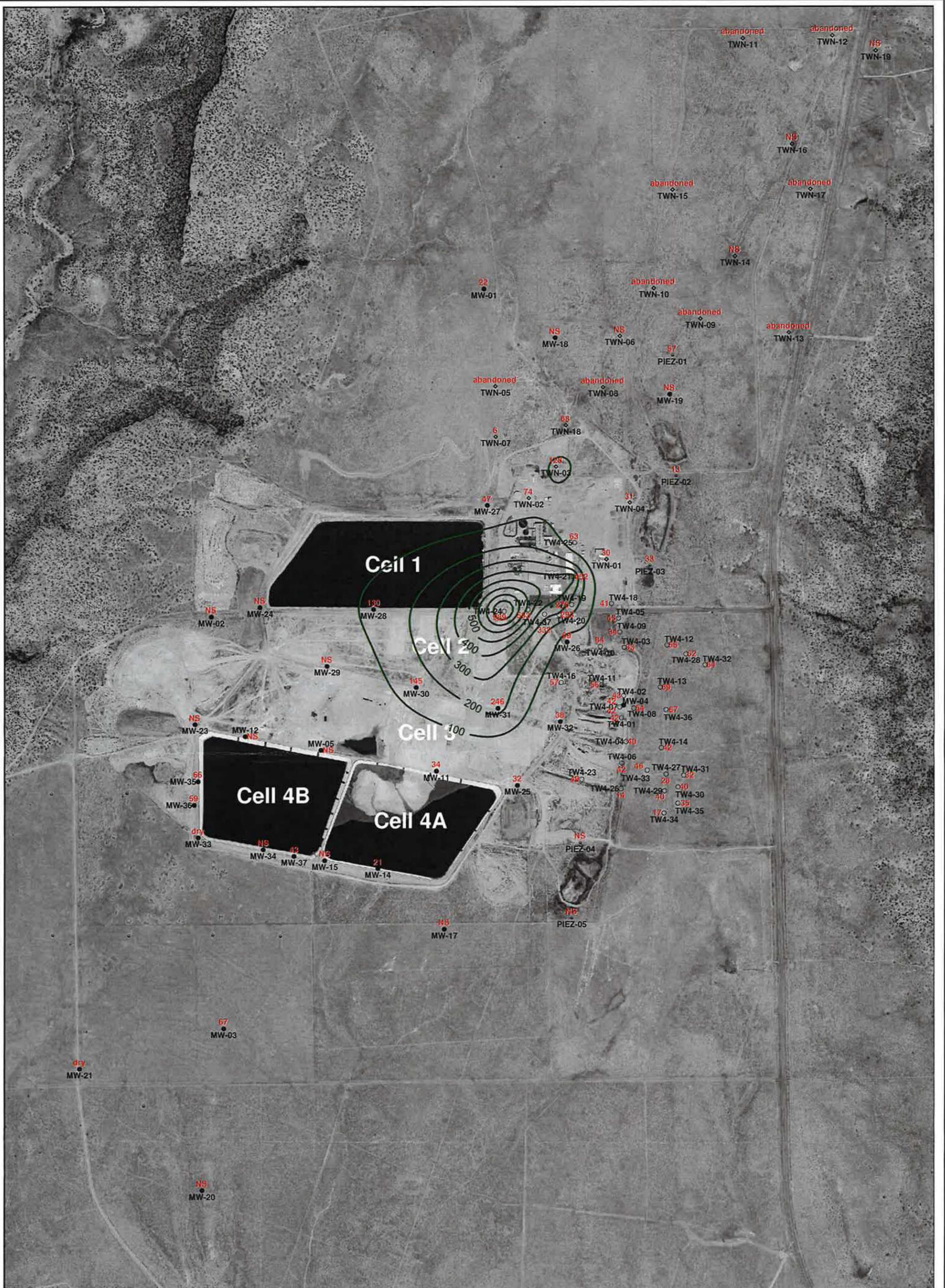
NOTE: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21, and TW4-37 are chloroform pumping wells; TW4-22, TW4-24, TW4-25, and TWN-2 are nitrate pumping wells



**HYDRO
GEO
CHEM, INC.**

**KRIGED 1st QUARTER, 2016 NITRATE (mg/L)
(NITRATE + NITRITE AS N)
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/May16/nitrate/Unt0316.srf	I - 1



EXPLANATION

NS = not sampled; ND = not detected

100 kriged chloride isocon and label

MW-32 ● 38 perched monitoring well showing concentration in mg/L

TW-7 ○ 42 temporary perched monitoring well showing concentration in mg/L

TWN-1 ◇ 30 temporary perched nitrate monitoring well showing concentration in mg/L

PIEZ-1 ● 57 perched piezometer showing concentration in mg/L



1 mile

NOTE: MW-4, MW-26, TW-1, TW-2, TW-4, TW-11, TW-19, TW-20, TW-21, and TW-37 are chloroform pumping wells; TW-22, TW-24, TW-25, and TW-2 are nitrate pumping wells



**HYDRO
GEO
CHEM, INC.**

**KRIGED 1st QUARTER, 2016 CHLORIDE (mg/L)
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/May16/chloride/Ucl0316.srf	I - 2

Tab J

Analyte Concentrations Over Time

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
10/8/2014	1.46	27.6
2/18/2015	1.37	27.8
5/13/2015	0.65	29.2
8/25/2015	0.324	33.2
10/13/2015	1.35	27.7
2/23/2016	1.51	30.3

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
10/8/2014	70.6	81
2/18/2015	48.6	84.8
5/12/2015	52.8	82.6
8/25/2015	49.7	87.8
10/14/2015	44.9	74.9
2/23/2016	86.3	73.9

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
10/9/2014	19.1	153
2/19/2015	19.4	164
5/14/2015	17.2	141
8/26/2015	16.2	156
10/14/2015	16.3	129
2/24/2016	16.8	128

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	2.0	28
10/8/2014	1.44	30.7
2/18/2015	1.48	31.5
5/13/2015	0.733	31.9
8/25/2015	0.974	35.2
10/13/2015	1.58	28.4
2/23/2016	2.02	30.7

TWN-7

Date	Nitrate (mg/l)	Chloride (mg/l)
8/25/2009	ND	11.00
9/21/2009	ND	7.00
11/10/2009	0.1	7.00
3/17/2010	0.8	6.00
5/28/2010	1.2	6.00
7/14/2010	1.6	7.00
12/10/2010	1	4.00
1/27/2011	1.3	6.00
4/21/2011	1.7	6.00
7/29/2011	0.7	5.00
10/19/2011	2.2	6.00
1/11/2012	2.3	5.00
4/20/2012	1.2	6.00
7/26/2012	0.9	6.00
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	6.00
10/9/2014	0.968	5.93
2/19/2015	1.04	5.58
5/14/2015	0.779	6.18
8/26/2015	0.348	6.12
10/14/2015	0.672	5.84
2/24//16	0.240	6.06

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
10/8/2014	1.47	74.8
2/18/2015	1.00	73.3
5/13/2015	1.35	76.6
8/25/2015	0.35	81.3
10/13/2015	0.668	69
2/23/2016	0.648	67.6

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
10/8/2014	5.75	57.6
2/18/2015	6.41	55.9
5/12/2015	5.95	57.5
8/26/2015	4.96	64.2
10/14/2015	6.17	54.4
2/23/2016	8.31	56.5

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
10/8/2014	0.755	12.2
2/18/2015	0.749	12.6
5/12/2015	0.646	13.1
8/26/2015	0.662	15.5
10/14/2015	0.692	13.3
2/23/2016	0.615	13.4

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
10/8/2014	1.74	28.3
2/18/2015	1.82	27.1
5/12/2015	1.75	30.2
8/26/2015	1.87	54.8
10/14/2015	2.24	39.5
2/23/2016	2.24	32.9

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
10/21/2014	54.9	596
3/9/2015	69.2	675
6/8/2015	47.1	390
8/31/2015	64.7	557
10/19/2015	56.1	567
3/9/2016	31.1	583

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
10/21/2014	35.7	1050
3/9/2015	34.6	944
6/8/2015	31.8	1290
8/31/2015	25.3	788
10/19/2015	29.6	909
3/9/2016	29.1	989

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
10/21/2014	1.03	58.1
3/9/2015	14.4	310
6/8/2015	1.14	58.3
8/31/2015	1.63	69.2
10/21/2015	1.78	93.7
3/9/2016	0.837	62.7

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

MW-30

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
4/10/2012	17.0	11/13/2012	114
5/2/2012	16.0	12/26/2012	122
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	4/23/2014	154
10/22/2013	19.7	5/14/2014	128
11/20/2013	19.5	6/3/2014	128
12/18/2013	20.7	7/29/2014	140
1/8/2014	20.3	8/20/2014	139
2/25/2014	18.4	9/9/2014	136
3/11/2014	21.3	10/7/2014	136
4/23/2014	18.3	11/10/2014	154
5/14/2014	17.9	12/10/2014	138
6/3/2014	19.4	1/21/2015	144
7/29/2014	15.6	2/4/2015	136
8/20/2014	13.8	3/3/2015	132
9/9/2014	16.8	4/8/2015	142
10/7/2014	11.0	5/12/2015	145
11/10/2014	16.2	6/24/2015	142
12/10/2014	17.1	7/7/2015	145
1/21/2015	19.5	8/11/2015	165
2/4/2015	14.9	9/15/2015	165
3/3/2015	17.3	11/11/2015	140

MW-30

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
4/8/2015	17.0	2/10/2016	145
5/12/2015	16.1		
6/24/2015	15.8		
7/7/2015	15.3		
8/11/2015	17.9		
9/15/2015	17.3		
11/11/2015	16.3		
2/10/2016	20.0		

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

MW-31

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
4/9/2012	21.0	11/6/2012	189
5/2/2012	20.0	12/18/2012	170
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	4/28/2014	230
10/23/2013	21.2	5/13/2014	200
11/18/2013	23.9	6/2/2014	173
12/17/2013	24.2	7/28/2014	200
1/7/2014	24.0	8/18/2014	210
2/17/2014	20.6	9/3/2014	210
3/10/2014	26.2	10/6/2014	205
4/28/2014	19.1	11/4/2014	204
5/13/2014	23.3	12/9/2014	215
6/2/2014	23.1	1/20/2015	226
7/28/2014	19.0	2/2/2015	211
8/18/2014	15.2	3/3/2015	209
9/3/2014	18.9	4/7/2015	211
10/6/2014	15.9	5/11/2015	225
11/4/2014	20.9	6/23/2015	228
12/9/2014	17.0	7/6/2015	222
1/20/2015	20.9	8/10/2015	264
2/2/2015	18.7	9/15/2015	231
3/3/2015	19.8	11/9/2015	215

MW-31

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
4/7/2015	19.0	2/15/2016	246
5/11/2015	18.4		
6/23/2015	18.0		
7/6/2015	18.8		
8/10/2015	19.9		
9/15/2015	18.9		
11/9/2015	18.4		
2/15/2016	18.8		

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.

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	10/21/2014	130
2/17/2011	17.00	3/9/2015	238
6/7/2011	12.00	6/8/2015	180
8/17/2011	3.00	8/31/2015	326
11/17/2011	5.00	10/19/2015	252
1/23/2012	0.60	3/9/2016	276
6/6/2012	2.40		
9/5/2012	2.50		
10/3/2012	4.10		

TW4-19

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
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		
10/21/2014	4.72		
3/9/2015	8.56		
6/8/2015	0.92		
8/31/2015	11.60		
10/19/2015	10.60		
3/9/2016	15.7		

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	10/29/2014	252
5/22/2014	11.5	3/12/2015	255
8/27/2014	7.1	6/8/2015	494
10/29/2014	10.0	8/31/2015	499

TW4-21

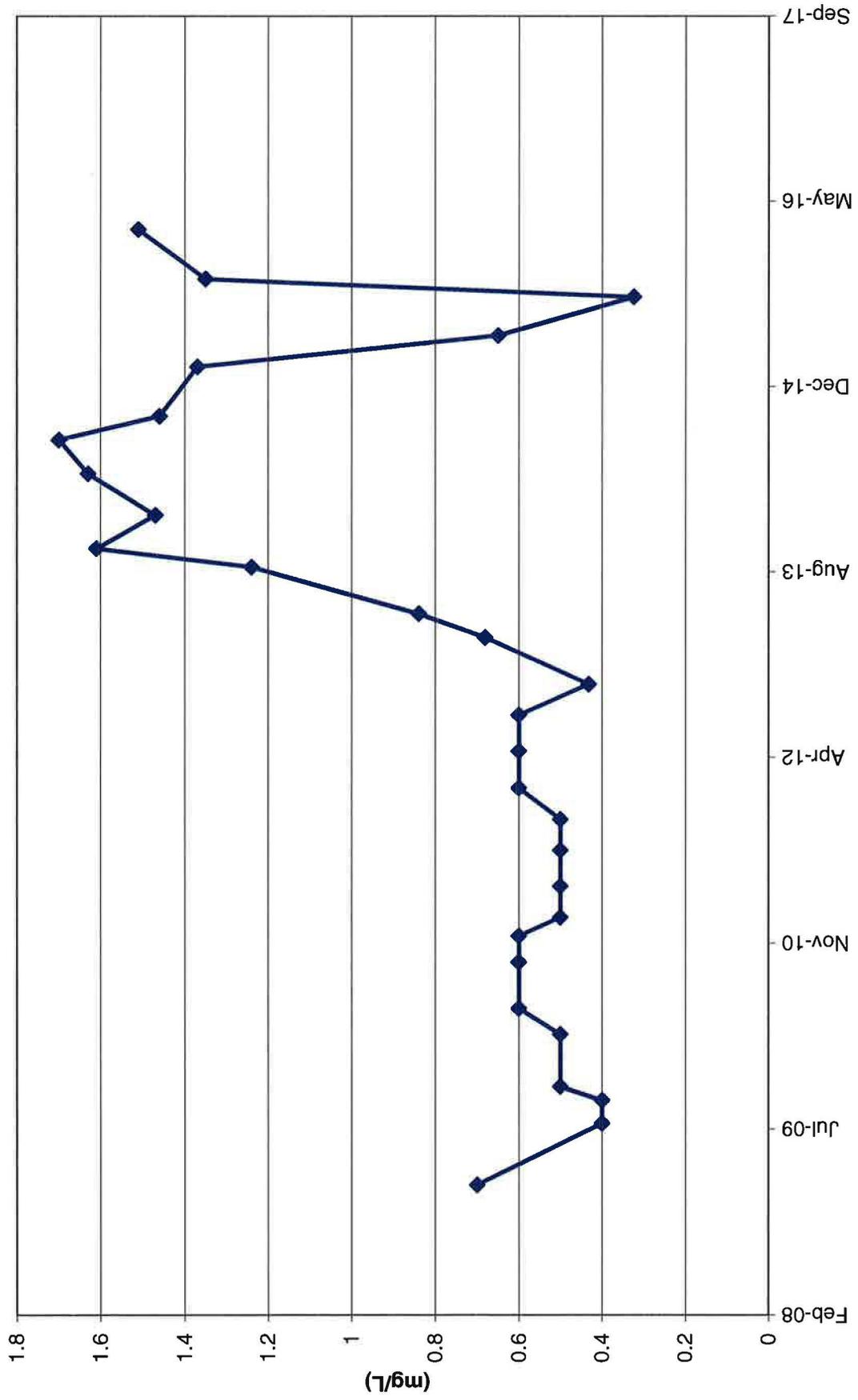
Date	Nitrate (mg/l)	Date	Chloride (mg/l)
3/12/2015	10.9	10/19/2015	413
6/8/2015	13.1	3/9/2016	452
8/31/2015	14.7		
10/19/2015	14.3		
3/9/2016	14.6		

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.

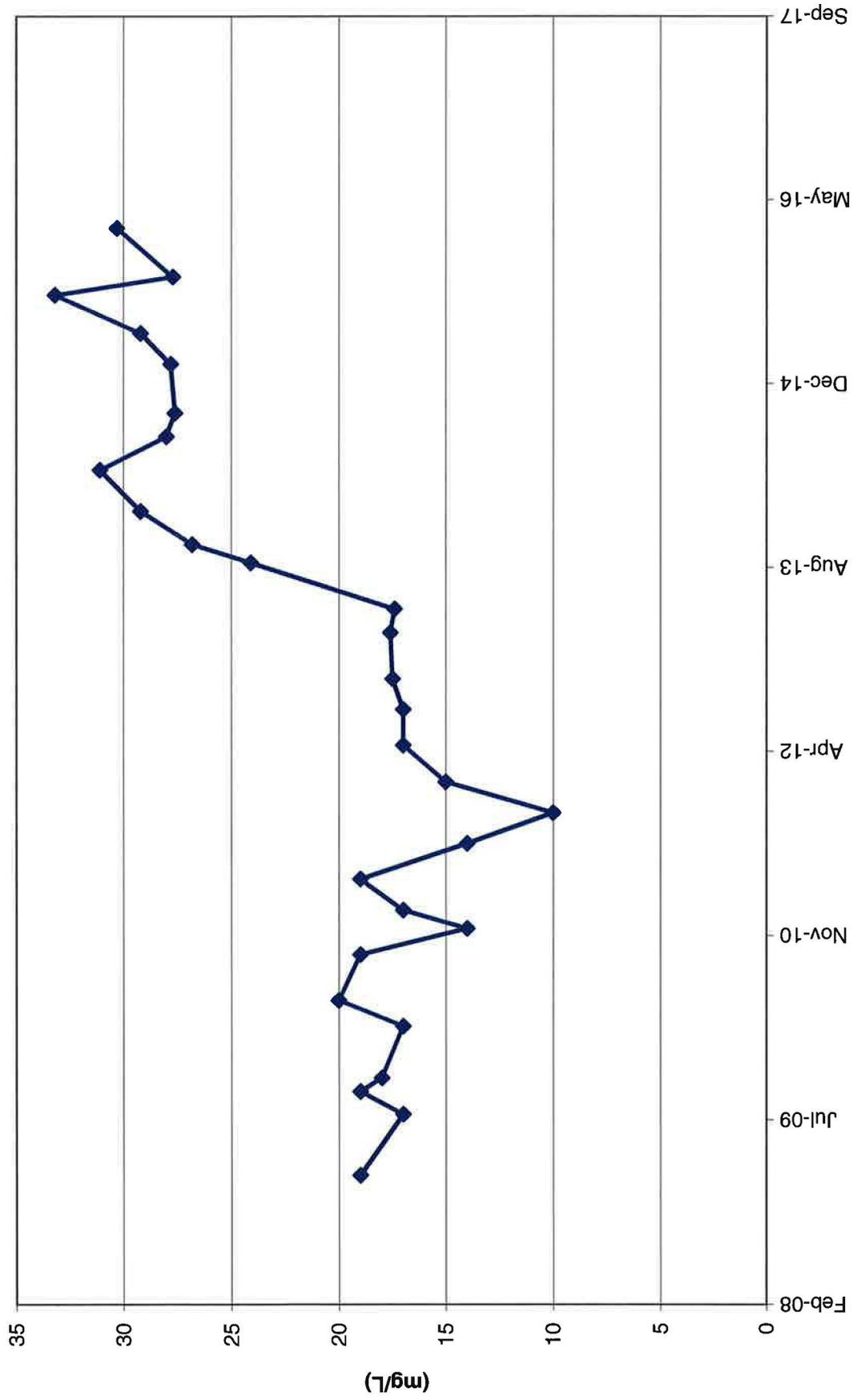
Tab K

Concentration Trend Graphs

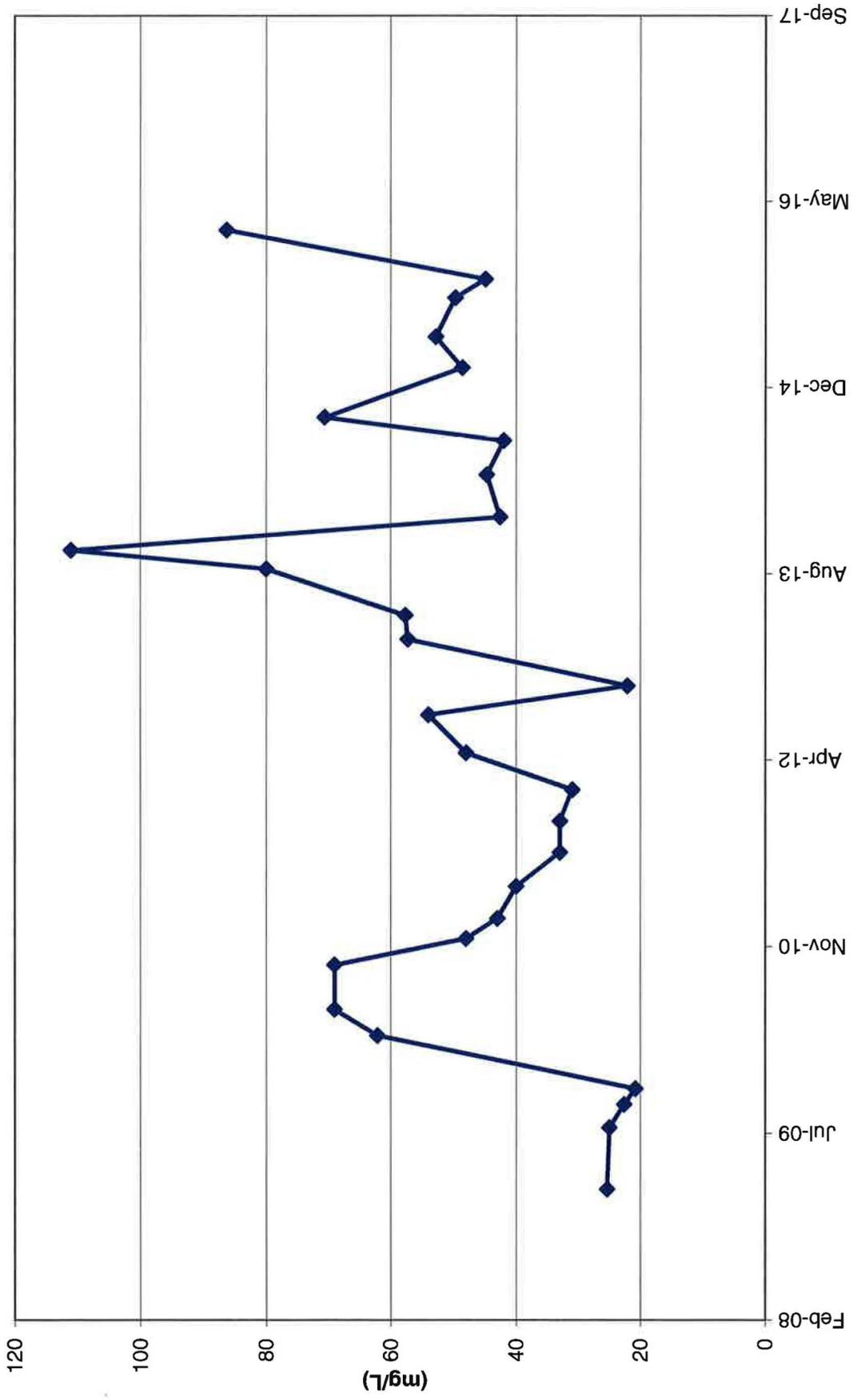
TWN-1 Nitrate Concentrations



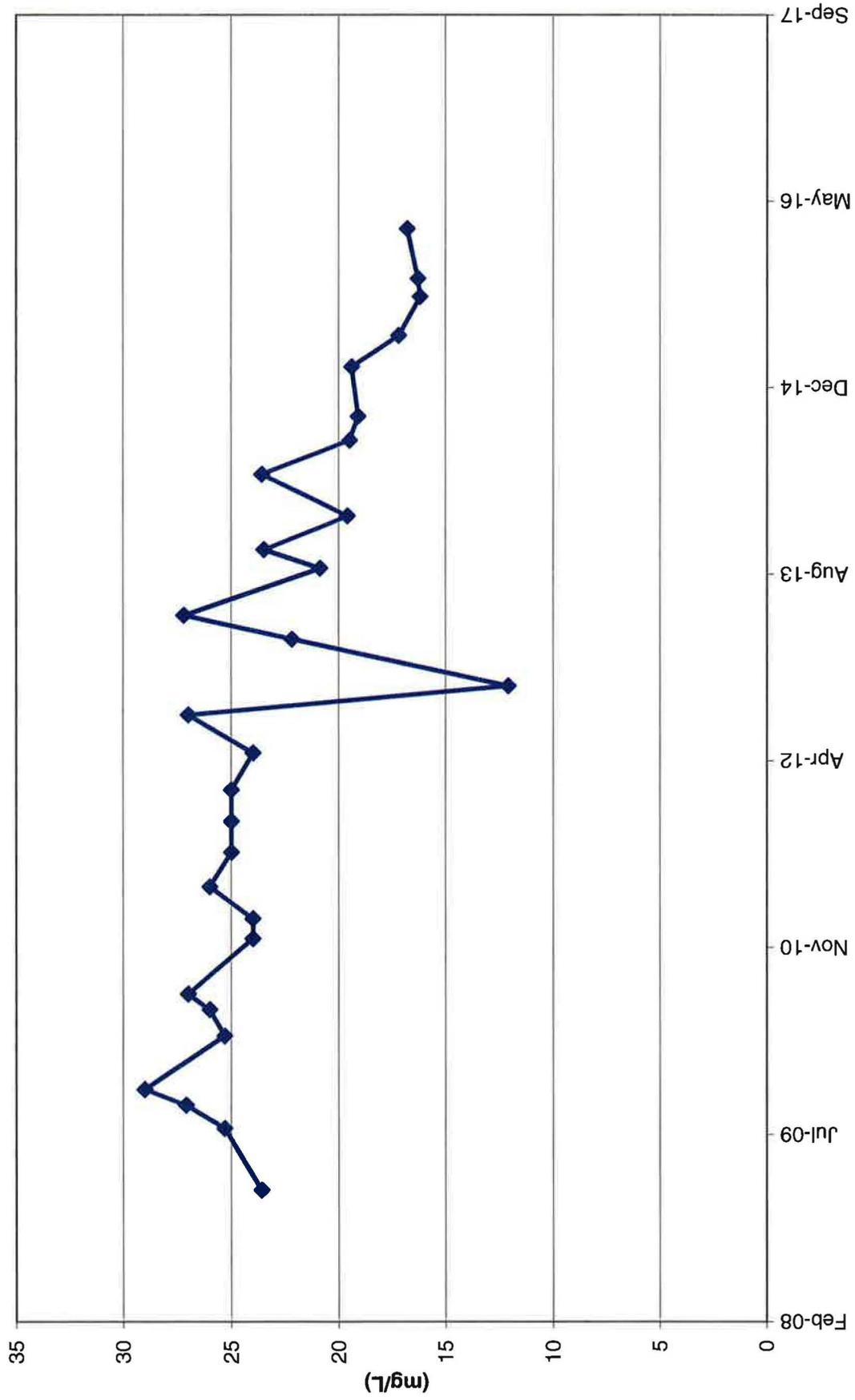
TWN-1 Chloride Concentrations



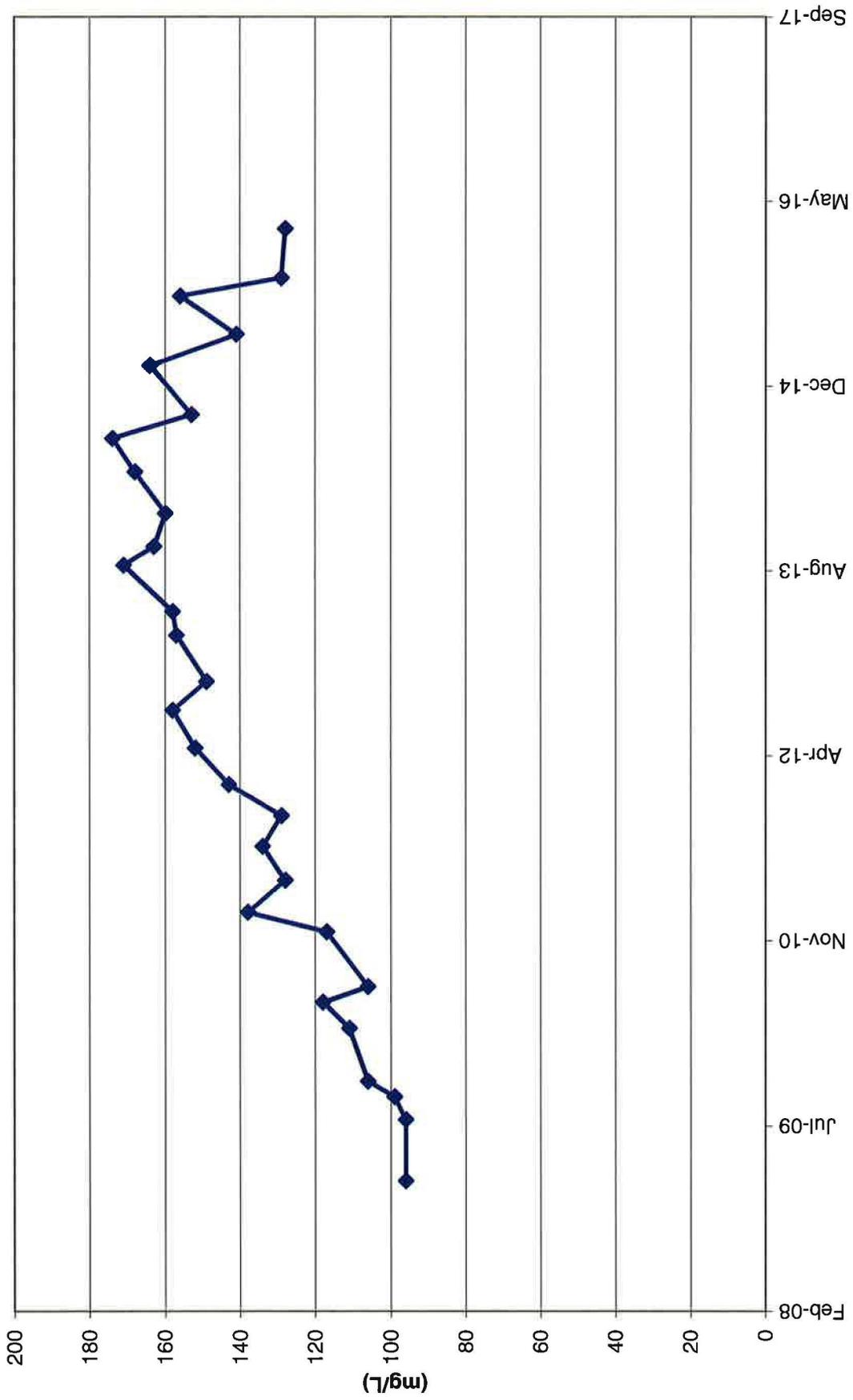
TWN-2 Nitrate Concentrations



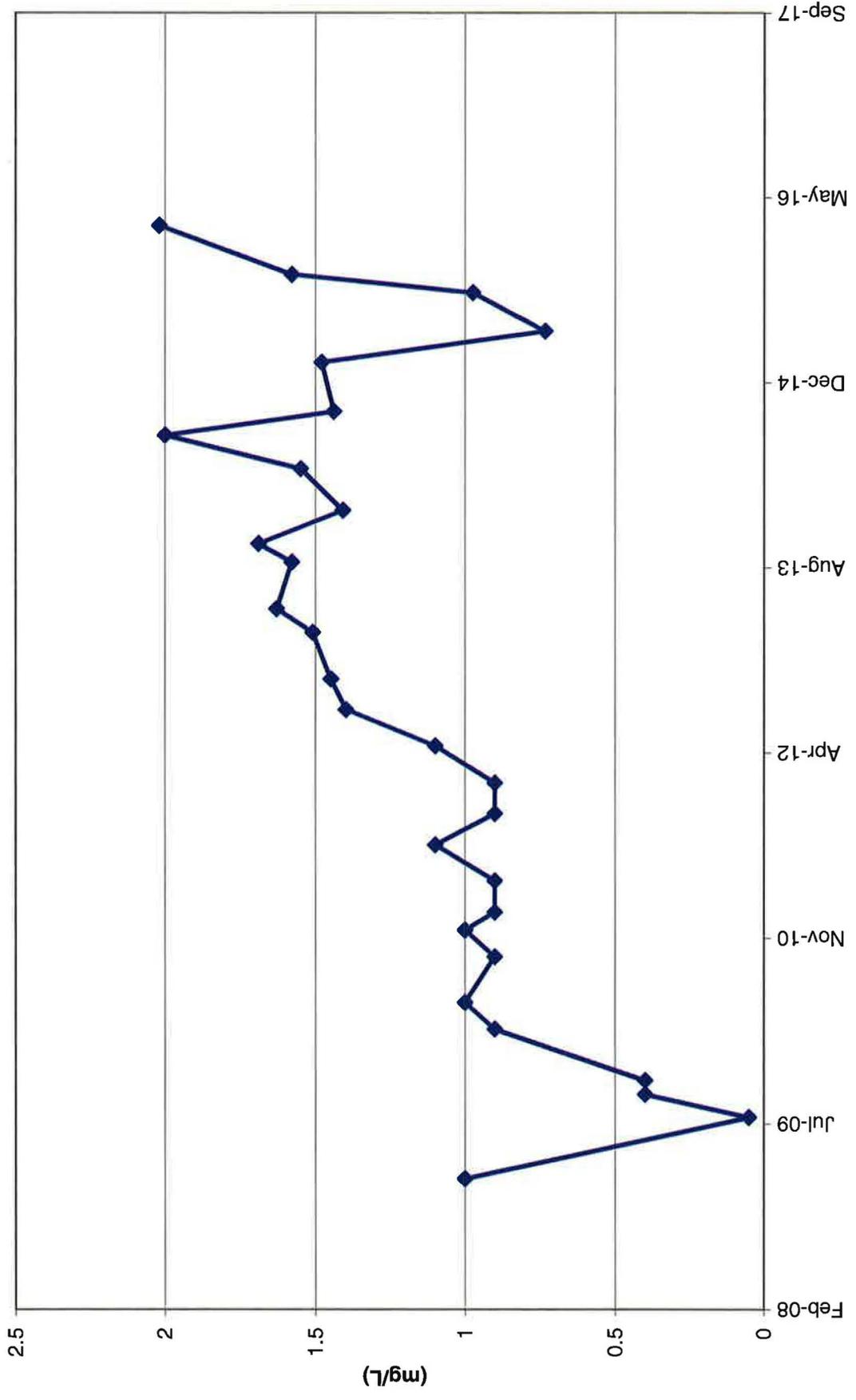
TWN-3 Nitrate Concentrations



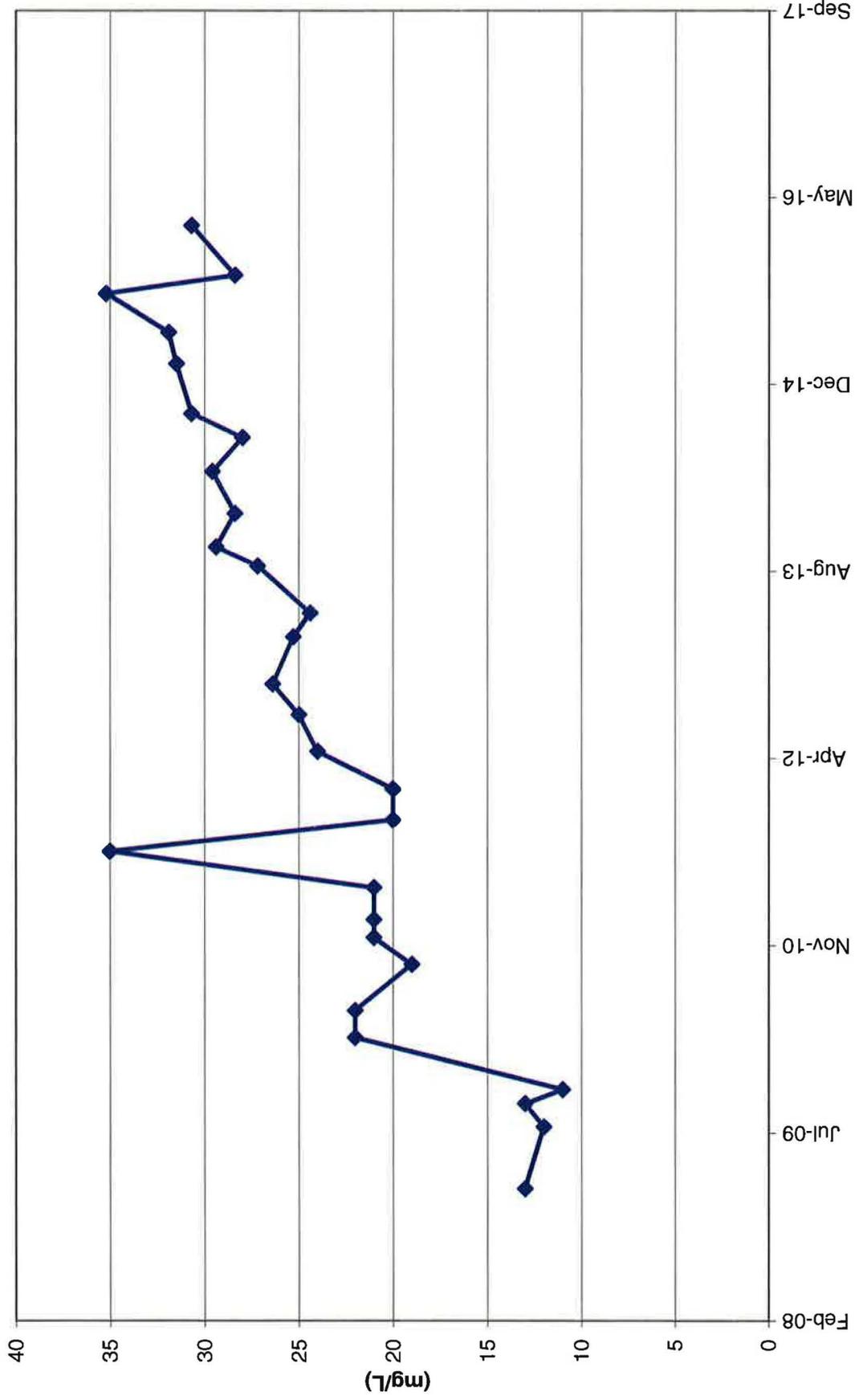
TWN-3 Chloride Concentrations



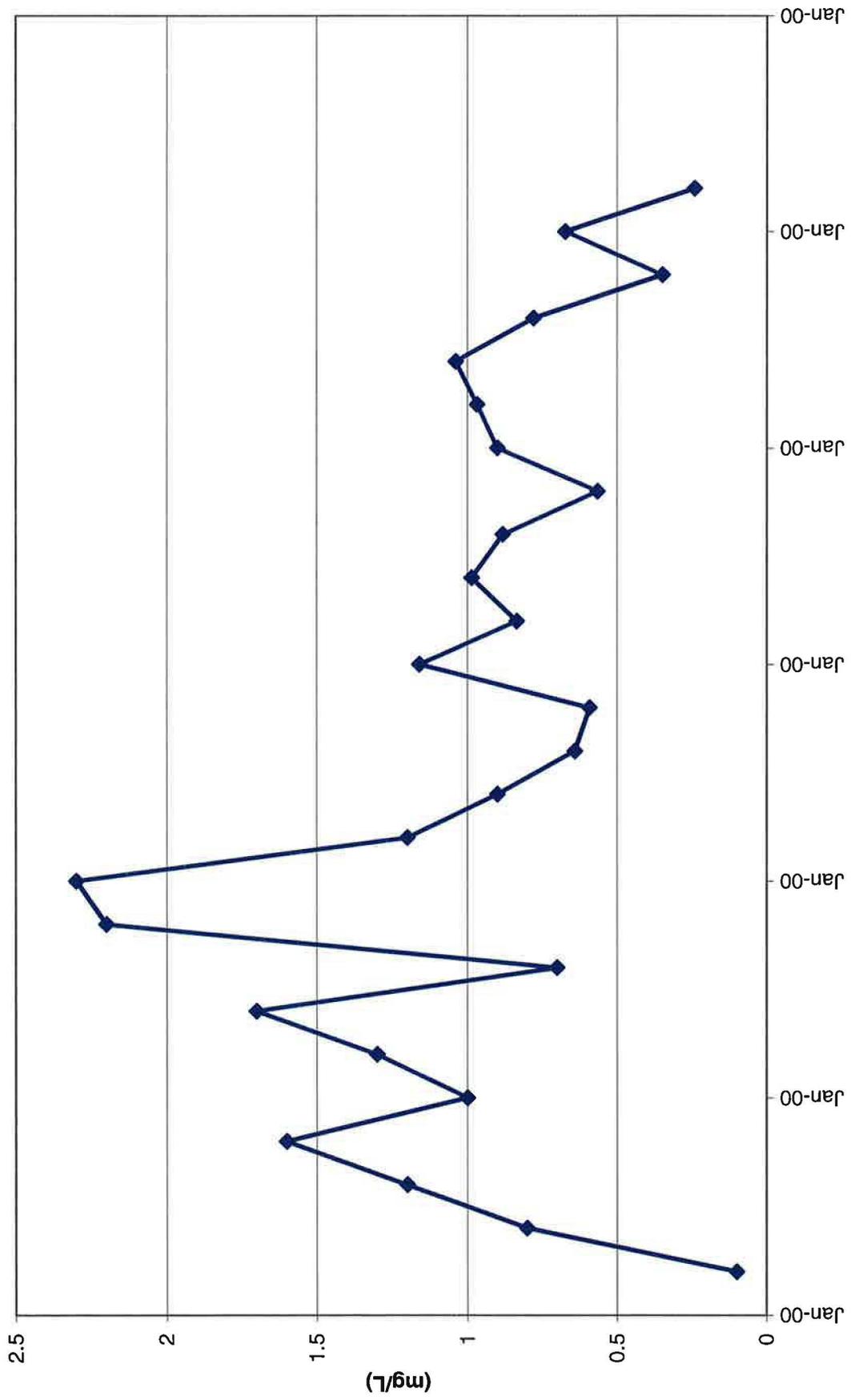
TWN-4 Nitrate Concentrations



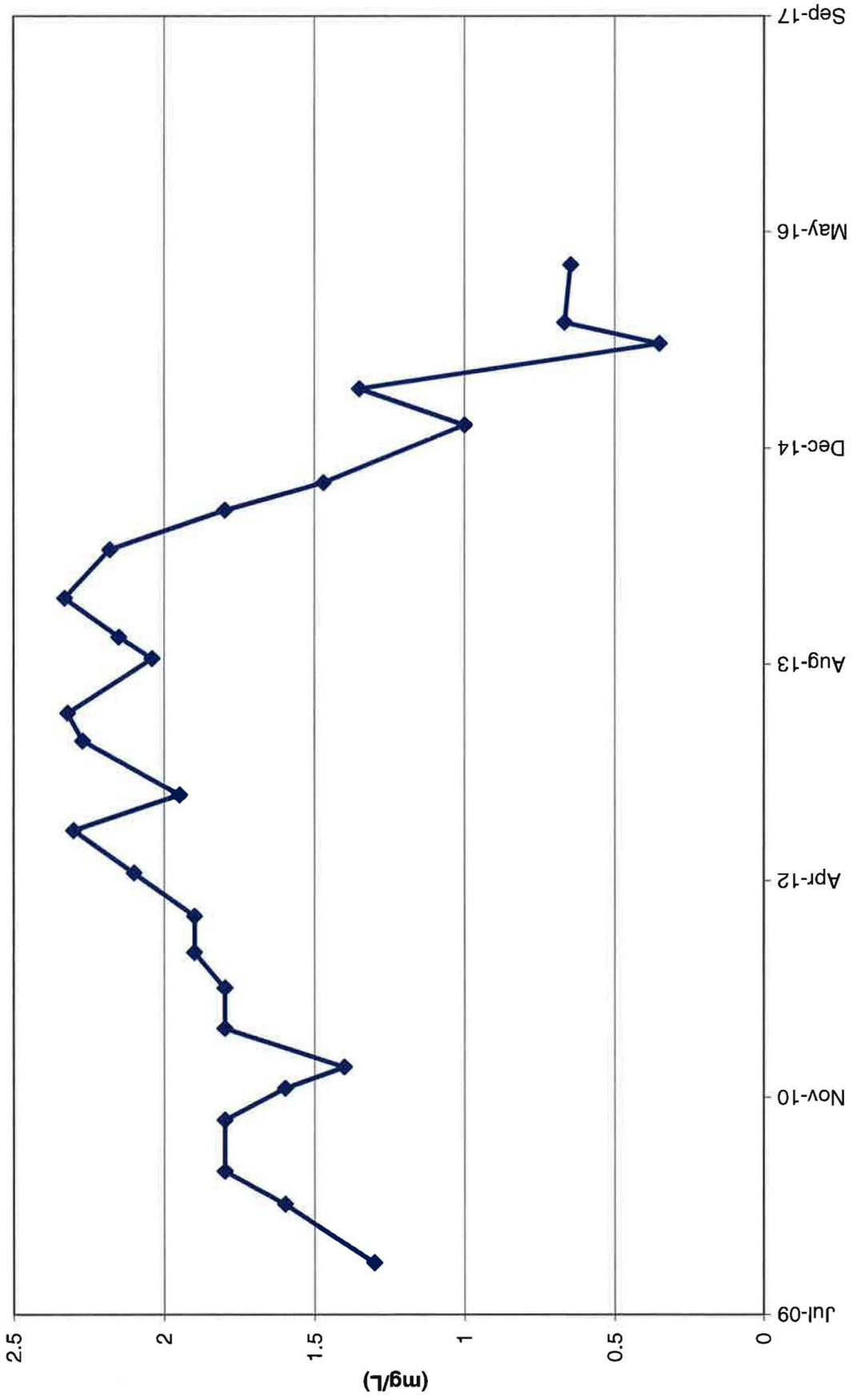
TWN-4 Chloride Concentrations



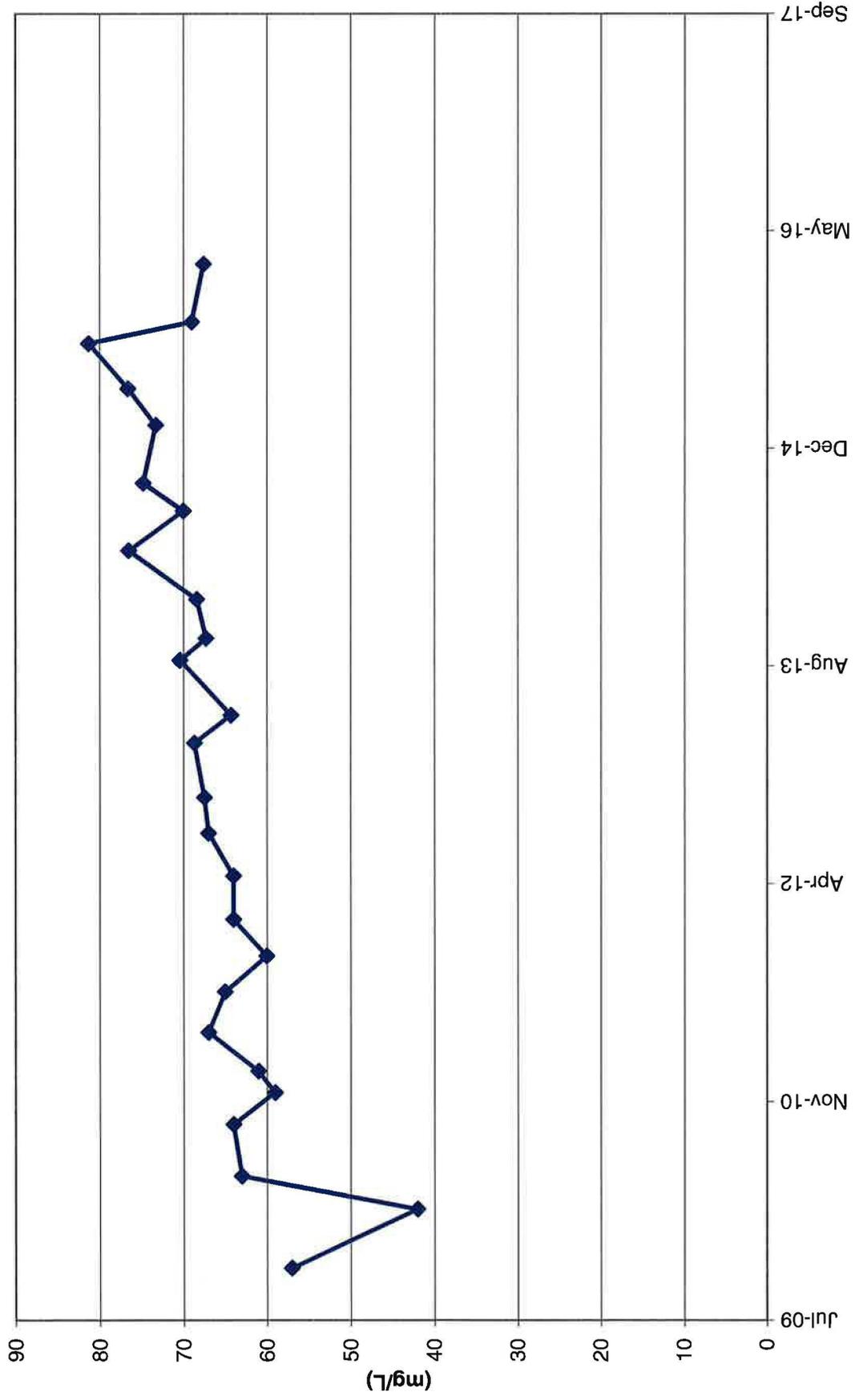
TWN-7 Nitrate Concentrations



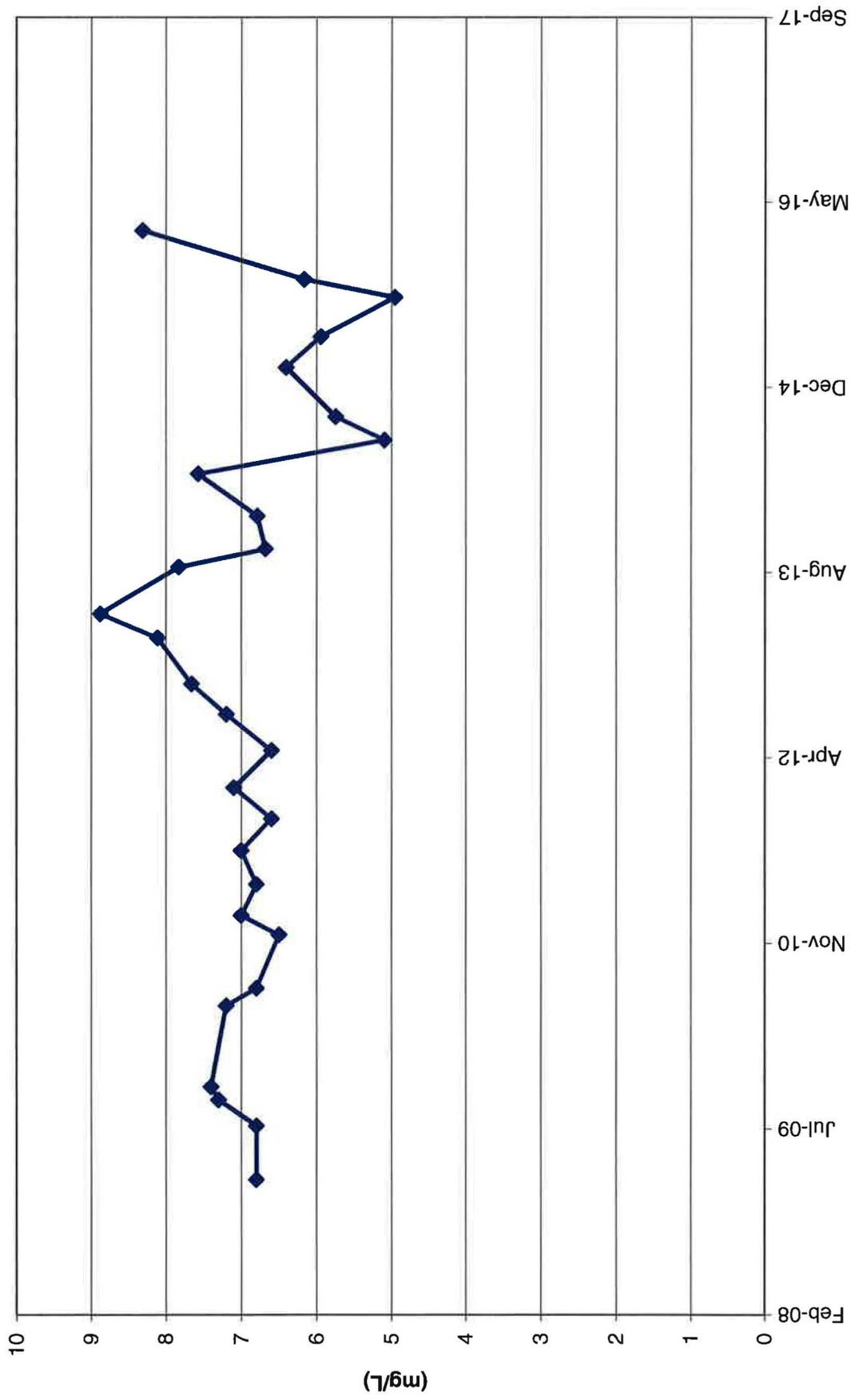
TWN-18 Nitrate Concentrations



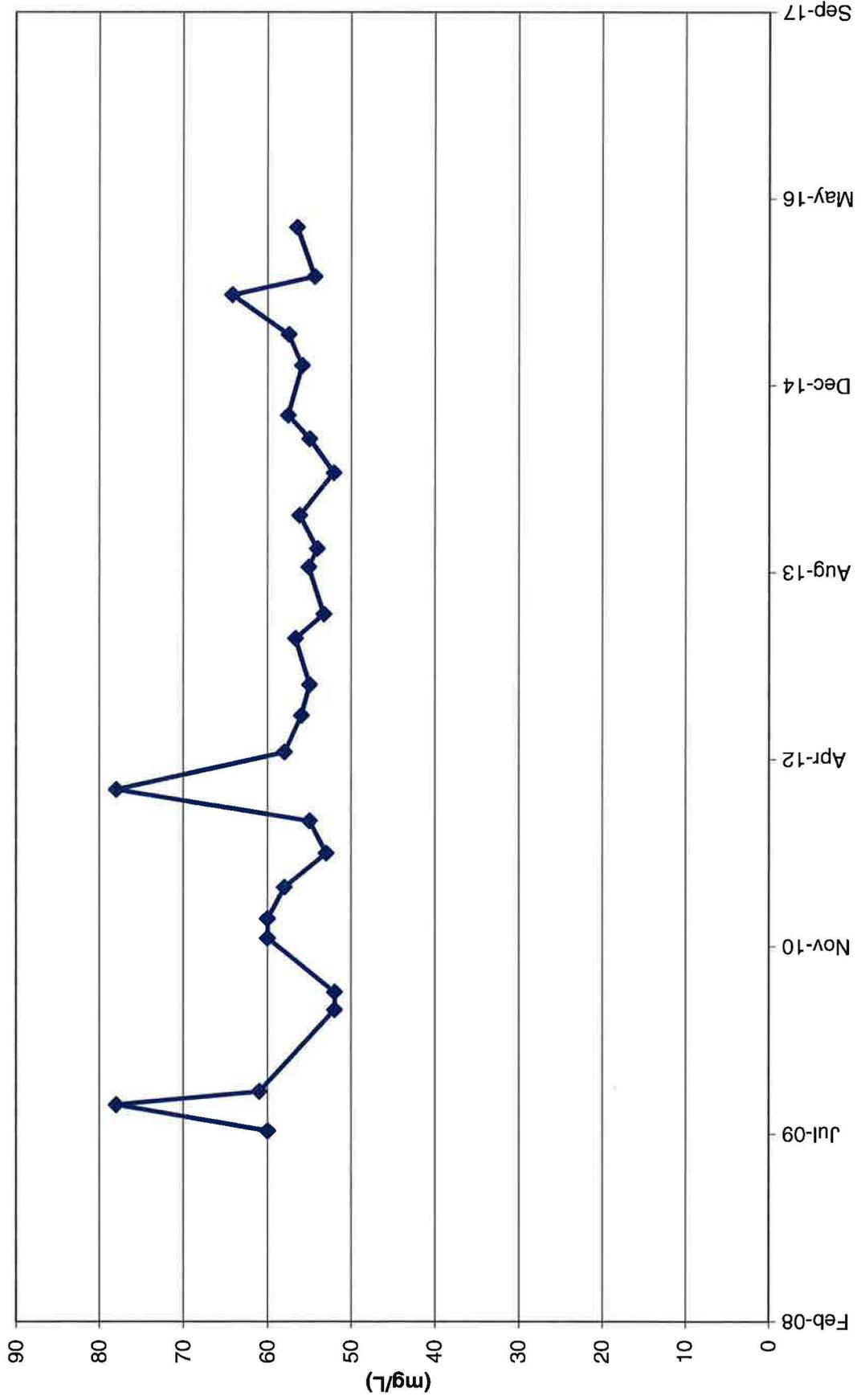
TWN-18 Chloride Concentrations



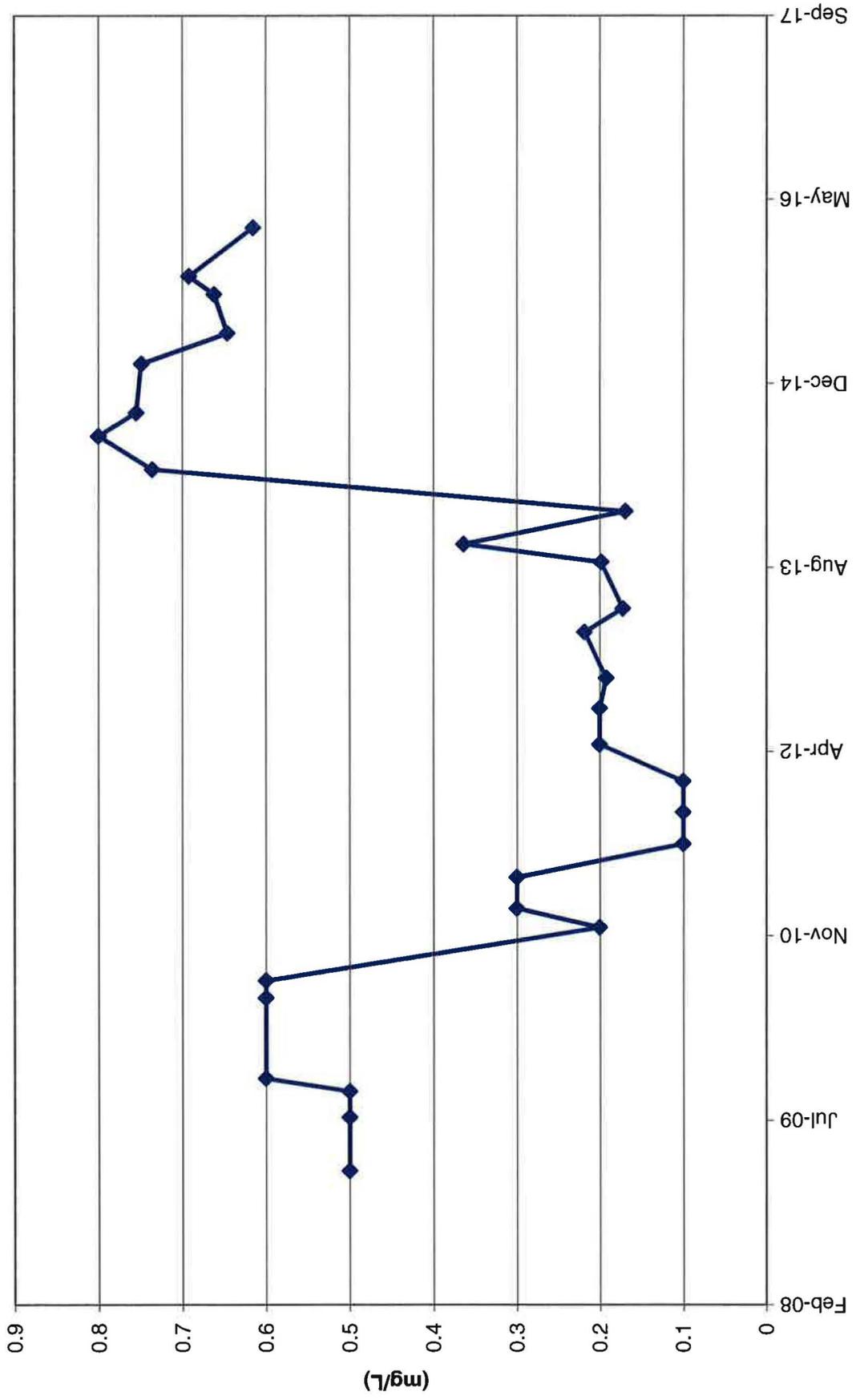
Piezometer 1 Nitrate Concentrations



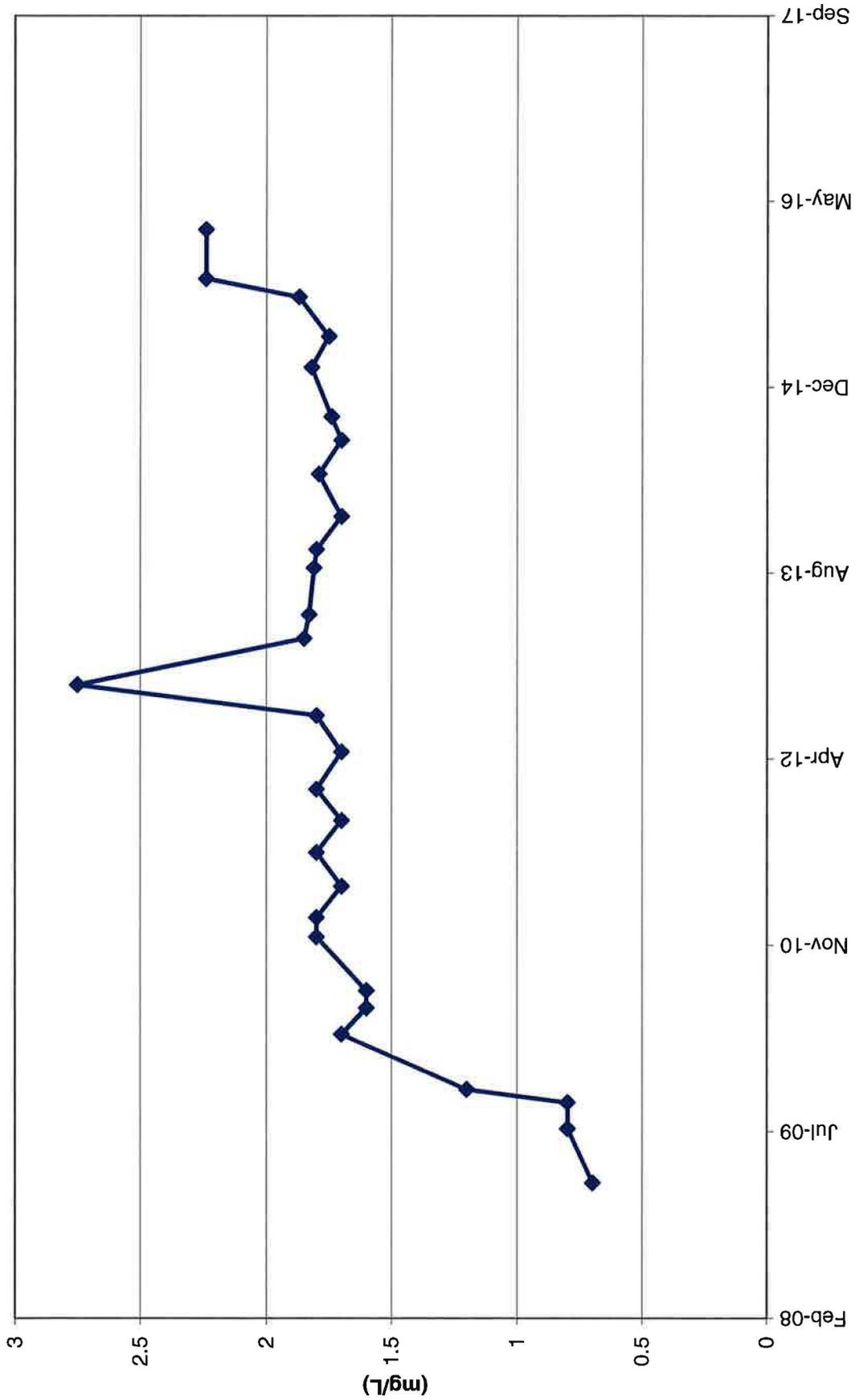
Piezometer 1 Chloride Concentrations



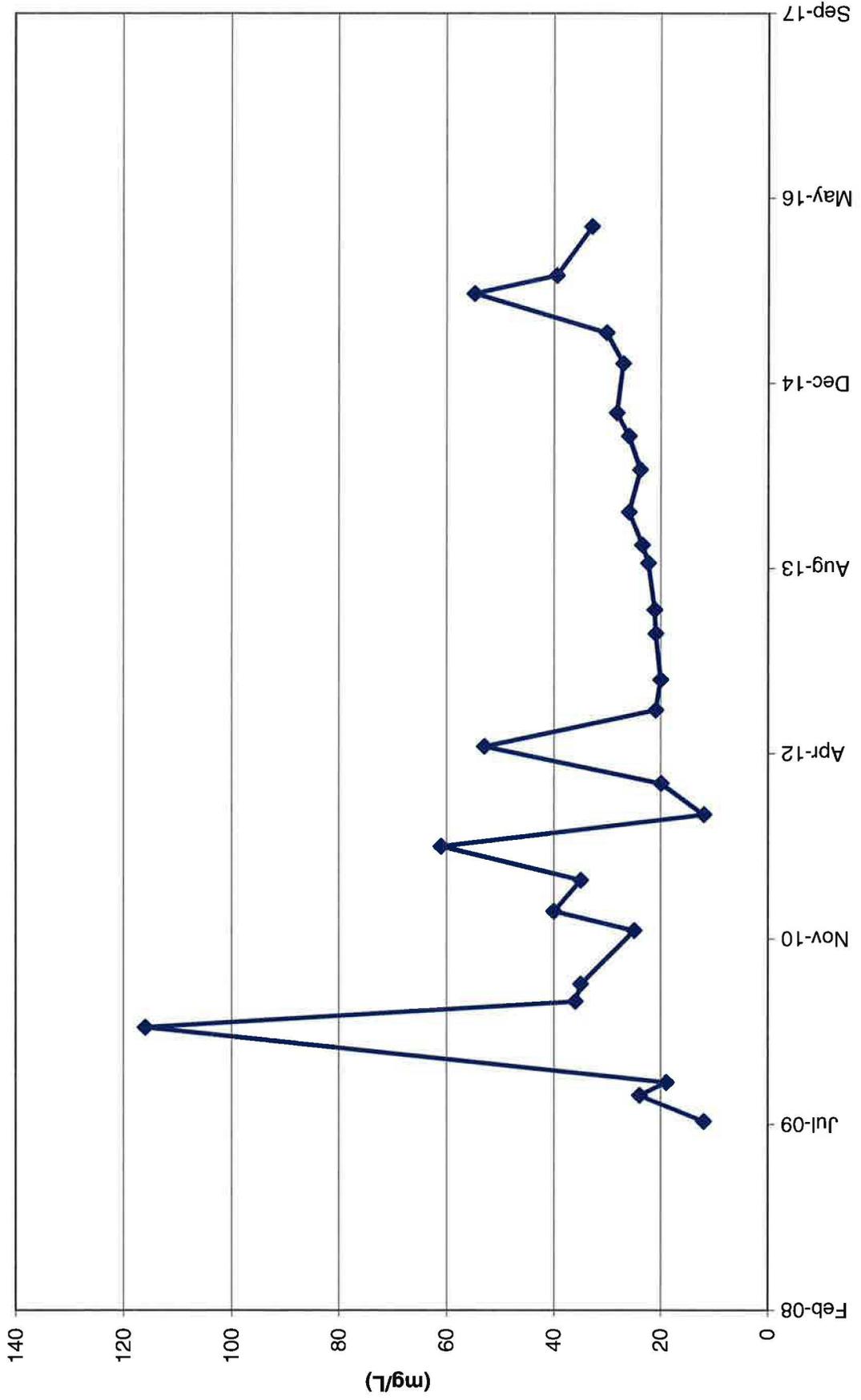
Piezometer 2 Nitrate Concentrations



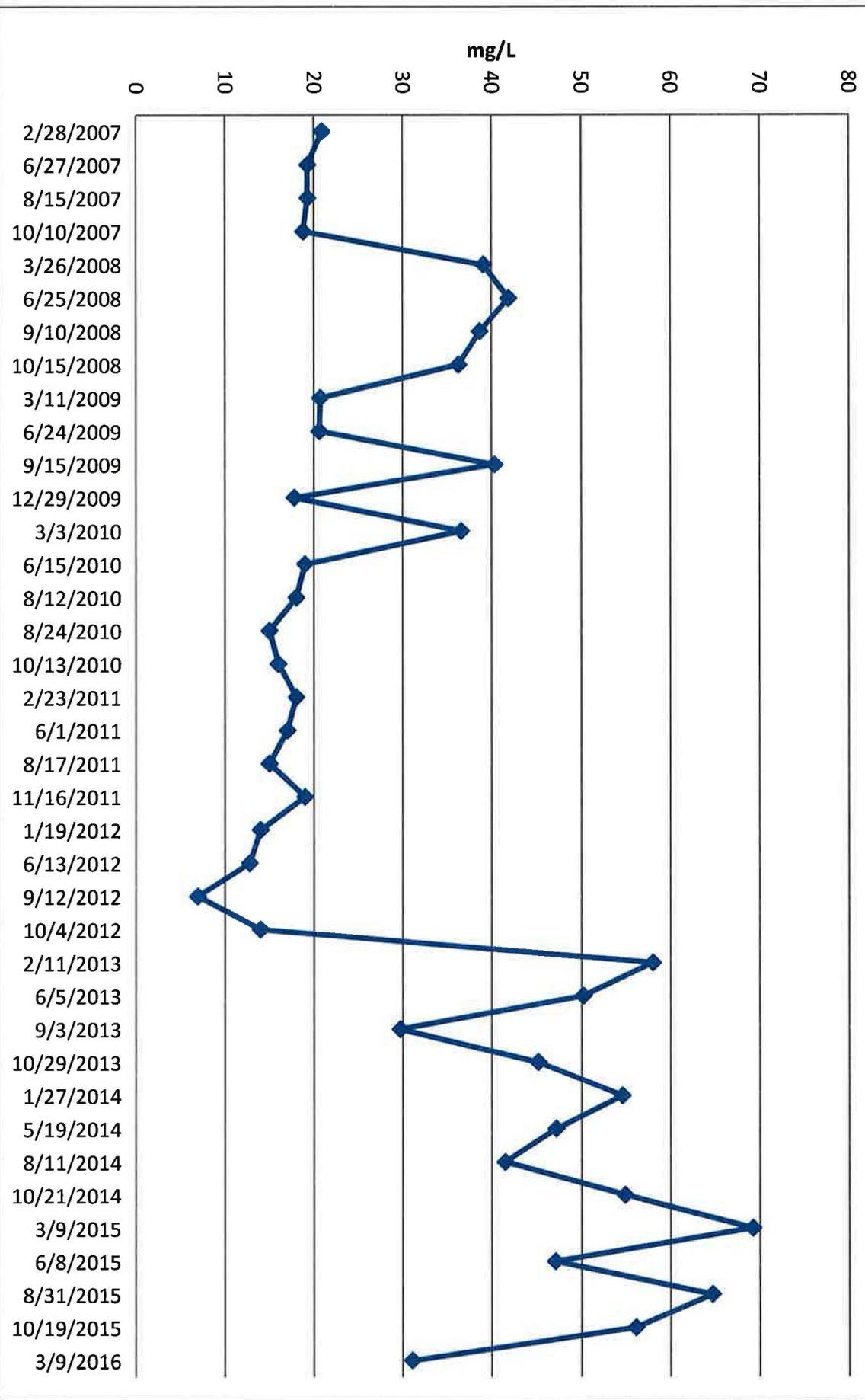
Piezometer 3 Nitrate Concentrations



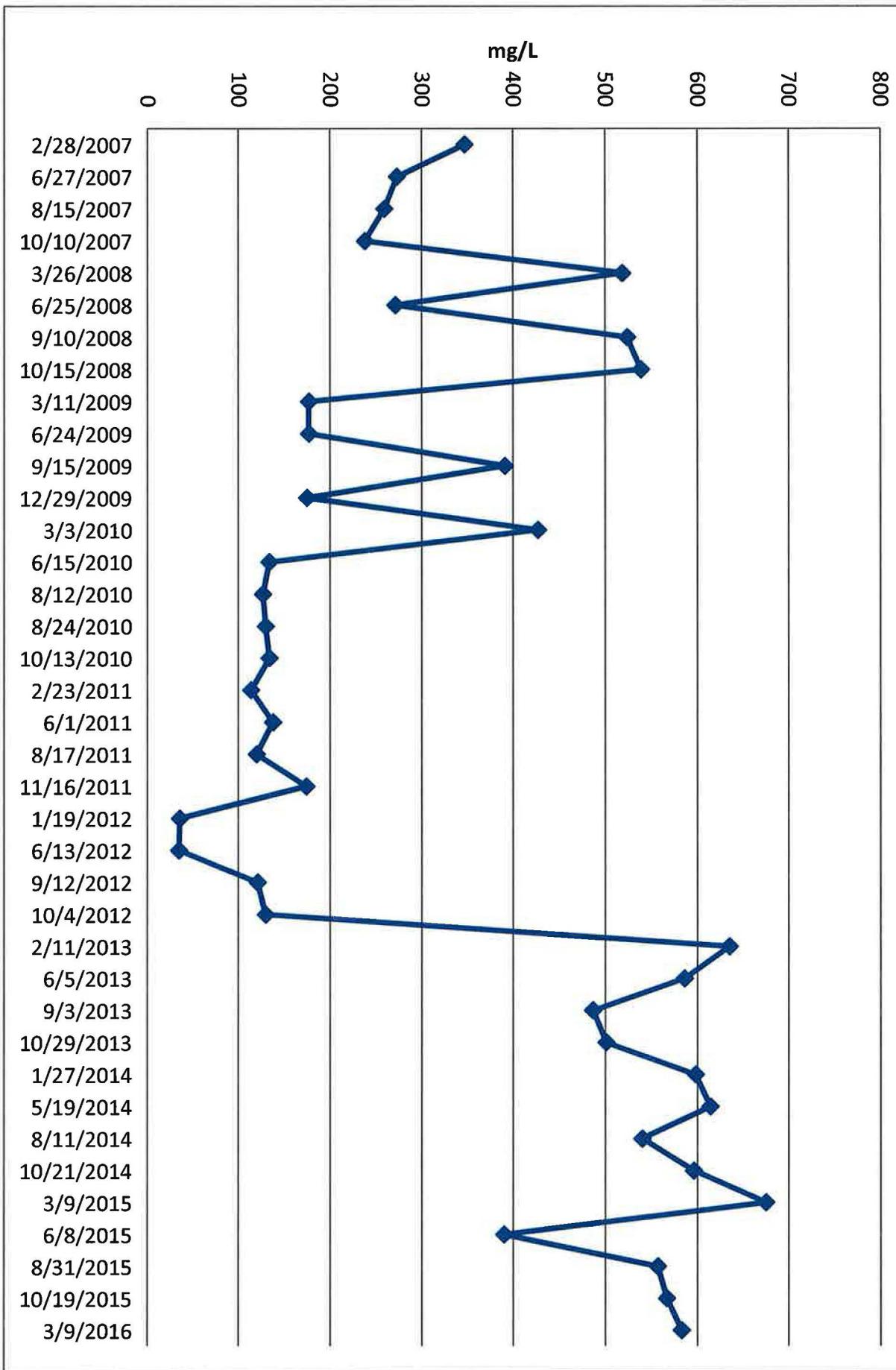
Piezometer 3 Chloride Concentrations



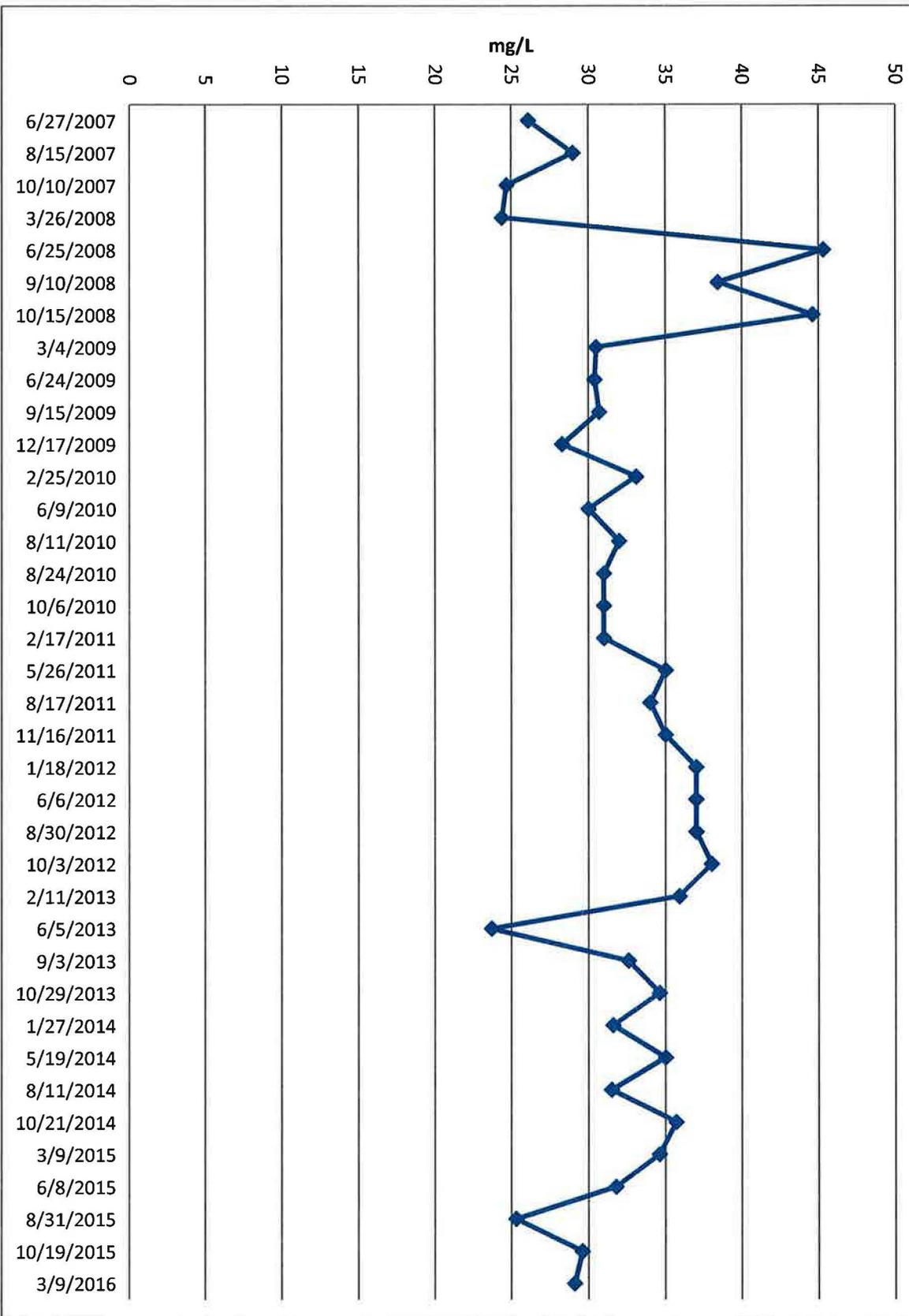
TW4-22 Nitrate Concentrations



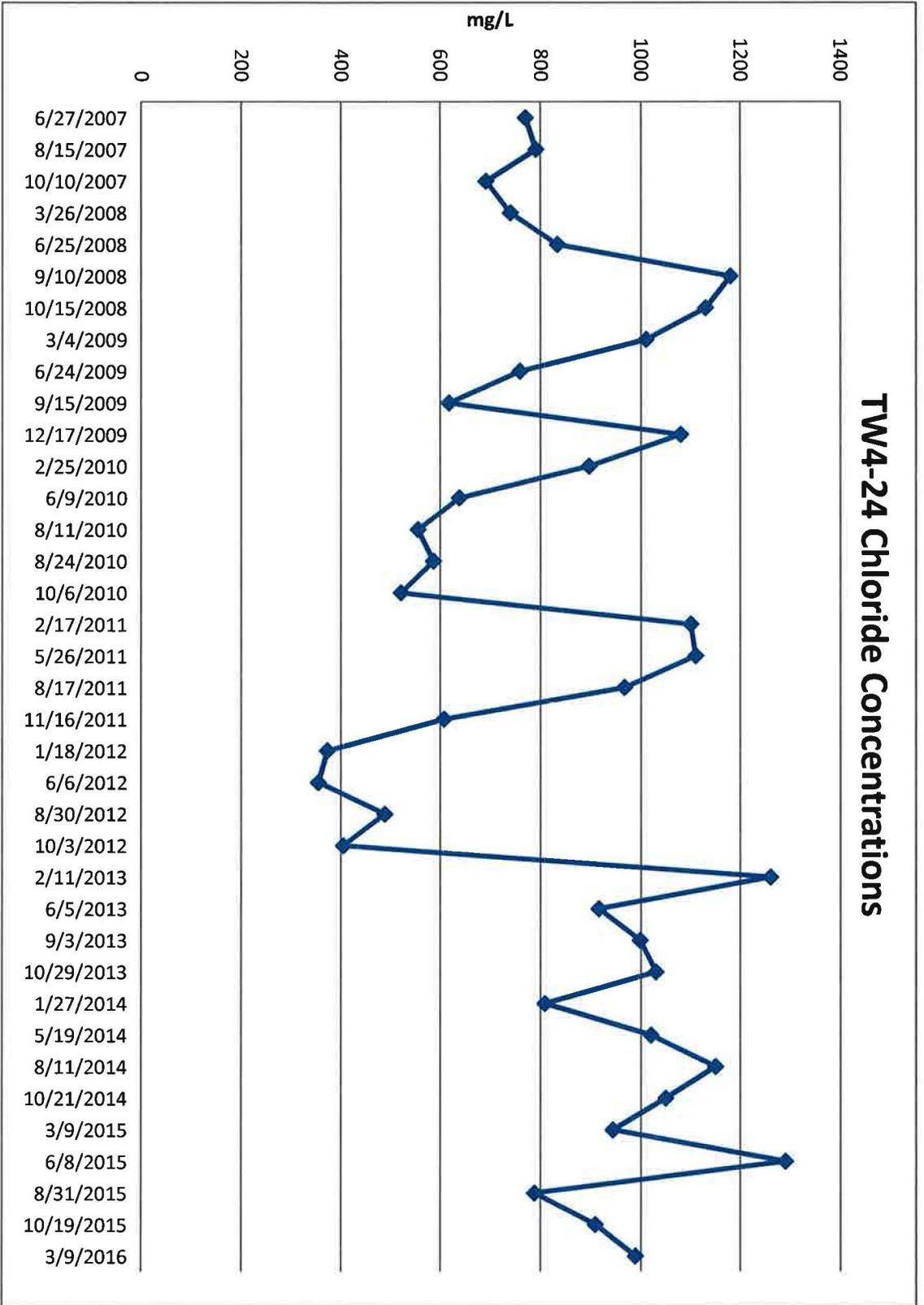
TW4-22 Chloride Concentrations



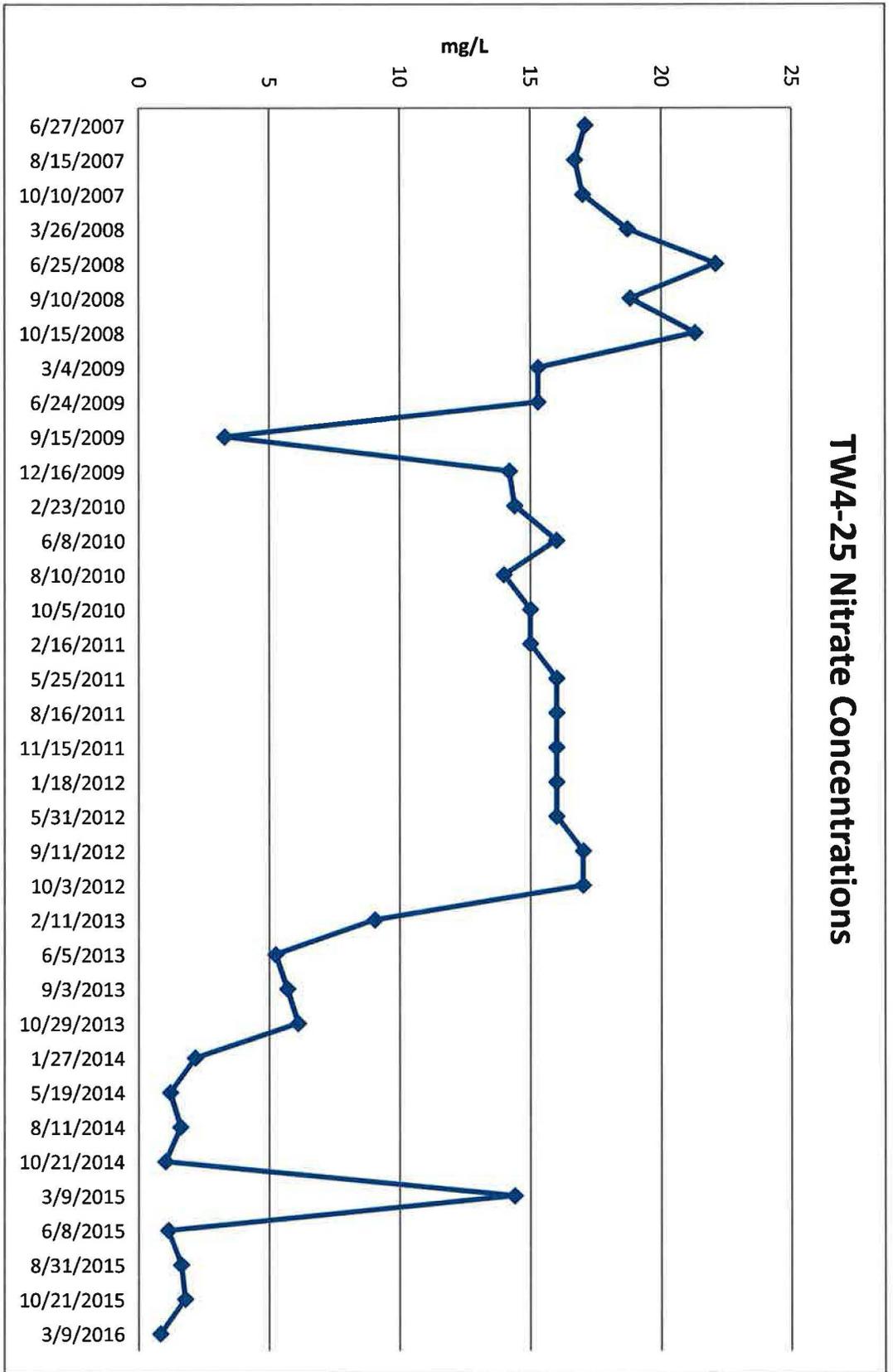
TW4-24 Nitrate Concentrations



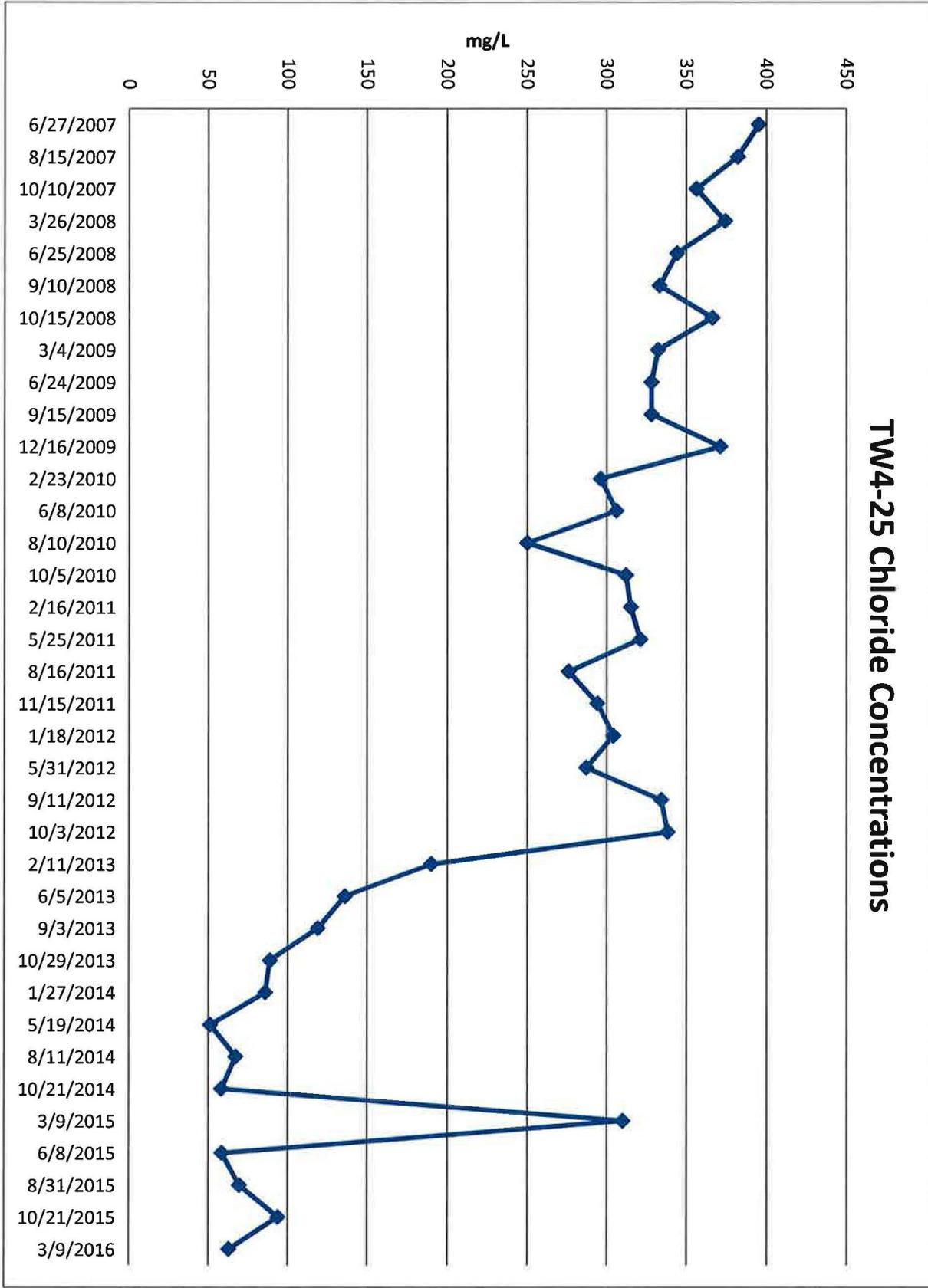
TW4-24 Chloride Concentrations



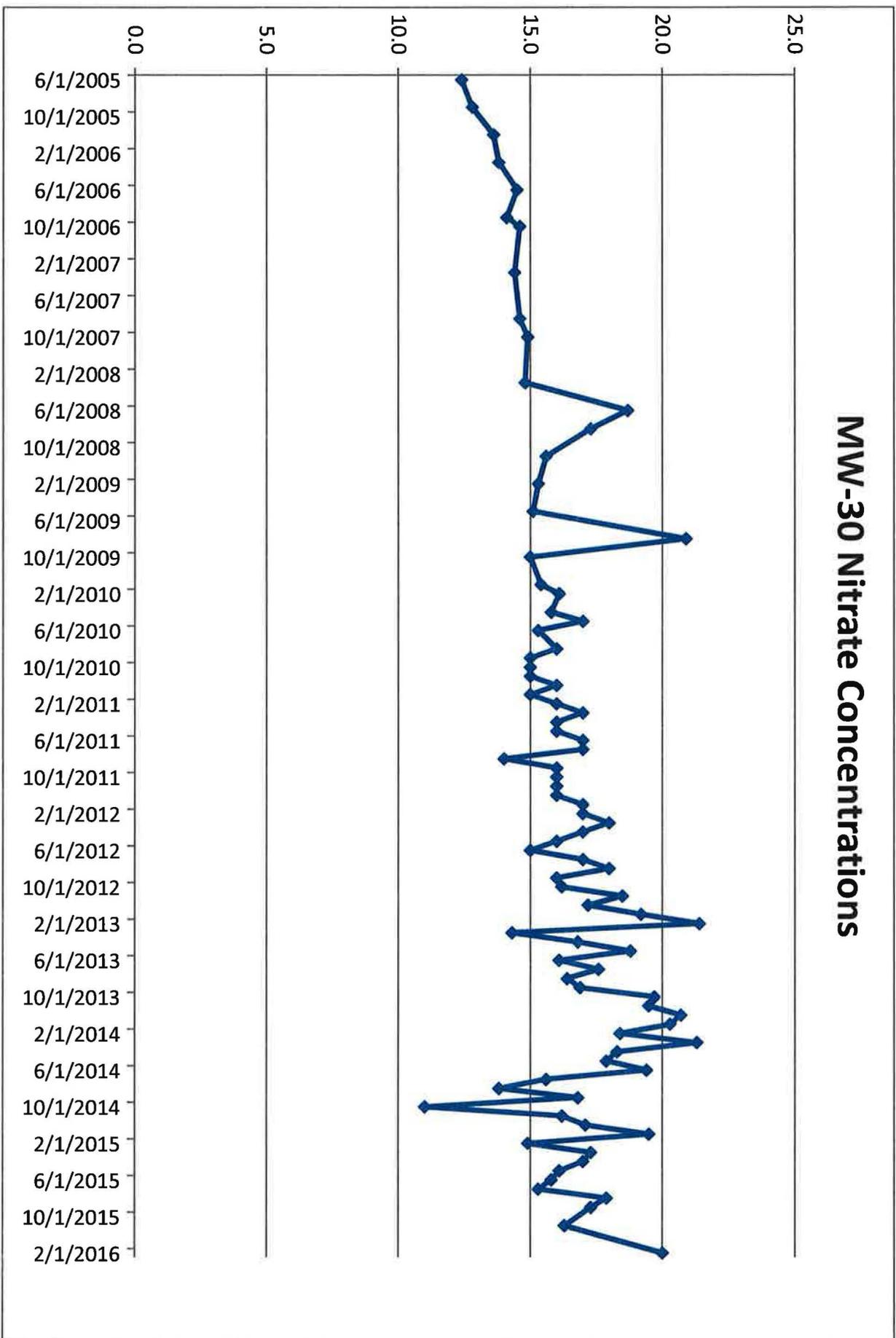
TW4-25 Nitrate Concentrations



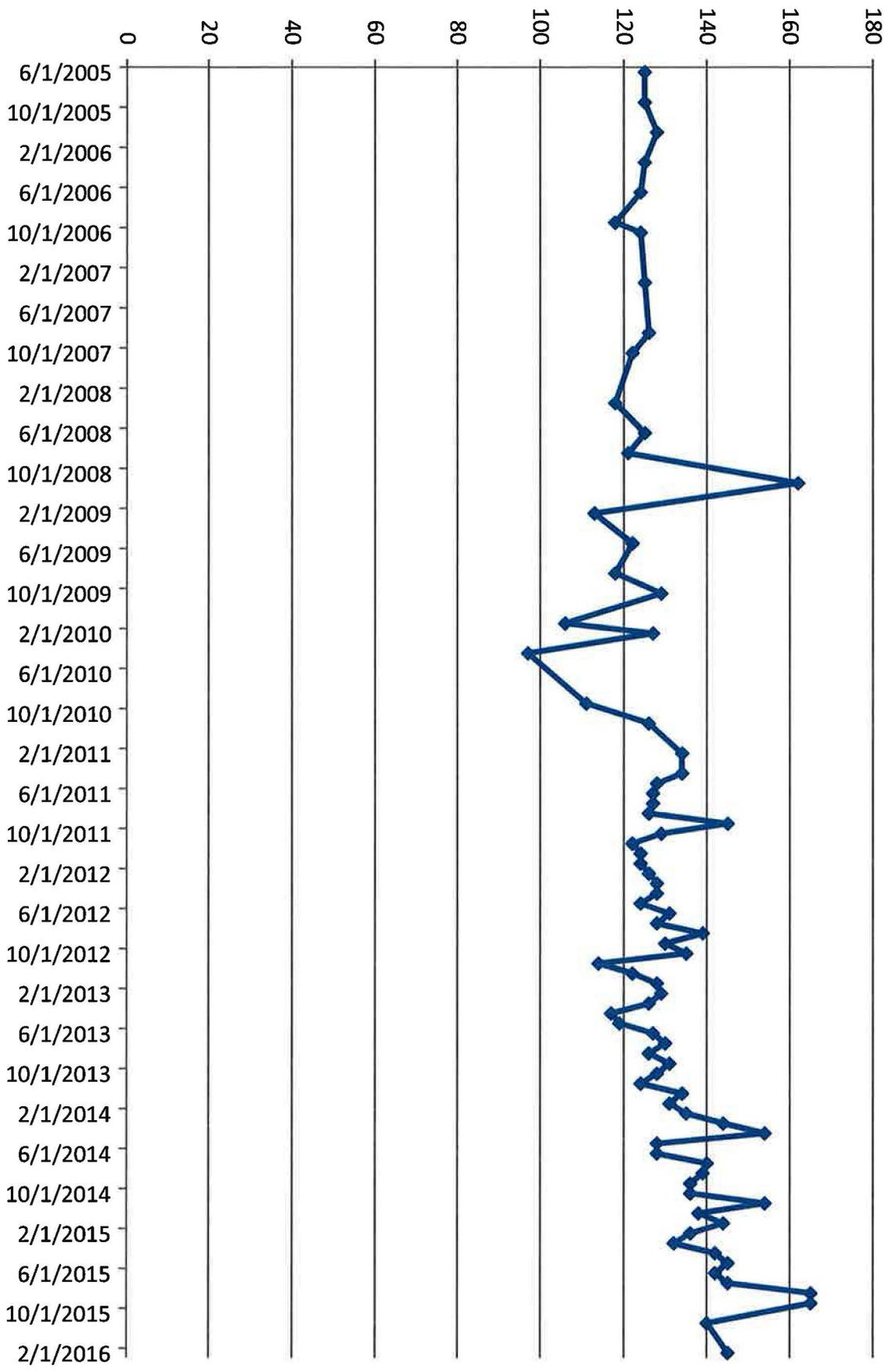
TW4-25 Chloride Concentrations



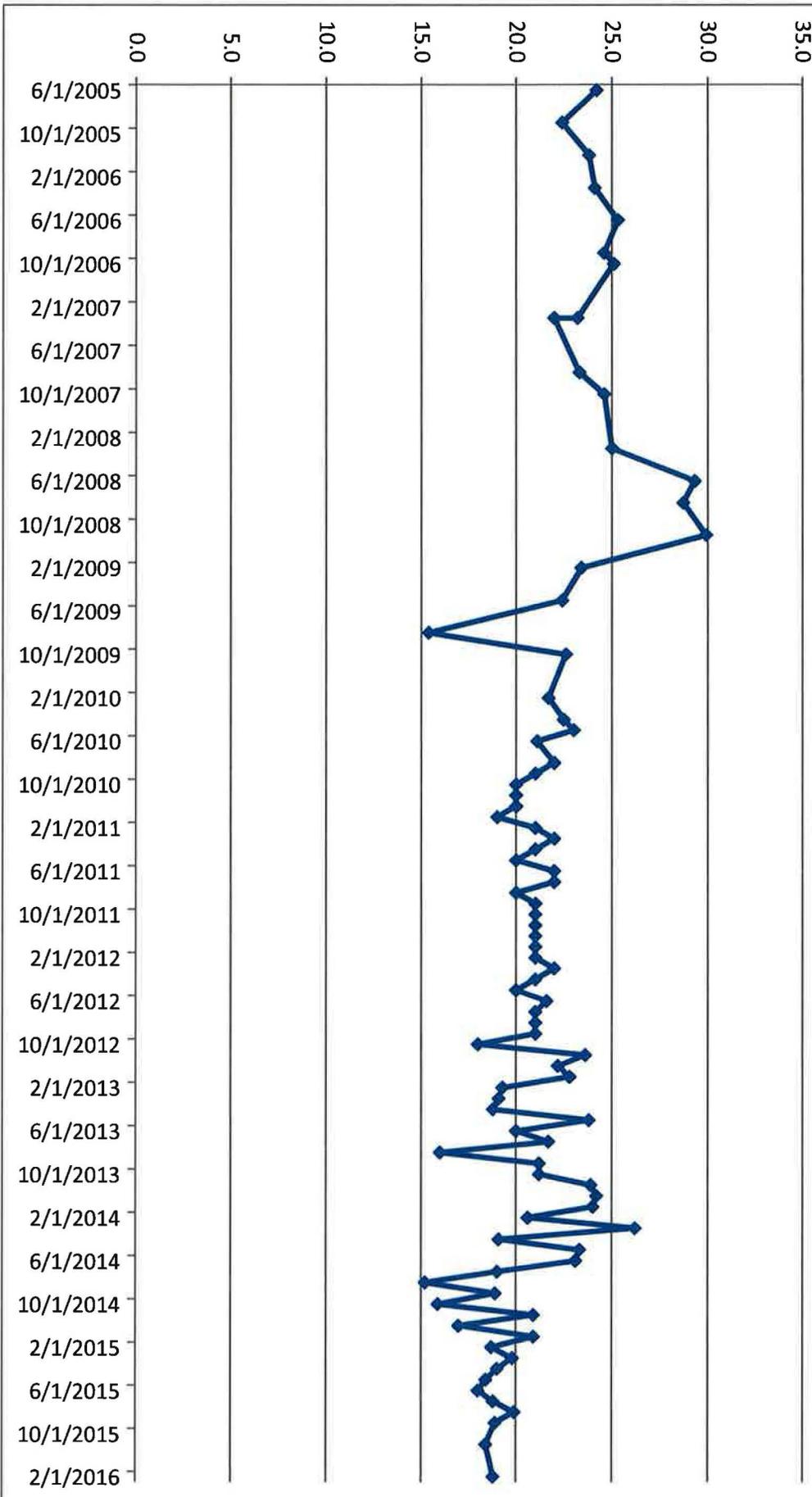
MW-30 Nitrate Concentrations



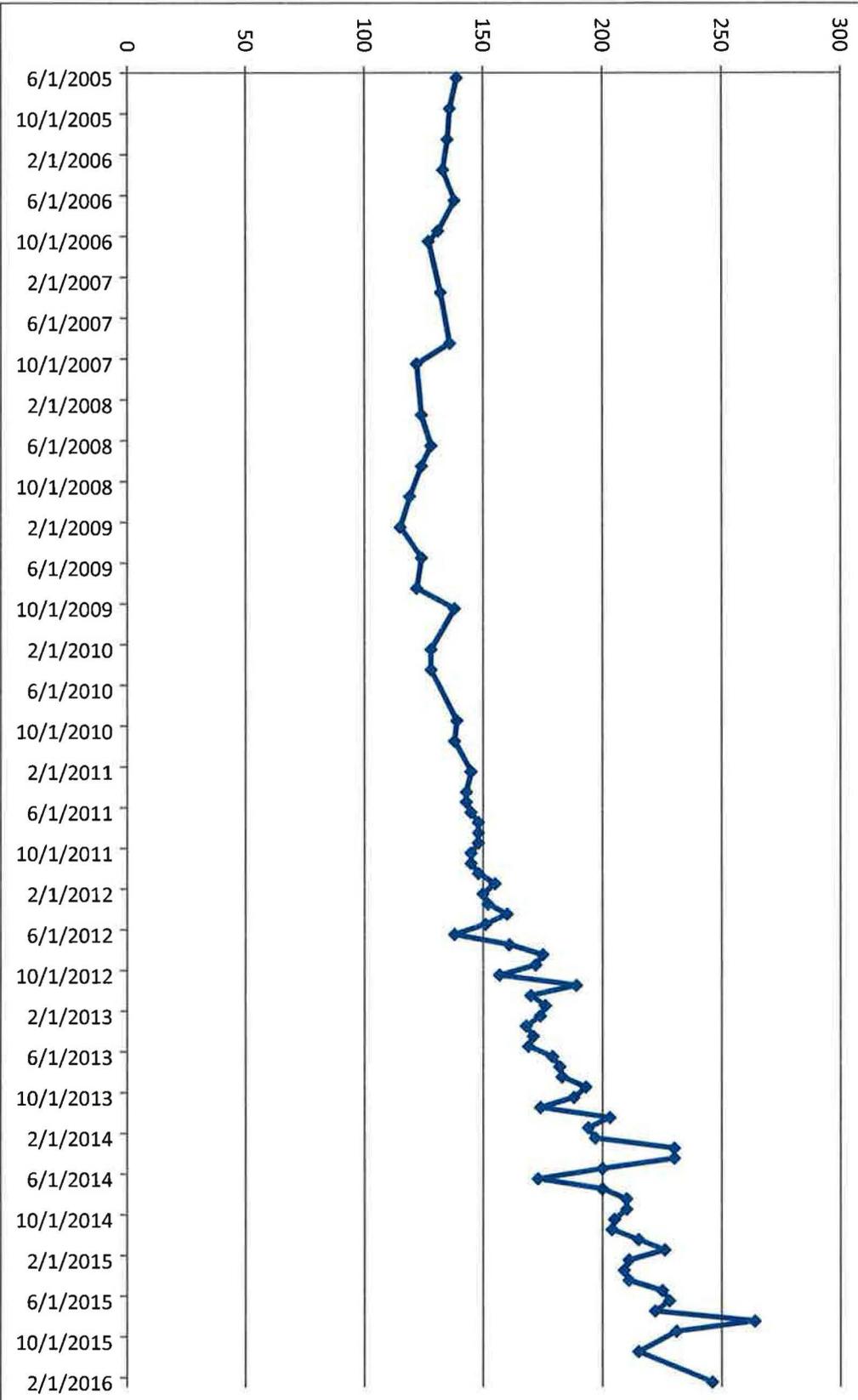
MW-30 Chloride Concentrations



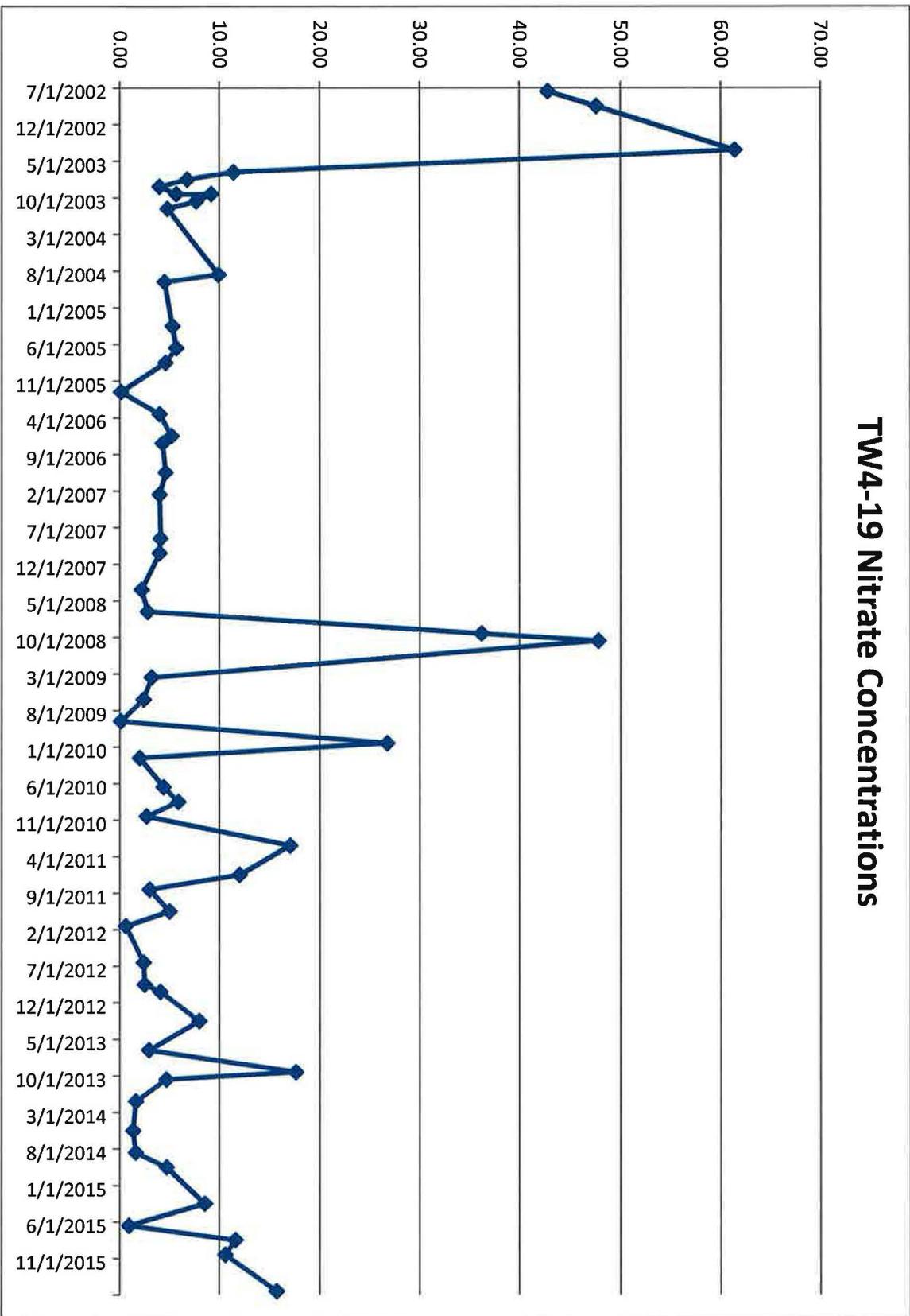
MW-31 Nitrate Concentrations



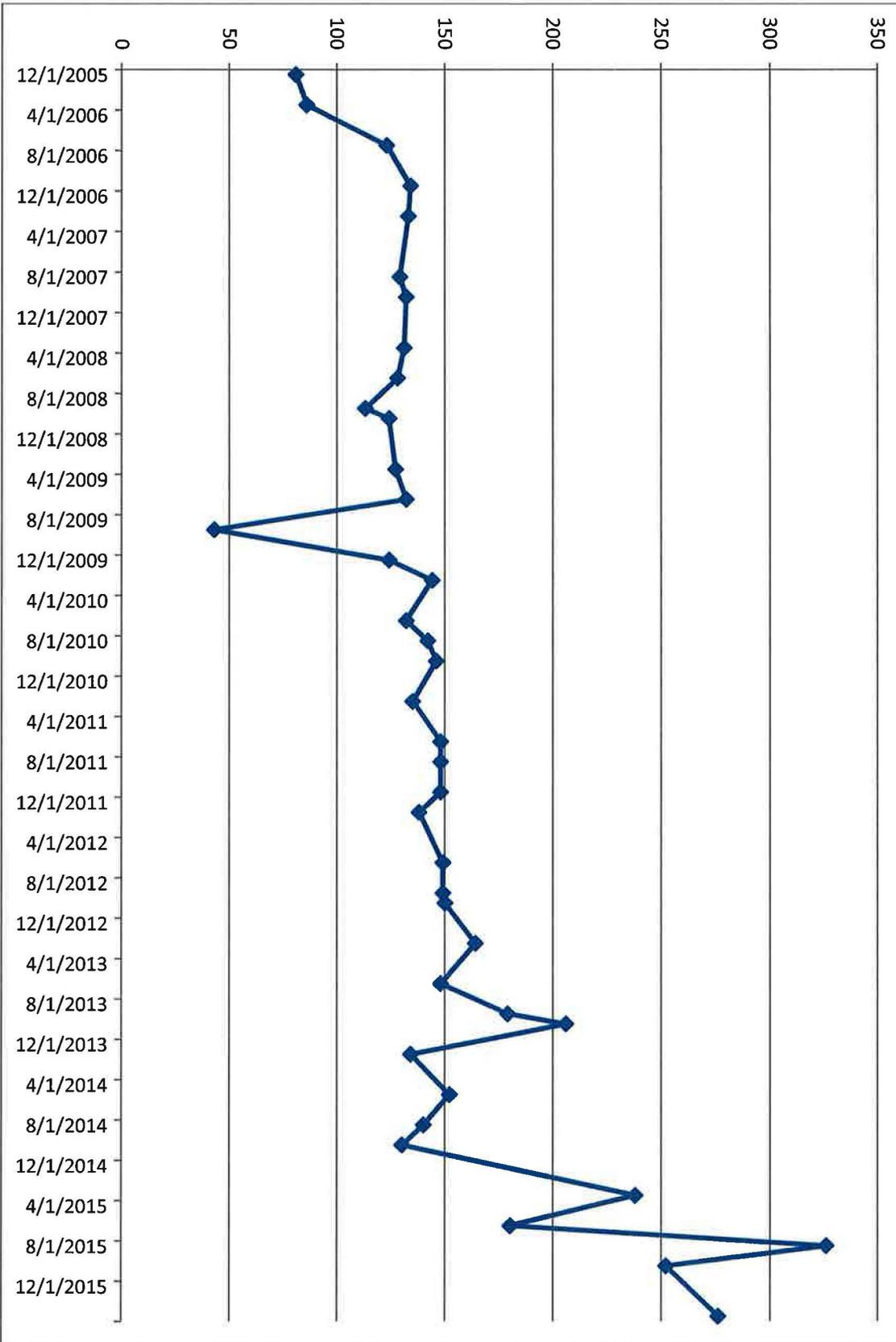
MW-31 Chloride Concentrations



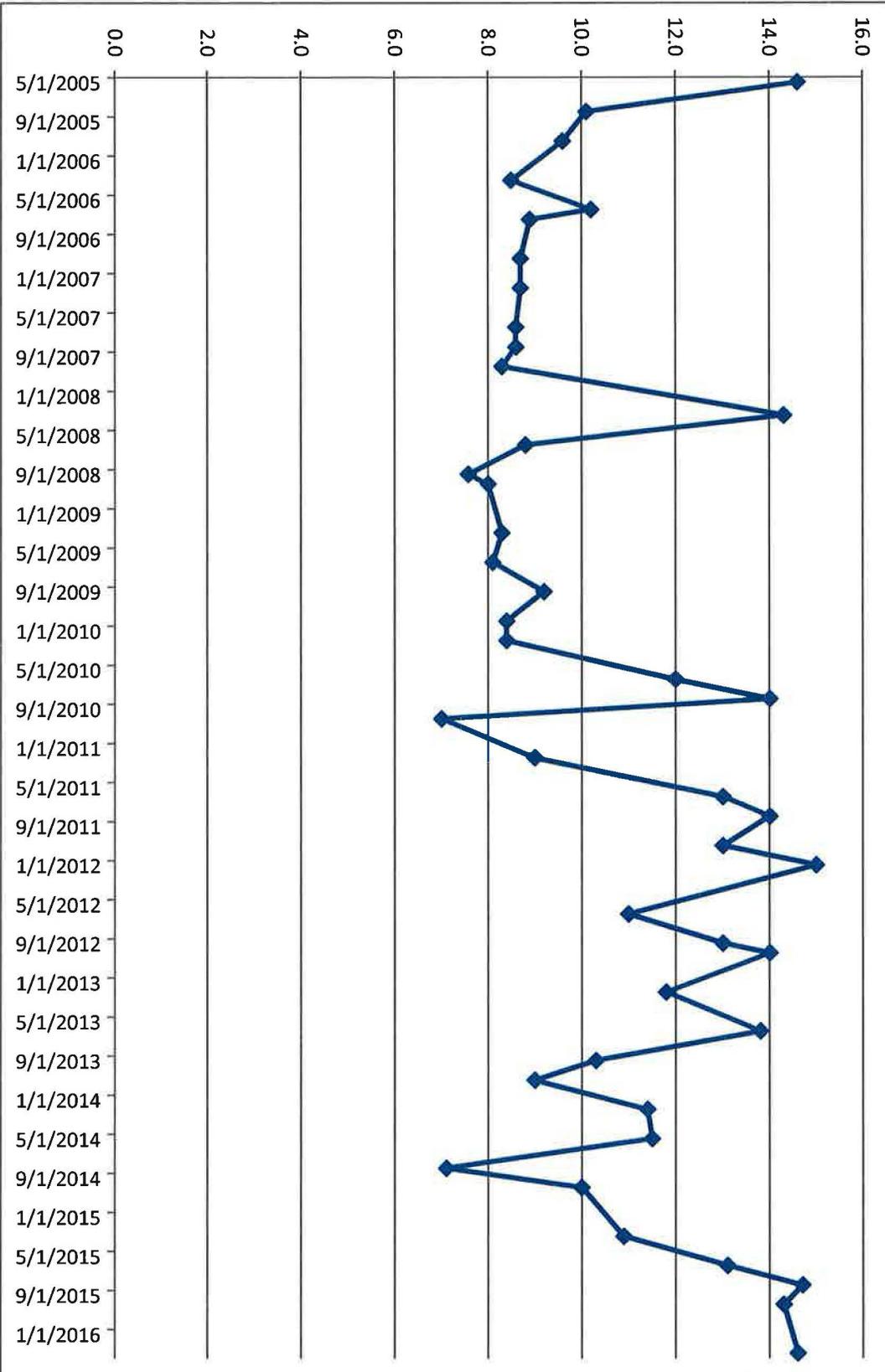
TW4-19 Nitrate Concentrations



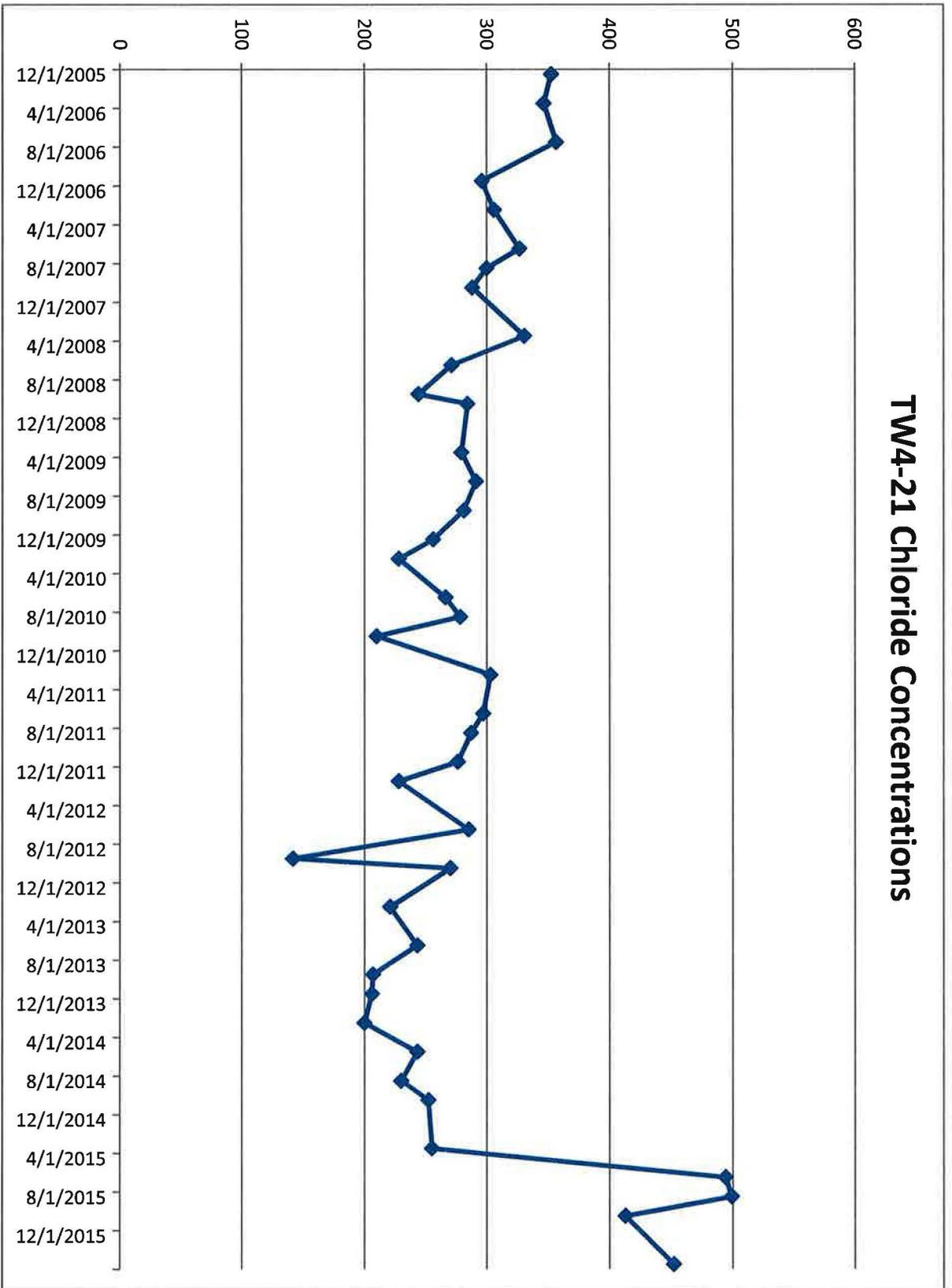
TW4-19 Chloride Concentrations



TW4-21 Nitrate Concentrations



TW4-21 Chloride Concentrations



Tab L
CSV Transmittal Letter

Kathy Weinel

From: Kathy Weinel
Sent: Tuesday, May 17, 2016 8:04 AM
To: Goble, Phillip
Cc: 'Dean Henderson'; Harold Roberts; David Turk; Scott Bakken; Logan Shumway; David Frydenlund
Subject: Transmittal of CSV Files White Mesa Mill 2016 Q1 Nitrate Monitoring
Attachments: 1602419-EDD.csv

Mr. Goble,

Attached to this e-mail is an electronic copy of laboratory results for nitrate monitoring conducted at the White Mesa Mill during the first quarter of 2016, 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



Kathy Weinel

Quality Assurance Manager

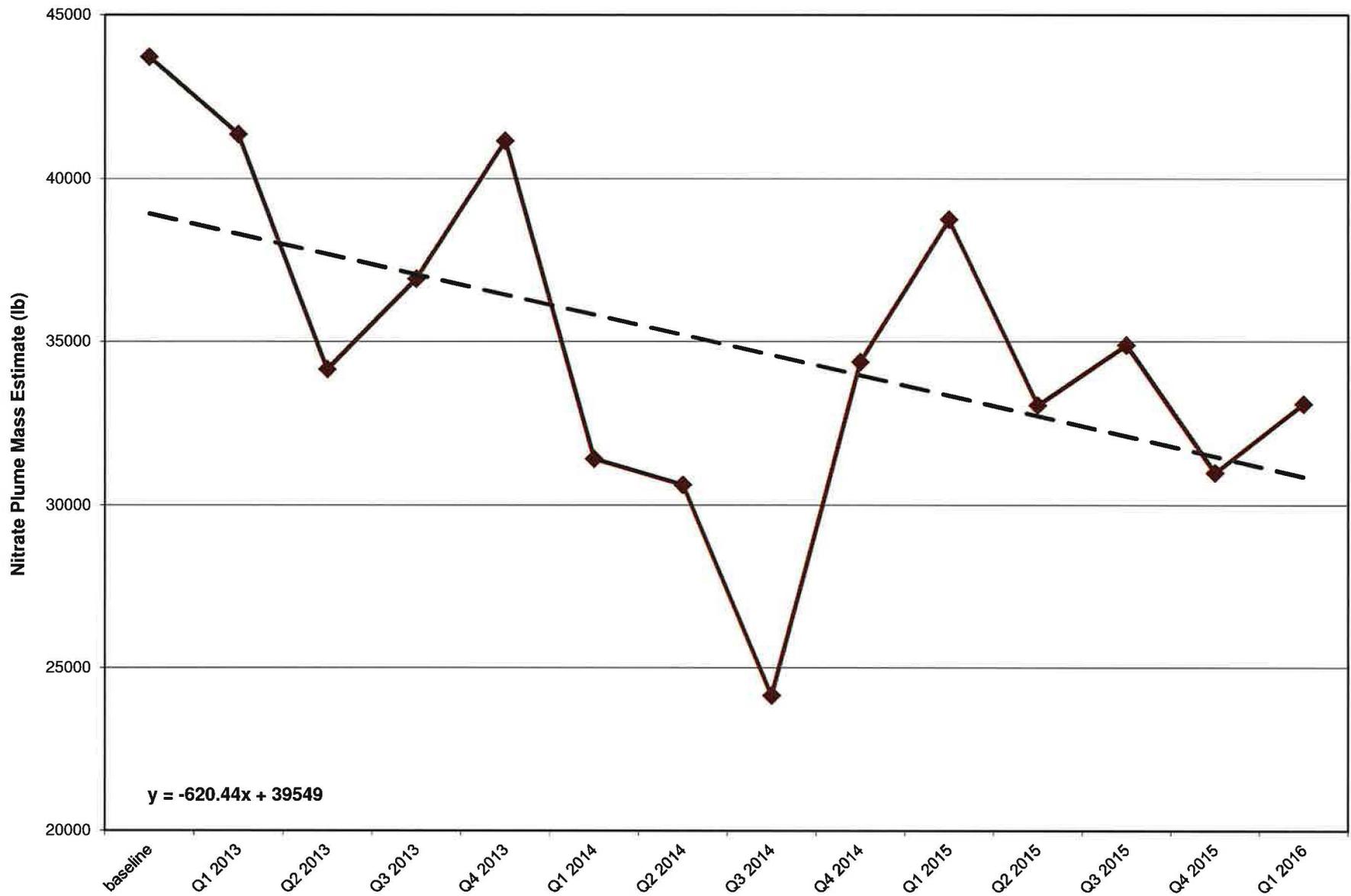
t: 303.389.4134 | f: 303.389.4125
225 Union Blvd., Suite 600
Lakewood, CO 80228

<http://www.energyfuels.com>

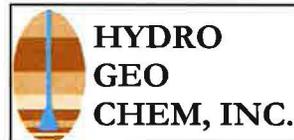
This e-mail is intended for the exclusive use of person(s) mentioned as the recipient(s). This message and any attached files with it are confidential and may contain privileged or proprietary information. If you are not the intended recipient(s) please delete this message and notify the sender. You may not use, distribute print or copy this message if you are not the intended recipient(s).

Tab M

Residual Mass Estimate Analysis Figure



Nitrate Plume Mass Estimates
 Linear (Nitrate Plume Mass Estimates)



Time Series of Nitrate Plume Mass Estimates

Approved	Date	Author	Date	File Name	Figure
SJS	2/11/16	GEM	2/11/16	Nmasstrend0615.xls	M.1