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

November 23, 2015

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 3rd Quarter 2015 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 3rd Quarter of 2015 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,

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

3rd Quarter
(July through September)
2015

Prepared by:

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

November 23, 2015

TABLE OF CONTENTS

LIST OF TABLES

INDEX OF TABS

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") (formerly the Division of Radiation Control ["DRC"]) noted in a Request dated September 30, 2008 (the "Request"), for a Voluntary Plan and Schedule to Investigate and Remediate Nitrate Contamination at the White Mesa Uranium Mill (the "Mill") (the "Plan"), that nitrate levels have exceeded the State water quality standard of 10 mg/L in certain monitoring wells. As a result of the Request, Energy Fuels Resources (USA) Inc. ("EFRI") entered into a Stipulated Consent Agreement with the Utah Water Quality Board in January 2009 which directed the preparation of a Nitrate Contamination Investigation Report ("CIR"). A subsequent letter dated December 1, 2009, among other things, recommended that EFRI also address elevated chloride concentrations in the CIR. The Stipulated Consent Agreement was amended in August 2011. Under the amended Consent Agreement ("CA"), EFRI submitted a Corrective Action Plan ("CAP"), pursuant to the requirements of the Utah Groundwater Quality Protection Rules [UAC R317-6-6.15(C – E)] on November 29, 2011 and revised versions of the CAP on February 27, 2012 and May 7, 2012. On December 12, 2012, 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 third quarter of 2015. This report meets the requirements of the SCO, State of UDEQ Docket No. UGW12-04 and is the document which covers nitrate corrective action and monitoring activities during the third quarter of 2015.

2.0 GROUNDWATER NITRATE MONITORING

2.1 Samples and Measurements Taken During the Quarter

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

2.1.1 Nitrate Monitoring

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

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

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

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

The December 12, 2012 SCO approved the CAP, which specified the cessation of sampling in TWN-5, TWN-6, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-14, TWN-15, TWN-16, TWN-17, and TWN-19. The CAP and SCO also approved the abandonment of TWN-5, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-15, and TWN-17 within 1 year of the SCO approval. These wells were abandoned in accordance with the 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-dectect) 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 conformed with the QAP purging and field measurement requirements. A summary of the purging techniques employed and field measurements taken is described below:

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

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

Continuously Pumped Wells

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

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

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

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

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

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

3.4.2 Holding Time Evaluation

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

3.4.3 Analytical Method Checklist

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

3.4.4 Reporting Limit Evaluation

All analytical method reporting limits ("RLs") reported by the laboratory were checked against the reporting limits enumerated in the QAP. Reporting Limit Checks are provided in Tab H. All

analytes were measured and reported to the required reporting limits, with the exception of several samples that had increased reporting limits due to matrix interference or required dilution due to the sample concentration. However, in all of those cases the analytical results were greater than the reporting limit used.

3.4.5 QA/QC Evaluation for Sample Duplicates

Section 9.1.4 a) of the QAP states that RPDs will be calculated for the comparison of duplicate and original field samples. The QAP acceptance limits for RPDs between the duplicate and original field sample is less than or equal to 20% unless the measured results are less than 5 times the required detection limit. This standard is based on the EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994, 9240.1-05-01 as cited in the QAP. The RPDs are calculated for duplicate pairs for all analytes regardless of whether or not the reported concentrations are greater than 5 times the required detection limits. However, data will be considered noncompliant only when the results are greater than 5 times the required detection limit and the RPD is greater than 20%.

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 map indicates that perched water flow ranges from generally southwesterly beneath the Mill site and tailings cells to generally southerly along the eastern and western margins of White Mesa. Perched water mounding associated with the wildlife ponds locally changes the generally southerly perched water flow patterns. For example, northeast of the Mill site, mounding associated with wildlife ponds results in locally northerly flow near PIEZ-1. The impact of the mounding associated with the northern ponds, to which water has not

been delivered since March 2012, is diminishing and is expected to continue to diminish as the mound decays due to reduced recharge.

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

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

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

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

The combined impact of the above two mechanisms may be especially evident at chloroform pumping wells MW-4, MW-26, TW4-4, TW4-19, and TW4-20; nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2; and non-pumped wells adjacent to the pumped wells. 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 last quarter (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 TW4-21 and TW4-37, which began pumping last quarter. 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 well-defined cones of depression near TW4-21 and TW4-37 likely results from their recent start-up.

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 of TW4-4 resulting from TW4-4 pumping are expected to be muted because TW4-4 is located at a transition from relatively high to relatively low permeability conditions south (downgradient) of TW4-4. The permeability of the perched zone at TW4-6 and TW4-26, and 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. Any drawdown of water levels at wells immediately south of TW4-4 resulting from TW4-4 pumping is also difficult to determine because of the general, long-term increase in water levels in this area that resulted from wildlife pond recharge.

Water levels at TW4-4 and TW4-6 increased by nearly 2.7 and 2.9 feet, respectively, between the fourth quarter of 2007 and the fourth quarter of 2009 (just prior to the start of TW4-4 pumping) at rates of approximately 1.2 feet/year and 1.3 feet/year, respectively. However, the rate of increase in water level at TW4-6 after the start of pumping at TW4-4 (first quarter of 2010) was reduced to less than 0.5 feet/year suggesting that TW4-6 is within the hydraulic influence of TW4-4. Furthermore, water levels at TW4-6 have been trending downward since the fourth quarter of 2013 suggesting an additional influence related to the cessation of water delivery to the northern wildlife ponds as discussed above, and more recently to the addition of chloroform pumping wells TW4-1, TW4-2, and TW4-11 (note: hydrographs for these wells are

provided in the quarterly Chloroform Monitoring Report). Recharge from the southern wildlife pond is expected to continue to have an effect on water levels near TW4-4 even as the groundwater mound associated with recharge from the northern ponds diminishes over time due to cessation of water delivery to those ponds.

The lack of a well-defined cone of depression at TW4-4 is also influenced by the persistent, relatively low water level at non-pumping well TW4-14, located east of TW4-4 and TW4-6. For the current quarter, the water level at TW4-14 was measured at approximately 5532.2 feet above mean sea level ("ft amsl"). This is approximately 5 feet lower than the water level at TW4-6 (approximately 5537.4 ft amsl) and 9 feet lower than the water level at TW4-4 (approximately 5541.4 ft amsl) even though TW4-4 is pumping.

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 5528.1 ft amsl) is 4.1 feet lower than the water level at TW4-14 (5532.2 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 that result 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 (5535.8 feet amsl) is, however, lower than water levels at adjacent wells TW4-6 (5537.4 feet amsl), and TW4-23 (5538.8 feet amsl), as shown in the detail water level map under Tab C.

Hydraulic tests indicate that the permeability at TW4-27 is an order of magnitude lower than at TW4-6 and three orders of magnitude lower than at TW4-4 (see Hydro Geo Chem, Inc. [HGC], September 20, 2010: Hydraulic Testing of TW4-4, TW4-6, and TW4-26, White Mesa Uranium Mill, July 2010; and HGC, November 28, 2011: Installation, Hydraulic Testing, and Perched Zone Hydrogeology of Perched Monitoring Well TW4-27, White Mesa Uranium Mill Near Blanding, Utah). The similar water levels at TW4-14 and TW4-27, and the low permeability estimate at TW4-27 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 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 (third quarter of 2015) to the water table contour maps for the previous quarter (second quarter of 2015) indicates similar patterns of drawdowns associated with pumping wells. Significant drawdowns associated with new chloroform pumping wells TW4-21 and TW4-37 are 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. While the water level in nitrate pumping well TW4-22 showed a slight increase (decrease in drawdown), the water levels at TW4-24, TW4-25, and TWN-2 showed decreases (increases in drawdowns) 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 12.6, 8.3, 4.2, and 2.8 feet occurred in chloroform pumping wells MW-4, TW4-1, TW4-2, and nitrate pumping well TW4-24, respectively. Increases in water level (decreases in drawdown) of approximately 6.2, 2.3, and 5.4 feet were reported for chloroform pumping wells TW4-11, MW-26, and TW4-19, 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 TW4-4, TW4-20, TW4-21, and TW4-37, and nitrate pumping wells TW4-22, TW4-25, and TWN-2) 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 0.8 feet at Piezometers 1, 2, 4, and 5, TWN-1, TWN-4, TWN-6, TWN-18, and MW-19 may result from cessation of water delivery to the northern wildlife ponds as discussed in Section 4.1.1 and the consequent continuing decay of the associated perched water mound. Reported water level decreases of approximately 0.7 feet and

0.8 feet at Piezometers 4 and 5, respectively, may result from reduced recharge at the southern wildlife pond.

Reported water levels decreased by approximately 2.8 feet at MW-3, and increased by approximately 4 feet and 6.6 feet at MW-20 and MW-37, respectively, between the previous quarter and the current quarter. Water level variability at these wells is likely the result of low permeability and variable intervals between purging/sampling and water level measurement. The water levels at TW4-7 and TW4-8 decreased by approximately 9.7 and 3 feet, respectively, likely related to the decrease at adjacent chloroform pumping well MW-4. Measurable water was again reported at DR-22. This piezometer is typically dry but on occasion has measurable water reported in the bottom of the casing.

4.1.3 Hydrographs

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

4.1.4 Depth to Groundwater Measured and Groundwater Elevation

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

4.2 Effectiveness of Hydraulic Containment and Capture

4.2.1 Hydraulic Containment and Control

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

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

The specific methodology for calculating the nitrate capture zones is substantially the same as that used since the fourth quarter of 2005 to calculate the capture zones for the chloroform

program, as agreed to by the DRC and International Uranium (USA) Corp. The procedure for calculating nitrate capture zones is as follows:

1) Calculate water level contours by gridding the water level data on approximately 50-foot centers using the ordinary linear kriging method in 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 nitrate pumping wells TW4-24, TW4-25, and TWN-2 decreased by approximately 2.8 feet, 0.51 feet, and 0.75 feet, respectively, and the water level in nitrate pumping well TW4-22 increased by approximately 0.3 feet . The water levels in chloroform pumping wells MW-4, TW4-1, TW4-2, TW4-20, TW4-21, and TW4-37 decreased by approximately 12.6 feet, 8.3 feet, 4.2 feet, 1.5 feet, 1.8 feet, and 1.3 feet respectively, while water levels in chloroform pumping wells TW4-4, TW4-11, MW-26, and TW4-19 increased by approximately 1.7 feet, 6.2 feet, 2.3 feet, and 5.4 feet, respectively. While the apparent capture of the combined pumping systems has expanded in some areas and been reduced in others, the overall apparent capture area 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 last quarter 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 last quarter was estimated using Darcy's Law to lie within a range of approximately 1.31 gpm to 2.79 gpm. Calculations were based on an average hydraulic conductivity range of 0.15 feet per day (ft/day) to 0.32 ft/day (depending on the calculation method), a pre-pumping hydraulic gradient of 0.025 feet per foot (ft/ft), a plume width of 1,200 feet, and a saturated thickness (at TW4-22 and TW4-24) of 56 feet. The hydraulic conductivity range was estimated by averaging the results obtained from slug test data that were collected automatically by data loggers from wells within the plume and analyzed using the KGS unconfined slug test solution available in Aqtesolve™ (see Hydro Geo Chem, Inc. [HGC], August 3, 2005: Perched Monitoring Well Installation and Testing at the White Mesa Uranium Mill, April Through June 2005; HGC, March 10, 2009: Perched Nitrate Monitoring Well Installation and Hydraulic Testing, White Mesa Uranium Mill; and HGC, March 17 2009: Letter Report to David Frydenlund, Esq, regarding installation and testing of TW4-23, TW4-24, and TW4-25). These results are summarized in Table 6. Data from fourth quarter 2012 were used to estimate the pre-pumping hydraulic gradient and saturated thickness. These data are also summarized in Tables 7 and 8.

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

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

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 'backgound' flow condition that accounts for reduced wildlife pond recharge is presented in Attachment N (Tab N). 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. 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 263,688 gallons. This equates to an average total extraction rate of approximately 2 gpm over the 90 day quarter. This average is similar to last quarter's average of approximately 1.7 gpm and accounts for time periods when pumps were off due to insufficient water columns in the wells. The current quarter's pumping (2 gpm) exceeds the high end of the recalculated 'background' flow range by a factor of 1.2.

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 1.2 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 plume has not migrated downgradient to MW-5 or MW-11 because nitrate was not detected at MW-11 and was detected at a concentration of only 0.14 mg/L at MW-5 last quarter. Between the previous and current quarters, nitrate concentrations increased slightly in both MW-30 and MW-31. Nitrate in MW-30 increased slightly from 17 mg/L to 17.9 mg/L and nitrate in MW-31 increased slightly from 19 mg/L to 19.9 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

Increases in nitrate concentrations in TW4-18 from approximately 10 mg/L to 16 mg/L and in TW4-19 from approximately 1 mg/L to 12 mg/L have caused a 'spur' of the plume to expand to the east and encompass TW4-18. A similar change occurred 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 last quarter after previous increases suggested that conditions in this area had stabilized.

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

Nitrate concentrations at the downgradient edge of the plume (MW-30 and MW-31) continue to be relatively stable, demonstrating that plume migration is minimal or absent. With regard to chloroform, the initiation of nitrate pumping has caused changes in the boundary of the chloroform plume. The boundary of the chloroform plume migrated to the west toward nitrate pumping well TW4-24, and more recently migrated to the southwest to reincorporate chloroform monitoring wells TW4-6 and TW4-16. The start-up of additional chloroform pumping wells during the first quarter of 2015, and reduced productivity at TW4-24, have apparently caused the chloroform plume to contract eastward away from TW4-24 and from TW4-16 (which was outside the plume last quarter). 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, TW4-18, TW4-19, TW4-20, TW4-22, TW4-25, and TWN-4;

b) Nitrate concentrations have decreased by more than 20% in the following wells compared to last quarter: TW4-24, TWN-7, and TWN-18;

c) Nitrate concentrations have remained within 20% in the following wells compared to last quarter: MW-27, MW-30, MW-31, TW4-5, TW4-16, TW4-21, TWN-1, TWN-2, and TWN-3;

d) MW-11 and MW-32 remained non-detect; and

e) MW-25 increased from non-detect to 0.75 mg/L.

As indicated, nitrate concentrations for many of the wells with detected nitrate were within 20% of the values reported during the previous quarter, suggesting that variations are within the range typical for sampling and analytical error. The remaining wells had changes in concentration greater than 20%. The latter includes chloroform pumping wells MW-26, TW4-19, and TW4-20; nitrate pumping wells TW4-22, TW4-24, and TW4-25; and non-pumping wells TW4-18, TWN-4, TWN-7, and TWN-18. TWN-7 and TWN-18 are located adjacent to nitrate pumping well TWN-2; TWN-4 is located adjacent to nitrate pumping wells TW4-25 and TWN-2; and TWN-7 and TWN-18 iare located outside the plume 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. Concentrations at TWN-4 are expected to be influenced by the adjacent wildlife ponds; concentrations at TWN-7 and TWN-18 are expected to be influenced by their location at the upgradient margin of the nitrate plume; and concentrations at TW4-18 are expected to be influenced by its position immediately downgradient of the northern wildlife ponds.

As discussed in Section 4.2.3, the nitrate concentration at TW4-18 and TW4-19 increased this quarter causing an eastward-extending 'spur' in the plume boundary. A similar event occurred in the third quarter of 2013. The nitrate concentrations in chloroform pumping wells MW-26, TW4-19, and TW4-20 increased from approximately < 1 mg/L, < 1 mg/L, and 5.8 mg/L, respectively, to approximately 1.8 mg/L, 11.6 mg/L, and 9.3 mg/L, respectively. The nitrate concentration in chloroform pumping well TW4-21 increased from approximately 13 to 15 mg/L. 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, TW4-5, TW4-16, TW4-20, TW4-25, 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: TW4-10 (14 mg/L), TW4-12 (16.4 mg/L),), TW4-26 (14.2 mg/L), TW4-27 (20.9 mg/L), and TW4-28 (17.8 mg/L). All these wells are located southeast of the nitrate plume as defined in the CAP and all are separated from the plume by wells having nitrate concentrations that are either

non-detect, or, if detected, are less than 10 mg/L. Concentrations at TW4-12, TW4-27 and TW4-28 are within 20% of their concentrations during the previous quarter. From the third quarter of 2013 through the second quarter of 2014, nitrate concentrations at TW4-10 and TW4-18 exceeded 10 mg/L, dropped below 10 mg/L in the third quarter of 2014, then increased above 10 mg/L in the fourth quarter of 2014. As discussed above, the concentrations at TW4-10 and TW4-18 are above 10 mg/L this quarter. Elevated nitrate concentrations at these wells are associated with the chloroform plume, and both are within the capture zone of the chloroform pumping system. Elevated nitrate at TW4-12, TW4-26, TW4-27, and TW4-28 is likely related to former cattle ranching operations at the site.

Chloride concentrations are measured because elevated chloride (greater than 100 mg/L) is associated with the nitrate plume. Chloride concentrations at all sampled locations this quarter are within 20% of their respective concentrations during the previous quarter except at MW-26, MW-31, TW4-19, TW4-20, TW4-22, and TW4-24. These changes likely result from 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 1,444 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 119 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 119 lb removed during the current quarter, approximately 49 lb, (or 41 %), was removed by the nitrate pumping wells.

The calculated nitrate mass removed was approximately 72% higher than last quarter due to pumping at TW4-21 and TW4-37 (which became operational during the last quarter), and higher nitrate concentrations at nitrate pumping well TW4-19. The higher concentrations at TW4-19 partially offset the generally lower productivity at that well since the third quarter of 2014. 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) provides an evaluation of reduced productivity at chloroform pumping well TW4-19 and nitratre 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 34,880 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 8,820 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 (34,880 lb) was larger than the mass estimate during the previous quarter (33,040 lb) by 1,840 lb or less than 6 %. This difference results primarily from the slightly increased plume area resulting from the eastward extension of the 'spur' that encompassed TW4-18.

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 was updated this quarter 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.

The following issue was noted as affecting multiple wells in the pumping network and is not repeated under the Section for each well.

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

5.4.1 MW-4

On July 7, 2015, Mill Field Personnel noted during the routine weekly inspection that the timer on MW-4 lost memory and the timer settings were erased. The well continued to pump and no loss of data were noted. The display batteries were changed and the timer was reset. No official notifications to DWMRC were required as the issue was rectified within 24-hours and there was no loss of pumping.

The timer issue noted above was the result of battery failure in the display module. The pump continued to operate as programed, however, the display was incorrect. Pumping continued uninterrupted.

5.4.2 TW4-11

On August 24, 2015, Mill Field Personnel noted during the routine weekly inspection that the timer on TW4-11 lost memory and the timer settings were erased. The well continued to pump and no loss of data were noted. The timer was reset. The well continued to pump and no loss of data were noted. The timer was inspected daily for several days and no issues were noted.

On August 31, 2015, Mill Field Personnel noted during the routine weekly inspection that the timer on TW4-11 lost memory and the timer settings were erased. The well continued to pump and no loss of data were noted. The display batteries were changed and the timer was reset. No further issues were noted during subsequent checks. No official notifications to DWMRC were required as the issue was rectified within 24-hours and there was no loss of pumping.

The timer issues noted above was the result of battery failure in the display module. The pump continued to operate as programed, however, the display was incorrect. 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 eighth quarter that hydraulic capture associated with nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 was evaluated. Although chloroform wells TW4-1, TW4-2, and TW4-11 began pumping during the first quarter of 2015 and TW4-21 and TW4-37 began pumping last quarter, water level monitoring indicates that the apparent combined capture area of the nitrate and chloroform pumping systems is similar to last quarter. Capture associated with nitrate pumping wells continues to develop and is expected to increase over time as water levels decline due to pumping and to cessation of water delivery to the northern wildlife ponds. Furthermore, the evaluation of the long term interaction between nitrate and chloroform pumping systems will require more data to be collected as part of routine monitoring. Slow development of hydraulic capture by the nitrate pumping system is consistent with and expected based on the relatively low permeability of the perched zone at the site. Definition of capture associated with the nitrate pumping system will also be influenced by the perched groundwater mound and the apparently anomalously low water level at TWN-7.

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 'backgound' flow condition that accounts for reduced wildlife pond recharge is presented in Attachment N (Tab N). 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. 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 gpm exceeds the high end of the recalculated 'background' range by a factor of 1.2..

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 1.2 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, 2015 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, TW4-24, and TW4-25; and non-pumping wells TW4-18, TWN-4, TWN-7, and TWN-18. TWN-7 and TWN-18 are located adjacent to nitrate pumping well TWN-2; TWN-4 is located adjacent to nitrate pumping wells TW4-26 and TWN-2; and TWN-7 and TWN-18 are located outside the plume 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. Concentrations at TWN-4 are expected to be influenced by the adjacent wildlife ponds; concentrations at TWN-7 and TWN-18 are expected to be influenced by their location at the upgradient margin of the nitrate plume; and concentrations at TW4-18 are expected to be influenced by its position immediately downgradient of the northern wildlife ponds. The concentrations in wells MW-11 and MW-32 remained non-detect; and the concentration in MW-25 increased from non-detect to 0.75 mg/L, but remains outside the plume.

As discussed in Section 4.2.3, the nitrate concentration at TW4-18 and TW4-19 increased this quarter causing an eastward-extending 'spur' in the plume boundary. A similar event occurred in the third quarter of 2013. The nitrate concentrations in chloroform pumping wells MW-26, TW4-19, and TW4-20 increased from approximately < 1 mg/L, < 1 mg/L, and 5.8 mg/L, respectively, to approximately 1.8 mg/L, 11.6 mg/L, and 9.3 mg/L, respectively. The nitrate concentration in chloroform pumping well TW4-21 increased from approximately 13 to 15 mg/L. 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, TW4-5, TW4-16, TW4-20, TW4-25, 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 slightly rom 17 mg/L to 17.9 mg/L and nitrate in MW-31 increased slightly from 19 mg/L to 19.9 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 119 lb 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 119 lb removed during the current quarter, approximately 49 lb, (or 41 %), 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 34,880 lbs which was larger than the mass estimate during the

previous quarter (33,042 lb) by 1,840 lb or less than 6 %. This difference results primarily from the slightly increased plume area resulting from the eastward extension of the 'spur' that encompassed TW4-18.

Nitrate concentrations outside the nitrate plume are greater than 10 mg/L at a few locations: TW4-10 (14 mg/L), TW4-12 (16.4 mg/L), TW4-26 (14.2 mg/L), TW4-27 (20.9 mg/L), and TW4-28 (17.8 mg/L). All these wells are located southeast of the nitrate plume as defined in the CAP and all are separated from the plume by wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. Concentrations at TW4-12, TW4-27 and TW4-28 are within 20% of their concentrations during the previous quarter. From the third quarter of 2013 through the second quarter of 2014, nitrate concentrations at TW4-10 and TW4-18 exceeded 10 mg/L, dropped below 10 mg/L in the third quarter of 2014, then increased above 10 mg/L in the fourth quarter of 2014. The concentrations at TW4-10 and TW4-18 are above 10 mg/L this quarter. Elevated nitrate concentrations at these wells are associated with the chloroform plume, and both are within the capture zone of the chloroform pumping system. Elevated nitrate at TW4-12, TW4-26, TW4-27, and TW4-28 is likely related to former cattle ranching operations at the site.

Increases in both nitrate and chloride concentrations at wells near the northern wildlife ponds (for example TW4-18) were anticipated as a result of reduced dilution caused by cessation of water delivery to the northern wildlife ponds. However, decreasing nitrate concentrations at most wells in the vicinity of TW4-18 from the first through third quarters of 2014 after a previously increasing trend (interrupted in the first quarter of 2014) suggested that conditions in this area had stabilized. The current increase in concentration at TW4-18 indicates that reduced wildlife pond recharge is still impacting concentrations in downgradient wells.

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

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

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

8.0 ELECTRONIC DATA FILES AND FORMAT

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

9.0 SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc. on November 23, 2015.

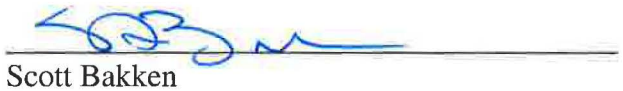
Energy Fuels Resources (USA) Inc.

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	8/26/2015	9/10/2015
Piezometer 02	8/26/2015	9/10/2015
Piezometer 03	8/26/2015	9/10/2015
TWN-01	8/25/2015	9/10/2015
TWN-01R	8/25/2015	9/10/2015
TWN-02	8/26/2015	9/10/2015
TWN-03	8/26/2015	9/10/2015
TWN-04	8/25/2015	9/10/2015
TWN-07	8/26/2015	9/10/2015
TWN-18	8/25/2015	9/10/2015
TW4-22	8/31/2015	9/28/2015
TW4-24	8/31/2015	9/28/2015
TW4-25	8/31/2015	9/28/2015
TWN-60	8/26/2015	9/10/2015
TW4-60	9/10/2015	9/22/2015
TWN-65	8/25/2015	9/10/2015

Note: All wells were sampled for Nitrate and Chloride.

TWN-60 is a DI Field Blank.

TWN-65 is a duplicate of TWN-04

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	NA	NA	NA	NA	NA	NA	NA	NA	15.69
Q4 2010	3.8	0.4	17.3	1.4	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.97
Q1 2011	2.9	0.2	64.5	1.4	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	73.30
Q2 2011	3.5	0.1	15.9	2.7	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.01
Q3 2011	3.5	0.5	3.5	3.9	5.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.82
Q4 2011	3.8	0.8	6.2	2.5	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.71
Q1 2012	3.6	0.4	0.7	5.0	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.86
Q2 2012	3.7	0.6	3.4	2.1	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.03
Q3 2012	3.8	0.5	3.6	2.0	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.67
Q4 2012	3.2	0.4	5.4	1.8	4.2	NA	NA	NA	NA	NA	NA	NA	NA	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	0.31	11.28	1.37	3.46	13.29	14.00	1.69	20.16	1.24	0.68	0.29	15.37	31.92	118.63
Well Totals (pounds)	**64.79**	**7.92**	**245.75**	**37.96**	**88.34**	**109.86**	**518.94**	**44.54**	**258.51**	**3.90**	**2.54**	**1.38**	**18.73**	**40.50**	**1443.66**

Table 3 Well Pumping Rates and Volumes

Pumping Well Name	Volume of Water Pumped During the Quarter (gals)	Average Pump Rate (gpm)
MW-4	89,520.8	4.6
MW-26	21,042.0	8.7
TW4-4	64,333.0	10.4
TW4-19	116,503.9	18.0
TW4-20	17,657.3	8.5
TW4-22	24,619.9	17.4
TW4-24	66,313.2	17.8
TW4-25	124,137.1	15.4
TWN-2	48,617.4	18.4
TW4-01	23,652.0	16.5
TW4-02	21,586.9	16.5
TW4-11	3,584.4	16.5
TW4-21	125,285.4	16.2
TW4-37	118,063.9	17.2

Table 4

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

	MW-4							MW-26						
Quarter	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)
Calculations and Data Origination	Total Gallons pumped for the quarter from the Flow Meter data	Concentration from the analytical data	Concentration in mg/LX1000 to convert to ug/L	Total pumped gallons/3.785 to conver 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
Totals Since Q3 2010	1642510.65						64.79	728729.2						7.92

Highlighted cells are the total for the current quarter

Table 4

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

	TW4-19							TW4-20						
Quarter	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**	**11.6**	**11600**	**440967.3**	**5.115E+09**	**5115**	**11.28**	**17657.3**	**9.27**	**9270**	**66832.9**	**619540802**	**620**	**1.37**
Totals Since Q3 2010	4970043.1						245.75	667168.3						37.96

Highlighted cells are the total for the current quarter

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

	TW4-4							TW4-22						
Quarter	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
Q4 2010	86872.1	7.10	7100.00	328810.9	2.3E+09	2334.56	5.15	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
Q2 2011	80334.6	7.00	7000.00	304066.5	2.1E+09	2128.47	4.69	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
Q4 2011	109043.5	7.00	7000.00	412729.6	2.9E+09	2889.11	6.37	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
Q2 2012	87759.1	7.10	7100.00	332168.2	2.4E+09	2358.39	5.20	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
Q4 2012	71596.0	7.00	7000.00	270990.9	1.9E+09	1896.94	4.18	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
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
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
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
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
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
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
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
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
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
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
Totals Since Q3 2010	1535426.4						88.34	259897.8						109.86

Highlighted cells are the total for the current quarter

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

	TW4-24							TW4-25						
Quarter	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
Totals Since Q3 2010	1920206.6						518.94	1288561.5						44.54

Highlighted cells are the total for the current quarter

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

	TWN-02							TW4-01						
Quarter	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	6.28	6280.0	89522.8	5.6E+08	562.2	1.24
Totals Since Q3 2010	515427.1						258.51	72211.1						3.90

Highlighted cells are the total for the current quarter

Highlighted cells are the total for the current quarter

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

	TW4-02							TW4-11						
Quarter	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	3.76	3760.0	81706.4	3.1E+08	307.2	0.68	3584.4	9.61	9610.0	13567.0	1.3E+08	130.4	0.29
Totals Since Q3 2010	67773.5						2.54	18726.4						1.38

Highlighted cells are the total for the current quarter

Highlighted cells are the total for the current quarter

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

	TW4-21							TW4-37							
Quarter	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)	Total Removed by All Wells (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	14.70	14700.0	474205.2	7.0E+09	6970.8	15.37	118063.9	32.40	32400.0	446871.9	1.4E+10	14478.6	31.92	118.63
Totals Since Q3 2010	156029.1						18.73	147269.9						40.50	1443.66

Highlighted cells are the total for the current quarter

Highlighted cells are the total for the current quarter

Table 5

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

Location	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
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
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
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
MW-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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 = arithemetic average of all wells

Average 2 = geometric average of all wells

Average 3 = arithemetic 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

INDEX OF TABS

Tab A

Site Plan and Perched Well Locations White Mesa Site

CORRAL CANYON

abandoned TWN-11
abandoned TWN-12
TWN-19
TWN-16
abandoned TWN-15
abandoned TWN-17
TWN-14
abandoned TWN-10
MW-01
abandoned TWN-09
abandoned TWN-13
MW-18
TWN-06
PIEZ-01
abandoned TWN-05
abandoned TWN-08
MW-19
TWN-18
TWN-07
wildlife pond
TWN-03
PIEZ-02
MW-27
TWN-02
TWN-04
Mill Site
wildlife pond
TW4-25
TWN-01
PIEZ-03
TW4-21
ENTRANCE SPRING
TW4-22
TW4-19
TW4-18
TW4-24
TW4-05
TW4-37
TW4-20
TW4-09
WESTWATER
MW-02
MW-24
MW-26
Cell 1
TW4-03
TW4-12
Cell 2
MW-28
TW4-10
TW4-32
MW-29
TW4-26
TW4-15
TW4-11
TW4-13
MW-30
TW4-02
MW-04
MW-31
TW4-07
TW4-08
TW4-36
MW-23
MW-12
Cell 3
MW-32
TW4-01
MW-05
TW4-04
TW4-14
TW4-06
TW4-23
TW4-31
TW4-33
DR-05
DR-06
DR-07
MW-35
Cell 4B
TW4-30
TW4-25
MW-35R
MW-25
TW4-29
TW4-35
Cell 4A
TW4-34
MW-33
PIEZ-04
MW-34
MW-37
MW-15
MW-14
wildlife pond
DR-08
DR-10
DR-11
DR-12
DR-13
MW-17
PIEZ-05
DR-09
COTTONWOOD
MW-03
MW-21
DR-14
DR-15
WHITE MESA
MW-20
DR-17
DR-19
DR-20
DR-21
MW-22
DR-23
DR-22
DR-24
RUIN SPRING
CORRAL SPRINGS
N
1 mile

EXPLANATION

- TW4-37 — perched chloroform pumping well installed March, 2015
- TW4-19 — perched chloroform or nitrate pumping well
- MW-5 — perched monitoring well
- TW4-12 — temporary perched monitoring well
- TWN-7 — temporary perched nitrate monitoring well
- PIEZ-1 — perched piezometer
- TW4-35 — temporary perched monitoring well installed May, 2014
- RUIN SPRING — seep or spring

HYDRO GEO CHEM, INC.

WHITE MESA SITE PLAN SHOWING LOCATIONS OF PERCHED WELLS AND PIEZOMETERS

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/Uwelloc0915.srf	A-1

Tab B

Order of Sampling and Field Data Worksheets

Nitrate Order
3rd Quarter 2015

Nitrate Samples					
Name	Nitrate Mg/L Previous Qrt.	Date/Purge	sample	Depth	Total Depth
TWN-1	0.65	8/25/15	0943		112.5
TWN-4	0.733	8/25/15	1017		125.7
TWN-7	0.779	8/26/15	1003		105
TWN-18	1.35	8/25/15	1236		145
TWN-3	17.2	8/26/15	1011		96
TWN-2	52.8	8/26/15	1214		96
65 Duplicate of Rinsate	4	8/25/15	1017		
60 DI Sample		8/26/15	1230		
Piez 1	5.95	8/26/15	1200		
Piez 2	0.646	8/26/15	1019		
Piez 3	1.75	8/26/15	1029		

Rinsate Samples		
Name	Date	Sample
TWN-1R	8/25/15	0920
TWN-4R	25	
TWN-7R		
TWN-18R		
TWN-3R		
TWN-2R		

Samplers: _____

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): Picz-01

Sampler Name and initials: Tanner Holliday TH

Field Sample ID: Picz-01_08262015

Date and Time for Purging: 8/26/2015 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: Picz-03

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 1000 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 65.05

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

Weather Cond.: Cloudy

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

Time	1159	Gal. Purged	0
Conductance	2260	pH	8.59
Temp. °C	15.85		
Redox Potential Eh (mV)	278		
Turbidity (NTU)	0		

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 [0] gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = [0]

Time to evacuate two casing volumes (2V)
T = 2V/Q = [0]

Number of casing volumes evacuated (if other than two) [0]

If well evacuated to dryness, number of gallons evacuated [0]

Name of Certified Analytical Laboratory if Other Than Energy Labs [AWAL]

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth [65,22] Sample Time [1200]

See instruction

Comment

Arrived on site at 1156 Tanner and Garrin present to collect samples.
Samples bailed at 1200 Water was mostly clear, with some wood chip like particles floating
Left site at 1206

Piez-01 08-26-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): Piez-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: Piez-02_08262015

Date and Time for Purging: 8/26/2015 and Sampling (if different): N/A

Well Purging Equip Used: ☐ pump or ☒ bailer

Well Pump (if other than Bennet): N/A

Purging Method Used: ☐ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: TWN-03

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 1000 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 38.19

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

Weather Cond.: Cloudy, light Rain

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

Time	1018	Gal. Purged	0
Conductance	863	pH	7.32
Temp. °C	14.82		
Redox Potential Eh (mV)	408		
Turbidity (NTU)	15		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 0

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 38.81 Sample Time: 1019

See instruction

Comment

Arrived on site at 1016 Tanner and Garrin present to collect samples.
Samples bailed at 1019 Water was mostly clear
Left site at 1021

Piez-02 08-26-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): Piez-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: Piez-03_08262015

Date and Time for Purging: 8/26/2015 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 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 50.57

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

Weather Cond.: Cloudy, light Rain

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

Time	1028	Gal. Purged	0
Conductance	1764	pH	11.65
Temp. °C	14.74		
Redox Potential Eh (mV)	178		
Turbidity (NTU)	2.3		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 0

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 57.66 Sample Time: 1029

See instruction

Comment

Arrived on site at 1025 Tanner and Garrin present to collect samples
Samples bailed at 1029 Water was mostly clear.
Left site at 1034

Piez-03 08-26-2015 Do not touch this cell (SheetName)

ENERGY FUELS

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate

Location (well name): TWN-01

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-01_08252015

Date and Time for Purging: 8/25/2015 and Sampling (if different): N/A

Well Purging Equip Used: [X] pump or [ ] bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: [X] 2 casings [ ] 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: TWN-01R

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 1000 µMHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging: 61.68

Casing Volume (V) 4" Well: 33.18 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

Ext'l Amb. Temp. °C (prior sampling event): 18°

Time	0940	Gal. Purged	55
Conductance	885	pH	6.95
Temp. °C	15.24		
Redox Potential Eh (mV)	425		
Turbidity (NTU)	25		

Time	0941	Gal. Purged	66
Conductance	894	pH	6.98
Temp. °C	15.24		
Redox Potential Eh (mV)	425		
Turbidity (NTU)	23		

Time	0942	Gal. Purged	77 77
Conductance	895	pH	7.00
Temp. °C	15.24		
Redox Potential Eh (mV)	423		
Turbidity (NTU)	24		

Time	0943	Gal. Purged	88
Conductance	900	pH	7.02
Temp. °C	15.24		
Redox Potential Eh (mV)	423		
Turbidity (NTU)	24		

Volume of Water Purged: 88 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 6.03

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 108.10 Sample Time: 0943

See instruction

Comment

Arrived on site at 0932 Tanner and Garrin present for purge and sampling event. Purge began at 0935. Purged well for a total of 8 minutes. Purge ended and samples collected at 0943, water was mostly clear Left site at 0947

TWN-01 08-25-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd ~~Quarterly~~ Quarter Nitrate 2015

Location (well name): TWN-01R

Sampler Name and initials: Tanner Holliday /TH

Field Sample ID: TWN-01R_08252015

Date and Time for Purging: 8/25/2015 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 µMHOS/ 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.: Cloudy

Ext'l Amb. Temp. °C (prior sampling event): 18°

Time	0919	Gal. Purged	143
Conductance	3.6	pH	6.03
Temp. °C	25.27		
Redox Potential Eh (mV)	485		
Turbidity (NTU)	0		

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: 150 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 0

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 0

Sample Time: 0920

See instruction

Comment

Arrived on site at 0900. Tanner and Garrin present for rinsate. Rinsate began at 0906
Pumped 50 Gallons of soap water and 100 Gallons of DI water.
Rinsate ended and samples collected at 0920. Left site at 0922

TWN-01R 08-25-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-02

Sampler Name and initials: Tanner Holliday /TH

Field Sample ID: TWN-02_08262015

Date and Time for Purging: 8/26/2015 and Sampling (if different): N/A

Well Purging Equip Used: [X] 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: Piez-01

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 1000 µMHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging: 61.40

Casing Volume (V) 4" Well: 22.59 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

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

Time	1213	Gal. Purged	0
Conductance	3238	pH	6.67
Temp. °C	15.31		
Redox Potential Eh (mV)	340		
Turbidity (NTU)	0		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 18.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 2.51

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☑	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 78.93 Sample Time: 1214

See instruction

Comment

Arrived on site at 1211 Tanner and Garrin present to collect samples
~~Samples baited at water was~~ samples collected at 1214
Left site 1216. Water was clear

TWN-02 08-26-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-03_08262015

Date and Time for Purging: 8/25/2015 and Sampling (if different): 8/26/2015

Well Purging Equip Used: [X] pump or [ ] bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: [X] 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 µMHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging: 38.30

Casing Volume (V) 4" Well: 37.67 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

Ext'l Amb. Temp. °C (prior sampling event): 27°

Time	1303	Gal. Purged	49.50		
Conductance	2395	pH	6.76		
Temp. °C	15.15				
Redox Potential Eh (mV)	363				
Turbidity (NTU)	28				

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

Time	1010	Gal. Purged	0		
Conductance	2378	pH	6.97 6.97		
Temp. °C	15.24				
Redox Potential Eh (mV)					
Turbidity (NTU)					

Before

Time	1012	Gal. Purged	0		
Conductance	2385	pH	6.95		
Temp. °C	15.23				
Redox Potential Eh (mV)					
Turbidity (NTU)					

After

Volume of Water Purged: 49.50 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 6.85

Number of casing volumes evacuated (if other than two): 1.31

If well evacuated to dryness, number of gallons evacuated: 49.50

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 94.01 Sample Time: 1011

See instruction

Comment

Arrived on site at 1256. Tanner and Garrin present for purge. Purge began at 1259 Purged well for a total of 4 minutes 30 seconds. Purged well dry. Purge ended at 1303. Water was mostly clear. Left site at 1307 Arrived on site at 1008 Tanner and Garrin present to collect samples. Depth to water was 38.05 Samples bailed at 1011 Left site at 1014

TWN-03 08-25-2013 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-04

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-04_08252015

Date and Time for Purging: 8/25/2015 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 µMHOS/ cm

Well Depth(0.01ft): 125.70

Depth to Water Before Purging: 54.32

Casing Volume (V) 4" Well: 46.61 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

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

Time	1014	Gal. Purged	88		
Conductance	1101	pH	6.85		
Temp. °C	14.91				
Redox Potential Eh (mV)	361				
Turbidity (NTU)	11.2				

Time	1015	Gal. Purged	99		
Conductance	1101	pH	6.85		
Temp. °C	14.92				
Redox Potential Eh (mV)	359				
Turbidity (NTU)	11.3				

Time	1016	Gal. Purged	110		
Conductance	1101	pH	6.85		
Temp. °C	14.92				
Redox Potential Eh (mV)	358				
Turbidity (NTU)	11.4				

Time	1017	Gal. Purged	121		
Conductance	1100	pH	6.87		
Temp. °C	14.91				
Redox Potential Eh (mV)	357				
Turbidity (NTU)	11.5				

Volume of Water Purged: 121 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 8.47

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 55.70

Sample Time: 1017

See instruction

Comment

Arrived on site at 1003 Tanner and Garrin present for purge and sampling event.
Purge began at 1006 Purged well for a total of 11 minutes.
Purge ended and samples collected at 1017. Water was clear
Left site at 1020

TWN-04 08-25-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-07

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-07_08262015

Date and Time for Purging: 8/25/2015 and Sampling (if different): 8/26/2015

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 µMHOS/ cm

Well Depth(0.01ft): 105.00

Depth to Water Before Purging: 85.60

Casing Volume (V) 4" Well: 12.66 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

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

Before				After			
Time	1042	Gal. Purged	16.50	Time		Gal. Purged	
Conductance	1320	pH	6.94	Conductance		pH	
Temp. °C	15.87			Temp. °C			
Redox Potential Eh (mV)	378			Redox Potential Eh (mV)			
Turbidity (NTU)	17.1			Turbidity (NTU)			
Time	1002	Gal. Purged	0	Time	1004	Gal. Purged	0
Conductance	1329	pH	6.73	Conductance	1338	pH	6.75
Temp. °C	16.26			Temp. °C	16.23		
Redox Potential Eh (mV)				Redox Potential Eh (mV)			
Turbidity (NTU)				Turbidity (NTU)			

Volume of Water Purged: 16.50 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 2.30

Number of casing volumes evacuated (if other than two): 1.30

If well evacuated to dryness, number of gallons evacuated: 16.50

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 102.97 Sample Time: 1003

See instruction

Comment

Arrived on site at 1038 Tanner and Garrin present for purge. Purge began at 1041
Purged well for a total of 1 minute 30 seconds. Purged well dry. Purge ended at 1042.
Water was mostly clear. Left site at 1045.
Arrived on site at 0959 Tanner and Garrin present to collect samples. Depth to water was 95.05
Samples bailed at 1003 Left site at 1005

TWN-07 08-25-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-18

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-18_08252015

Date and Time for Purging: 8/25/2015 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 µMHOS/ cm

Well Depth(0.01ft): 145.00

Depth to Water Before Purging: 60.18

Casing Volume (V) 4" Well: 55.38 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

Ext'l Amb. Temp. °C (prior sampling event): 25°

Time	1233	Gal. Purged	99
Conductance	2351	pH	6.60
Temp. °C	14.75		
Redox Potential Eh (mV)	374		
Turbidity (NTU)	~~3~~ 20	20	

Time	1234	Gal. Purged	110
Conductance	2344	pH	6.60
Temp. °C	14.73		
Redox Potential Eh (mV)	372		
Turbidity (NTU)	20		

Time	1235	Gal. Purged	121
Conductance	2371	pH	6.60
Temp. °C	14.73		
Redox Potential Eh (mV)	371		
Turbidity (NTU)	21		

Time	1236	Gal. Purged	132
Conductance	2341	pH	6.60
Temp. °C	14.73		
Redox Potential Eh (mV)	369		
Turbidity (NTU)	21		

Volume of Water Purged: 132 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 10.67

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 61.70 Sample Time: 1236

See instruction

Comment

Arrived on site at 1220 Tanner and Garrin present for purge and sampling event.
Purge began at 1224 Purged well for a total of 12 minutes
Purge ended and samples collected at 1236. water was mostly clear.
Left site at 1239

TWN-18 08-25-2015 Do not touch this cell (SheetName)

ENERGY FUELS

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

See instruction

Description of Sampling Event: 3rd Quarter Chloroform 2015

Location (well name): TW4-22

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-22_08312015

Date and Time for Purging: 8/31/2015

and Sampling (if different): N/A

Well Purging Equip Used: [X] pump or [ ] bailer

Well Pump (if other than Bennet): Continuous

Purging Method Used: [X] 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: 1000 µMHOS/ cm

Well Depth(0.01ft): 113.50

Depth to Water Before Purging: 57.68

Casing Volume (V) 4" Well: 36.45 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Sunny

Ext'l Amb. Temp. °C (prior sampling event): 26°

Time	1358	Gal. Purged	0
Conductance	5752	pH	6.57
Temp. °C	16.29		
Redox Potential Eh (mV)	278		
Turbidity (NTU)	11.2		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 17.2

Time to evacuate two casing volumes (2V)
T = 2V/Q = 4.23

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☒	☐	3x40 ml	☐	☒	HCL	☒	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 71.41 Sample Time: 1359

See instruction

Comment

Arrived on site at 1354 Tanner and Garrin present to collect samples.
Samples collected at 1359 Water was clear
Left site at 1401

TW4-22 08-31-2015 Do not touch this cell (SheetName)

ENERGY FUELS

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

See instruction

Description of Sampling Event: 3rd Quarter Chloroform 2015

Location (well name): TW4-24

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-24_08312015

Date and Time for Purging: 8/31/2015 and Sampling (if different): N/A

Well Purging Equip Used: [X] pump or [ ] bailer

Well Pump (if other than Bennet): Continuous

Purging Method Used: [X] 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 µMHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging: 62.00

Casing Volume (V) 4" Well: 32.97 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Sunny

Ext'l Amb. Temp. °C (prior sampling event): 26°

Time	1347	Gal. Purged	0
Conductance	~~1737~~ 5737	pH	6.45
Temp. °C	16.70		
Redox Potential Eh (mV)	284		
Turbidity (NTU)	1.0		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 17.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 3.87

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☒	☐	3x40 ml	☐	☒	HCL	☒	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 68.49 Sample Time: 1348

See instruction

Comment

Arrived on site at 1345 Tanner and Garrin present to collect Samples
Samples collected at 1348 water was clear
Left site at 1353

TW4-24 08-31-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Chloroform 2015

Location (well name): TW4-25

Sampler Name and initials: Tanner Holliday /TH

Field Sample ID: TW4-25_08312015

Date and Time for Purging: 8/31/2015 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 µMHOS/ cm

Well Depth(0.01ft): 134.80

Depth to Water Before Purging: 63.66

Casing Volume (V) 4" Well: 46.45 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Sunny

Ext'l Amb. Temp. °C (prior sampling event): 26°

Time	1334	Gal. Purged	0
Conductance	2668	pH	6.84
Temp. °C	16.11		
Redox Potential Eh (mV)	329		
Turbidity (NTU)	12.0		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 15.2

Time to evacuate two casing volumes (2V)
T = 2V/Q = 6.11

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☒	☐	3x40 ml	☐	☒	HCL	☒	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 77.23 Sample Time: 1335

See instruction

Comment

Arrived on site at 1332 Tanner and Garrin present to collect samples.
Samples collected at 1335 Water was mostly clear
Left site at 1339

TW4-25 08-31-2015 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-60_08262015

Date and Time for Purging: 8/26/2015 and Sampling (if different): N/A

Well Purging Equip Used: [X] 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 µMHOS/ 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.: Cloudy

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

Time	1229	Gal. Purged	0
Conductance	0.9	pH	8.11
Temp. °C	24.69		
Redox Potential Eh (mV)	258		
Turbidity (NTU)	0		

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 [0] gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = [0]

Time to evacuate two casing volumes (2V)
T = 2V/Q = [0]

Number of casing volumes evacuated (if other than two) [0]

If well evacuated to dryness, number of gallons evacuated [0]

Name of Certified Analytical Laboratory if Other Than Energy Labs [AWAL]

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth [0] Sample Time [1230]

See instruction

Comment

DI Blank

TWN-60 08-26-2015 Do not touch this cell (SheetName)

ENERGY FUELS

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

See instruction

Description of Sampling Event: 3rd Quarter Chloroform 2015

Location (well name): TW4-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-60_09102015

Date and Time for Purging: 9/10/2015 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): N/A

Purging Method Used: ☐ 2 casings ☐ 3 casings

Sampling Event: Quarterly Chloroform

Prev. Well Sampled in Sampling Event: TW4-10

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 1000 µMHOS/ 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.: Sunny

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

Time	0744	Gal. Purged	6
Conductance	~~22.76~~ 0.8	pH	7.50
Temp. °C	22.76		
Redox Potential Eh (mV)	343		
Turbidity (NTU)	0.5		

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: 0 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 0

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☒	☐	3x40 ml	☐	☒	HCL	☒	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 0

Sample Time: 0745

See instruction

Comment

DI Blank

TW4-60 09-10-2015 Do not touch this cell (SheetName)

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

ENERGY FUELS

See instruction

Description of Sampling Event: 3rd Quarter Nitrate 2015

Location (well name): TWN-65

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-65_08252015

Date and Time for Purging: 8/25/2015 and Sampling (if different): N/A

Well Purging Equip Used: [x] pump or [ ] bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: [x] 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 µMHOS/ cm

Well Depth(0.01ft): 125.70

Depth to Water Before Purging: 54.32

Casing Volume (V) 4" Well: 46.61 (.653h)
3" Well: 0 (.367h)

Weather Cond.: Cloudy

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

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

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

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

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

Volume of Water Purged: 12 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 11.0

Time to evacuate two casing volumes (2V)
T = 2V/Q = 8.47

Number of casing volumes evacuated (if other than two): 0

If well evacuated to dryness, number of gallons evacuated: 0

Name of Certified Analytical Laboratory if Other Than Energy Labs: AWAL

Type of Sample	Sample Taken		Sample Vol (indicate if other than as specified below)	Filtered		Preservative Type	Preservative Added	
	Y	N		Y	N		Y	N
VOCs	☐	☐	3x40 ml	☐	☐	HCL	☐	☐
Nutrients	☒	☐	100 ml	☐	☒	H2SO4	☒	☐
Heavy Metals	☐	☐	250 ml	☐	☐	HNO3	☐	☐
All Other Non Radiologics	☐	☐	250 ml	☐	☐	No Preserv.	☐	☐
Gross Alpha	☐	☐	1,000 ml	☐	☐	HNO3	☐	☐
Other (specify)	☒	☐	Sample volume	☐	☒		☐	☒
Chloride								

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

Final Depth: 55.70

Sample Time: 1017

See instruction

Comment

Duplicate of TWN-04

TWN-65 08-25-2015 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: Tanner Holliday

9/30/2015

TIME	WELL	Depth to Water (ft.)
937	MW-1	64.12
1050	MW-2	109.66
833	MW-3	85.50
834	MW-3A	84.51
1057	MW-5	106.10
1130	MW-11	86.10
1100	MW-12	108.19
1115	MW-14	103.07
1116	MW-15	106.04
838	MW-17	71.95
934	MW-18	71.79
923	MW-19	61.15
758	MW-20	86.15
721	MW-22	66.70
1054	MW-23	113.96
1048	MW-24	113.11
1133	MW-25	76.28
1404	MW-26	64.64
1041	MW-27	53.97
1045	MW-28	75.30
1220	MW-29	100.83
1217	MW-30	75.40
1214	MW-31	68.40
1211	MW-32	76.91
1445	MW-33	DRY
1125	MW-34	107.13
1103	MW-35	112.29
1105	MW-36	110.40
1121	MW-37	107.18

TIME	WELL	Depth to Water (ft.)
1415	MW-4	78.95
1419	TW4-1	82.73
1412	TW4-2	77.60
1158	TW4-3	56.07
1424	TW4-4	72.14
1204	TW4-5	63.78
1148	TW4-6	71.38
1152	TW4-7	74.85
1155	TW4-8	76.56
1201	TW4-9	61.61
1206	TW4-10	61.26
1409	TW4-11	90.35
855	TW4-12	45.36
900	TW4-13	51.28
903	TW4-14	80.62
1404	TW4-15	64.64
1209	TW4-16	63.40
1211	TW4-17	76.91
1025	TW4-18	64.65
1436	TW4-19	63.23
1400	TW4-20	62.75
1337	TW4-21	66.30
1353	TW4-22	57.76
1140	TW4-23	68.55
1350	TW4-24	65.22
1341	TW4-25	63.51
1143	TW4-26	65.92
843	TW4-27	79.81
1856	TW4-28	39.44
844	TW4-29	73.25
850	TW4-30	76.07
852	TW4-31	80.24
858	TW4-32	50.88
841	TW4-33	71.92
846	TW4-34	71.26
848	TW4-35	74.06
901	TW4-36	56.41
1356	TW4-37	61.18

TIME	WELL	Depth to Water (ft.)
927	PIEZ-1	64.84
921	PIEZ-2	38.20
1034	PIEZ-3	49.11
1140	PIEZ-4	57.55
1137	PIEZ-5	57.08
1023	TWN-1	61.70
1344	TWN-2	28.80
1029	TWN-3	37.89
1032	TWN-4	54.39
	TWN-5	Abandoned
931	TWN-6	78.01
939	TWN-7	85.62
	TWN-8	Abandoned
	TWN-9	Abandoned
	TWN-10	Abandoned
	TWN-11	Abandoned
	TWN-12	Abandoned
	TWN-13	Abandoned
917	TWN-14	61.35
	TWN-15	Abandoned
914	TWN-16	47.65
	TWN-17	Abandoned
1038	TWN-18	60.08
910	TWN-19	53.30

TIME	WELL	Depth to Water (ft.)
NA	DR-1	Abandoned
NA	DR-2	Abandoned
816	DR-5	82.98
813	DR-6	94.25
1108	DR-7	92.05
809	DR-8	51.25
806	DR-9	86.47
802	DR-10	78.12
824	DR-11	98.08
827	DR-12	90.78
830	DR-13	69.87
751	DR-14	76.21
754	DR-15	92.83
	DR-16	Abandoned
747	DR-17	64.85
	DR-18	Abandoned
736	DR-19	63.00
733	DR-20	55.56
726	DR-21	101.00
740	DR-22	60.60
729	DR-23	70.43
743	DR-24	44.17
NA	DR-25	Abandoned

Weekly Inspection Form

Date 7/7/15 **Name** Garrin Palmer, Tanner Halliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1502	MW-4	65.08	Flow 4.6 GPM	(Yes) No
			Meter 689757.90	(Yes) No
1449	MW-26	63.40	Flow 9.6 GPM	(Yes) No
			Meter 16496.10	(Yes) No
1049	TW4-19	66.48	Flow 18.2 GPM	(Yes) No
			Meter 43007.00	(Yes) No
1444	TW4-20	66.45	Flow 8.6 GPM	(Yes) No
			Meter 81336.16	(Yes) No
1514	TW4-4	72.60	Flow 10.6 GPM	(Yes) No
			Meter 134731.80	(Yes) No
1431	TWN-2	27.64	Flow 18.0 GPM	(Yes) No
			Meter 470526.90	(Yes) No
1438	TW4-22	59.05	Flow 17.8 GPM	(Yes) No
			Meter 237289.40	(Yes) No
1436	TW4-24	62.32	Flow 17.8 GPM	(Yes) No
			Meter 1858713.70	(Yes) No
1427	TW4-25	62.28	Flow 15.8 GPM	(Yes) No
			Meter 1174161.30	(Yes) No
1310	TW4-1	72.30	Flow 16.0 GPM	(Yes) No
			Meter 50417.20	(Yes) No
1458	TW4-2	71.29	Flow 17.0 GPM	(Yes) No
			Meter 47827.00	(Yes) No
1456	TW4-11	91.29	Flow 16.3 GPM	(Yes) No
			Meter 15508.40	(Yes) No
1423	TW4-21	69.49	Flow 16.1 GPM	(Yes) No
			Meter 40576.82	(Yes) No
1441	TW4-37	61.68	Flow 17.6 GPM	(Yes) No
~~1444~~			Meter 38512.40	(Yes) No

Operational Problems (Please list well number): MW-4 timer settings were erased.

Corrective Action(s) Taken (Please list well number): Reset timer settings on MW-04.

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 7/13/15 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1429	MW-4	73.42	Flow 4.6 GPM	(Yes) No
			Meter 696192.54	(Yes) No
1421	MW-26	64.25	Flow 9.2 GPM	(Yes) No
			Meter 17971.70	(Yes) No
1335	TW4-19	63.15	Flow 18.0 GPM	(Yes) No
			Meter 50804.50	(Yes) No
1418	TW4-20	61.80	Flow 9.0 GPM	(Yes) No
			Meter 82505.64	(Yes) No
1434	TW4-4	72.62	Flow 10.6 GPM	(Yes) No
			Meter 138920.70	(Yes) No
1405	TWN-2	27.95	Flow 18.5 GPM	(Yes) No
			Meter 473771.20	(Yes) No
1413	TW4-22	69.00	Flow 17.4 GPM	(Yes) No
			Meter 238892.20	(Yes) No
1410	TW4-24	62.82	Flow 17.8 GPM	(Yes) No
			Meter 1863171.30	(Yes) No
1402	TW4-25	62.70	Flow 15.6 GPM	(Yes) No
			Meter 1182455.20	(Yes) No
1432	TW4-1	77.91	Flow 17.4 GPM	(Yes) No
			Meter 52009.30	(Yes) No
1427	TW4-2	72.40	Flow 17.2 GPM	(Yes) No
			Meter 49311.60	(Yes) No
1425	TW4-11	91.80	Flow 16.2 GPM	(Yes) No
			Meter 15897.60	(Yes) No
1339	TW4-21	65.38	Flow 16.0 GPM	(Yes) No
			Meter 48510.06	(Yes) No
1416	TW4-37	67.09	Flow 17.6 GPM	(Yes) No
			Meter 46427.20	(Yes) No

Operational Problems (Please list well number): _____

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

* Depth is measured to the nearest 0.01 feet.

Monthly Depth Check Form

Date 7-14-2015 **Name** Tanner Holliday

Time	Well	Depth*	Time	Well	Depth*
1051	MW-4	71.69	1005	TWN-1	61.34
1049	TW4-1	77.90	0958	TWN-2	28.05
1054	TW4-2	72.45	1013	TWN-3	~~28.05~~ 38.38
~~1227~~ 1229	TW4-3	55.69	1016	TWN-4	53.86
1047	TW4-4	70.69	1026	TWN-7	85.72
1225	TW4-5	63.40	1019	TWN-18	60.00
1045	TW4-6	71.09	1022	MW-27	53.81
1100	TW4-7	69.86	1031	MW-30	75.49
1103	TW4-8	72.16	1035	MW-31	68.52
1227	TW4-9	61.27			
1223	TW4-10	60.96			
1106	TW4-11	92.02			
1250	TW4-12	45.05			
1255	TW4-13	50.85	1251	TW4-28	39.20
1258	TW4-14	81.20	1240	TW4-29	73.11
1112	TW4-15	67.35	1246	TW4-30	76.26
1109	TW4-16	63.44	1247	TW4-31	80.62
1038	TW4-17	76.97	1253	TW4-32	50.72
1008	TW4-18	64.25	1236	TW4-33	71.75
0950	TW4-19	64.01	1242	TW4-34	71.10
1115	TW4-20	63.35	1244	TW4-35	74.15
1010	TW4-21	65.40	1256	TW4-36	56.56
1116	TW4-22	69.11	1114	TW4-37	63.54
1040	TW4-23	68.31			
1119	TW4-24	63.95			
1002	TW4-25	64.05			
1043	TW4-26	65.65			
1238	TW4-27	80.02			

6.3 388918
8.07 42300
5984911

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

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 7/20/15 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1311	MW-4	80.95	Flow 4.7 GPM	(Yes) No
			Meter 703509.42	(Yes) No
1302	MW-26	83.42	Flow 8.2 GPM	(Yes) No
			Meter 19530.10	(Yes) No
1208	TW4-19	62.60	Flow 18.5 GPM	(Yes) No
			Meter 59654.60	(Yes) No
1300	TW4-20	62.28	Flow 8.4 GPM	(Yes) No
			Meter 83970.66	(Yes) No
1317	TW4-4	73.88	Flow 10.0 GPM	(Yes) No
			Meter 143910.70	(Yes) No
1248	TWN-2	27.75	Flow 18.0 GPM	(Yes) No
			Meter 477477.5	(Yes) No
1253	TW4-22	58.05	Flow 17.2 GPM	(Yes) No
			Meter 240629.20	(Yes) No
1251	TW4-24	62.80	Flow 18.0 GPM	(Yes) No
			Meter 1868103.00	(Yes) No
1244	TW4-25	66.43	Flow 15.4 GPM	(Yes) No
			Meter 1192085.60	(Yes) No
1314	TW4-1	89.77	Flow 16.4 GPM	(Yes) No
			Meter 53849.70	(Yes) No
1308	TW4-2	76.48	Flow 16.6 GPM	(Yes) No
			Meter 51036.20	(Yes) No
1306	TW4-11	92.73	Flow 16.1 GPM	(Yes) No
			Meter 16145.70	(Yes) No
1240	TW4-21	65.85	Flow 16.2 GPM	(Yes) No
			Meter 58188.93	(Yes) No
1257	TW4-37	60.90	Flow 17.0 GPM	(Yes) No
			Meter 55347.30	(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 7/27/15 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1440	MW-4	75.84	Flow 4.6 GPM	(Yes) No
			Meter 711161.85	(Yes) No
1431	MW-26	63.65	Flow 9.0 GPM	(Yes) No
			Meter 21272.80	(Yes) No
1348	TW4-19	62.95	Flow 18.4 GPM	(Yes) No
			Meter 68611.20	(Yes) No
1429	TW4-20	75.45	Flow 8.0 GPM	(Yes) No
			Meter 85374.60	(Yes) No
1446	TW4-4	73.10	Flow 10.6 GPM	(Yes) No
			Meter 148992.80	(Yes) No
1415	TWN-2	27.00	Flow 18.6 GPM	(Yes) No
			Meter 481187.60	(Yes) No
1425	TW4-22	61.39	Flow 17.0 GPM	(Yes) No
			Meter 242514.60	(Yes) No
1420	TW4-24	62.27	Flow 17.8 GPM	(Yes) No
			Meter 1873234.60	(Yes) No
1412	TW4-25	62.58	Flow 16.0 GPM	(Yes) No
			Meter 1201675.50	(Yes) No
1443	TW4-1	73.91	Flow 17.0 GPM	(Yes) No
			Meter 55701.40	(Yes) No
1437	TW4-2	73.96	Flow 16.4 GPM	(Yes) No
			Meter 52738.70	(Yes) No
1433	TW4-11	91.61	Flow 16.4 GPM	(Yes) No
			Meter 16590.60	(Yes) No
1408	TW4-21	65.45	Flow 16.0 GPM	(Yes) No
			Meter 67620.92	(Yes) No
1427	TW4-37	63.15	Flow 17.0 GPM	(Yes) No
			Meter 64652.30	(Yes) No

Operational Problems (Please list well number): _____

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/3/2015 **Name** Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1336	MW-4	78.60	Flow 4.6 GPM	(Yes) No
			Meter 718597.01	(Yes) No
1328	MW-26	69.84	Flow 9.8 GPM	(Yes) No
			Meter 22884.20	(Yes) No
1412	TW4-19	63.00	Flow 18.2	(Yes) No
			Meter 77511.05	(Yes) No
1326	TW4-20	62.59	Flow 8.2 GPM	(Yes) No
			Meter 86669.70	(Yes) No
1347	TW4-4	73.10	Flow 10.3 GPM	(Yes) No
			Meter ~~73.10~~ 153844.50	(Yes) No
1312	TWN-2	27.35	Flow 18.5 GPM	(Yes) No
			Meter 484806.60	(Yes) No
1320	TW4-22	57.90	Flow 17.4 GPM	(Yes) No
			Meter 244454.80	(Yes) No
1316	TW4-24	62.34	Flow 18.0 GPM	(Yes) No
			Meter 1378368.70	(Yes) No
1308	TW4-25	64.32	Flow 15.3 GPM	(Yes) No
			Meter 1211118.60	(Yes) No
1339	TW4-1	82.94	Flow 17.0 GPM	(Yes) No
			Meter 57545.30	(Yes) No
1335	TW4-2	75.65	Flow 16.0 GPM	(Yes) No
			Meter 54490.30	(Yes) No
1333	TW4-11	92.50	Flow 16.0 GPM	(Yes) No
			Meter 16826.50	(Yes) No
1304	TW4-21	65.95	Flow 15.6 GPM	(Yes) No
			Meter 77268.93	(Yes) No
1323	TW4-37	60.92	Flow 17.4 GPM	(Yes) No
			Meter 73313.40	(Yes) No

Operational Problems (Please list well number):

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/10/15 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1419	MW-4	71.61	Flow 4.6 GPM	(Yes) No
			Meter 725763.66	(Yes) No
1503	MW-26	63.60	Flow 9.6 GPM	(Yes) No
			Meter 24478.70	(Yes) No
1330	TW4-19	63.55	Flow 18.0 GPM	(Yes) No
			Meter 86374.60	(Yes) No
1500	TW4-20	64.12	Flow 8.6 GPM	(Yes) No
			Meter 88096.96	(Yes) No
1415	TW4-4	73.42	Flow 10.2 GPM	(Yes) No
			Meter 158793.00	(Yes) No
1521	TWN-2	29.15	Flow 18.4 GPM	(Yes) No
			Meter 488675.90	(Yes) No
1454	TW4-22	58.39	Flow 17.1 GPM	(Yes) No
			Meter 246358.50	(Yes) No
1452	TW4-24	62.35	Flow 18.0 GPM	(Yes) No
			Meter 1893453.80	(Yes) No
1518	TW4-25	84.85	Flow 15.0 GPM	(Yes) No
			Meter 1220897.30	(Yes) No
1417	TW4-1	84.20	Flow 17.0 GPM	(Yes) No
			Meter 59486.20	(Yes) No
1418	TW4-2	75.45	Flow 16.8 GPM	(Yes) No
			Meter 56021.90	(Yes) No
1421	TW4-11	92.97	Flow 16.9 GPM	(Yes) No
			Meter 16838.00	(Yes) No
1515	TW4-21	66.30	Flow 16.2 GPM	(Yes) No
			Meter 86855.20	(Yes) No
1457	TW4-37	61.88	Flow 16.8 GPM	(Yes) No
			Meter 82570.20	(Yes) No

Operational Problems (Please list well number):

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

* Depth is measured to the nearest 0.01 feet.

Monthly Depth Check Form

Date 8/12/15 **Name** Garrin Palmer

Time	Well	Depth*	Time	Well	Depth*
1248	MW-4	70.88	1511	TWN-1	61.65
1247	TW4-1	82.84	1509	TWN-2	29.60
1246	TW4-2	76.60	1448	TWN-3	38.39
1524	TW4-3	56.02	1454	TWN-4	54.30
1251	TW4-4	71.00	1506	TWN-7	85.70
1520	TW4-5	63.74	1514	TWN-18	64.60
1441	TW4-6	71.40	1540	MW-27	54.12
1249	TW4-7	73.70	1536	MW-30	75.71
1307	TW4-8	74.70	1534	MW-31	68.68
1522	TW4-9	61.60			
1526	TW4-10	61.25			
1245	TW4-11	93.28			
1340	TW4-12	45.35			
1337	TW4-13	51.50	1342	TW4-28	39.41
1333	TW4-14	81.21	1322	TW4-29	73.40
1243	TW4-15	64.20	1328	TW4-30	76.44
1530	TW4-16	63.65	1330	TW4-31	80.70
1532	TW4-17	77.18	1344	TW4-32	51.05
1451	TW4-18	60.24	1317	TW4-33	72.04
1200	TW4-19	63.86	1323	TW4-34	71.40
1242	TW4-20	64.01	1326	TW4-35	74.31
1530	TW4-21	67.02	1335	TW4-36	56.80
1235	TW4-22	60.22	1239	TW4-37	63.20
1437	TW4-23	68.65			
1237	TW4-24	61.98			
1238	TW4-25	78.89			
1439	TW4-26	65.95			
1320	TW4-27	80.16			

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

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 8/17/2015 **Name** Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
0826	MW-4	72.89	Flow 4.6 GPM	(Yes) No
			Meter 732781.52	(Yes) No
0806	MW-26	67.35	Flow 9.4 GPM	(Yes) No
			Meter 25941.3	(Yes) No
0725	TW4-19	63.49	Flow 18.0 GPM	(Yes) No
			Meter 94847.5	(Yes) No
0802	TW4-20	64.03	Flow 8.6 GPM	(Yes) No
			Meter 89277.9	(Yes) No
0835	TW4-4	72.39	Flow 10.1	(Yes) No
			Meter 163415.5	(Yes) No
0744	TWN-2	28.20	Flow 18.4	(Yes) No
			Meter 492274.4	(Yes) No
0754	TW4-22	57.95	Flow 18.0	(Yes) No
			Meter 248042.8	(Yes) No
0750	TW4-24	69.11	Flow 18.0	(Yes) No
			Meter 1888226.1	(Yes) No
0740	TW4-25	66.83	Flow 15.1	(Yes) No
			Meter 1229752.0	(Yes) No
~~0829~~ 0831	TW4-1	83.21	Flow 17.0	(Yes) No
			Meter 61137.0	(Yes) No
0824	TW4-2	75.61	Flow 16.8	(Yes) No
			Meter 57690.4	(Yes) No
0817	TW4-11	92.21	Flow 16.5	(Yes) No
			Meter 16838.4	(Yes) No
0735	TW4-21	66.02	Flow 16.0	(Yes) No
			Meter 95878.99	(Yes) No
0758	TW4-37	60.95	Flow 17.0	(Yes) No
			Meter 91100.2	(Yes) No

Operational Problems (Please list well number):

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/24/15 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1315	MW-4	80.95	Flow 4.7 GPM	(Yes) No
			Meter 740412.00	(Yes) No
1305	MW-26	83.15	Flow 8.0 GPM	(Yes) No
			Meter 27695.30	(Yes) No
1342	TW4-19	65.20	Flow 18.0 GPM	(Yes) No
			Meter 103981.11	(Yes) No
1303	TW4-20	62.85	Flow 8.6 GPM	(Yes) No
			Meter 90766.74	(Yes) No
1321	TW4-4	70.86	Flow 10.4 GPM	(Yes) No
			Meter 168581.00	(Yes) No
1252	TWN-2	27.96	Flow 18.8 GPM	(Yes) No
			Meter 495907.40	(Yes) No
1257	TW4-22	58.00	Flow 17.0 GPM	(Yes) No
			Meter 249829.40	(Yes) No
1255	TW4-24	62.95	Flow 18.0 GPM	(Yes) No
			Meter 1893456.50	(Yes) No
1238	TW4-25	68.05	Flow 15.4 GPM	(Yes) No
			Meter 1239467.10	(Yes) No
1318	TW4-1	95.61	Flow 16.3 GPM	(Yes) No
			Meter 63001.80	(Yes) No
1313	TW4-2	80.04	Flow 16.8 GPM	(Yes) No
			Meter 59254.50	(Yes) No
1308	TW4-11	70.10	Flow 17.0 GPM	(Yes) No
			Meter 16839.70	(Yes) No
1235	TW4-21	~~16.20~~ 67.68	Flow 16.2 GPM	(Yes) No
			Meter 105721.31	(Yes) No
1300	TW4-37	61.38	Flow 17.0 GPM	(Yes) No
			Meter 100214.00	(Yes) No

Operational Problems (Please list well number): The timer on TW4-11 lost memory and pump settings were erased.

Corrective Action(s) Taken (Please list well number): Reset timer on tw4-11. Well is operational.

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 8/31/15 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1455	MW-4	81.00	Flow 4.6 GPM	(Yes) No
			Meter 7479951.7	(Yes) No
1420	MW-26	64.50	Flow 8.2 GPM	(Yes) No
			Meter 29269.90	(Yes) No
1535	TW4-19	62.95	Flow 18.0 GPM	(Yes) No
			Meter 112866.4	(Yes) No
1413	TW4-20	62.55	Flow 8.6 GPM	(Yes) No
			Meter 92005.90	(Yes) No
1510	TW4-4	72.10	Flow 10.0 GPM	(Yes) No
			Meter 173322.20	(Yes) No
1340	TWN-2	27.80	Flow 18.5 GPM	(Yes) No
			Meter 499747.60	(Yes) No
1354	TW4-22	57.68	Flow 17.2 GPM	(Yes) No
			Meter 251899.70	(Yes) No
1348	TW4-24	62.00	Flow 17.0 GPM	(Yes) No
			Meter 1898597.00	(Yes) No
1335	TW4-25	63.66	Flow 15.2 GPM	(Yes) No
			Meter 1245733.90	(Yes) No
1502	TW4-1	80.50	Flow 16.6 GPM	(Yes) No
			Meter 64871.20	(Yes) No
1437	TW4-2	76.40	Flow 16.5 GPM	(Yes) No
			Meter 60951.20	(Yes) No
1428	TW4-11	69.40	Flow 17.0 GPM	Yes (No)
			Meter 16858.60	Yes (No)
1325	TW4-21	66.18	Flow 16.0 GPM	(Yes) No
			Meter 115246.89	(Yes) No
1405	TW4-37	61.00	Flow 17.4 GPM	(Yes) No
			Meter 109128.50	(Yes) No

Operational Problems (Please list well number): Internal Batteries on TW4-11 are no good.

Corrective Action(s) Taken (Please list well number): Replaced batteries and well is working.

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/8/15 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1254	MW-4	77.65	Flow 4.6 GPM	(Yes) No
			Meter 756360.41	(Yes) No
1243	MW-26	62.40	Flow 8.1	(Yes) No
			Meter 30988.20	(Yes) No
1315	TW4-19	63.21	Flow 18.0 GPM	(Yes) No
			Meter 123066.50	(Yes) No
1238	TW4-20	63.20	Flow 8.8 GPM	(Yes) No
			Meter 93509.64	(Yes) No
1300	TW4-4	69.94	Flow 10.6 GPM	(Yes) No
			Meter 178806.90	(Yes) No
1228	TWN-2	30.10	Flow 18.5 GPM	(Yes) No
			Meter 503979.20	(Yes) No
1234	TW4-22	57.82	Flow 17.4 GPM	(Yes) No
			Meter 253924.90	(Yes) No
1232	TW4-24	62.04	Flow 18.0 GPM	(Yes) No
			Meter 1904349.80	(Yes) No
1219	TW4-25	84.17	Flow 15.0 GPM	(Yes) No
			Meter 1259442.70	(Yes) No
1257	TW4-1	104.60	Flow 16.0 GPM	(Yes) No
			Meter 66894.50	(Yes) No
1250	TW4-2	92.61	Flow 16.4 GPM	(Yes) No
			Meter 62711.10	(Yes) No
1245	TW4-11	88.97	Flow 16.2 GPM	(Yes) No
			Meter 17424.20	(Yes) No
1216	TW4-21	66.65	Flow 16.4 GPM	(Yes) No
			Meter 126155.84	(Yes) No
1236	TW4-37	61.60	Flow 17.0 GPM	(Yes) No
			Meter 119211.10	(Yes) No

Operational Problems (Please list well number): _____

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/14/15 **Name** Garrin Palmer

Time	Well	Depth*	Comments		System Operational (If no note any problems/corrective actions)
1347	MW-4	79.38	Flow	4.4 GPM	(Yes) No
			Meter	762751.05	(Yes) No
1338	MW-26	67.69	Flow	8.0 GPM	(Yes) No
			Meter	32224.40	(Yes) No
1305	TW4-19	69.88	Flow	17.2 GPM	(Yes) No
			Meter	130670.30	(Yes) No
1335	TW4-20	62.65	Flow	8.2 GPM	(Yes) No
		~~62.65~~	Meter	94628.58	(Yes) No
1353	TW4-4	71.81	Flow	10.6 GPM	(Yes) No
			Meter	183021.80	(Yes) No
1320	TWN-2	39.68	Flow	18.0 GPM	(Yes) No
			Meter	507004.60	(Yes) No
1333	TW4-22	57.47	Flow	17.6 GPM	(Yes) No
			Meter	255627.90	(Yes) No
1328	TW4-24	62.00	Flow	17.6 GPM	(Yes) No
			Meter	1908744.70	(Yes) No
1316	TW4-25	63.98	Flow	15.6 GPM	(Yes) No
			Meter	1267485.40	(Yes) No
1350	TW4-1	99.97	Flow	16.0 GPM	(Yes) No
			Meter	68385.00	(Yes) No
1344	TW4-2	77.70	Flow	16.2 GPM	(Yes) No
			Meter	64162.20	(Yes) No
1341	TW4-11	89.00	Flow	17.0 GPM	(Yes) No
			Meter	17831.70	(Yes) No
1313	TW4-21	66.20	Flow	16.6 GPM	(Yes) No
			Meter	134306.81	(Yes) No
1336	TW4-37	61.09	Flow	17.4 GPM	(Yes) No
			Meter	126844.70	(Yes) No

Operational Problems (Please list well number): _____

_____

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

_____

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 9/21/15 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1410	MW-4	78.95	Flow 4.4 GPM	(Yes) No
			Meter 769926.60	(Yes) No
1400	MW-26	65.20	Flow 8.0 GPM	(Yes) No
			Meter 33860.60	(Yes) No
1443	TW4-19	63.72	Flow 18.1 GPM	(Yes) No
			Meter 139436.70	(Yes) No
1355	TW4-20	62.62	Flow 8.5 GPM	(Yes) No
			Meter 95921.20	(Yes) No
1417	TW4-4	82.88	Flow 10.4	(Yes) No
			Meter 187824.70	(Yes) No
1345	TWN-2	28.40	Flow 18.8 GPM	(Yes) No
			Meter 510796	(Yes) No
1354	TW4-22	57.52	Flow 17.8 GPM	(Yes) No
			Meter 257491.70	(Yes) No
1350	TW4-24	68.30	Flow 17.8 GPM	(Yes) No
			Meter 1913866.90	(Yes) No
1336	TW4-25	63.53	Flow 15.6 GPM	(Yes) No
			Meter 1276771.90	(Yes) No
1414	TW4-1	82.75	Flow 16.0 GPM	(Yes) No
			Meter 70009.20	(Yes) No
1409	TW4-2	77.35	Flow 16.0 GPM	(Yes) No
			Meter 65742.80	(Yes) No
1403	TW4-11	89.64	Flow 16.6 GPM	(Yes) No
			Meter 18244.30	(Yes) No
1332	TW4-21	66.19	Flow 16.4 GPM	(Yes) No
			Meter 143812.57	(Yes) No
1357	TW4-37	61.07	Flow 17.4 GPM	(Yes) No
			Meter 135748.10	(Yes) No

Operational Problems (Please list well number):

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

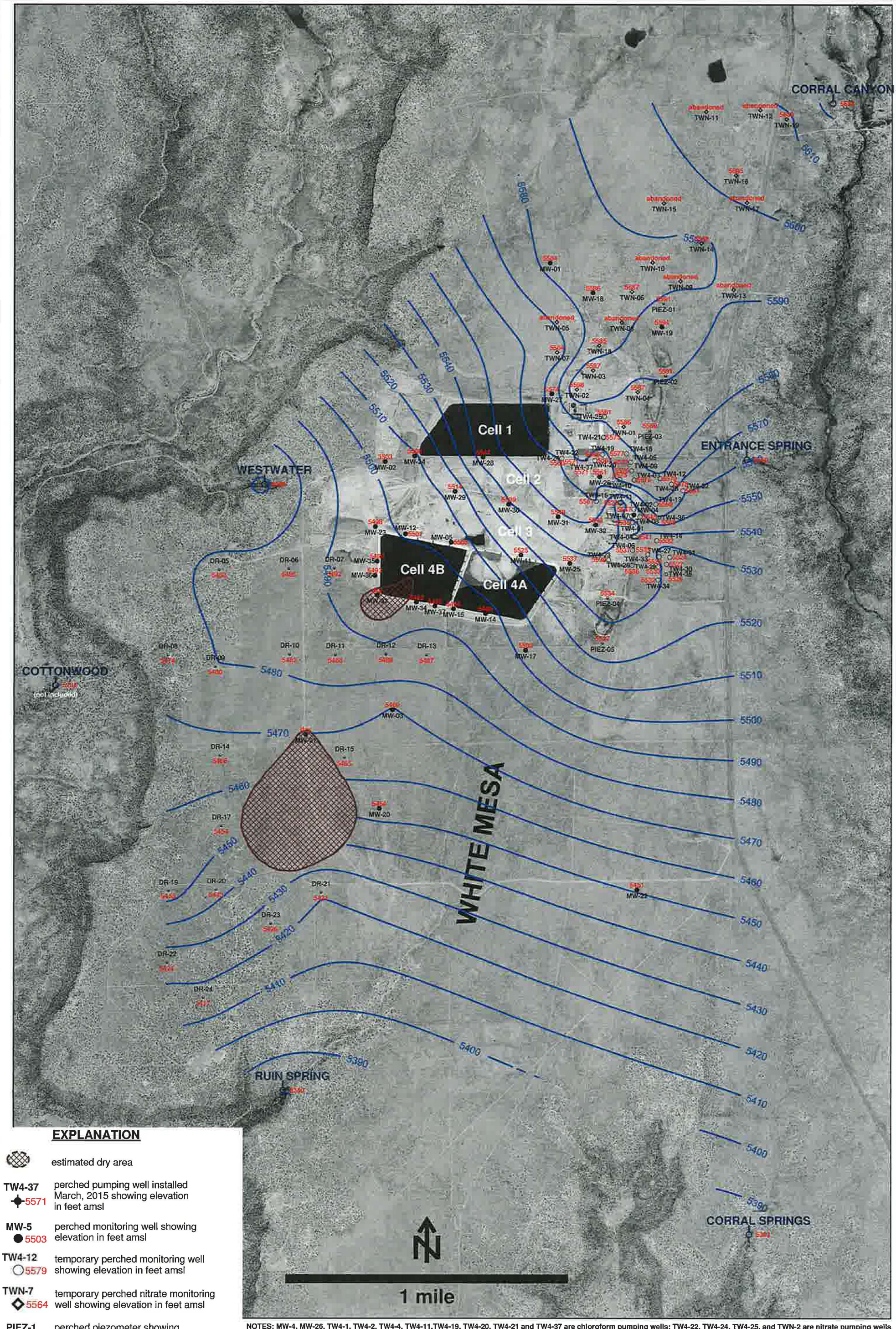
Date 9/30/2015 **Name** Tanner Halliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1415	MW-4	78.95	Flow 4.4	(Yes) No
			Meter 779272.34	(Yes) No
1404	MW-26	64.64	Flow 8.0	(Yes) No
			Meter 35778.7	(Yes) No
1436	TW4-19	63.23	Flow 18.0	(Yes) No
			Meter 150836.7	(Yes) No
1400	TW4-20	62.75	Flow 8.3	(Yes) No
			Meter 97558.08	(Yes) No
1424	TW4-4	72.14	Flow 10.5	(Yes) No
			Meter 193961.7	(Yes) No
1344	TWN-2	28.80	Flow 18.1	(Yes) No
			Meter 515427.1	(Yes) No
1353	TW4-22	57.76	Flow 17.6	(Yes) No
			Meter 259887.8	(Yes) No
1350	TW4-24	65.22	Flow 18.0	(Yes) No
			Meter 1920206.6	(Yes) No
1341	TW4-25	63.51	Flow 15.5	(Yes) No
			Meter 1288561.5	(Yes) No
1419	TW4-1	82.73	Flow 16.0	(Yes) No
			Meter 72211.1	(Yes) No
1412	TW4-2	77.60	Flow 16.1	(Yes) No
			Meter 67773.5	(Yes) No
1409	TW4-11	90.35	Flow 16.50	(Yes) No
			Meter 18726.4	(Yes) No
1337	TW4-21	66.30	Flow 16.50	(Yes) No
			Meter 156029.09	(Yes) No
1356	TW4-37	61.18	Flow 17.5	(Yes) No
			Meter 147269.9	(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.



EXPLANATION

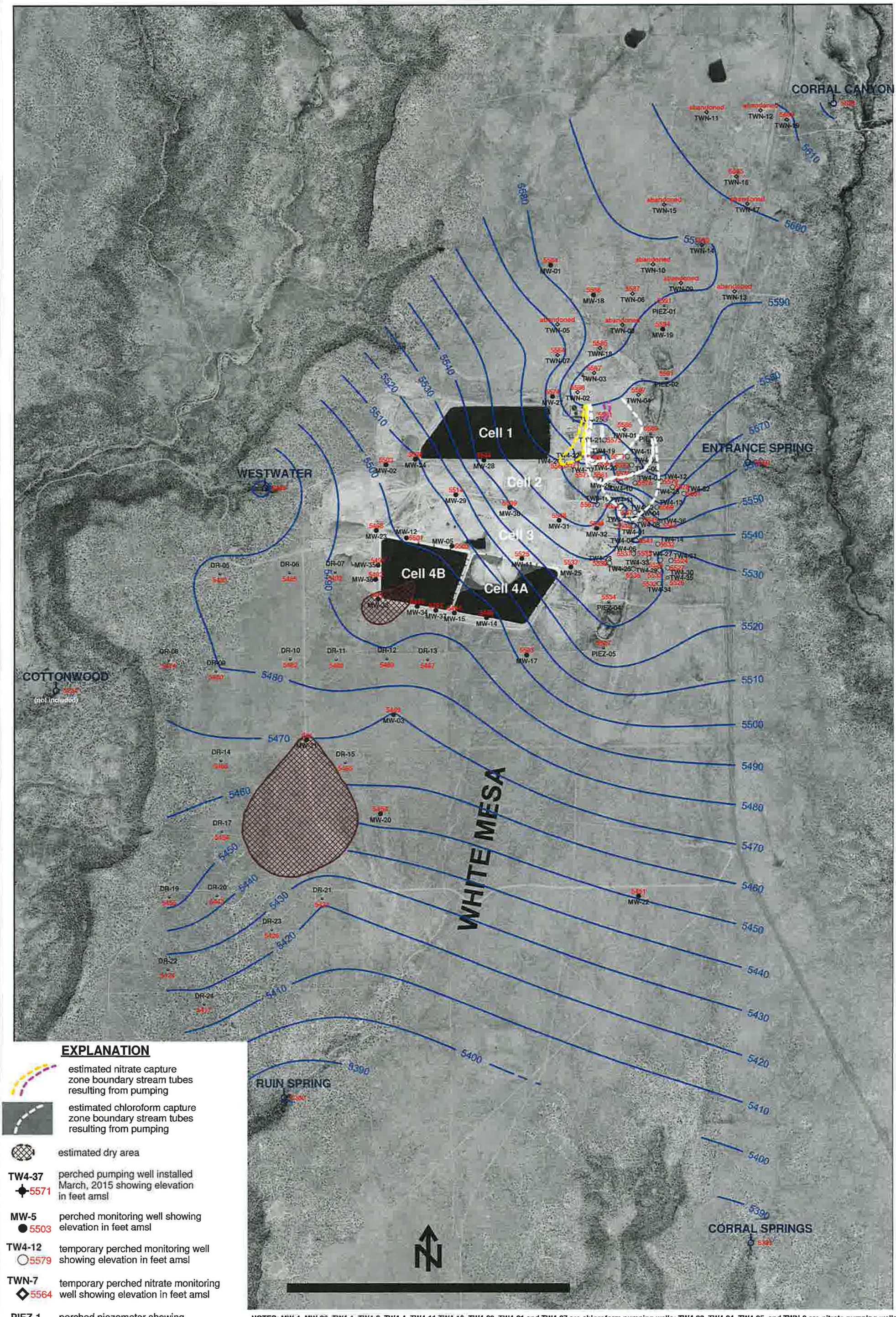
- estimated dry area
- **TW4-37** 5571 — perched pumping well installed March, 2015 showing elevation in feet amsl
- **MW-5** 5503 — perched monitoring well showing elevation in feet amsl
- **TW4-12** 5579 — temporary perched monitoring well showing elevation in feet amsl
- **TWN-7** 5564 — temporary perched nitrate monitoring well showing elevation in feet amsl
- **PIEZ-1** 5591 — perched piezometer showing elevation in feet amsl
- **TW4-35** 5526 — temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
- **RUIN SPRING** 5380 — seep or spring showing elevation in feet amsl

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 3rd QUARTER, 2015 WATER LEVELS WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/WL/Uwl0915.srf	C-1



EXPLANATION

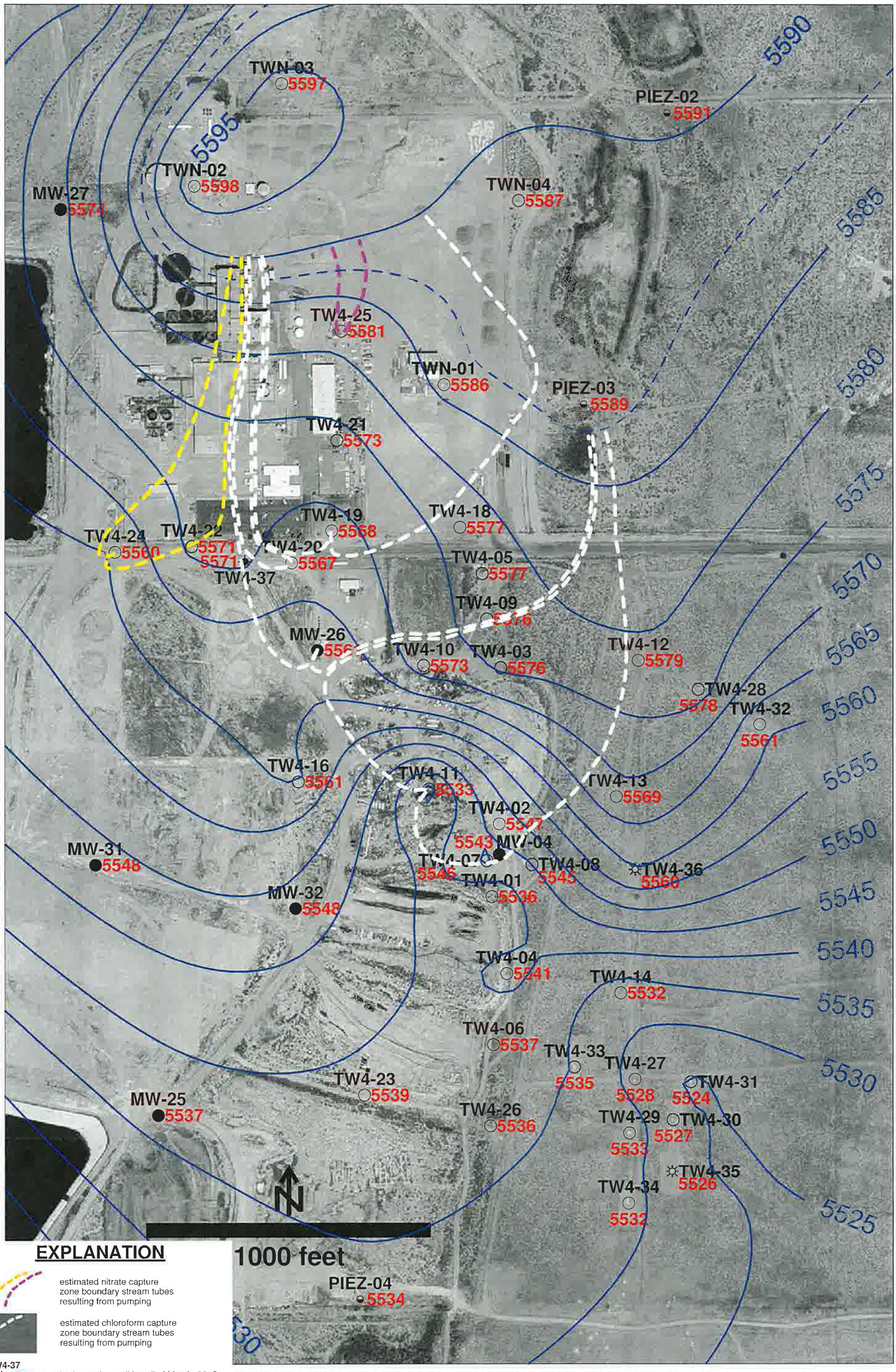
- estimated nitrate capture zone boundary stream tubes resulting from pumping
- estimated chloroform capture zone boundary stream tubes resulting from pumping
- estimated dry area
- **TW4-37** ✦ 5571 — perched pumping well installed March, 2015 showing elevation in feet amsl
- **MW-5** ● 5503 — perched monitoring well showing elevation in feet amsl
- **TW4-12** ○ 5579 — temporary perched monitoring well showing elevation in feet amsl
- **TWN-7** ◇ 5564 — temporary perched nitrate monitoring well showing elevation in feet amsl
- **PIEZ-1** ◒ 5591 — perched piezometer showing elevation in feet amsl
- **TW4-35** ☼ 5526 — temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
- **RUIN SPRING** 5380 — seep or spring showing elevation in feet amsl

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 3rd QUARTER, 2015 WATER LEVELS AND ESTIMATED CAPTURE ZONES WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/nitrate/Uwl0915ntcz2.srf	C-2



EXPLANATION

estimated nitrate capture zone boundary stream tubes resulting from pumping

estimated chloroform capture zone boundary stream tubes resulting from pumping

TW4-37 5571 — perched pumping well installed March, 2015 showing elevation in feet amsl

MW-32 5548 — perched monitoring well showing elevation in feet amsl

TW4-7 5546 — temporary perched monitoring well showing elevation in feet amsl

PIEZ-2 5591 — perched piezometer showing elevation in feet amsl

TW4-35 5526 — temporary perched monitoring well installed May, 2014 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

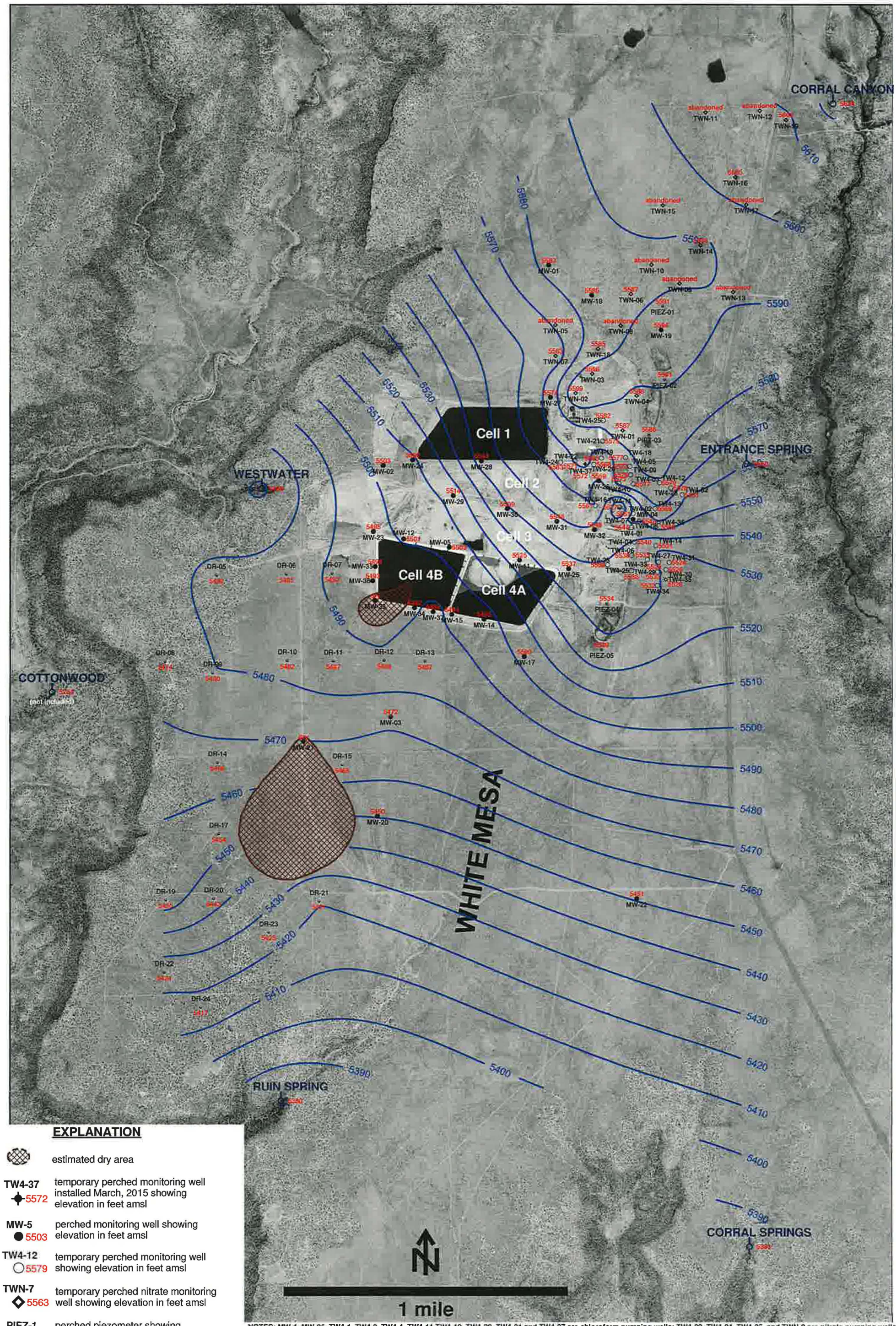
HYDRO GEO CHEM, INC.

KRIGED 3rd QUARTER, 2015 WATER LEVELS AND ESTIMATED CAPTURE ZONES WHITE MESA SITE (detail map)

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/WL/Uwl0915ntcz.srf	C-3

Tab D

Kriged Previous Quarter Groundwater Contour Map



EXPLANATION

- estimated dry area
- **TW4-37** 5572 — temporary perched monitoring well installed March, 2015 showing elevation in feet amsl
- **MW-5** 5503 — perched monitoring well showing elevation in feet amsl
- **TW4-12** 5579 — temporary perched monitoring well showing elevation in feet amsl
- **TWN-7** 5563 — temporary perched nitrate monitoring well showing elevation in feet amsl
- **PIEZ-1** 5591 — perched piezometer showing elevation in feet amsl
- **TW4-35** 5526 — temporary perched monitoring well installed May, 2014 showing elevation in feet amsl
- **RUIN SPRING** 5380 — seep or spring showing elevation in feet amsl

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

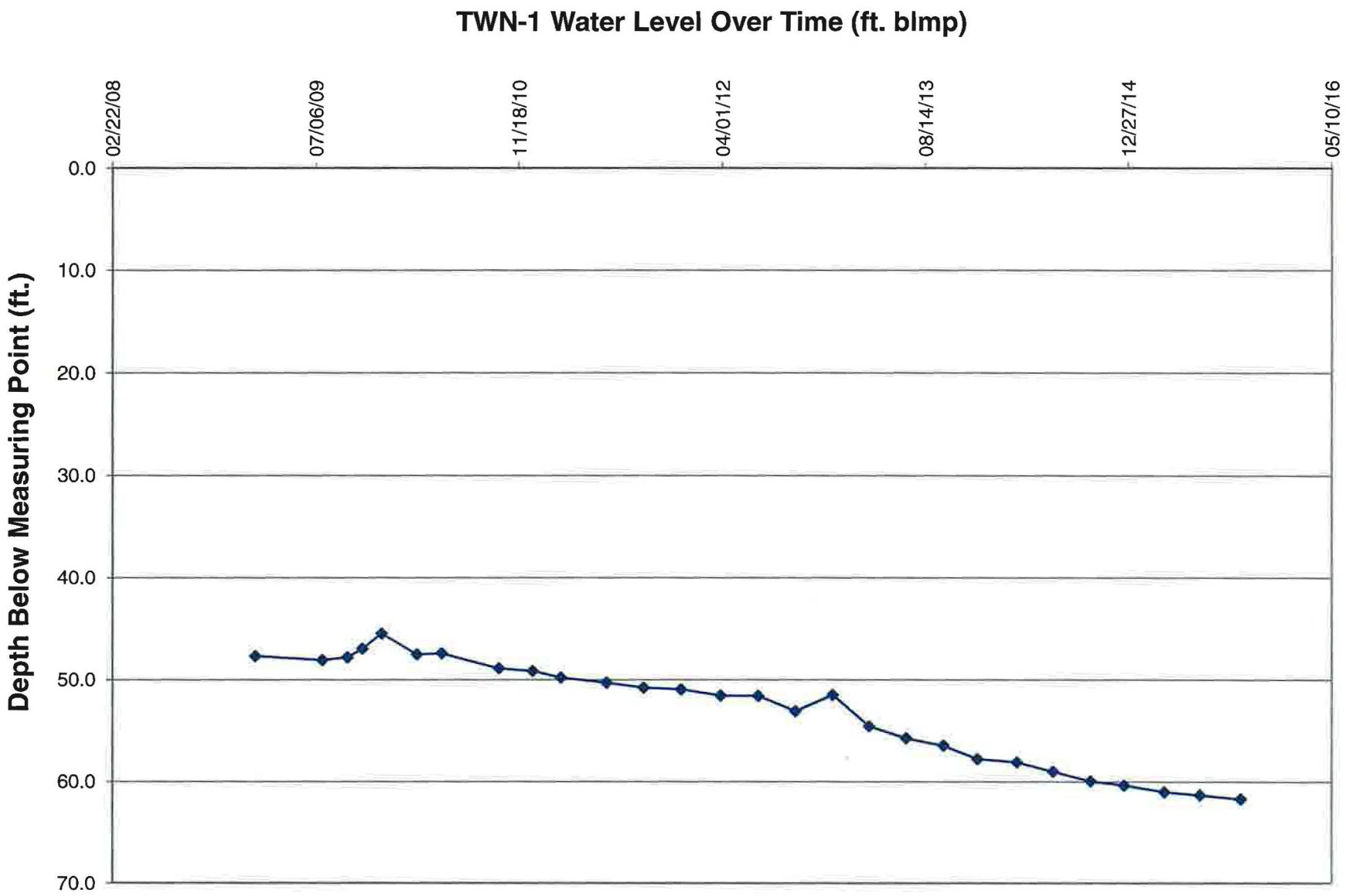
HYDRO GEO CHEM, INC.

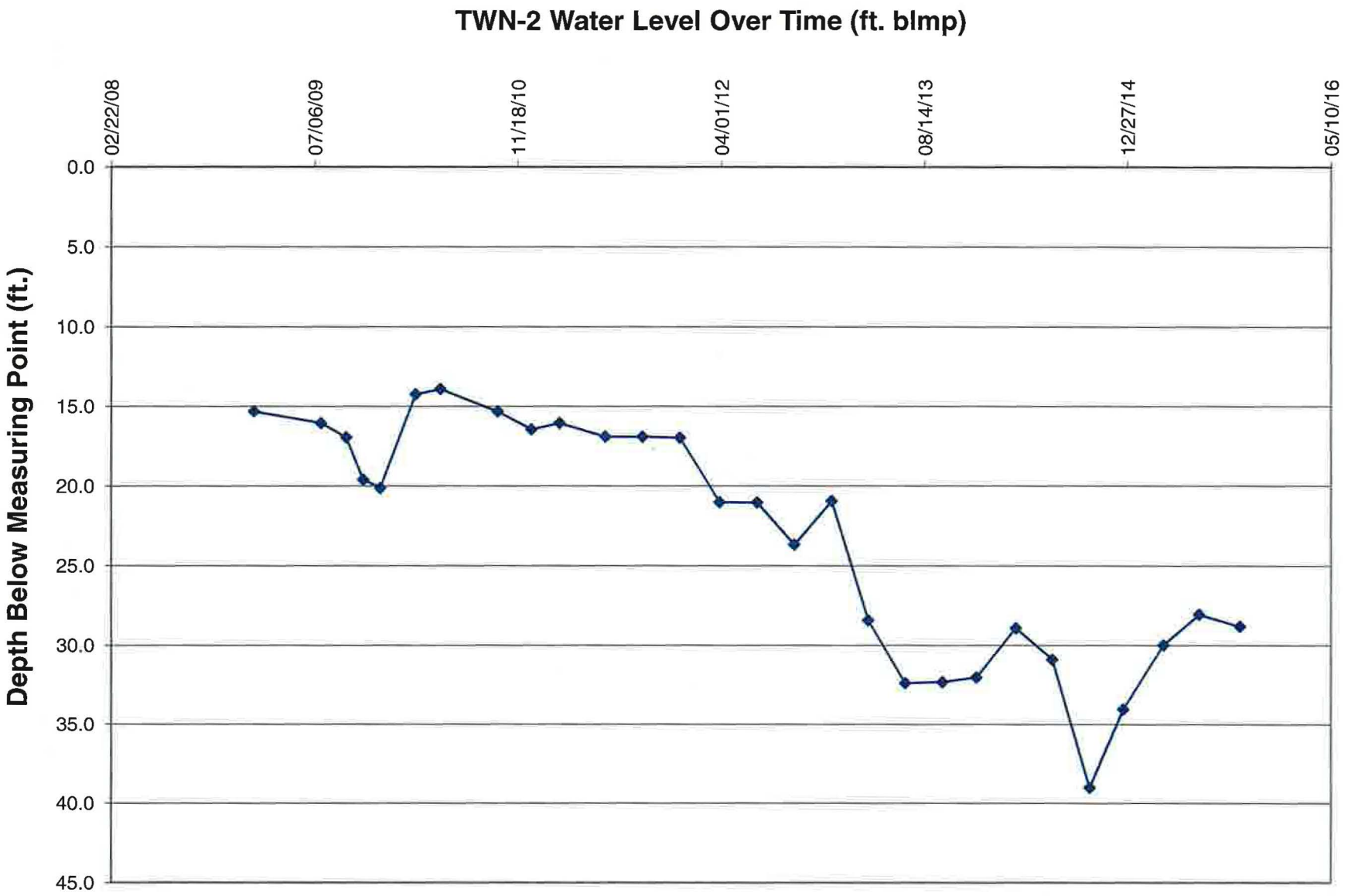
KRIGED 2nd QUARTER, 2015 WATER LEVELS WHITE MESA SITE

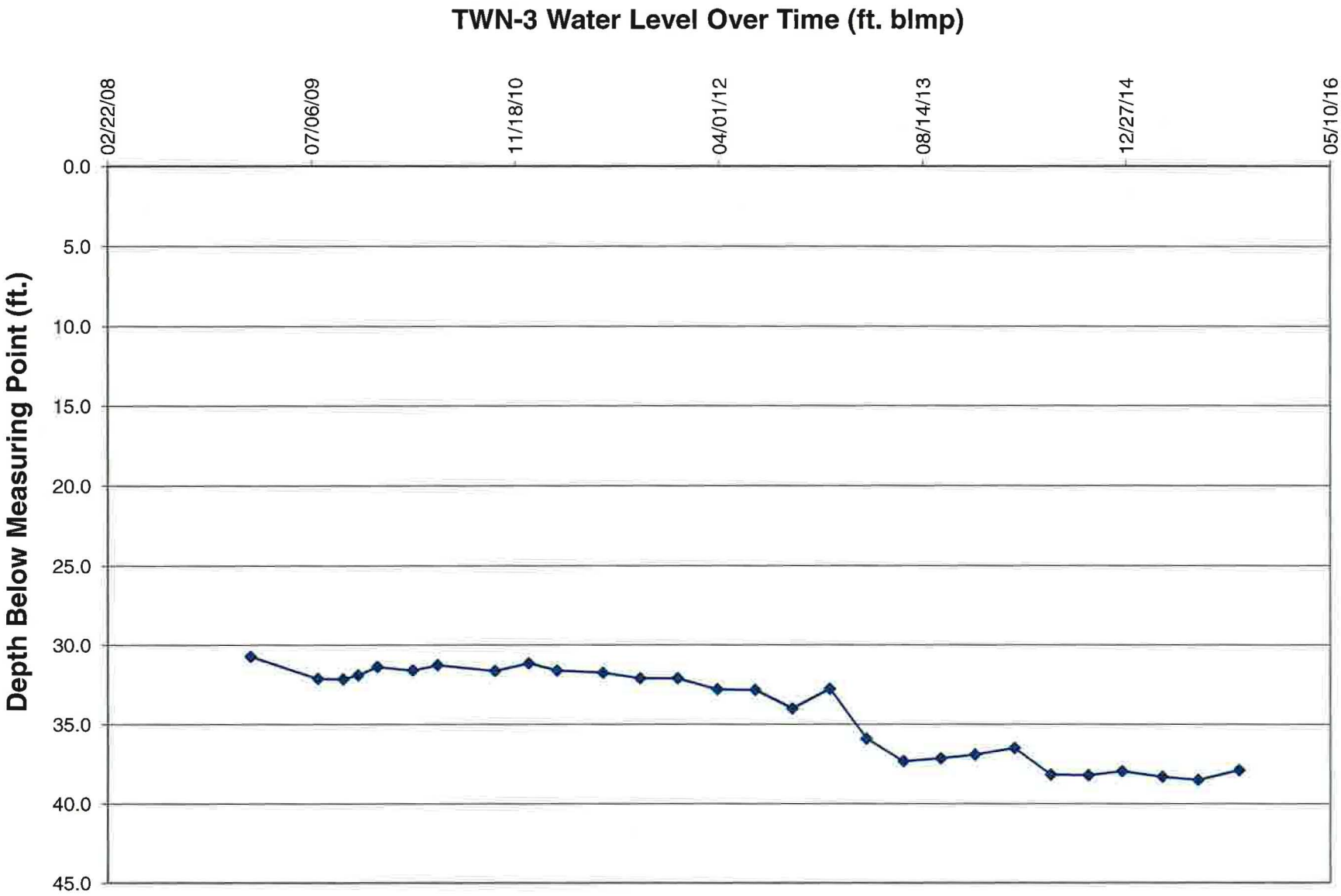
APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug15/WL/Uwl0615.srf	D-1

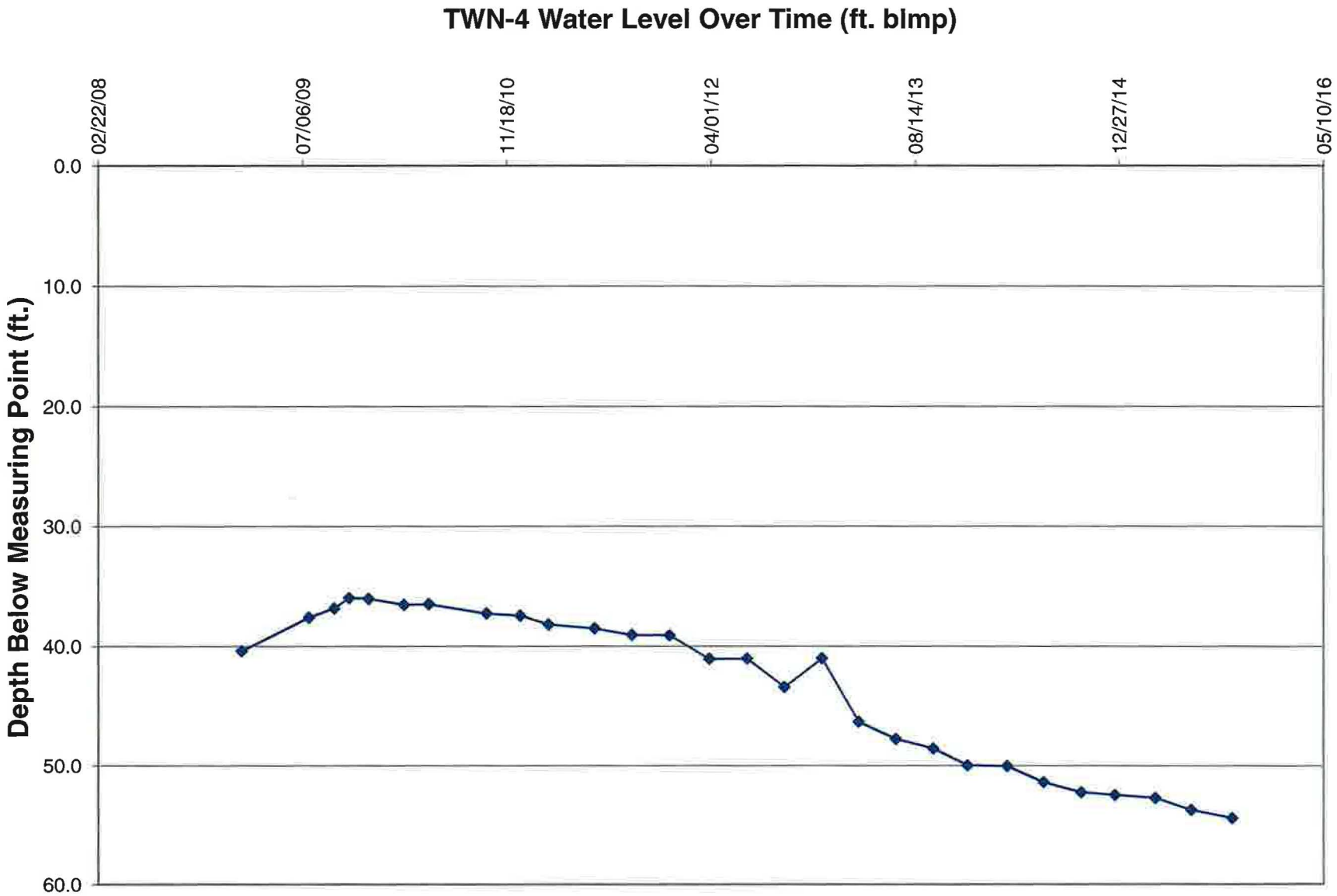
Tab E

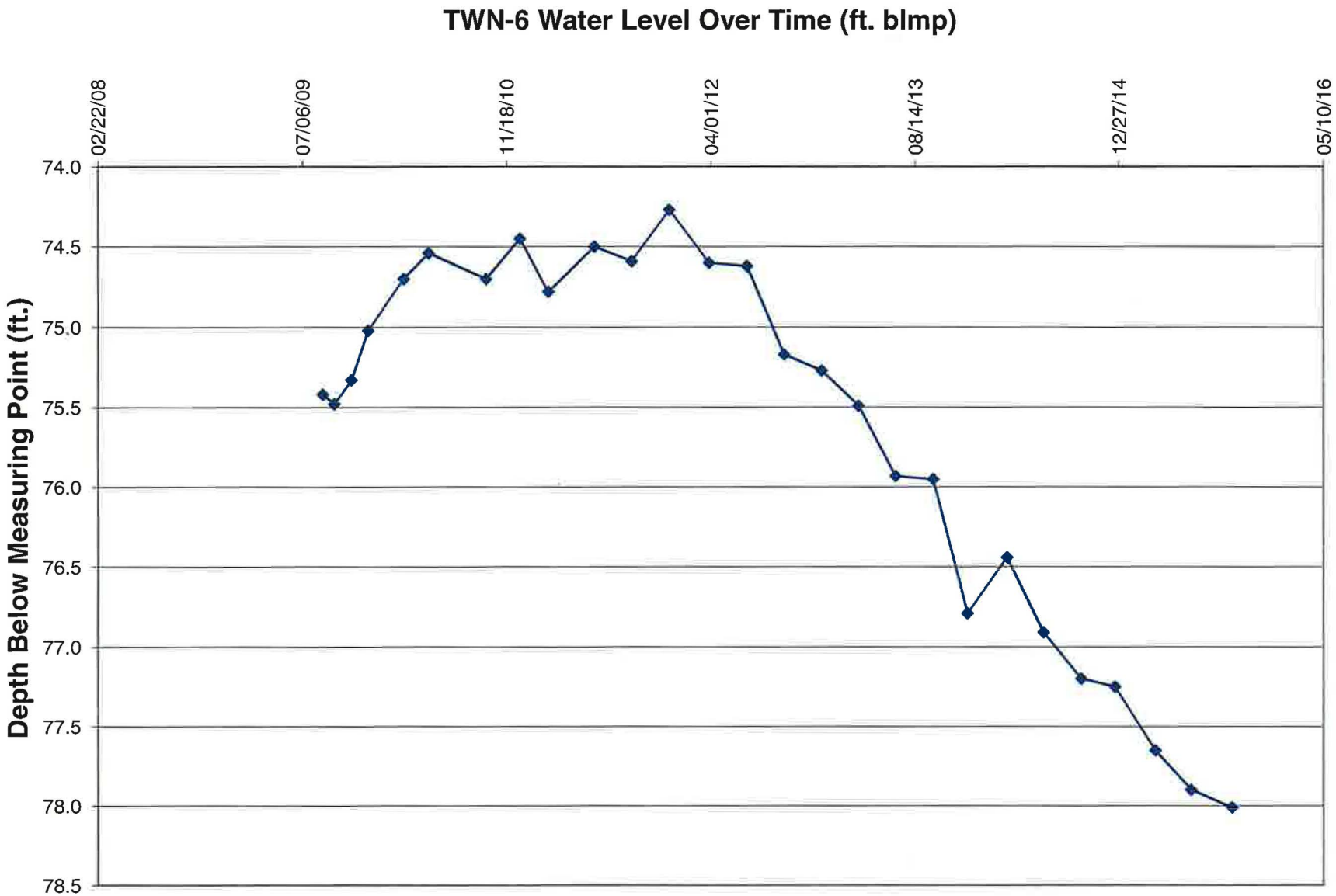
Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

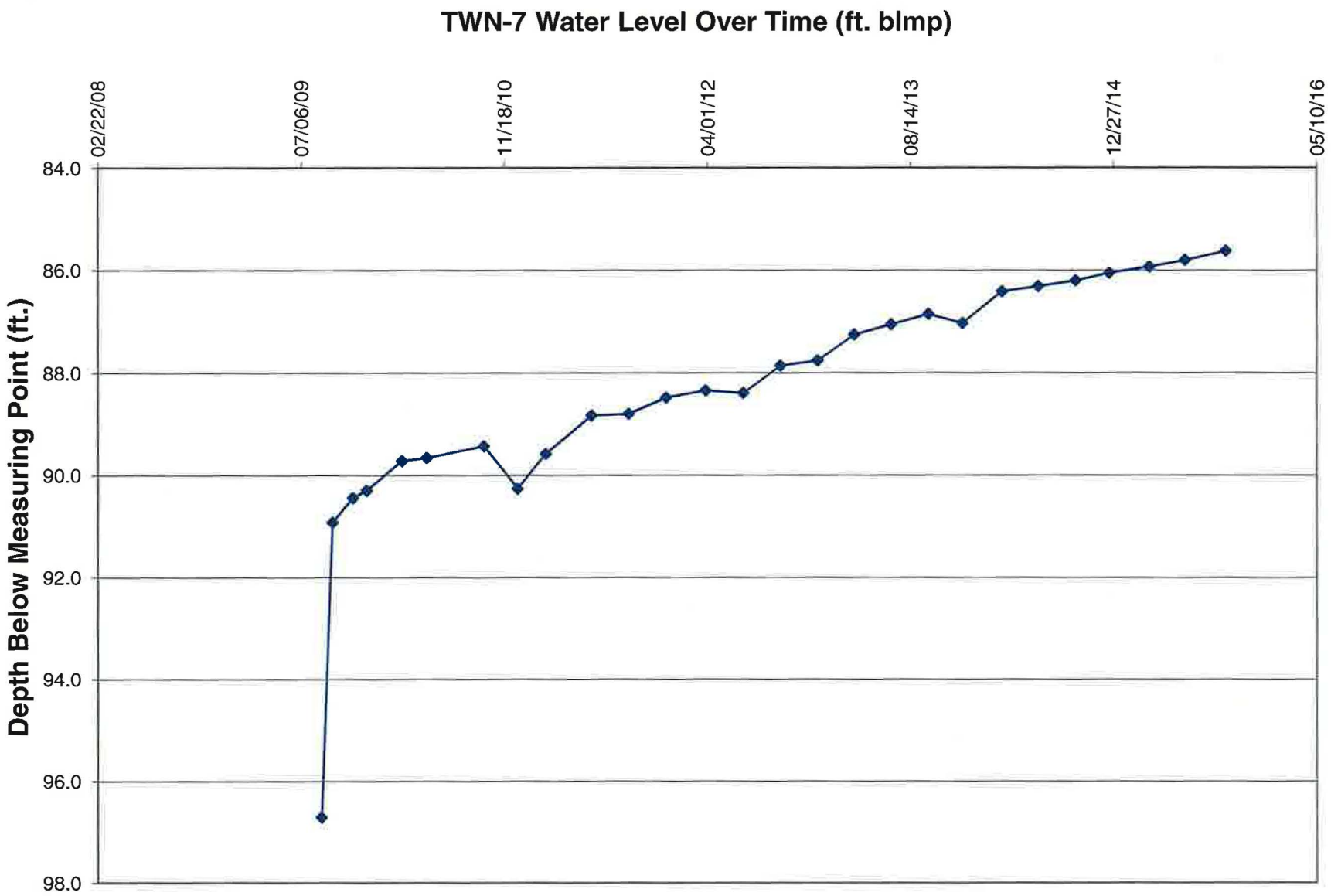

TWN-1 Water Level Over Time (ft. bImp)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0

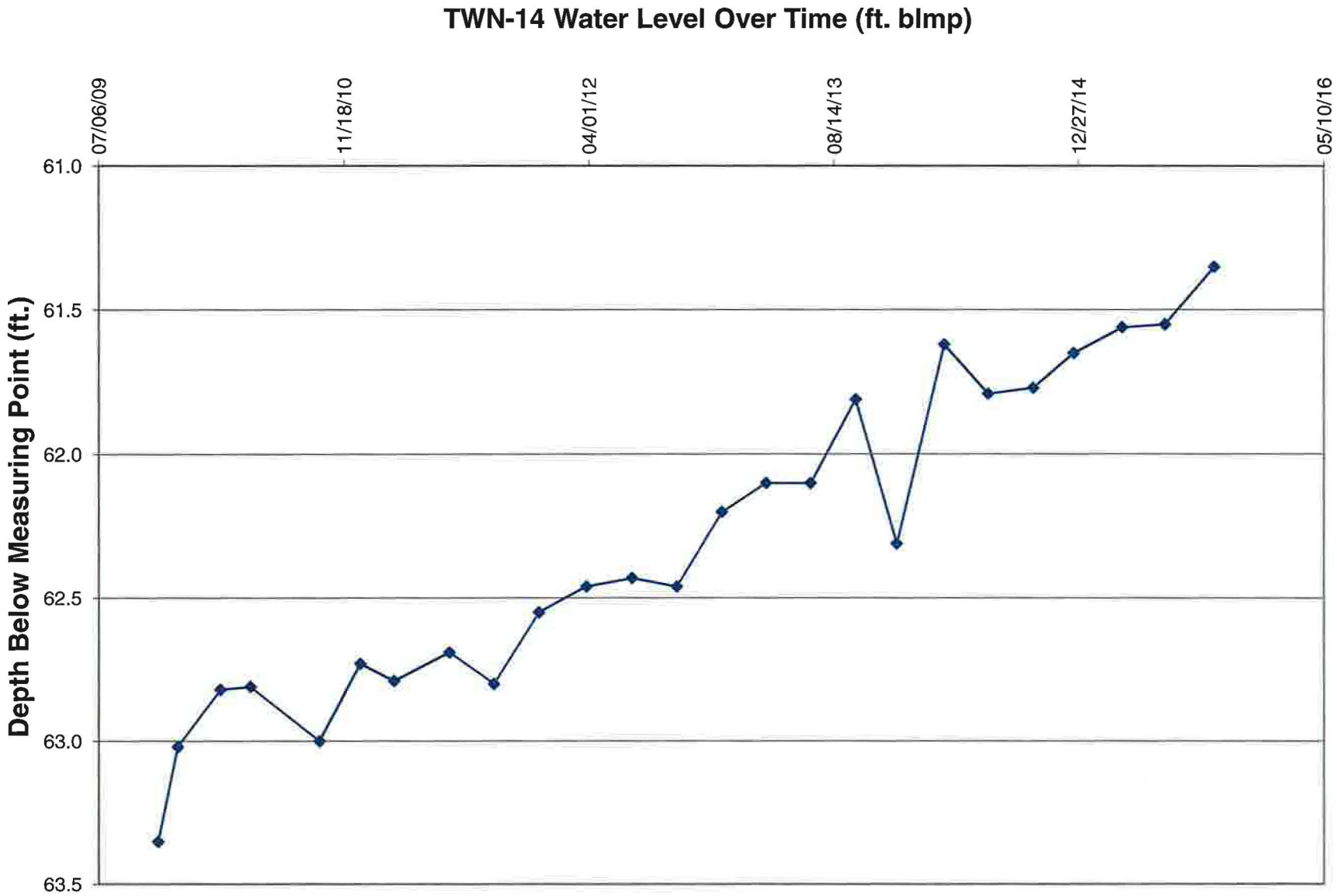

TWN-2 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0

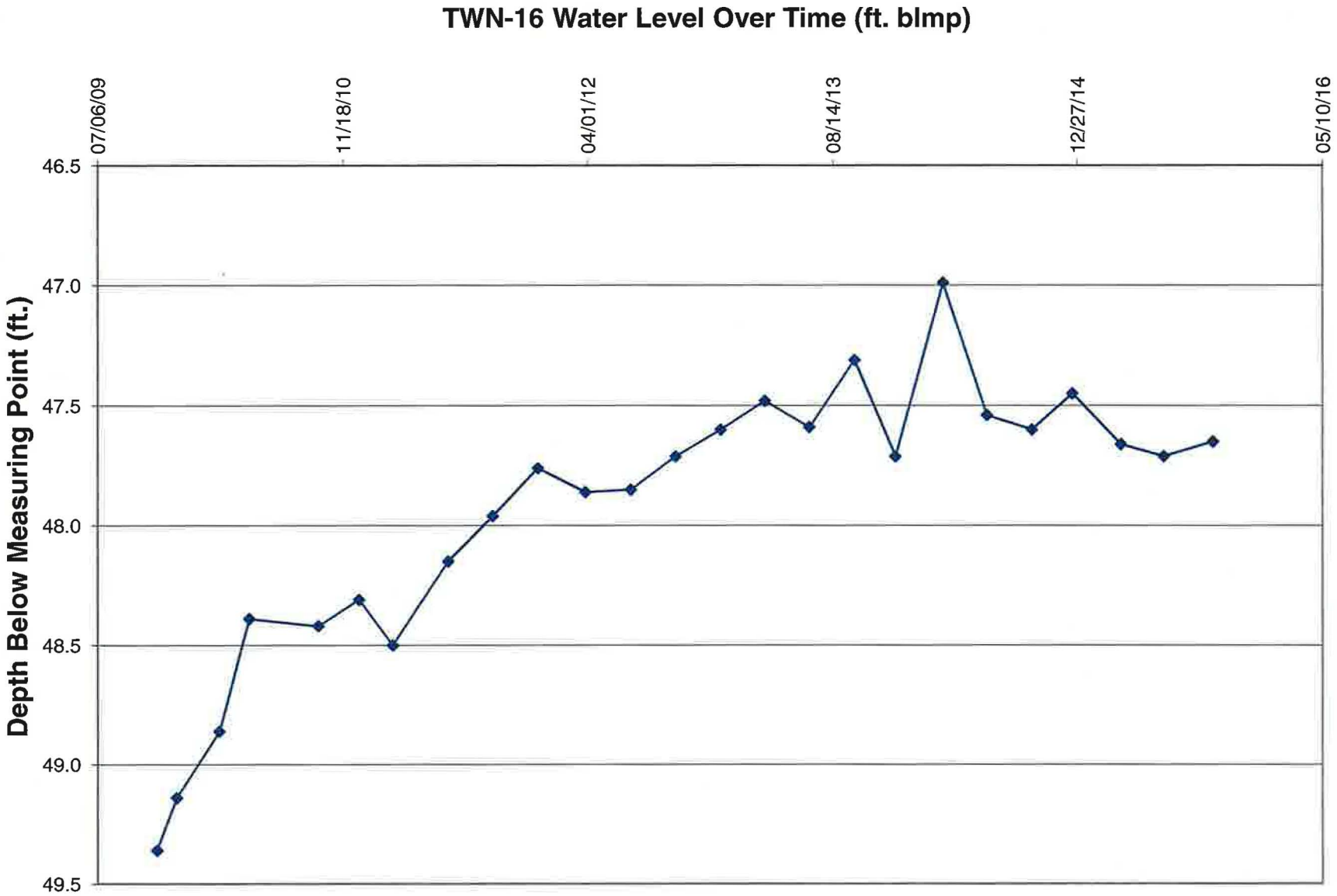

TWN-3 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0

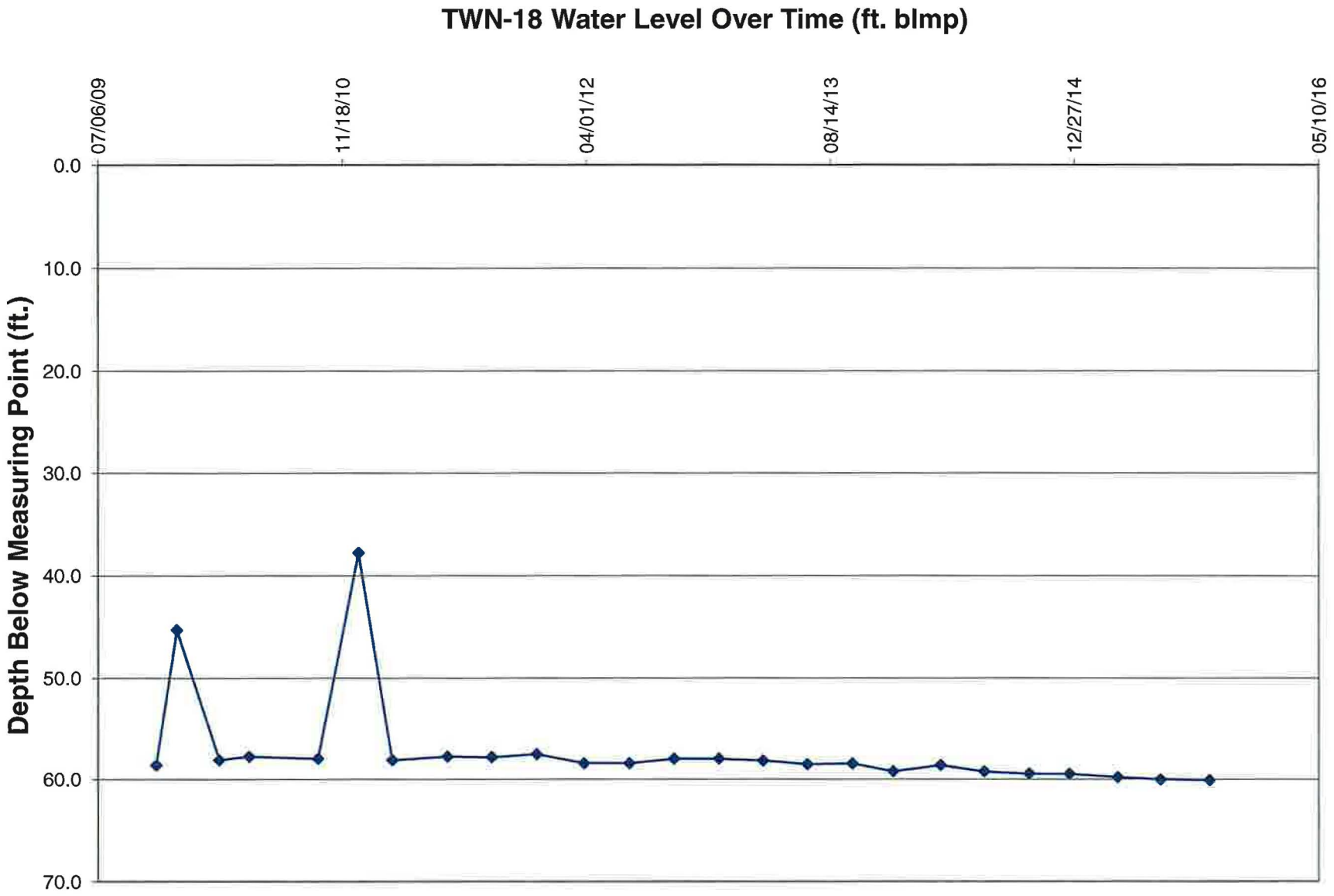

TWN-4 Water Level Over Time (ft. bImp)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
0.0
10.0
20.0
30.0
40.0
50.0
60.0

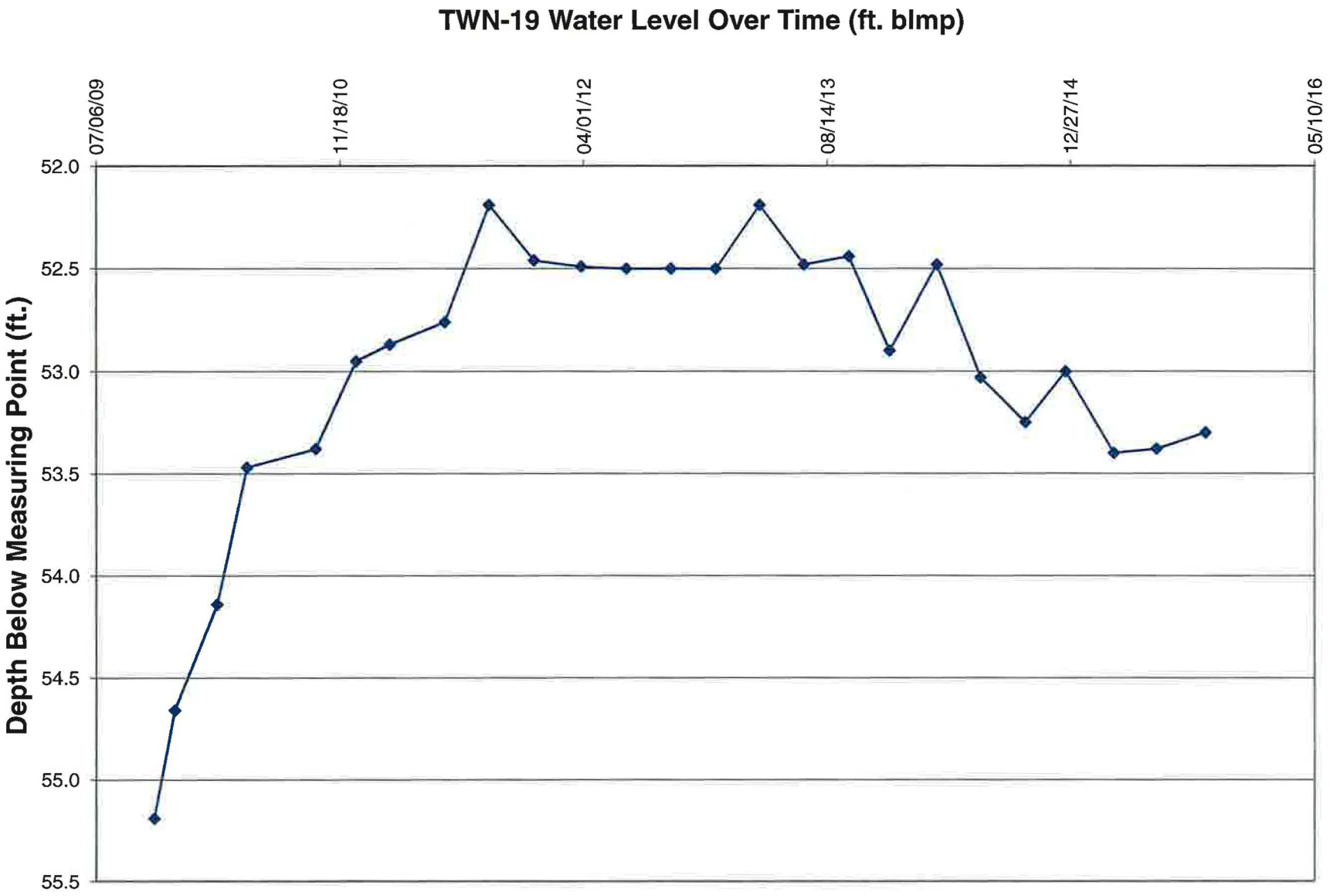

TWN-6 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
74.0
74.5
75.0
75.5
76.0
76.5
77.0
77.5
78.0
78.5

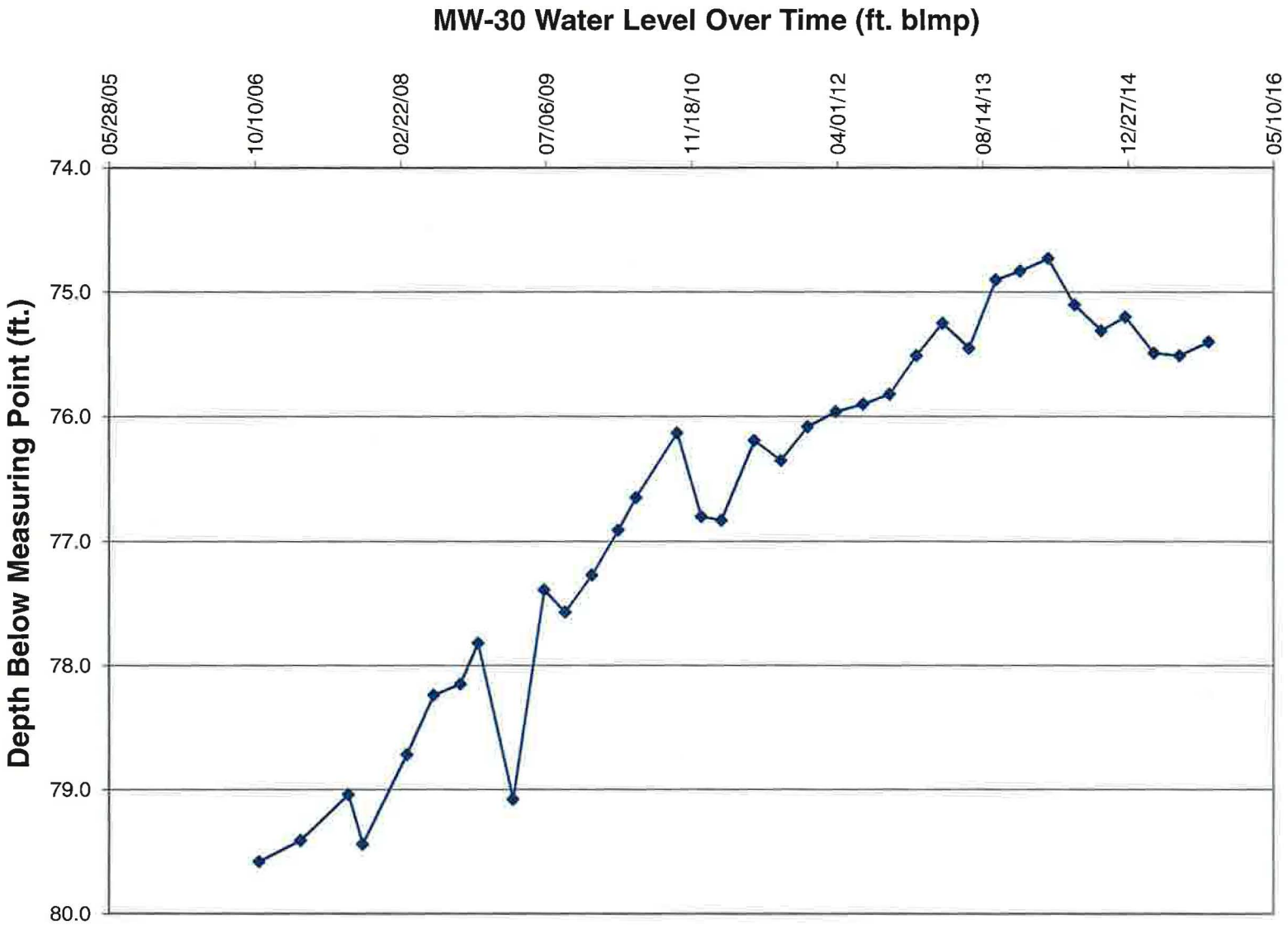

TWN-7 Water Level Over Time (ft. blmp)
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
84.0
86.0
88.0
90.0
92.0
94.0
96.0
98.0
Depth Below Measuring Point (ft.)

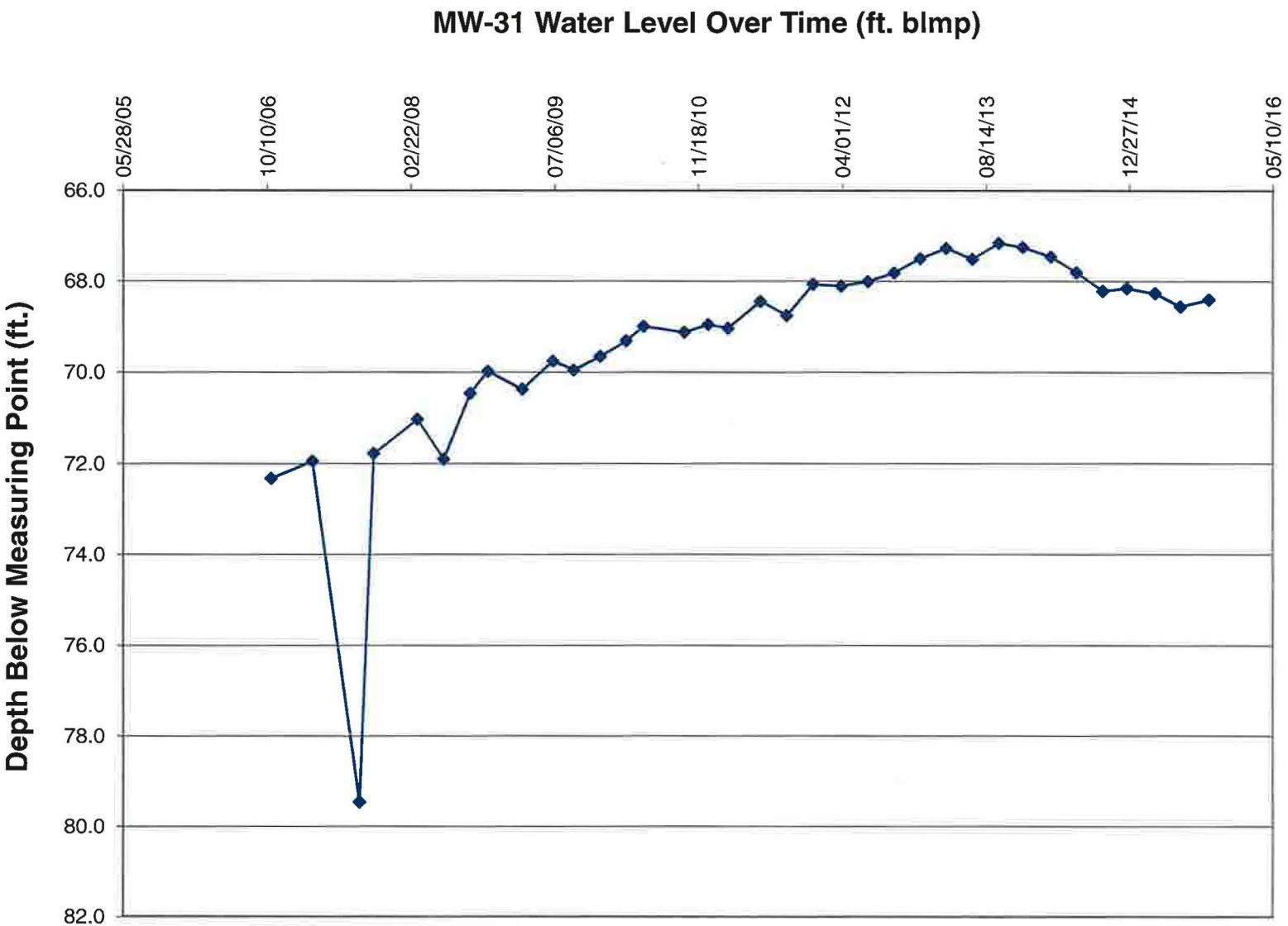

TWN-14 Water Level Over Time (ft. blmp)
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
61.0
61.5
62.0
62.5
63.0
63.5


TWN-16 Water Level Over Time (ft. blmp)
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
46.5
47.0
47.5
48.0
48.5
49.0
49.5


TWN-18 Water Level Over Time (ft. blmp)
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0


TWN-19 Water Level Over Time (ft. bImp)
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
Depth Below Measuring Point (ft.)
52.0
52.5
53.0
53.5
54.0
54.5
55.0
55.5


MW-30 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
05/28/05
10/10/06
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
74.0
75.0
76.0
77.0
78.0
79.0
80.0


MW-31 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
05/28/05
10/10/06
02/22/08
07/06/09
11/18/10
04/01/12
08/14/13
12/27/14
05/10/16
66.0
68.0
70.0
72.0
74.0
76.0
78.0
80.0
82.0

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

Tab G

Laboratory Analytical Reports

INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-010
Client Sample ID: Piez-01_08262015
Collection Date: 8/26/2015 1200h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2039h	E300.0	10.0	**64.2**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1331h	E353.2	0.100	**4.96**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-011
Client Sample ID: Piez-02_08262015
Collection Date: 8/26/2015 1019h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2056h	E300.0	10.0	**15.5**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1332h	E353.2	0.100	**0.662**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-012
Client Sample ID: Piez-03_08262015
Collection Date: 8/26/2015 1029h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2147h	E300.0	10.0	**54.8**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1333h	E353.2	0.100	**1.87**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-002
Client Sample ID: TWN-01_08252015
Collection Date: 8/25/2015 943h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 1915h	E300.0	10.0	**33.2**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1303h	E353.2	0.100	**0.624**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-001
Client Sample ID: TWN-01R_08252015
Collection Date: 8/25/2015 920h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2237h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1302h	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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-007
Client Sample ID: TWN-02_08262015
Collection Date: 8/26/2015 1214h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2006h	E300.0	10.0	**87.8**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1310h	E353.2	1.00	**49.7**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-006
Client Sample ID: TWN-03_08262015
Collection Date: 8/26/2015 1011h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 1825h	E300.0	100	**156**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1309h	E353.2	0.100	**16.2**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-003
Client Sample ID: TWN-04_08252015
Collection Date: 8/25/2015 1017h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 1932h	E300.0	10.0	**35.2**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1305h	E353.2	0.100	**0.974**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-004
Client Sample ID: TWN-07_08262015
Collection Date: 8/26/2015 1003h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2254h	E300.0	1.00	**6.12**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1306h	E353.2	0.100	**0.348**	

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-005
Client Sample ID: TWN-18_08252015
Collection Date: 8/25/2015 1236h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 1949h	E300.0	10.0	**81.3**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1307h	E353.2	0.100	**0.350**	

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: 3rd Quarter Chloroform 2015
Lab Sample ID: 1509123-033
Client Sample ID: TW4-22_08312015
Collection Date: 8/31/2015 1359h
Received Date: 9/4/2015 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/14/2015 1209h	E300.0	100	**557**	
Nitrate/Nitrite (as N)	mg/L		9/15/2015 1012h	E353.2	5.00	**64.7**	

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: 3rd Quarter Chloroform 2015
Lab Sample ID: 1509123-021
Client Sample ID: TW4-24_08312015
Collection Date: 8/31/2015 1348h
Received Date: 9/4/2015 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/12/2015 2346h	E300.0	100	**788**	
Nitrate/Nitrite (as N)	mg/L		9/10/2015 1734h	E353.2	5.00	**25.3**	

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: 3rd Quarter Chloroform 2015
Lab Sample ID: 1509123-011
Client Sample ID: TW4-25_08312015
Collection Date: 8/31/2015 1335h
Received Date: 9/4/2015 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/12/2015 1826h	E300.0	10.0	**69.2**	
Nitrate/Nitrite (as N)	mg/L		9/9/2015 1507h	E353.2	0.100	**1.63**	

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: 3rd Quarter Chloroform 2015
Lab Sample ID: 1509241-006
Client Sample ID: TW4-60_09102015
Collection Date: 9/10/2015 745h
Received Date: 9/11/2015 1030h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/16/2015 1631h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		9/15/2015 1038h	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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-009
Client Sample ID: TWN-60_08262015
Collection Date: 8/26/2015 1230h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2311h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1327h	E353.2	0.100	< 0.100	'

' - 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

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: 3rd Quarter Nitrate 2015
Lab Sample ID: 1508568-008
Client Sample ID: TWN-65_08252015
Collection Date: 8/25/2015 1017h
Received Date: 8/28/2015 1011h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		9/1/2015 2023h	E300.0	10.0	**35.2**	
Nitrate/Nitrite (as N)	mg/L		9/3/2015 1311h	E353.2	0.100	**1.16**	

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

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

Garrin Palmer
Energy Fuels Resources, Inc.
6425 S. Hwy 191
Blanding, UT 84511
TEL: (435) 678-2221

RE: 3rd Quarter Nitrate 2015

Dear Garrin Palmer: Lab Set ID: 1508568

American West Analytical Laboratories received sample(s) on 8/28/2015 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.

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: 2015.09.10 15:17:16 -06'00'

Laboratory Director or designee

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

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Nitrate 2015
Lab Set ID: 1508568
Date Received: 8/28/2015 1011h

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1508568-001A	TWN-01R_08252015	8/25/2015 920h	Aqueous	Anions, E300.0
1508568-001B	TWN-01R_08252015	8/25/2015 920h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-002A	TWN-01_08252015	8/25/2015 943h	Aqueous	Anions, E300.0
1508568-002B	TWN-01_08252015	8/25/2015 943h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-003A	TWN-04_08252015	8/25/2015 1017h	Aqueous	Anions, E300.0
1508568-003B	TWN-04_08252015	8/25/2015 1017h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-004A	TWN-07_08262015	8/26/2015 1003h	Aqueous	Anions, E300.0
1508568-004B	TWN-07_08262015	8/26/2015 1003h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-005A	TWN-18_08252015	8/25/2015 1236h	Aqueous	Anions, E300.0
1508568-005B	TWN-18_08252015	8/25/2015 1236h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-006A	TWN-03_08262015	8/26/2015 1011h	Aqueous	Anions, E300.0
1508568-006B	TWN-03_08262015	8/26/2015 1011h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-007A	TWN-02_08262015	8/26/2015 1214h	Aqueous	Anions, E300.0
1508568-007B	TWN-02_08262015	8/26/2015 1214h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-008A	TWN-65_08252015	8/25/2015 1017h	Aqueous	Anions, E300.0
1508568-008B	TWN-65_08252015	8/25/2015 1017h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-009A	TWN-60_08262015	8/26/2015 1230h	Aqueous	Anions, E300.0
1508568-009B	TWN-60_08262015	8/26/2015 1230h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-010A	Piez-01_08262015	8/26/2015 1200h	Aqueous	Anions, E300.0
1508568-010B	Piez-01_08262015	8/26/2015 1200h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-011A	Piez-02_08262015	8/26/2015 1019h	Aqueous	Anions, E300.0
1508568-011B	Piez-02_08262015	8/26/2015 1019h	Aqueous	Nitrite/Nitrate (as N), E353.2
1508568-012A	Piez-03_08262015	8/26/2015 1029h	Aqueous	Anions, E300.0
1508568-012B	Piez-03_08262015	8/26/2015 1029h	Aqueous	Nitrite/Nitrate (as N), E353.2

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

Inorganic Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	3rd Quarter Nitrate 2015
Lab Set ID:	1508568

Sample Receipt Information:

Date of Receipt:	8/28/2015
Date(s) of Collection:	8/25-8/26/2015
Sample Condition:	Intact
C-O-C Discrepancies:	See Chain of Custody

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
1508568-009B	Nitrate/Nitrite	MS/MSD	Sample matrix interference

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: 1508568
Project: 3rd Quarter Nitrate 2015

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-R82408 Date Analyzed: 09/01/2015 1553h													
Test Code: 300.0-W													
Chloride	5.22	mg/L	E300.0	0.00751	0.100	5.000	0	104	90 - 110				
Lab Sample ID: LCS NO3-R82488 Date Analyzed: 09/03/2015 1325h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.984	mg/L	E353.2	0.00833	0.0100	1.000	0	98.4	90 - 110				
Lab Sample ID: LCS-R82495 Date Analyzed: 09/03/2015 1126h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.991	mg/L	E353.2	0.00833	0.0100	1.000	0	99.1	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: 1508568
Project: 3rd Quarter Nitrate 2015

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-R82408 Date Analyzed: 09/01/2015 1536h													
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00751	0.100								
Lab Sample ID: MB-R82488 Date Analyzed: 09/03/2015 1324h													
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-R82495 Date Analyzed: 09/03/2015 1124h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								

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: 1508568
Project: 3rd Quarter Nitrate 2015

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:	**1508568-006AMS**	Date Analyzed:	09/01/2015 1842h											
Test Code:	300.0-W													
Chloride		656	mg/L	E300.0	0.751	10.0	500.0	156	100	90 - 110				
Lab Sample ID:	**1508568-012AMS**	Date Analyzed:	09/01/2015 2204h											
Test Code:	300.0-W													
Chloride		101	mg/L	E300.0	0.0751	1.00	50.00	54.8	93.1	90 - 110				
Lab Sample ID:	**1508568-009BMS NO3**	Date Analyzed:	09/03/2015 1328h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		0.653	mg/L	E353.2	0.00833	0.0100	1.000	0	65.3	90 - 110				1
Lab Sample ID:	**1509095-001DMS NO3**	Date Analyzed:	09/03/2015 1250h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		11.2	mg/L	E353.2	0.0833	0.100	10.00	1.5	96.9	90 - 110				

[1] - 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: 1508568
Project: 3rd Quarter Nitrate 2015

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: 1508568-006AMSD Date Analyzed: 09/01/2015 1858h Test Code: 300.0-W													
Chloride	659	mg/L	E300.0	0.751	10.0	500.0	156	101	90 - 110	656	0.541	20	
Lab Sample ID: 1508568-012AMSD Date Analyzed: 09/01/2015 2221h Test Code: 300.0-W													
Chloride	101	mg/L	E300.0	0.0751	1.00	50.00	54.8	91.7	90 - 110	101	0.671	20	
Lab Sample ID: 1508568-009BMSD NO3 Date Analyzed: 09/03/2015 1329h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.660	mg/L	E353.2	0.00833	0.0100	1.000	0	66.0	90 - 110	0.653	1.13	10	1
Lab Sample ID: 1509095-001DMSD NO3 Date Analyzed: 09/03/2015 1259h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	10.7	mg/L	E353.2	0.0833	0.100	10.00	1.5	91.8	90 - 110	11.2	4.66	10	

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

American West Analytical Laboratories

UL
Denison

WORK ORDER Summary

Work Order: **1508568**

Client: Energy Fuels Resources, Inc. Due Date: 9/9/2015

Client ID: DEN100 **Contact:** Garrin Palmer

Project: **3rd Quarter Nitrate 2015** **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. EDD-Denison & LOCUS. Email Group; SAMPLES WITH AN "R" OR TWN-60 CAN NOT BE RUN BY 4500, THEY MUST BE RUN BY 300.0.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1508568-001A	**TWN-01R_08252015**	8/25/2015 0920h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-001B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-002A	**TWN-01_08252015**	8/25/2015 0943h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-002B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-003A	**TWN-04_08252015**	8/25/2015 1017h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-003B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-004A	**TWN-07_08262015**	8/26/2015 1003h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-004B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-005A	**TWN-18_08252015**	8/25/2015 1236h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-005B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-006A	**TWN-03_08262015**	8/26/2015 1011h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-006B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-007A	**TWN-02_08262015**	8/26/2015 1214h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				
1508568-007B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1508568-008A	**TWN-65_08252015**	8/25/2015 1017h	8/28/2015 1011h	**300.0-W**	Aqueous		df - cl	1
				1 SEL Analytes: CL				

Printed: 9/1/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

WORK ORDER Summary

Work Order: **1508568**

Client: Energy Fuels Resources, Inc. Due Date: 9/9/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1508568-008B	**TWN-65_08252015**	8/25/2015 1017h	8/28/2015 1011h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous		df - no2/no3	1
1508568-009A	**TWN-60_08262015**	8/26/2015 1230h	8/28/2015 1011h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - cl	1
1508568-009B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1508568-010A	**Piez-01_08262015**	8/26/2015 1200h	8/28/2015 1011h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - cl	1
1508568-010B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1508568-011A	**Piez-02_08262015**	8/26/2015 1019h	8/28/2015 1011h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - cl	1
1508568-011B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1508568-012A	**Piez-03_08262015**	8/26/2015 1029h	8/28/2015 1011h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - cl	1
1508568-012B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	

Printed: 8/28/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

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

1508568
AWAL Lab Sample Set #
Page 1 of 1

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.

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		

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: **3rd Quarter Nitrate 2015**
Project #:
PO #:
Sampler Name: **Tanner Holliday**

X Include EDD:
LOCUS UPLOAD
EXCEL
Field Filtered For:

For Compliance With:
- ☐ NELAP
- ☐ RCRA
- ☐ CWA
- ☐ SDWA
- ☐ ELAP / A2LA
- ☐ NLLAP
- ☐ Non-Compliance
- ☐ Other:

Known Hazards & Sample Comments

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	Comments
1	TWN-01R_08252015	8/25/2015	920	2	W	X	X	
2	TWN-01_08252015	8/25/2015	943	2	W	X	X	
3	TWN-04_08252015	8/25/2015	1017	2	W	X	X	
4	TWN-07_08262015	8/26/2015	1003	2	W	X	X	
5	TWN-18_08252015	8/25/2015	1236	2	W	X	X	
6	TWN-03_08262015	8/26/2015	1011	2	W	X	X	
7	TWN-02_08262015	8/26/2015	1214	2	W	X	X	
8	TWN-65_08252015	8/25/2015	1017	2	W	X	X	
9	TWN-60_08262015	8/26/2015	1230	2	W	X	X	
10	Piez-01_08262015	8/26/2015	1200	2	W	X	X	
	Piez-02_08262015	8/26/2015	1019	2	W	X	X	
11	Piez-03_08262015	8/26/2015	1029	2	W	X	X	
12	Temp. Blank			1	W			

Laboratory Use Only

Samples Were:
Shipped or hand delivered
2 Ambient or Chilled
3 Temperature 3-8 °C
4 Received Broken/Leaking (Improperly Sealed) Y N
5 Properly Preserved Y N
Checked at bench Y N
6 Received Within Holding Times Y N

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 / Print Name	Date / Time	Received by: Signature / Print Name	Date / Time
Tanner Holliday	8/27/2015 1230		
		Elma Hayes	8/28/15 1011

Special Instructions:

Lab Set ID: 1508568

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_2SO_4																		
COD	pH <2 H_2SO_4																		
Cyanide	pH >12 NaOH																		
Metals	pH <2 HNO_3																		
NO_2 & NO_3	pH <2 H_2SO_4	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes						
O & G	pH <2 HCL																		
Phenols	pH <2 H_2SO_4																		
Sulfide	pH > 9NaOH, Zn Acetate																		
TKN	pH <2 H_2SO_4																		
T PO_4	pH <2 H_2SO_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.

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

Garrin Palmer
Energy Fuels Resources, Inc.
6425 S. Hwy 191
Blanding, UT 84511
TEL: (435) 678-2221

RE: 3rd Quarter Chloroform 2015

Dear Garrin Palmer: Lab Set ID: 1509241

American West Analytical Laboratories received sample(s) on 9/11/2015 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.

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: 2015.09.22 13:31:04 -06'00'

Laboratory Director or designee

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Chloroform 2015
Lab Set ID: 1509241
Date Received: 9/11/2015 1030h

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
1509241-001A	MW-32_09092015	9/9/2015	1310h	Aqueous	Anions, E300.0
1509241-001B	MW-32_09092015	9/9/2015	1310h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-001C	MW-32_09092015	9/9/2015	1310h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-002A	TW4-07_09102015	9/10/2015	703h	Aqueous	Anions, E300.0
1509241-002B	TW4-07_09102015	9/10/2015	703h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-002C	TW4-07_09102015	9/10/2015	703h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-003A	TW4-08_09102015	9/10/2015	710h	Aqueous	Anions, E300.0
1509241-003B	TW4-08_09102015	9/10/2015	710h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-003C	TW4-08_09102015	9/10/2015	710h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-004A	TW4-06_09102015	9/10/2015	715h	Aqueous	Anions, E300.0
1509241-004B	TW4-06_09102015	9/10/2015	715h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-004C	TW4-06_09102015	9/10/2015	715h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-005A	TW4-10_09102015	9/10/2015	723h	Aqueous	Anions, E300.0
1509241-005B	TW4-10_09102015	9/10/2015	723h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-005C	TW4-10_09102015	9/10/2015	723h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-006A	TW4-60_09102015	9/10/2015	745h	Aqueous	Anions, E300.0
1509241-006B	TW4-60_09102015	9/10/2015	745h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-006C	TW4-60_09102015	9/10/2015	745h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-007A	TW4-07R_09092015	9/9/2015	823h	Aqueous	Anions, E300.0
1509241-007B	TW4-07R_09092015	9/9/2015	823h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509241-007C	TW4-07R_09092015	9/9/2015	823h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509241-008A	Trip Blank	9/9/2015		Aqueous	VOA by GC/MS Method 8260C/5030C

Inorganic Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	3rd Quarter Chloroform 2015
Lab Set ID:	1509241

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

Sample Receipt Information:

Date of Receipt:	9/11/2015
Date(s) of Collection:	9/9 & 9/10/2015
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: The MSD percent recovery was outside of control limits due to sample matrix interference and the RPD was outside of limits due to suspected sample non-homogeneity or matrix interference for nitrate/nitrite on sample 1509241-002B.

Corrective Action: None required.

Volatile Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	3rd Quarter Chloroform 2015
Lab Set ID:	1509241

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

Sample Receipt Information:

Date of Receipt:	9/11/2015
Date(s) of Collection:	9/9 & 9/10/2015
Sample Condition:	Intact
C-O-C Discrepancies:	None
Method:	SW-846 8260C/5030C
Analysis:	Volatile Organic Compounds

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

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

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

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

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

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

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

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.

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: 1509241
Project: 3rd Quarter Chloroform 2015

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-R82902 Date Analyzed: 09/16/2015 1326h													
Test Code: 300.0-W													
Chloride	5.11	mg/L	E300.0	0.00751	0.100	5.000	0	102	90 - 110				
Lab Sample ID: LCS-R82866 Date Analyzed: 09/15/2015 945h													
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				

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: 1509241
Project: 3rd Quarter Chloroform 2015

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-R82902 Date Analyzed: 09/16/2015 1309h													
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00751	0.100								
Lab Sample ID: MB-R82866 Date Analyzed: 09/15/2015 942h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								

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: 1509241
Project: 3rd Quarter Chloroform 2015

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: 1509241-001AMS Date Analyzed: 09/16/2015 1359h													
Test Code: 300.0-W													
Chloride	83.6	mg/L	E300.0	0.0751	1.00	50.00	37.7	91.8	90 - 110				
Lab Sample ID: 1509123-027BMS Date Analyzed: 09/15/2015 952h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	15.9	mg/L	E353.2	0.0833	0.100	10.00	6.45	94.4	90 - 110				
Lab Sample ID: 1509241-002BMS Date Analyzed: 09/15/2015 1031h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	9.60	mg/L	E353.2	0.0417	0.0500	5.000	4.72	97.7	90 - 110				

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: 1509241
Project: 3rd Quarter Chloroform 2015

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:	**1509241-001AMSD**	Date Analyzed:	09/16/2015 1416h											
Test Code:	300.0-W													
Chloride		83.6	mg/L	E300.0	0.0751	1.00	50.00	37.7	91.9	90 - 110	83.6	0.0347	20	
Lab Sample ID:	**1509123-027BMSD**	Date Analyzed:	09/15/2015 953h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		16.1	mg/L	E353.2	0.0833	0.100	10.00	6.45	96.4	90 - 110	15.9	1.25	10	
Lab Sample ID:	**1509241-002BMSD**	Date Analyzed:	09/15/2015 1032h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		7.84	mg/L	E353.2	0.0417	0.0500	5.000	4.72	62.5	90 - 110	9.6	20.2	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.

American West Analytical Laboratories

UL
Denison

WORK ORDER Summary

Work Order: **1509241**

Client: Energy Fuels Resources, Inc. Due Date: 9/22/2015

Client ID: DEN100 **Contact:** Garrin Palmer

Project: **3rd Quarter Chloroform 2015** **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. Expected levels provided by client - see Jenn. J-flag what we can't meet. EIM Locus and EDD-Denison. Email Group.;

DB

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509241-001A	**MW-32_09092015**	9/9/2015 1310h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-001B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-001C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-002A	**TW4-07_09102015**	9/10/2015 0703h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-002B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-002C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-003A	**TW4-08_09102015**	9/10/2015 0710h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-003B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-003C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-004A	**TW4-06_09102015**	9/10/2015 0715h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-004B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-004C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-005A	**TW4-10_09102015**	9/10/2015 0723h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-005B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-005C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				

Printed: 9/11/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☑ RT ☑ CN ☑ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed 9/14/15

WORK ORDER Summary

Work Order: **1509241**

Client: Energy Fuels Resources, Inc. Due Date: 9/22/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509241-006A	**TW4-60_09102015**	9/10/2015 0745h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-006B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-006C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-007A	**TW4-07R_09092015**	9/9/2015 0823h	9/11/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509241-007B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509241-007C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509241-008A	**Trip Blank**	9/9/2015	9/11/2015 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

1509241
AWAL Lab Sample Set #
Page 1 of 1

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.

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		

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: **3rd Quarter Chloroform 2015**
Project #:
PO #:
Sampler Name: **Tanner Holliday**

X Include EDD:
LOCUS UPLOAD
EXCEL
Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)	Known Hazards & Sample Comments
1	MW-32_09092015	9/9/2015	1310	5	W	X	X	X	
2	TW4-07_09102015	9/10/2015	703	5	W	X	X	X	
3	TW4-08_09102015	9/10/2015	710	5	W	X	X	X	
4	TW4-06_09102015	9/10/2015	715	5	W	X	X	X	
5	TW4-10_09102015	9/10/2015	723	5	W	X	X	X	
6	TW4-60_09102015	9/10/2015	745	5	W	X	X	X	
7	TW4-07R_09092015	9/9/2015	823	5	W	X	X	X	
8	TRIP BLANK	9/9/2015		3	W			X	
9	TEMP BLANK	9/10/2015		1	W				
10									
11									
12									

Laboratory Use Only

Samples Were: UPS
1 Shipped or hand delivered
2 Ambient or Chilled
3 Temperature 2.4 °C
4 Received Broken/Leaking (Improperly Sealed) Y N
5 Properly Preserved Y N
Checked at bench Y N
6 Received Within Holding Times Y N

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 / Print Name	Date / Time	Received by: Signature / Print Name	Date / Time
Tanner Holliday	9/10/2015 1230	Denise Brown	9/11/15 10:30

Special Instructions:

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

Lab Set ID: 1509241

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative	-001	-002	-003	-004	-005	-006	-007											
Ammonia	pH <2 H_2SO_4																		
COD	pH <2 H_2SO_4																		
Cyanide	pH >12 NaOH																		
Metals	pH <2 HNO_3																		
NO_2 & NO_3	pH <2 H_2SO_4	yes	yes	yes	yes	yes	yes	yes											
O & G	pH <2 HCL																		
Phenols	pH <2 H_2SO_4																		
Sulfide	pH > 9NaOH, Zn Acetate																		
TKN	pH <2 H_2SO_4																		
T PO_4	pH <2 H_2SO_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.

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

Garrin Palmer
Energy Fuels Resources, Inc.
6425 S. Hwy 191
Blanding, UT 84511
TEL: (435) 678-2221

RE: 3rd Quarter Chloroform 2015

Dear Garrin Palmer: Lab Set ID: 1509123

American West Analytical Laboratories received sample(s) on 9/4/2015 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.

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: 2015.09.28 13:15:57 -06'00'

Laboratory Director or designee

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

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Chloroform 2015
Lab Set ID: 1509123
Date Received: 9/4/2015 1030h

Lab Sample ID	Client Sample ID	Date Collected		Matrix	Analysis
1509123-001A	TW4-03R_09012015	9/1/2015	737h	Aqueous	Anions, E300.0
1509123-001B	TW4-03R_09012015	9/1/2015	737h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-001C	TW4-03R_09012015	9/1/2015	737h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-002A	TW4-03_09022015	9/2/2015	705h	Aqueous	Anions, E300.0
1509123-002B	TW4-03_09022015	9/2/2015	705h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-002C	TW4-03_09022015	9/2/2015	705h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-003A	TW4-12_09022015	9/2/2015	715h	Aqueous	Anions, E300.0
1509123-003B	TW4-12_09022015	9/2/2015	715h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-003C	TW4-12_09022015	9/2/2015	715h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-004A	TW4-28_09022015	9/2/2015	725h	Aqueous	Anions, E300.0
1509123-004B	TW4-28_09022015	9/2/2015	725h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-004C	TW4-28_09022015	9/2/2015	725h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-005A	TW4-32_09022015	9/2/2015	730h	Aqueous	Anions, E300.0
1509123-005B	TW4-32_09022015	9/2/2015	730h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-005C	TW4-32_09022015	9/2/2015	730h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-006A	TW4-13_09022015	9/2/2015	737h	Aqueous	Anions, E300.0
1509123-006B	TW4-13_09022015	9/2/2015	737h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-006C	TW4-13_09022015	9/2/2015	737h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-007A	TW4-36_09022015	9/2/2015	743h	Aqueous	Anions, E300.0
1509123-007B	TW4-36_09022015	9/2/2015	743h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-007C	TW4-36_09022015	9/2/2015	743h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-008A	TW4-27_09022015	9/2/2015	750h	Aqueous	Anions, E300.0
1509123-008B	TW4-27_09022015	9/2/2015	750h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-008C	TW4-27_09022015	9/2/2015	750h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-009A	TW4-31_09022015	9/2/2015	757h	Aqueous	Anions, E300.0
1509123-009B	TW4-31_09022015	9/2/2015	757h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-009C	TW4-31_09022015	9/2/2015	757h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-010A	TW4-65_09022015	9/2/2015	715h	Aqueous	Anions, E300.0
1509123-010B	TW4-65_09022015	9/2/2015	715h	Aqueous	Nitrite/Nitrate (as N), E353.2

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

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Chloroform 2015
Lab Set ID: 1509123
Date Received: 9/4/2015 1030h

Lab Sample ID	Client Sample ID	Date Collected		Matrix	Analysis
1509123-010C	TW4-65_09022015	9/2/2015	715h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-011A	TW4-25_08312015	8/31/2015	1335h	Aqueous	Anions, E300.0
1509123-011B	TW4-25_08312015	8/31/2015	1335h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-011C	TW4-25_08312015	8/31/2015	1335h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-012A	TW4-14_09032015	9/3/2015	825h	Aqueous	Anions, E300.0
1509123-012B	TW4-14_09032015	9/3/2015	825h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-012C	TW4-14_09032015	9/3/2015	825h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-013A	TW4-30_09032015	9/3/2015	834h	Aqueous	Anions, E300.0
1509123-013B	TW4-30_09032015	9/3/2015	834h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-013C	TW4-30_09032015	9/3/2015	834h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-014A	TW4-26_09032015	9/3/2015	844h	Aqueous	Anions, E300.0
1509123-014B	TW4-26_09032015	9/3/2015	844h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-014C	TW4-26_09032015	9/3/2015	844h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-015A	TW4-05_09032015	9/3/2015	853h	Aqueous	Anions, E300.0
1509123-015B	TW4-05_09032015	9/3/2015	853h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-015C	TW4-05_09032015	9/3/2015	853h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-016A	TW4-18_09032015	9/3/2015	901h	Aqueous	Anions, E300.0
1509123-016B	TW4-18_09032015	9/3/2015	901h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-016C	TW4-18_09032015	9/3/2015	901h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-017A	TW4-09_09032015	9/3/2015	910h	Aqueous	Anions, E300.0
1509123-017B	TW4-09_09032015	9/3/2015	910h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-017C	TW4-09_09032015	9/3/2015	910h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-018A	TW4-16_09032015	9/3/2015	917h	Aqueous	Anions, E300.0
1509123-018B	TW4-16_09032015	9/3/2015	917h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-018C	TW4-16_09032015	9/3/2015	917h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-019A	TW4-33_09032015	9/3/2015	925h	Aqueous	Anions, E300.0
1509123-019B	TW4-33_09032015	9/3/2015	925h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-019C	TW4-33_09032015	9/3/2015	925h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-020A	TW4-29_09032015	9/3/2015	933h	Aqueous	Anions, E300.0
1509123-020B	TW4-29_09032015	9/3/2015	933h	Aqueous	Nitrite/Nitrate (as N), E353.2

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

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Chloroform 2015
Lab Set ID: 1509123
Date Received: 9/4/2015 1030h

Lab Sample ID	Client Sample ID	Date Collected		Matrix	Analysis
1509123-020C	TW4-29_09032015	9/3/2015	933h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-021A	TW4-24_08312015	8/31/2015	1348h	Aqueous	Anions, E300.0
1509123-021B	TW4-24_08312015	8/31/2015	1348h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-021C	TW4-24_08312015	8/31/2015	1348h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-022A	TW4-34_09032015	9/3/2015	754h	Aqueous	Anions, E300.0
1509123-022B	TW4-34_09032015	9/3/2015	754h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-022C	TW4-34_09032015	9/3/2015	754h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-023A	TW4-35_09032015	9/3/2015	803h	Aqueous	Anions, E300.0
1509123-023B	TW4-35_09032015	9/3/2015	803h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-023C	TW4-35_09032015	9/3/2015	803h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-024A	TW4-23_09032015	9/3/2015	813h	Aqueous	Anions, E300.0
1509123-024B	TW4-23_09032015	9/3/2015	813h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-024C	TW4-23_09032015	9/3/2015	813h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-025A	TW4-21_08312015	8/31/2015	1327h	Aqueous	Anions, E300.0
1509123-025B	TW4-21_08312015	8/31/2015	1327h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-025C	TW4-21_08312015	8/31/2015	1327h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-026A	TW4-01_08312015	8/31/2015	1502h	Aqueous	Anions, E300.0
1509123-026B	TW4-01_08312015	8/31/2015	1502h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-026C	TW4-01_08312015	8/31/2015	1502h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-027A	TW4-04_08312015	8/31/2015	1512h	Aqueous	Anions, E300.0
1509123-027B	TW4-04_08312015	8/31/2015	1512h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-027C	TW4-04_08312015	8/31/2015	1512h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-028A	MW-04_08312015	8/31/2015	1455h	Aqueous	Anions, E300.0
1509123-028B	MW-04_08312015	8/31/2015	1455h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-028C	MW-04_08312015	8/31/2015	1455h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-029A	TW4-19_08312015	8/31/2015	1535h	Aqueous	Anions, E300.0
1509123-029B	TW4-19_08312015	8/31/2015	1535h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-029C	TW4-19_08312015	8/31/2015	1535h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-030A	TW4-02_08312015	8/31/2015	1437h	Aqueous	Anions, E300.0
1509123-030B	TW4-02_08312015	8/31/2015	1437h	Aqueous	Nitrite/Nitrate (as N), E353.2

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

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 3rd Quarter Chloroform 2015
Lab Set ID: 1509123
Date Received: 9/4/2015 1030h

Lab Sample ID	Client Sample ID	Date Collected		Matrix	Analysis
1509123-030C	TW4-02_08312015	8/31/2015	1437h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-031A	MW-26_08312015	8/31/2015	1420h	Aqueous	Anions, E300.0
1509123-031B	MW-26_08312015	8/31/2015	1420h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-031C	MW-26_08312015	8/31/2015	1420h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-032A	TW4-11_08312015	8/31/2015	1428h	Aqueous	Anions, E300.0
1509123-032B	TW4-11_08312015	8/31/2015	1428h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-032C	TW4-11_08312015	8/31/2015	1428h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-033A	TW4-22_08312015	8/31/2015	1359h	Aqueous	Anions, E300.0
1509123-033B	TW4-22_08312015	8/31/2015	1359h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-033C	TW4-22_08312015	8/31/2015	1359h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-034A	TW4-20_08312015	8/31/2015	1413h	Aqueous	Anions, E300.0
1509123-034B	TW4-20_08312015	8/31/2015	1413h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-034C	TW4-20_08312015	8/31/2015	1413h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-035A	TW4-37_08312015	8/31/2015	1405h	Aqueous	Anions, E300.0
1509123-035B	TW4-37_08312015	8/31/2015	1405h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-035C	TW4-37_08312015	8/31/2015	1405h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-036A	TW4-70_09032015	9/3/2015	813h	Aqueous	Anions, E300.0
1509123-036B	TW4-70_09032015	9/3/2015	813h	Aqueous	Nitrite/Nitrate (as N), E353.2
1509123-036C	TW4-70_09032015	9/3/2015	813h	Aqueous	VOA by GC/MS Method 8260C/5030C
1509123-037A	Trip Blank	8/31/2015		Aqueous	VOA by GC/MS Method 8260C/5030C

Inorganic Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	3rd Quarter Chloroform 2015
Lab Set ID:	1509123

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

Sample Receipt Information:

Date of Receipt:	9/4/2015
Date(s) of Collection:	8/31-9/3/2015
Sample Condition:	Intact
C-O-C Discrepancies:	See Chain of Custody

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
1509123-005B	Nitrate-Nitrite (as N)	MS/MSD	Sample matrix interference
1509123-036B	Nitrate-Nitrite (as N)	MS/MSD	Sample matrix interference
1509241-002B	Nitrate-Nitrite (as N)	MSD/RPD	Sample matrix interference or suspected sample non-homogeneity
1509381-003C	Nitrate-Nitrite (as N)	MS/MSD	Sample matrix interference

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

Volatile Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	3rd Quarter Chloroform 2015
Lab Set ID:	1509123

Sample Receipt Information:

Date of Receipt:	9/4/2015
Date(s) of Collection:	8/31-9/3/2015
Sample Condition:	Intact
C-O-C Discrepancies:	See Chain of Custody
Method:	SW-846 8260C/5030C
Analysis:	Volatile Organic Compounds

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

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

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

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

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

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

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

Surrogates: All surrogate recoveries were within established limits.

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: 1509123
Project: 3rd Quarter Chloroform 2015

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-R82766 Date Analyzed: 09/12/2015 1430h Test Code: 300.0-W													
Chloride	5.10	mg/L	E300.0	0.00751	0.100	5.000	0	102	90 - 110				
Lab Sample ID: LCS-R82767 Date Analyzed: 09/12/2015 2330h Test Code: 300.0-W													
Chloride	5.13	mg/L	E300.0	0.00751	0.100	5.000	0	103	90 - 110				
Lab Sample ID: LCS-R82792 Date Analyzed: 09/14/2015 1153h Test Code: 300.0-W													
Chloride	5.07	mg/L	E300.0	0.00751	0.100	5.000	0	101	90 - 110				
Lab Sample ID: LCS-R82651 Date Analyzed: 09/09/2015 1445h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.960	mg/L	E353.2	0.00833	0.0100	1.000	0	96.0	90 - 110				
Lab Sample ID: LCS-R82716 Date Analyzed: 09/10/2015 1724h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.980	mg/L	E353.2	0.00833	0.0100	1.000	0	98.0	90 - 110				
Lab Sample ID: LCS-R82866 Date Analyzed: 09/15/2015 945h 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-R82882 Date Analyzed: 09/16/2015 933h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.06	mg/L	E353.2	0.00833	0.0100	1.000	0	106	90 - 110				
Lab Sample ID: LCS-R82927 Date Analyzed: 09/17/2015 1541h 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				

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: 1509123
Project: 3rd Quarter Chloroform 2015

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-R83139 Date Analyzed: 09/22/2015 1533h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.992	mg/L	E353.2	0.00833	0.0100	1.000	0	99.2	90 - 110				
Lab Sample ID: LCS-R83140 Date Analyzed: 09/22/2015 1656h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.913	mg/L	E353.2	0.00833	0.0100	1.000	0	91.3	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: 1509123
Project: 3rd Quarter Chloroform 2015

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-R82766 Date Analyzed: 09/12/2015 1414h Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00751	0.100								
Lab Sample ID: MB-R82767 Date Analyzed: 09/12/2015 2313h Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00751	0.100								
Lab Sample ID: MB-R82792 Date Analyzed: 09/14/2015 1136h Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.00751	0.100								
Lab Sample ID: MB-R82651 Date Analyzed: 09/09/2015 1443h 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-R82716 Date Analyzed: 09/10/2015 1721h 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-R82866 Date Analyzed: 09/15/2015 942h 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-R82882 Date Analyzed: 09/16/2015 930h 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-R82927 Date Analyzed: 09/17/2015 1540h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								

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: 1509123
Project: 3rd Quarter Chloroform 2015

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-R83139 Date Analyzed: 09/22/2015 1531h 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-R83140 Date Analyzed: 09/22/2015 1654h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100								

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: 1509123
Project: 3rd Quarter Chloroform 2015

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: 1509123-002AMS Date Analyzed: 09/12/2015 1504h Test Code: 300.0-W													
Chloride	75.6	mg/L	E300.0	0.0751	1.00	50.00	27.4	96.4	90 - 110				
Lab Sample ID: 1509123-012AMS Date Analyzed: 09/12/2015 1900h Test Code: 300.0-W													
Chloride	92.6	mg/L	E300.0	0.0751	1.00	50.00	42.4	100	90 - 110				
Lab Sample ID: 1509123-021AMS Date Analyzed: 09/13/2015 003h Test Code: 300.0-W													
Chloride	1,760	mg/L	E300.0	1.50	20.0	1,000	788	97.1	90 - 110				
Lab Sample ID: 1509123-028AMS Date Analyzed: 09/13/2015 402h Test Code: 300.0-W													
Chloride	91.4	mg/L	E300.0	0.0751	1.00	50.00	44.3	94.2	90 - 110				
Lab Sample ID: 1509123-033AMS Date Analyzed: 09/14/2015 1226h Test Code: 300.0-W													
Chloride	1,010	mg/L	E300.0	0.751	10.0	500.0	557	91.2	90 - 110				
Lab Sample ID: 1509123-011BMS Date Analyzed: 09/09/2015 1543h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.9	mg/L	E353.2	0.0833	0.100	10.00	1.63	102	90 - 110				
Lab Sample ID: 1509123-021BMS Date Analyzed: 09/10/2015 1743h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	125	mg/L	E353.2	0.833	1.00	100.0	25.3	99.5	90 - 110				
Lab Sample ID: 1509123-027BMS Date Analyzed: 09/15/2015 952h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	15.9	mg/L	E353.2	0.0833	0.100	10.00	6.45	94.4	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: 1509123
Project: 3rd Quarter Chloroform 2015

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: 1509241-002BMS Date Analyzed: 09/15/2015 1031h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	9.60	mg/L	E353.2	0.0417	0.0500	5.000	4.72	97.7	90 - 110				
Lab Sample ID: 1509123-036BMS Date Analyzed: 09/16/2015 938h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100	1.000	0	0	90 - 110				1
Lab Sample ID: 1509123-005BMS Date Analyzed: 09/17/2015 1544h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.8	mg/L	E353.2	0.0833	0.100	10.00	5.09	66.8	90 - 110				1
Lab Sample ID: 1509123-002BMS Date Analyzed: 09/22/2015 1542h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	14.0	mg/L	E353.2	0.0833	0.100	10.00	3.89	101	90 - 110				
Lab Sample ID: 1509123-007BMS Date Analyzed: 09/22/2015 1726h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	9.94	mg/L	E353.2	0.0833	0.100	10.00	0	99.4	90 - 110				
Lab Sample ID: 1509381-003CMS Date Analyzed: 09/22/2015 1737h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	4.91	mg/L	E353.2	0.0417	0.0500	5.000	0.795	82.3	90 - 110				1

[1] - 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: 1509123
Project: 3rd Quarter Chloroform 2015

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: 1509123-002AMSD Date Analyzed: 09/12/2015 1521h Test Code: 300.0-W													
Chloride	76.2	mg/L	E300.0	0.0751	1.00	50.00	27.4	97.5	90 - 110	75.6	0.746	20	
Lab Sample ID: 1509123-012AMSD Date Analyzed: 09/12/2015 1917h Test Code: 300.0-W													
Chloride	93.1	mg/L	E300.0	0.0751	1.00	50.00	42.4	101	90 - 110	92.6	0.536	20	
Lab Sample ID: 1509123-021AMSD Date Analyzed: 09/13/2015 020h Test Code: 300.0-W													
Chloride	1,750	mg/L	E300.0	1.50	20.0	1,000	788	96.5	90 - 110	1760	0.376	20	
Lab Sample ID: 1509123-028AMSD Date Analyzed: 09/13/2015 419h Test Code: 300.0-W													
Chloride	91.0	mg/L	E300.0	0.0751	1.00	50.00	44.3	93.3	90 - 110	91.4	0.518	20	
Lab Sample ID: 1509123-033AMSD Date Analyzed: 09/14/2015 1243h Test Code: 300.0-W													
Chloride	1,010	mg/L	E300.0	0.751	10.0	500.0	557	90.8	90 - 110	1010	0.244	20	
Lab Sample ID: 1509123-011BMSD Date Analyzed: 09/09/2015 1544h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.9	mg/L	E353.2	0.0833	0.100	10.00	1.63	103	90 - 110	11.9	0.253	10	
Lab Sample ID: 1509123-021BMSD Date Analyzed: 09/10/2015 1745h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	121	mg/L	E353.2	0.833	1.00	100.0	25.3	95.8	90 - 110	125	3.01	10	
Lab Sample ID: 1509123-027BMSD Date Analyzed: 09/15/2015 953h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	16.1	mg/L	E353.2	0.0833	0.100	10.00	6.45	96.4	90 - 110	15.9	1.25	10	

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: 1509123
Project: 3rd Quarter Chloroform 2015

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: 1509241-002BMSD Date Analyzed: 09/15/2015 1032h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	7.84	mg/L	E353.2	0.0417	0.0500	5.000	4.72	62.5	90 - 110	9.6	20.2	10	'@
Lab Sample ID: 1509123-036BMSD Date Analyzed: 09/16/2015 940h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00833	0.0100	1.000	0	0	90 - 110	0	0	10	'
Lab Sample ID: 1509123-005BMSD Date Analyzed: 09/17/2015 1545h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.9	mg/L	E353.2	0.0833	0.100	10.00	5.09	68.3	90 - 110	11.8	1.27	10	'
Lab Sample ID: 1509123-002BMSD Date Analyzed: 09/22/2015 1544h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	13.8	mg/L	E353.2	0.0833	0.100	10.00	3.89	99.0	90 - 110	14	1.44	10	
Lab Sample ID: 1509123-007BMSD Date Analyzed: 09/22/2015 1727h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	10.4	mg/L	E353.2	0.0833	0.100	10.00	0	104	90 - 110	9.94	4.63	10	
Lab Sample ID: 1509381-003CMSD Date Analyzed: 09/22/2015 1738h Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	5.02	mg/L	E353.2	0.0417	0.0500	5.000	0.795	84.4	90 - 110	4.91	2.08	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.

American West Analytical Laboratories

UL
Denison

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Client ID: DEN100 **Contact:** Garrin Palmer

Project: **3rd Quarter Chloroform 2015** **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. 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	
1509123-001A	**TW4-03R_09012015**	9/1/2015 0737h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-001B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-001C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-002A	**TW4-03_09022015**	9/2/2015 0705h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-002B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-002C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-003A	**TW4-12_09022015**	9/2/2015 0715h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-003B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-003C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-004A	**TW4-28_09022015**	9/2/2015 0725h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-004B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-004C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-005A	**TW4-32_09022015**	9/2/2015 0730h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-005B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-005C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				

Printed: 9/4/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed 9-4-15 el

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509123-006A	**TW4-13_09022015**	9/2/2015 0737h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-006B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-006C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-007A	**TW4-36_09022015**	9/2/2015 0743h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-007B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-007C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-008A	**TW4-27_09022015**	9/2/2015 0750h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-008B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-008C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-009A	**TW4-31_09022015**	9/2/2015 0757h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-009B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-009C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-010A	**TW4-65_09022015**	9/2/2015 0715h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-010B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-010C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-011A	**TW4-25_08312015**	8/31/2015 1335h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-011B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-011C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-012A	**TW4-14_09032015**	9/3/2015 0825h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				

Printed: 9/4/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509123-012B	**TW4-14_09032015**	9/3/2015 0825h	9/4/2015 1030h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous		df - no2/no3	1
1509123-012C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-013A	**TW4-30_09032015**	9/3/2015 0834h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-013B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-013C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-014A	**TW4-26_09032015**	9/3/2015 0844h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-014B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-014C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-015A	**TW4-05_09032015**	9/3/2015 0853h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-015B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-015C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-016A	**TW4-18_09032015**	9/3/2015 0901h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-016B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-016C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-017A	**TW4-09_09032015**	9/3/2015 0910h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-017B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-017C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-018A	**TW4-16_09032015**	9/3/2015 0917h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-018B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	

FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509123-018C	**TW4-16_09032015**	9/3/2015 0917h	9/4/2015 1030h	**8260-W-DEN100**	Aqueous		VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-019A	**TW4-33_09032015**	9/3/2015 0925h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-019B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-019C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-020A	**TW4-29_09032015**	9/3/2015 0933h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-020B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-020C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-021A	**TW4-24_08312015**	8/31/2015 1348h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-021B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-021C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-022A	**TW4-34_09032015**	9/3/2015 0754h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-022B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-022C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-023A	**TW4-35_09032015**	9/3/2015 0803h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-023B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-023C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-024A	**TW4-23_09032015**	9/3/2015 0813h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-024B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-024C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509123-025A	**TW4-21_08312015**	8/31/2015 1327h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-025B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-025C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-026A	**TW4-01_08312015**	8/31/2015 1502h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-026B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-026C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-027A	**TW4-04_08312015**	8/31/2015 1512h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-027B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-027C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-028A	**MW-04_08312015**	8/31/2015 1455h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-028B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-028C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-029A	**TW4-19_08312015**	8/31/2015 1535h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-029B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-029C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-030A	**TW4-02_08312015**	8/31/2015 1437h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				
1509123-030B				**NO2/NO3-W-353.2**			df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1509123-030C				**8260-W-DEN100**			VOCFridge	3
				Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4				
1509123-031A	**MW-26_08312015**	8/31/2015 1420h	9/4/2015 1030h	**300.0-W**	Aqueous		df - wc	1
				1 SEL Analytes: CL				

WORK ORDER Summary

Work Order: **1509123**

Client: Energy Fuels Resources, Inc. Due Date: 9/16/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1509123-031B	**MW-26_08312015**	8/31/2015 1420h	9/4/2015 1030h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous		df - no2/no3	1
1509123-031C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-032A	**TW4-11_08312015**	8/31/2015 1428h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-032B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-032C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-033A	**TW4-22_08312015**	8/31/2015 1359h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-033B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-033C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-034A	**TW4-20_08312015**	8/31/2015 1413h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-034B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-034C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-035A	**TW4-37_08312015**	8/31/2015 1405h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-035B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-035C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-036A	**TW4-70_09032015**	9/3/2015 0813h	9/4/2015 1030h	**300.0-W** *1 SEL Analytes: CL*	Aqueous		df - wc	1
1509123-036B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*			df - no2/no3	
1509123-036C				**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*			VOCFridge	3
1509123-037A	**Trip Blank**	8/31/2015	9/4/2015 1030h	**8260-W-DEN100** *Test Group: 8260-W-DEN100; # of Analytes: 4 / # of Surr: 4*	Aqueous		VOCFridge	3

Printed: 9/4/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

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

1509123
AWAL Lab Sample Set #
Page 1 of 3

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.

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		

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: **3rd Quarter Chloroform 2015**
Project #:
PO #:
Sampler Name: **Tanner Holliday**

X Include EDD:
LOCUS UPLOAD
EXCEL
Field Filtered For:

For Compliance With:
- ☐ NELAP
- ☐ RCRA
- ☐ CWA
- ☐ SDWA
- ☐ ELAP / A2LA
- ☐ NLLAP
- ☐ Non-Compliance
- ☐ Other:

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)	Known Hazards & Sample Comments
1	TW4-03R_09012015	9/1/2015	737	5	W	X	X	X	
2	TW4-03_09022015	9/2/2015	705	5	W	X	X	X	
3	TW4-12_09022015	9/2/2015	715	5	W	X	X	X	
4	TW4-28_09022015	9/2/2015	725	5	W	X	X	X	
5	TW4-32_09022015	9/2/2015	730	5	W	X	X	X	
6	TW4-13_09022015	9/2/2015	737	5	W	X	X	X	
7	TW4-36_09022015	9/2/2015	743	5	W	X	X	X	
8	TW4-27_09022015	9/2/2015	750	5	W	X	X	X	
9	TW4-31_09022015	9/2/2015	757	5	W	X	X	X	
10	TW4-65_09022015	9/2/2015	715	5	W	X	X	X	
	TW4-25_08312015	8/31/2015	1335	5	W	X	X	X	
11	TW4-14_09032015	9/3/2015	825	5	W	X	X	X	
12	TW4-30_09032015	9/3/2015	834	5	W	X	X	X	

Laboratory Use Only

Samples Were: UPS
1 Shipped or hand delivered
2 Ambient or Chilled
3 Temperature 1.6 °C
4 Received Broken/Leaking (Improperly Sealed) Y (N)
5 Properly Preserved (Y) N
Checked at bench Y N
6 Received Within Holding Times (Y) N

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 / Print Name	Date / Time	Received by: Signature / Print Name	Date / Time
Tanner Holliday	9/3/2015 1230		
			9-4-15 1030

Special Instructions:

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

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

1509/23
AWAL Lab Sample Set #
Page 1 of 3

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.

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		

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: **3rd Quarter Chloroform 2015**
Project #:
PO #:
Sampler Name: **Tanner Holliday**

X Include EDD:
LOCUS UPLOAD
EXCEL
Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

Laboratory Use Only
Samples Were: UPS
1 Shipped or hand delivered
2 Ambient or Chilled
3 Temperature 1.6 °C
4 Received Broken/Leaking (Improperly Sealed) Y N
5 Properly Preserved Y N
Checked at bench Y N
6 Received Within Holding Times Y N

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)	Known Hazards & Sample Comments
1	TW4-26_09032015	9/3/2015	844	5	W	X	X	X	
2	TW4-05_09032015	9/3/2015	853	5	W	X	X	X	
3	TW4-18_09032015	9/3/2015	901	5	W	X	X	X	
4	TW4-09_09032015	9/3/2015	910	5	W	X	X	X	
5	TW4-16_09032015	9/3/2015	917	5	W	X	X	X	
6	TW4-33_09032015	9/3/2015	925	5	W	X	X	X	
7	TW4-29_09032015	9/3/2015	933	5	W	X	X	X	
8	TW4-24_08312015	8/31/2015	1348	5	W	X	X	X	
9	TW4-34_09032015	9/3/2015	754	5	W	X	X	X	
10	TW4-35_09032015	9/3/2015	803	5	W	X	X	X	
11	TW4-23_09032015	9/3/2015	813	5	W	X	X	X	
12	TW4-21_08312015	8/31/2015	1327	5	W	X	X	X	
13	TW4-01_08312015	8/31/2015	1502	5	W	X	X	X	

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	Tanner Holliday	Date: 9/3/2015	Received by: Signature		Date:
Print Name:	Tanner Holliday	Time: 1230	Print Name:		Time:
Relinquished by: Signature		Date:	Received by: Signature	Eelynn Deny	Date: 9-4-15
Print Name:		Time:	Print Name:	Elmo Hayes	Time: 1030
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.

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

1509123
AWAL Lab Sample Set #
Page 3 of 3

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.

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		

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: **3rd Quarter Chloroform 2015**
Project #:
PO #:
Sampler Name: **Tanner Holliday**

X Include EDD:
LOCUS UPLOAD
EXCEL
Field Filtered For:

For Compliance With:
- ☐ NELAP
- ☐ RCRA
- ☐ CWA
- ☐ SDWA
- ☐ ELAP / A2LA
- ☐ NLLAP
- ☐ Non-Compliance
- ☐ Other:

Laboratory Use Only

Samples Were: (UPS)
1 (Shipped) or hand delivered
2 Ambient or (Chilled)
3 Temperature 1.6 °C
4 Received Broken/Leaking (Improperly Sealed) Y (N)
5 Properly Preserved (Y) N
Checked at bench Y N
6 Received Within Holding Times (Y) N

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)

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	Cl (4500 or 300.0)	VOCs (8260C)	Known Hazards & Sample Comments
1	TW4-04_08312015	8/31/2015	1512	5	W	X	X	X	
2	MW-04_08312015	8/31/2015	1455	5	W	X	X	X	
3	TW4-19_08312015	8/31/2015	1535	5	W	X	X	X	
4	TW4-02_08312015	8/31/2015	1437	5	W	X	X	X	
5	MW-26_08312015	8/31/2015	1420	5	W	X	X	X	
6	TW4-11_08312015	8/31/2015	1428	5	W	X	X	X	
7	TW4-22_08312015	8/31/2015	1359	5	W	X	X	X	
8	TW4-20_08312015	8/31/2015	1413	5	W	X	X	X	
9	TW4-37_08312015	8/31/2015	1405	5	W	X	X	X	
10	TW4-70_09032015	9/3/2015	813	5	W	X	X	X	
11	TRIP BLANK	8/31/2015		3	W			X	
12	TEMP BLANK	9/3/2015		1	W				
13									

Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name: Tanner Holliday	Time: 1230	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date: 9-4-15
Print Name:	Time:	Print Name:	Time: 1036
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-SO4 E or E300.0	1 mg/L	28 days	None	≤ 6°C
Carbonate as CO3	A2320 B	1 mg/L	14 days	None	≤ 6°C
Bicarbonate as HCO3	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

Lab Set ID: 1509123

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Ammonia	pH <2 H_2SO_4																		
COD	pH <2 H_2SO_4																		
Cyanide	pH >12 NaOH																		
Metals	pH <2 HNO_3																		
NO_2 & NO_3	pH <2 H_2SO_4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
O & G	pH <2 HCL																		
Phenols	pH <2 H_2SO_4																		
Sulfide	pH > 9NaOH, Zn Acetate																		
TKN	pH <2 H_2SO_4																		
T PO_4	pH <2 H_2SO_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.

Lab Set ID: 1509123

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Ammonia	pH <2 H_2SO_4																		
COD	pH <2 H_2SO_4																		
Cyanide	pH >12 NaOH																		
Metals	pH <2 HNO_3																		
NO_2 & NO_3	pH <2 H_2SO_4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
O & G	pH <2 HCL																		
Phenols	pH <2 H_2SO_4																		
Sulfide	pH > 9NaOH, Zn Acetate																		
TKN	pH <2 H_2SO_4																		
T PO_4	pH <2 H_2SO_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.

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		--			2260		NC	8.59		NC	15.85		NC	278		NC	0.0		NC
Piezometer 2		--			863		NC	7.32		NC	14.82		NC	408		NC	15.0		NC
Piezometer 3		--			1764		NC	11.65		NC	14.74		NC	178		NC	2.3		NC
TWN-1	33.18	66.36	88.00	OK	895.0	900.0	0.56	7.00	7.02	0.29	15.24	15.24	0.00	423	423	0.00	24.0	24.0	0.00
TWN-2	NA	Continuously Pumped Well			3238		NC	6.67		NC	15.31		NC	340		NC	0.0		NC
TWN-3	37.67	75.34	49.50	Pumped Dry	2378.0	2385.0	0.29	6.97	6.95	0.29	15.24	15.23	0.07	NM		NC	NM		NC
TWN-4	46.61	93.22	121.00	OK	1101.0	1100.0	0.09	6.85	6.87	0.29	14.92	14.91	0.07	358	357	0.28	11.4	11.5	0.87
TWN-7	12.66	25.32	16.50	Pumped Dry	1329.0	1338.0	0.67	6.73	6.75	0.30	16.26	16.23	0.18	NM		NC	NM		NC
TWN-18	55.38	110.76	132.00	OK	2371.0	2341.0	1.27	6.60	6.60	0.00	14.73	14.73	0.00	371	369	0.54	21.0	21.0	0.00
TW4-22	NA	Continuously pumped well			5752		NC	6.57		NC	16.29		NC	278		NC	11.2		NC
TW4-24	NA	Continuously pumped well			5737		NC	6.45		NC	16.70		NC	284		NC	1.0		NC
TW4-25	NA	Continuously pumped well			2668		NC	6.84		NC	16.11		NC	329		NC	12.0		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	08/26/2015	09/01/2015	6	28	OK
PIEZ-01	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
PIEZ-02	Chloride	08/26/2015	09/01/2015	6	28	OK
PIEZ-02	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
PIEZ-03	Chloride	08/26/2015	09/01/2015	6	28	OK
PIEZ-03	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
TWN-01	Chloride	08/25/2015	09/01/2015	7	28	OK
TWN-01	Nitrate/Nitrite (as N)	08/25/2015	09/03/2015	9	28	OK
TWN-01R	Chloride	08/25/2015	09/01/2015	7	28	OK
TWN-01R	Nitrate/Nitrite (as N)	08/25/2015	09/03/2015	9	28	OK
TWN-02	Chloride	08/26/2015	09/01/2015	6	28	OK
TWN-02	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
TWN-03	Chloride	08/26/2015	09/01/2015	6	28	OK
TWN-03	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
TWN-04	Chloride	08/25/2015	09/01/2015	7	28	OK
TWN-04	Nitrate/Nitrite (as N)	08/25/2015	09/03/2015	9	28	OK
TWN-07	Chloride	08/26/2015	09/01/2015	6	28	OK
TWN-07	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
TWN-18	Chloride	08/25/2015	09/01/2015	7	28	OK
TWN-18	Nitrate/Nitrite (as N)	08/25/2015	09/03/2015	9	28	OK
TW4-22	Chloride	08/31/2015	09/14/2015	14	28	OK
TW4-22	Nitrate/Nitrite (as N)	08/31/2015	09/15/2015	15	28	OK
TW4-24	Chloride	08/31/2015	09/12/2015	12	28	OK
TW4-24	Nitrate/Nitrite (as N)	08/31/2015	09/10/2015	10	28	OK
TW4-25	Chloride	08/31/2015	09/12/2015	12	28	OK
TW4-25	Nitrate/Nitrite (as N)	08/31/2015	09/09/2015	9	28	OK
TW4-60	Chloride	09/10/2015	09/16/2015	6	28	OK
TW4-60	Nitrate/Nitrite (as N)	09/10/2015	09/15/2015	5	28	OK
TWN-60	Chloride	08/26/2015	09/01/2015	6	28	OK
TWN-60	Nitrate/Nitrite (as N)	08/26/2015	09/03/2015	8	28	OK
TWN-65	Chloride	08/25/2015	09/01/2015	7	28	OK
TWN-65	Nitrate/Nitrite (as N)	08/25/2015	09/03/2015	9	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	RL Check	Dilution Factor
PIEZ-01	Chloride	10	mg/L		1	OK	10
PIEZ-01	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	OK	10
PIEZ-02	Chloride	10	mg/L		1	OK	10
PIEZ-02	Nitrate/Nitrite (as N)	0.10	mg/L		0.1	OK	1
PIEZ-03	Chloride	10	mg/L		1	OK	10
PIEZ-03	Nitrate/Nitrite (as N)	0.10	mg/L		0.1	OK	1
TWN-01	Chloride	10	mg/L		1	OK	10
TWN-01	Nitrate/Nitrite (as N)	0.10	mg/L		0.1	OK	1
TWN-01R	Chloride	1	mg/L		1	OK	1
TWN-01R	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	OK	1
TWN-02	Chloride	10	mg/L		1	OK	10
TWN-02	Nitrate/Nitrite (as N)	1	mg/L		0.1	OK	100
TWN-03	Chloride	100	mg/L		1	OK	100
TWN-03	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	OK	10
TWN-04	Chloride	10	mg/L		1	OK	10
TWN-04	Nitrate/Nitrite (as N)	0.10	mg/L		0.1	OK	1
TWN-07	Chloride	1	mg/L		1	OK	1
TWN-07	Nitrate/Nitrite (as N)	0.10	mg/L		0.1	OK	1
TWN-18	Chloride	10	mg/L	U	1	OK	10
TWN-18	Nitrate/Nitrite (as N)	0.10	mg/L	U	0.1	OK	1
TW4-22	Chloride	100	mg/L		1	OK	100
TW4-22	Nitrate/Nitrite (as N)	5	mg/L		0.1	OK	50
TW4-24	Chloride	100	mg/L		1	OK	100
TW4-24	Nitrate/Nitrite (as N)	5	mg/L		0.1	OK	50
TW4-25	Chloride	10	mg/L		1	OK	10
TW4-25	Nitrate/Nitrite (as N)	0	mg/L		0.1	OK	1
TW4-60	Chloride	1	mg/L	U	1	OK	1
TW4-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	OK	1
TWN-60	Chloride	1	mg/L	U	1	OK	1
TWN-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	OK	1
TWN-65	Chloride	10	mg/L		1	OK	10
TWN-65	Nitrate/Nitrite (as N)	0.10	mg/L	U	0.1	OK	1

U = Value was reported by the laboratory as nondetect.

H-5 QA/QC Evaluation for Sample Duplicates

Constituent	TWN-04	TWN-65	%RPD
Chloride	35.2	35.2	0.00
Nitrogen	0.974	1.16	17.43

ND - non-detect
NC - not calculated. The RPD was not calucated, 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
1508568	1508568-009BMS	TWN-60	Nitrate	65.3	66	90-110	1.13
1509241	1509241-002BMS	TW4-07	Nitrate	97.7	62.5	90-110	20.2
1509123	1509123-036BMS	TW4-70	Nitrate	0	0	90-110	0
1509123	1509123-005BMS	TW4-32	Nitrate	66.8	68.3	90-110	1.27
1509123	1509381-003CMS	N/A	Nitrate	82.3	84.4	90-110	2.08

* - 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

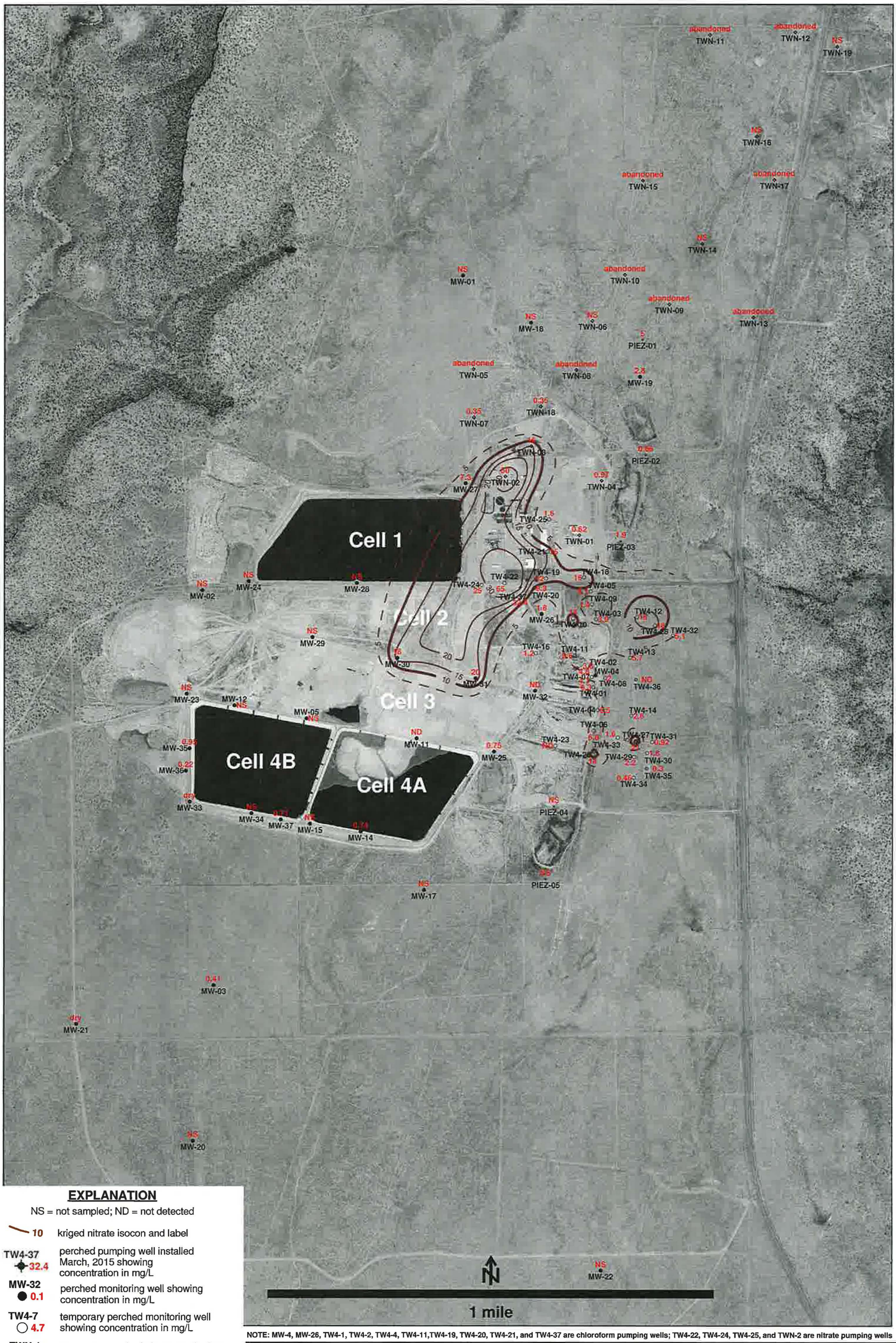
Sample Batch	Wells in Batch	Temperature
1508568	Piezometer 1, Piezometer 2, Piezometer 3, TWN-1, TWN-2, TWN-3, TWN-4, TWN-7, TWN-07R, TWN-18, TWN-60, TWN-65	3.8 ˚C
1509123	TW4-22, TW4-24, TW4-25	1.6 ˚C
1509241	TW4-60	2.4 ˚C

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

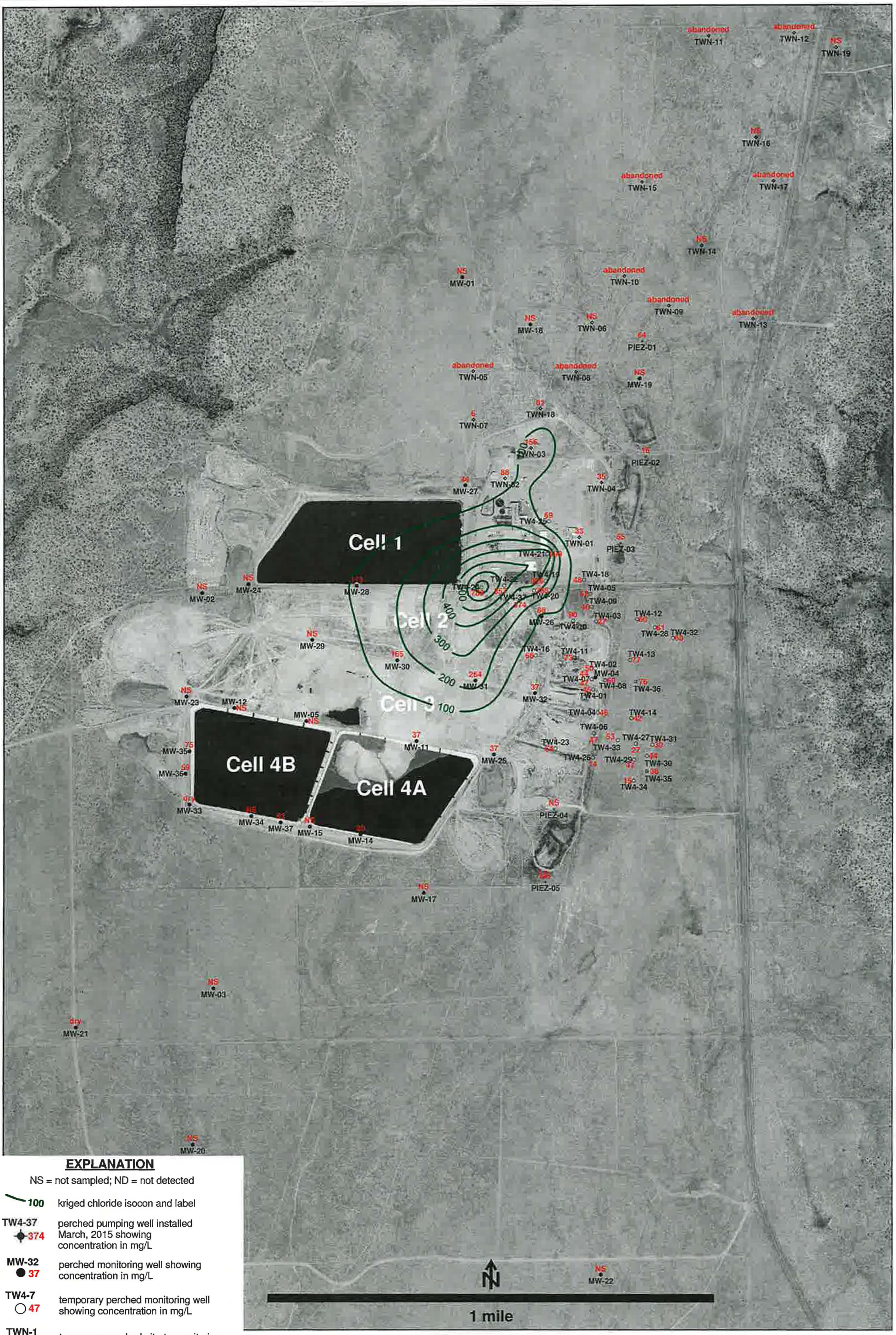
10	kriged nitrate isocon and label
TW4-37 32.4	perched pumping well installed March, 2015 showing concentration in mg/L
MW-32 0.1	perched monitoring well showing concentration in mg/L
TW4-7 4.7	temporary perched monitoring well showing concentration in mg/L
TWN-1 0.62	temporary perched nitrate monitoring well showing concentration in mg/L
PIEZ-1 5	perched piezometer showing concentration in mg/L
TW4-35 0.3	temporary perched monitoring well installed May, 2014 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 3rd QUARTER, 2015 NITRATE (mg/L) (NITRATE + NITRITE AS N) WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/nitrate/Unt0915.srf	I-1



EXPLANATION

NS = not sampled; ND = not detected

- 100 — kriged chloride isocon and label
- TW4-37 ✦ 374 — perched pumping well installed March, 2015 showing concentration in mg/L
- MW-32 ● 37 — perched monitoring well showing concentration in mg/L
- TW4-7 ○ 47 — temporary perched monitoring well showing concentration in mg/L
- TWN-1 ◇ 33 — temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 ⬭ 64 — perched piezometer showing concentration in mg/L
- TW4-36 ☼ 76 — temporary perched monitoring well installed May, 2014 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 3rd QUARTER, 2015 CHLORIDE (mg/L) WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov15/chloride/Ucl0915.srf	I-2

Tab J

Analyte Concentrations Over Time

Piezometer 1

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

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

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

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

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

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

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

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

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

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		
1/23/2012	0.60		
6/6/2012	2.40		
9/5/2012	2.50		
10/3/2012	4.10		
2/11/2013	7.99		
6/5/2013	2.95		
9/3/2013	17.60		
10/29/2013	4.70		
1/27/2014	1.62		
5/19/2014	1.34		
8/11/2014	1.60		
10/21/2014	4.72		
3/9/2015	8.56		
6/8/2015	0.92		
8/31/2015	11.60		

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

TW4-21

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
5/25/2005	14.6	12/7/2005	353
8/31/2005	10.1	3/9/2006	347
11/30/2005	9.6	7/20/2006	357
3/9/2006	8.5	11/8/2006	296
6/14/2006	10.2	2/28/2007	306
7/20/2006	8.9	6/27/2007	327
11/8/2006	8.7	8/15/2007	300
2/28/2007	8.7	10/10/2007	288
6/27/2007	8.6	3/26/2008	331
8/15/2007	8.6	6/25/2008	271
10/10/2007	8.3	9/10/2008	244
3/26/2008	14.3	10/15/2008	284
6/25/2008	8.8	3/11/2009	279
9/10/2008	7.6	6/24/2009	291
10/15/2008	8.0	9/15/2009	281
3/11/2009	8.3	12/22/2009	256
6/24/2009	8.1	2/25/2010	228
9/15/2009	9.2	6/10/2010	266
12/22/2009	8.4	8/12/2010	278
2/25/2010	8.4	10/13/2010	210
6/10/2010	12.0	2/22/2011	303
8/12/2010	14.0	6/1/2011	297
10/13/2010	7.0	8/17/2011	287
2/22/2011	9.0	11/16/2011	276
6/1/2011	13.0	1/19/2012	228
8/17/2011	14.0	6/13/2012	285
11/16/2011	13.0	9/13/2012	142
1/19/2012	15.0	10/4/2012	270
6/13/2012	11.0	2/13/2013	221
9/13/2012	13.0	6/18/2013	243
10/4/2012	14.0	9/12/2013	207
2/13/2013	11.8	11/13/2013	206
6/18/2013	13.8	2/5/2014	200
9/12/2013	10.3	5/22/2014	243
11/13/2013	9.0	8/27/2014	230
2/5/2014	11.4	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
3/12/2015	10.9		
6/8/2015	13.1		
8/31/2015	14.7		

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

TW4-22

Date	Nitrate (mg/l)	Chloride (mg/l)
2/28/2007	20.9	347
6/27/2007	19.3	273
8/15/2007	19.3	259
10/10/2007	18.8	238
3/26/2008	39.1	519
6/25/2008	41.9	271
9/10/2008	38.7	524
10/15/2008	36.3	539
3/11/2009	20.7	177
6/24/2009	20.6	177
9/15/2009	40.3	391
12/29/2009	17.8	175
3/3/2010	36.6	427
6/15/2010	19	134
8/12/2010	18	127
8/24/2010	15	130
10/13/2010	16	134
2/23/2011	18	114
6/1/2011	17	138
8/17/2011	15	120
11/16/2011	19	174
1/19/2012	14	36
6/13/2012	12.8	35
9/12/2012	7	121
10/4/2012	14	130
2/11/2013	58	635
6/5/2013	50.2	586
9/3/2013	29.7	487
10/29/2013	45.2	501
1/27/2014	54.6	598
5/19/2014	47.2	614
8/11/2014	41.5	540
10/21/2014	54.9	596
3/9/2015	69.2	675
6/8/2015	47.1	390
8/31/2015	64.7	557

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

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

MW-30

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

MW-30

Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/18/2012	15.0	1/23/2013	128
7/10/2012	17.0	2/26/2013	129
8/7/2012	18.0	3/20/2013	126
9/19/2012	16.0	4/17/2013	117
10/23/2012	16.2	5/15/2013	119
11/13/2012	18.5	6/25/2013	127
12/26/2012	17.2	7/10/2013	130
1/23/2013	19.2	8/20/2013	126
2/26/2013	21.4	9/18/2013	131
3/20/2013	14.3	10/22/2013	128
4/17/2013	16.8	11/20/2013	124
5/15/2013	18.8	12/18/2013	134
6/25/2013	16.1	1/8/2014	131
7/10/2013	17.6	2/25/2014	135
8/20/2013	16.4	3/11/2014	144
9/18/2013	16.9	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		
4/8/2015	17.0		
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		

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

MW-31

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

MW-31

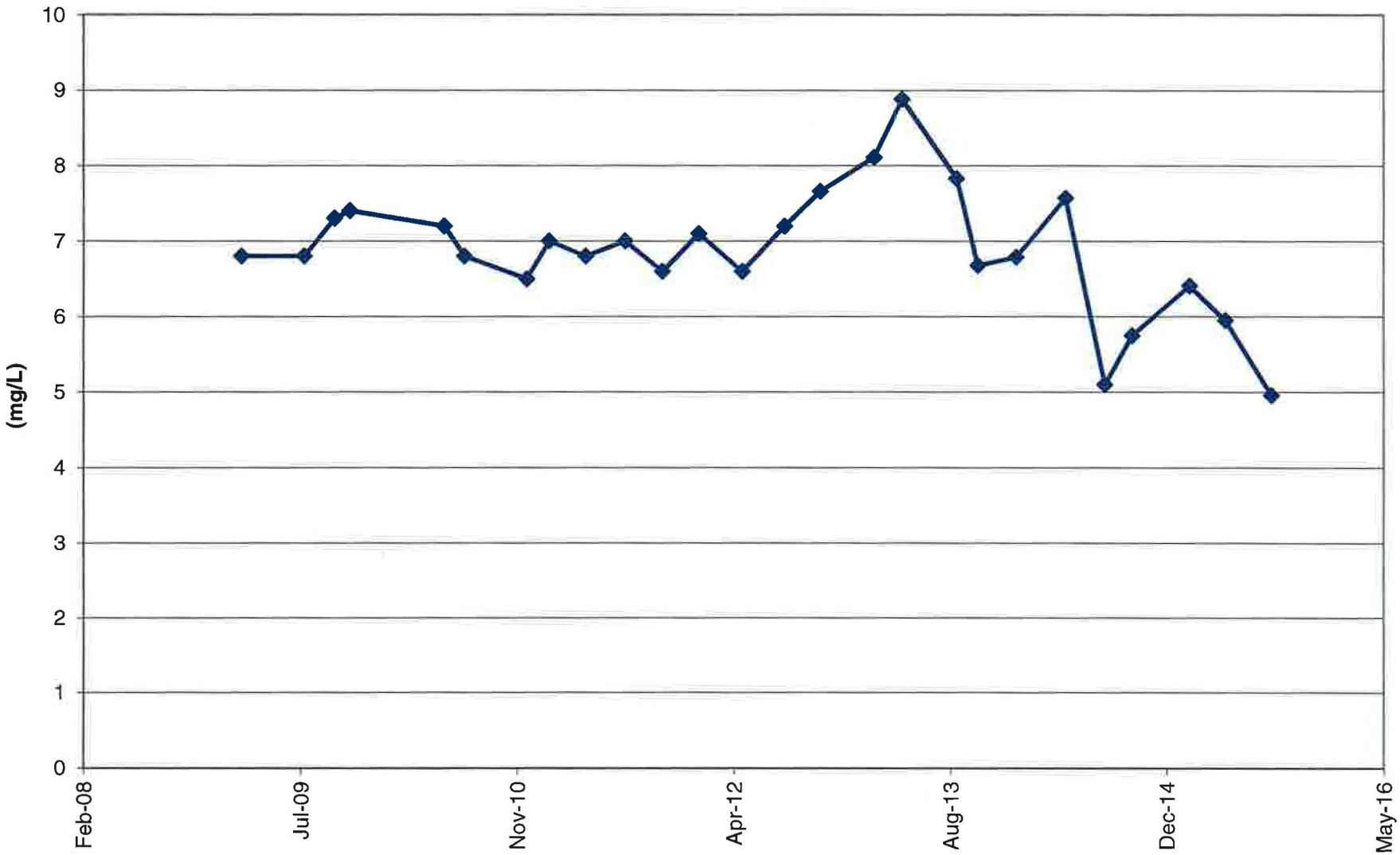
Date	Nitrate (mg/l)	Date	Chloride (mg/l)
6/18/2012	21.6	1/22/2013	176
7/9/2012	21.0	2/19/2013	174
8/6/2012	21.0	3/19/2013	168
9/18/2012	21.0	4/16/2013	171
10/22/2012	18.0	5/13/2013	169
11/6/2012	23.6	6/24/2013	179
12/18/2012	22.2	7/9/2013	182
1/22/2013	22.8	8/19/2013	183
2/19/2013	19.3	9/17/2013	193
3/19/2013	19.1	10/23/2013	188
4/16/2013	18.8	11/18/2013	174
5/13/2013	23.8	12/17/2013	203
6/24/2013	20.0	1/7/2014	194
7/9/2013	21.7	2/17/2014	197
8/19/2013	16.0	3/10/2014	230
9/17/2013	21.2	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		
4/7/2015	19.0		
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		

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

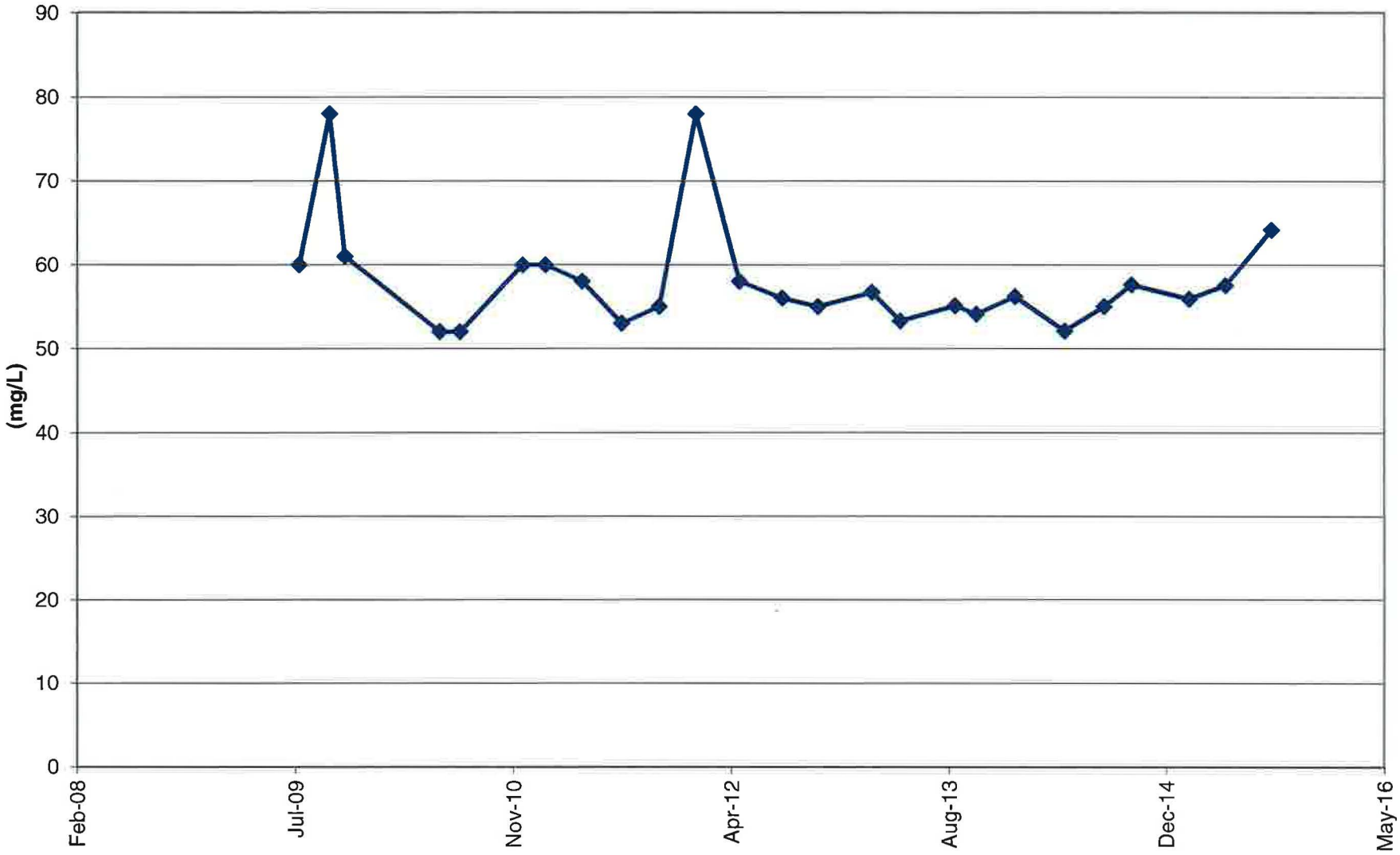
Tab K

Concentration Trend Graphs

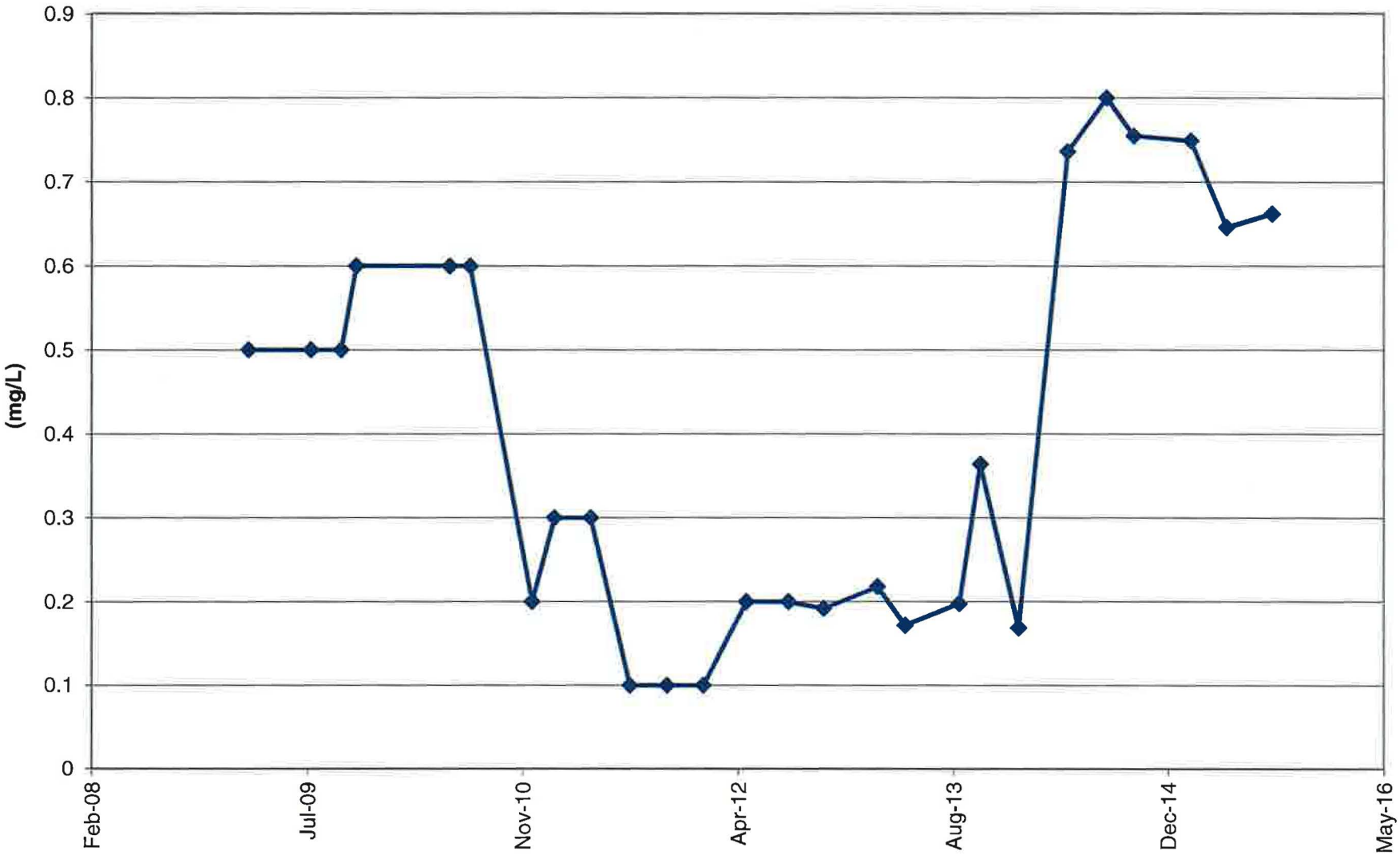
Piezometer 1 Nitrate Concentrations



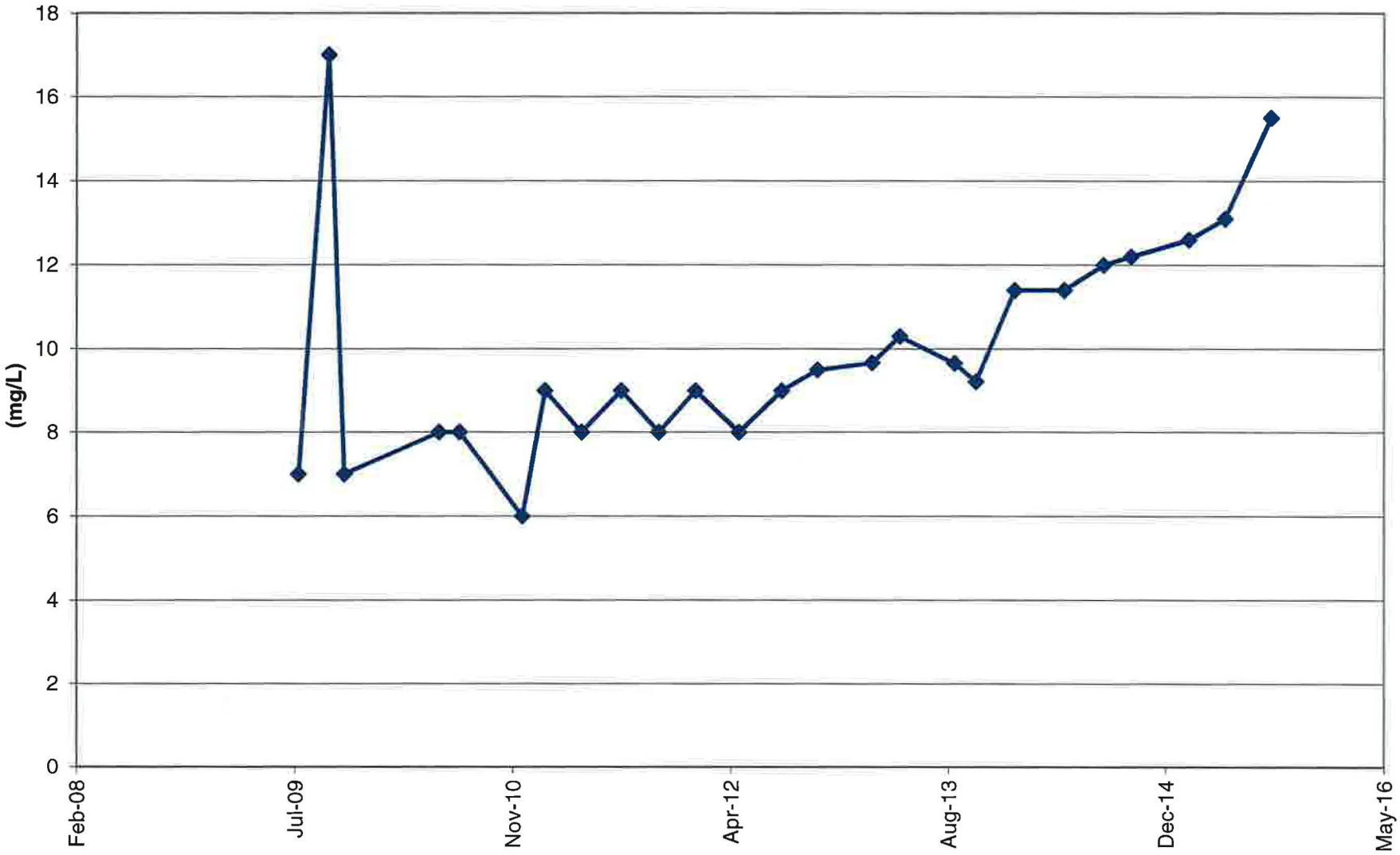
Piezometer 1 Chloride Concentrations



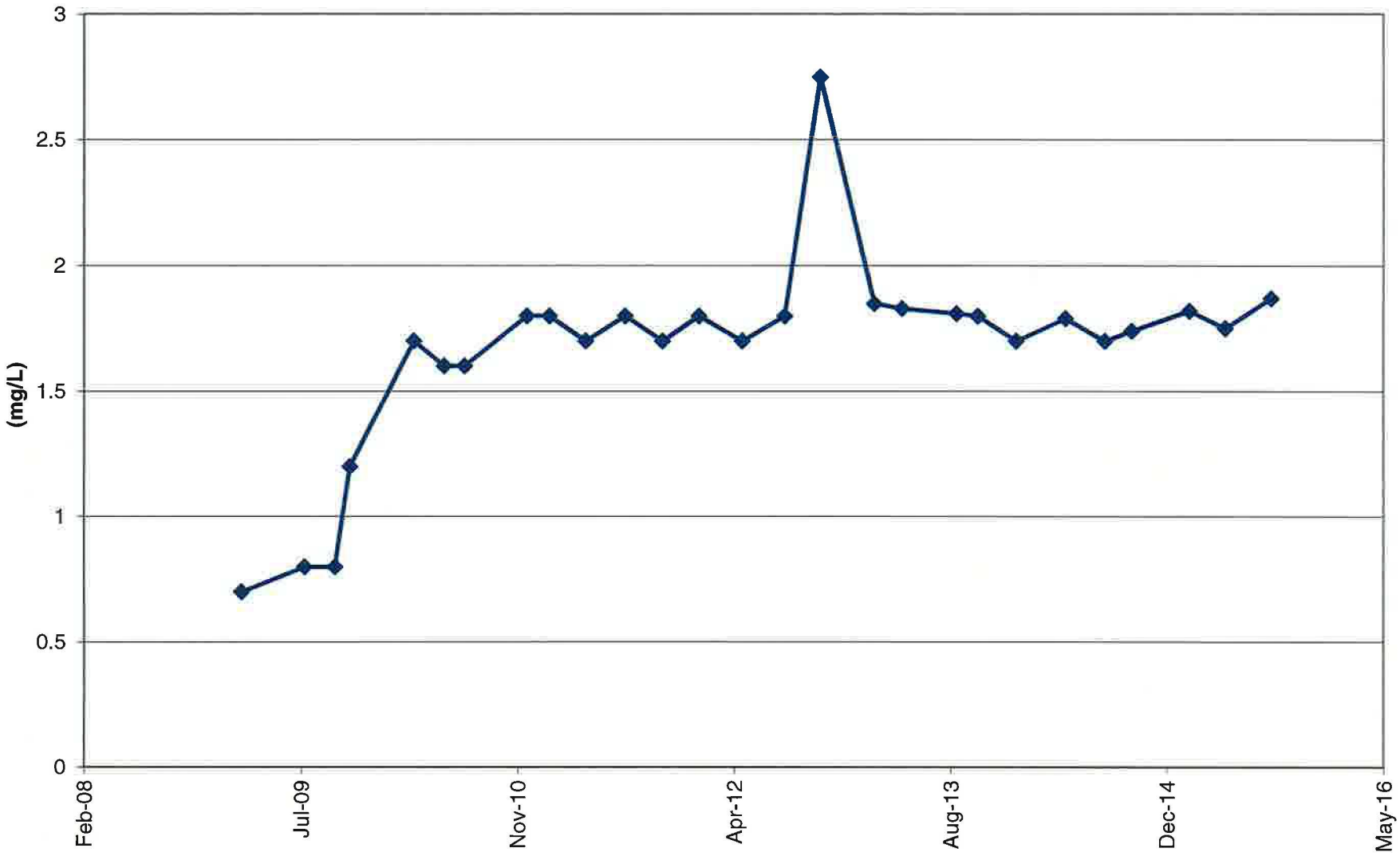
Piezometer 2 Nitrate Concentrations



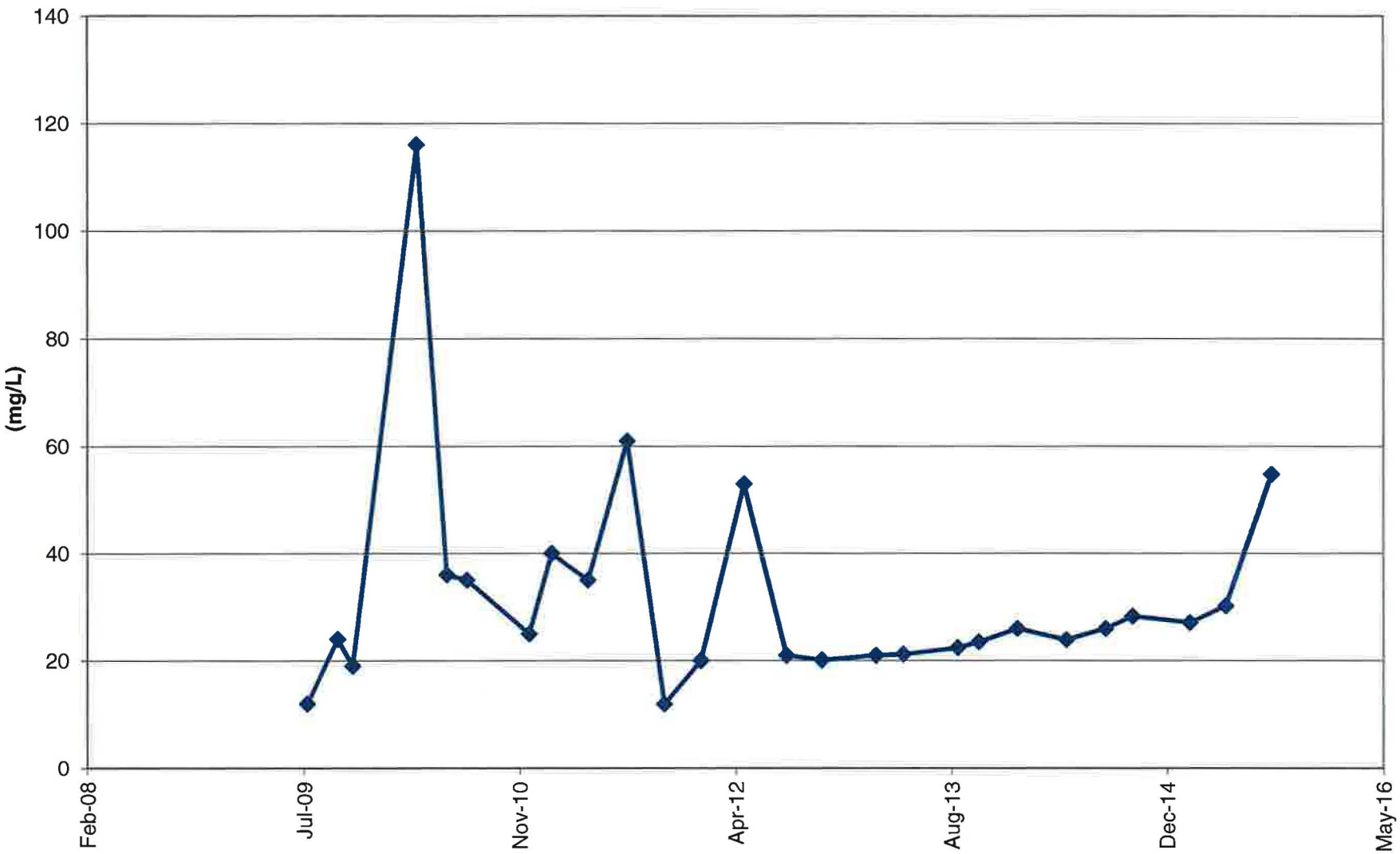
Piezometer 2 Chloride Concentrations



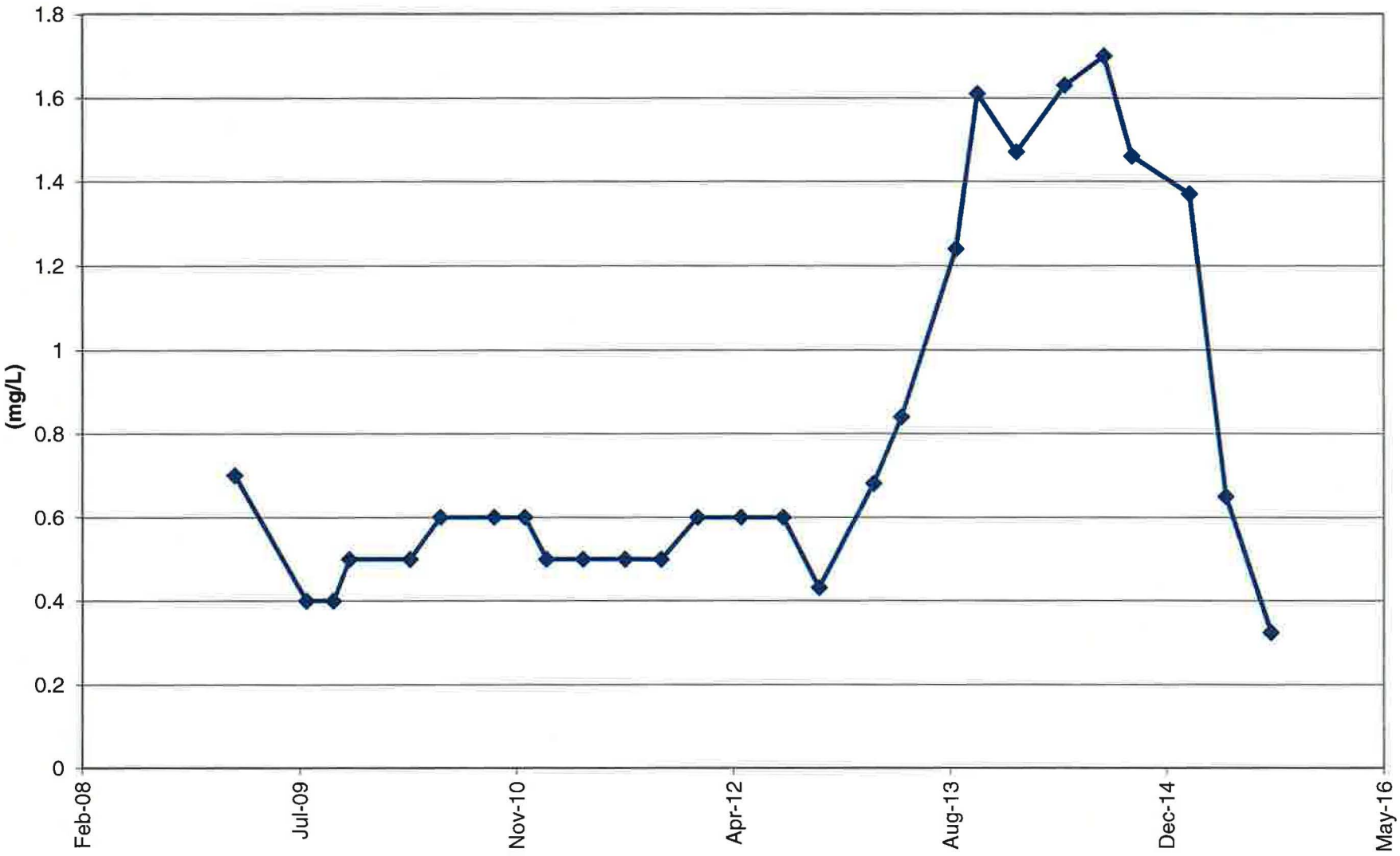
Piezometer 3 Nitrate Concentrations



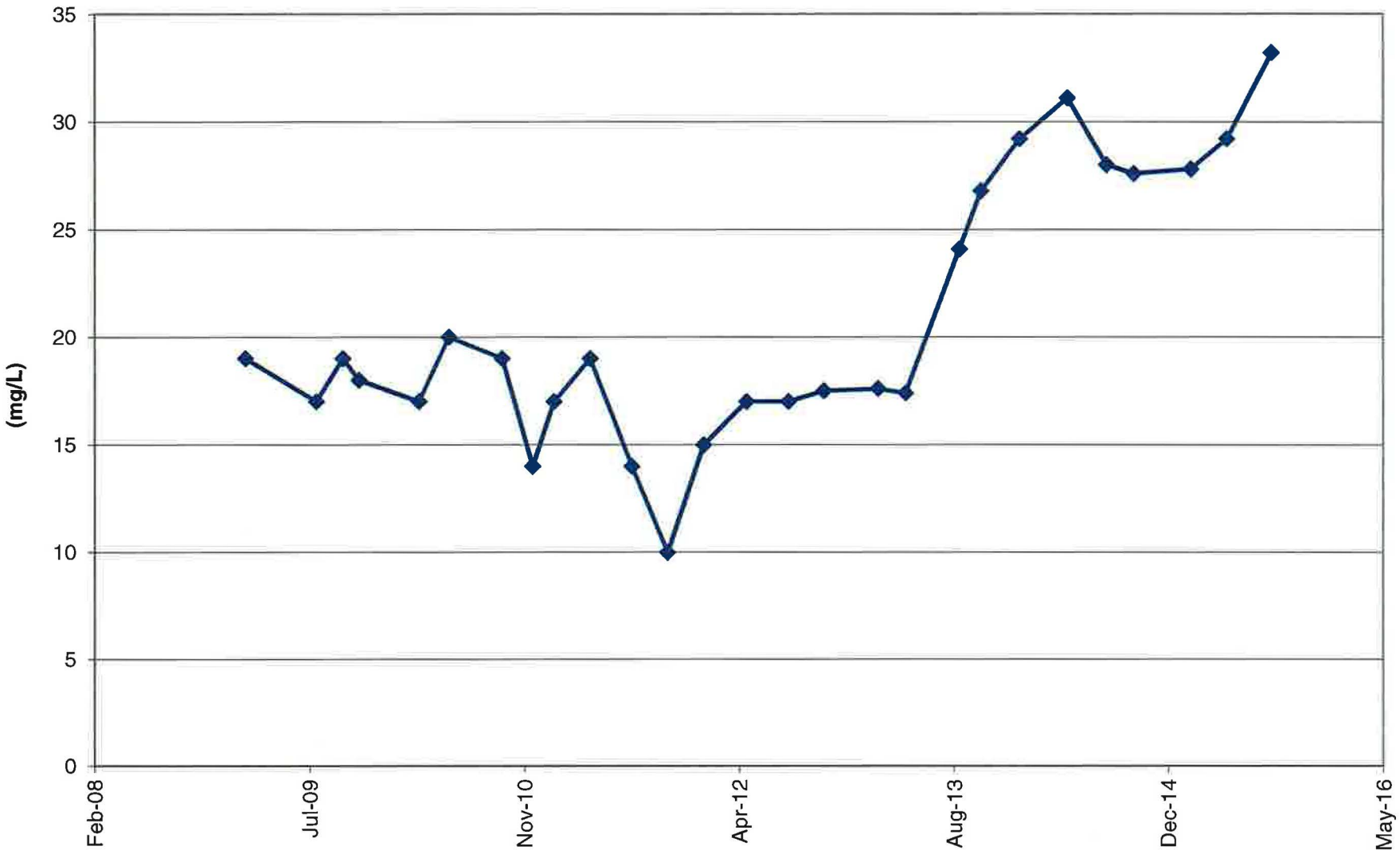
Piezometer 3 Chloride Concentrations



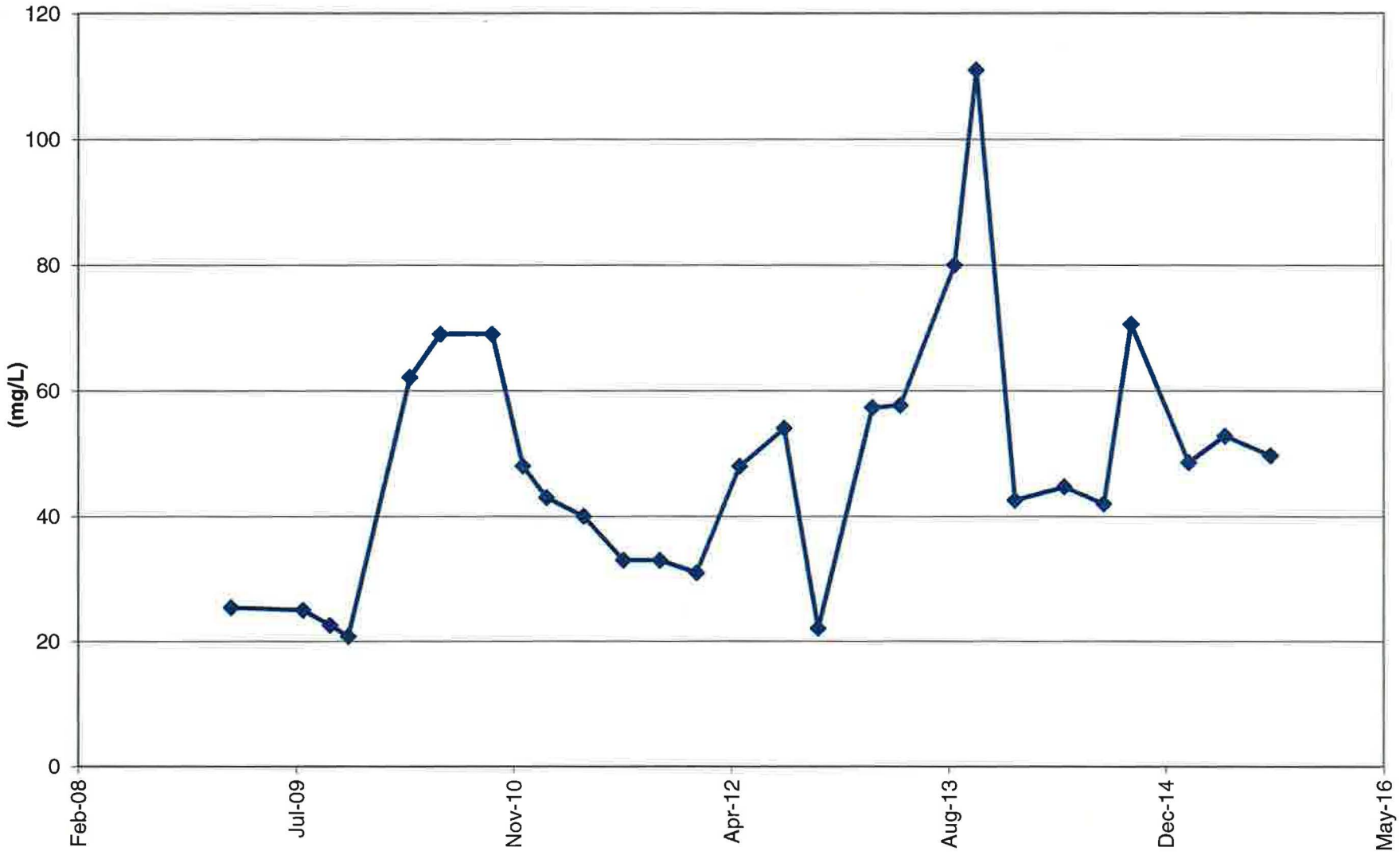
TWN-1 Nitrate Concentrations



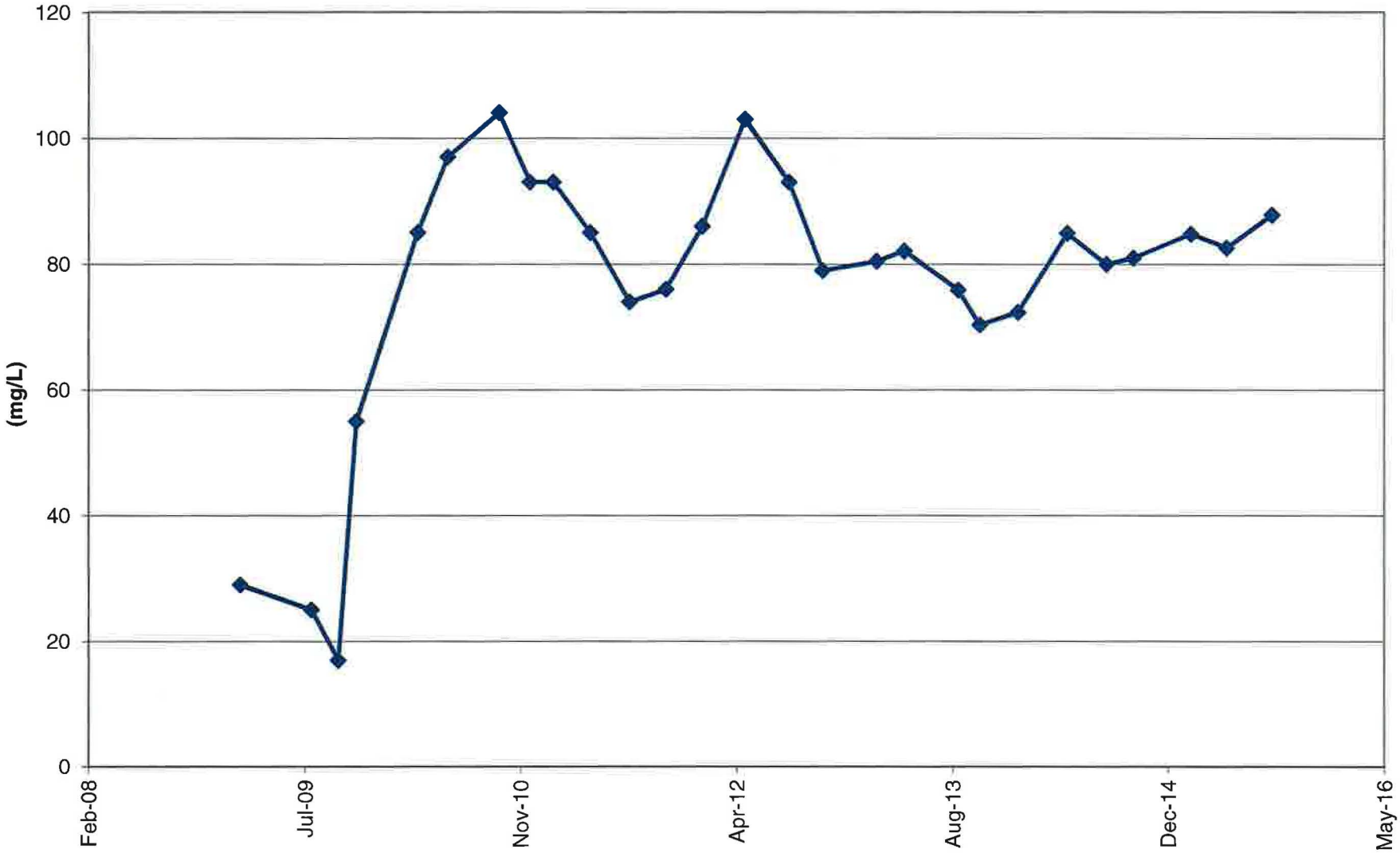
TWN-1 Chloride Concentrations



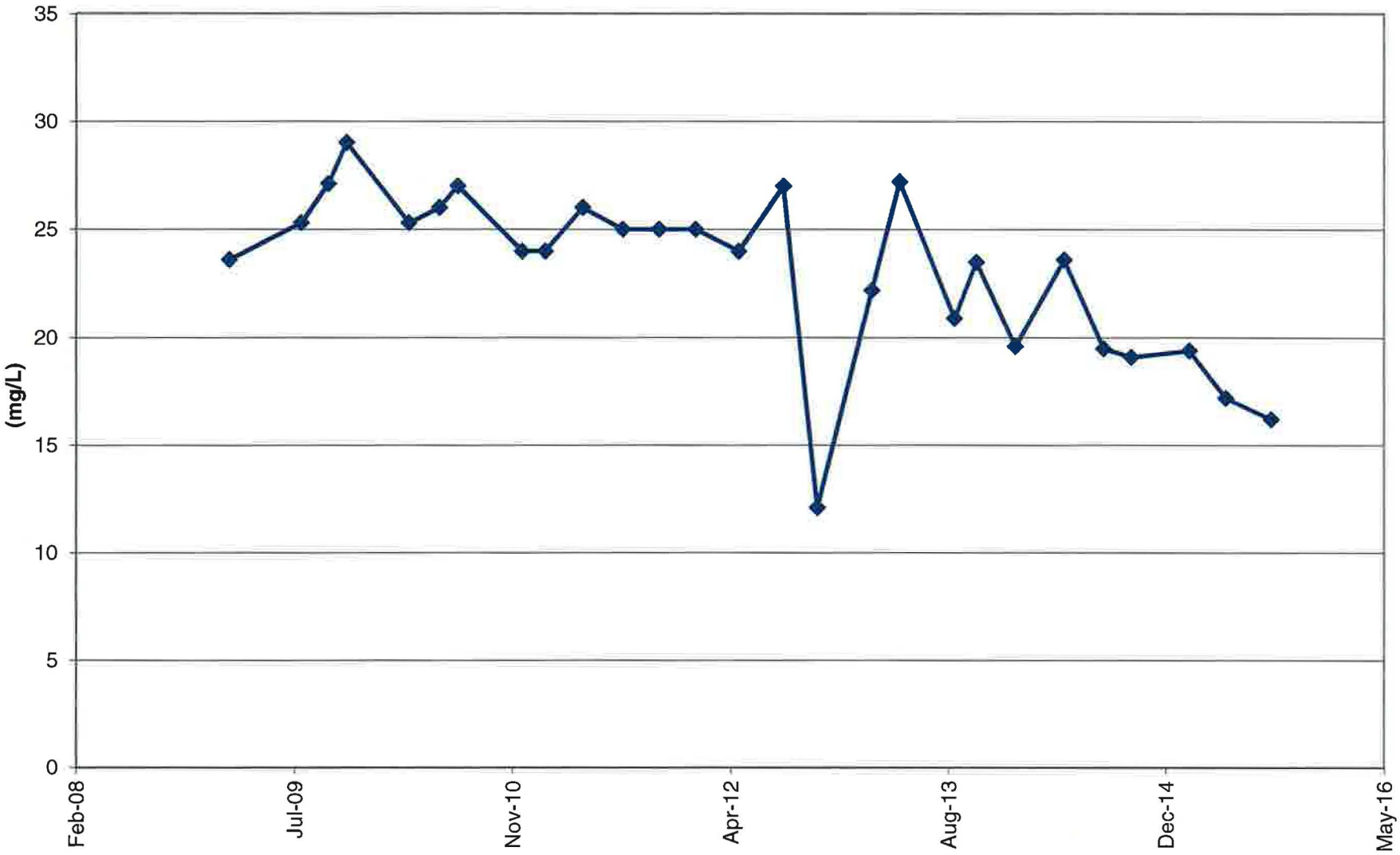
TWN-2 Nitrate Concentrations



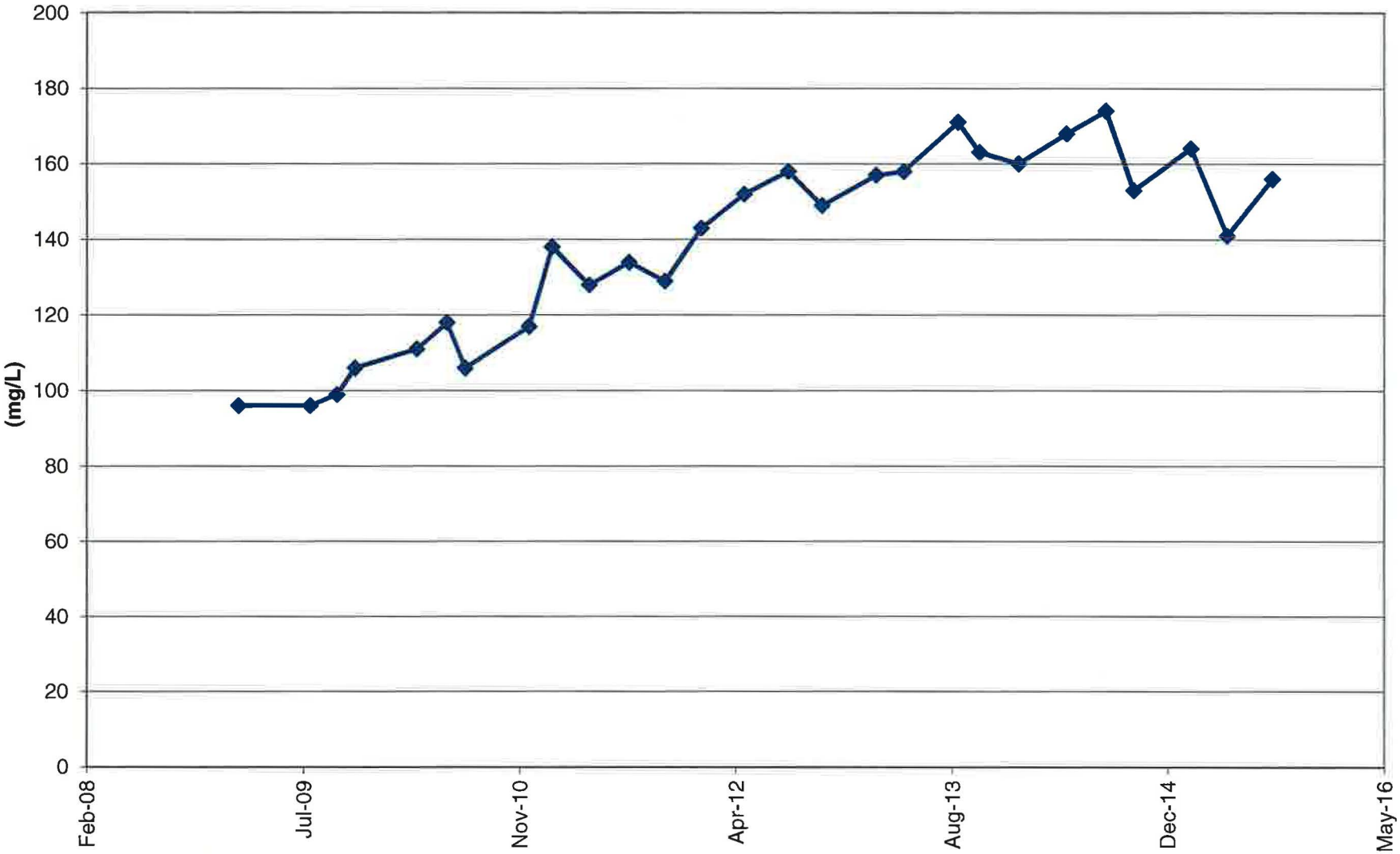
TWN-2 Chloride Concentrations



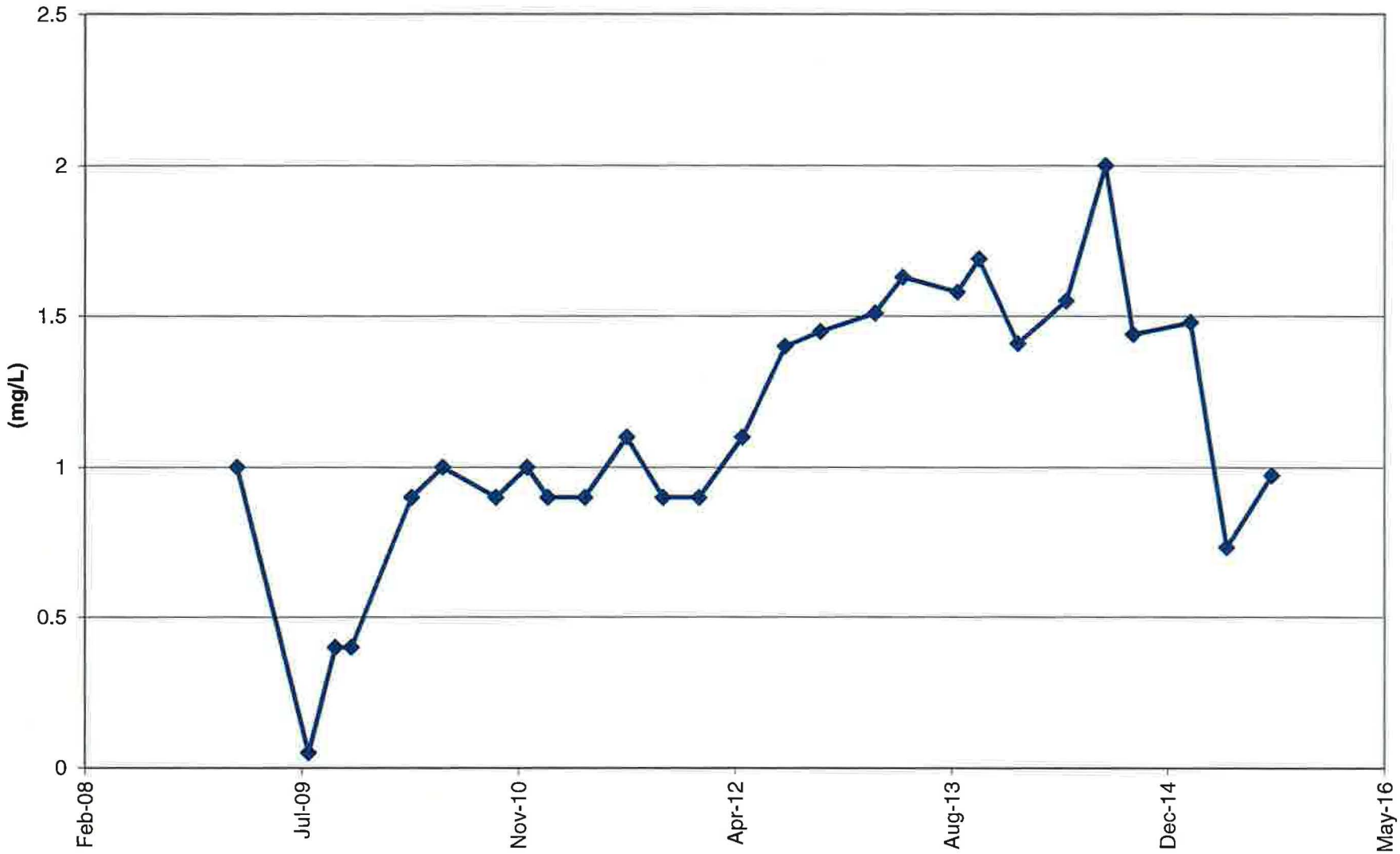
TWN-3 Nitrate Concentrations



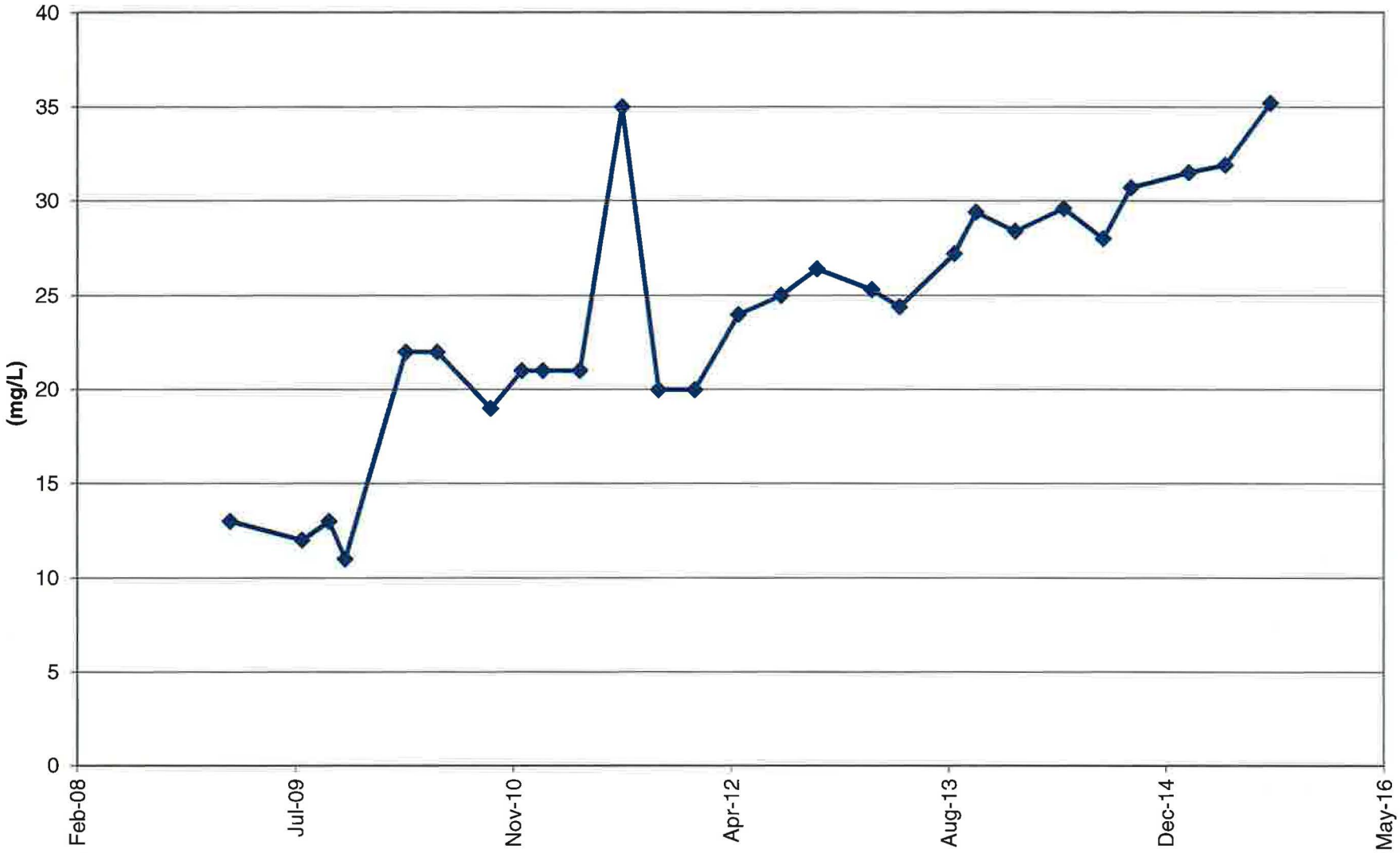
TWN-3 Chloride Concentrations



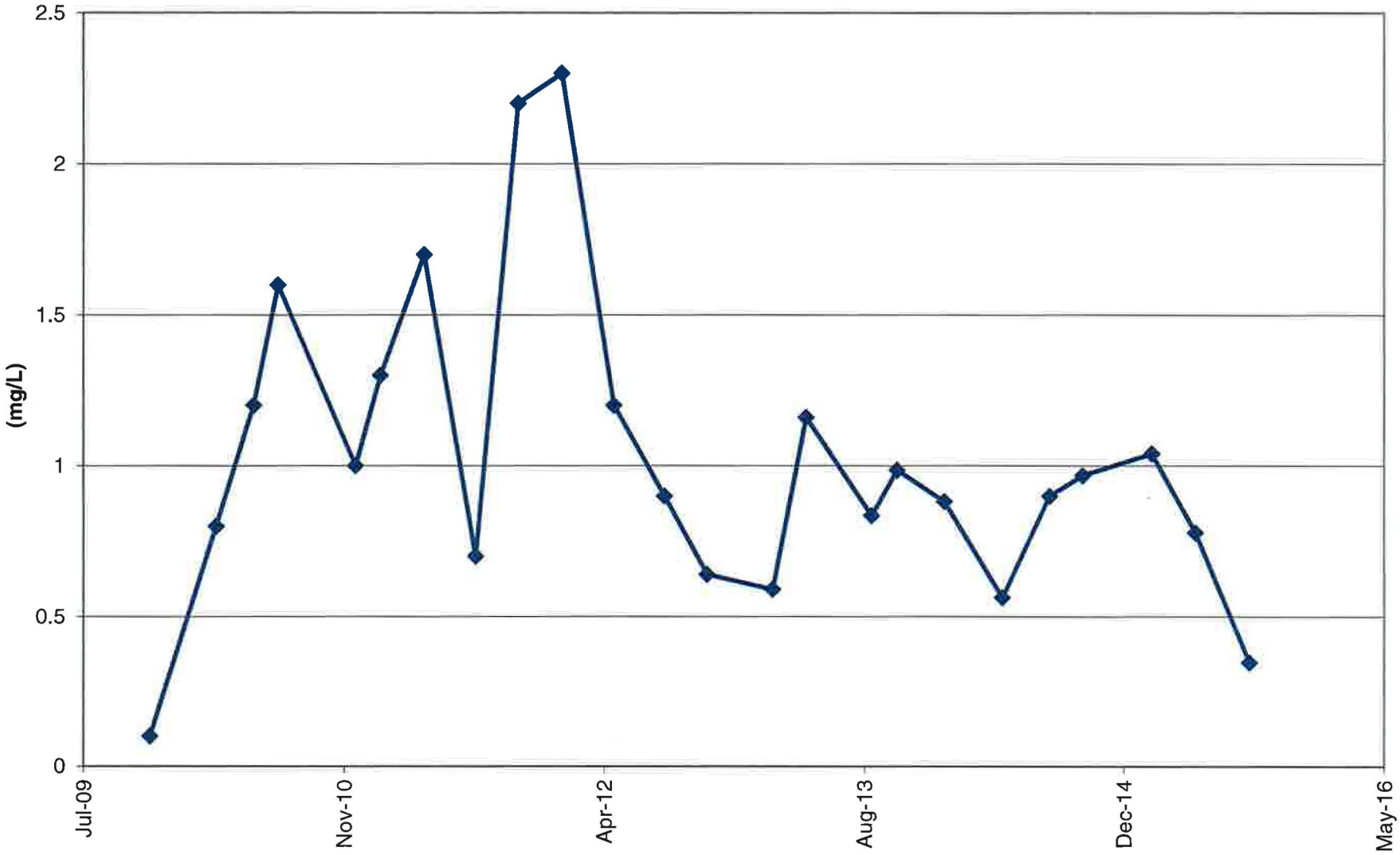
TWN-4 Nitrate Concentrations

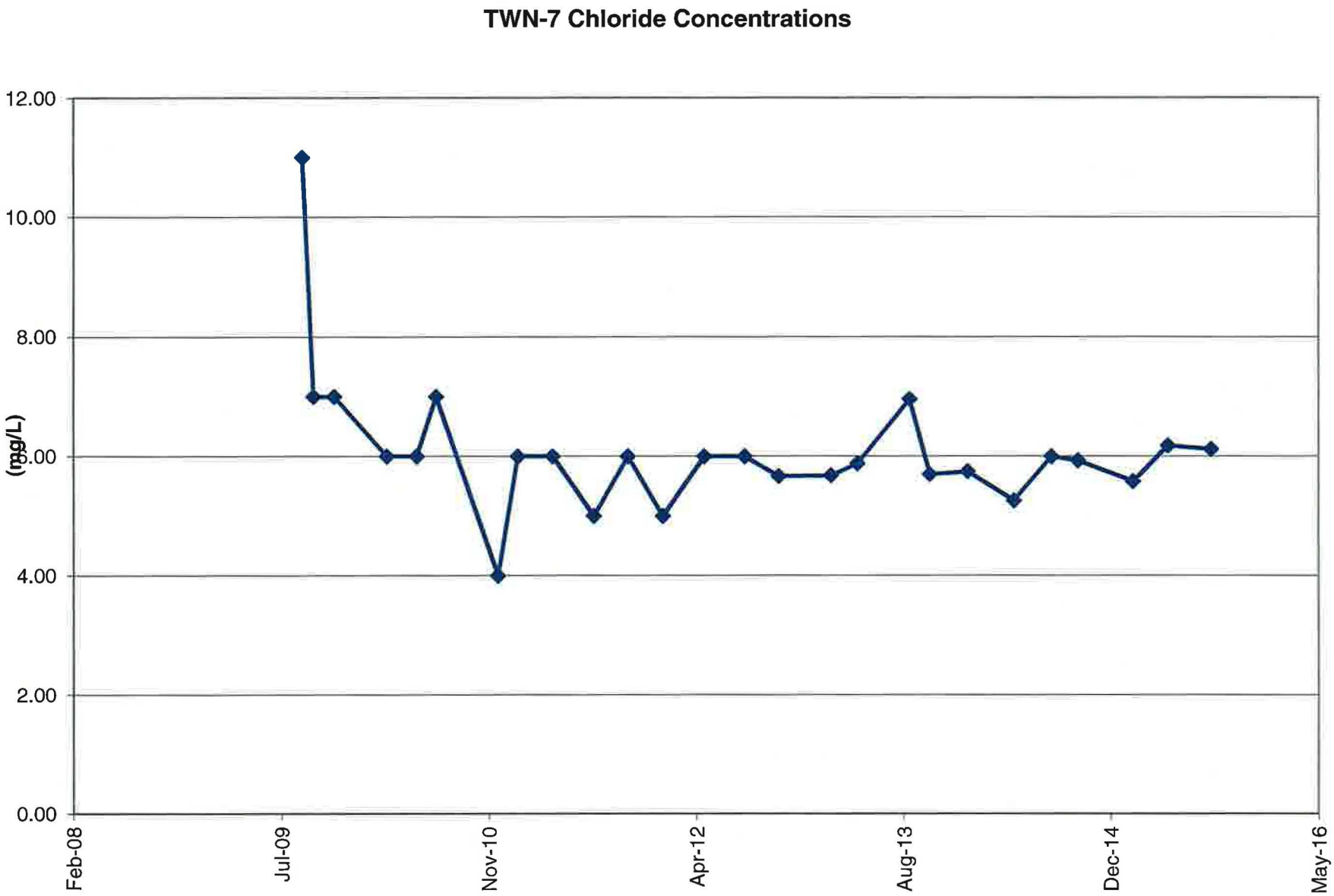


TWN-4 Chloride Concentrations

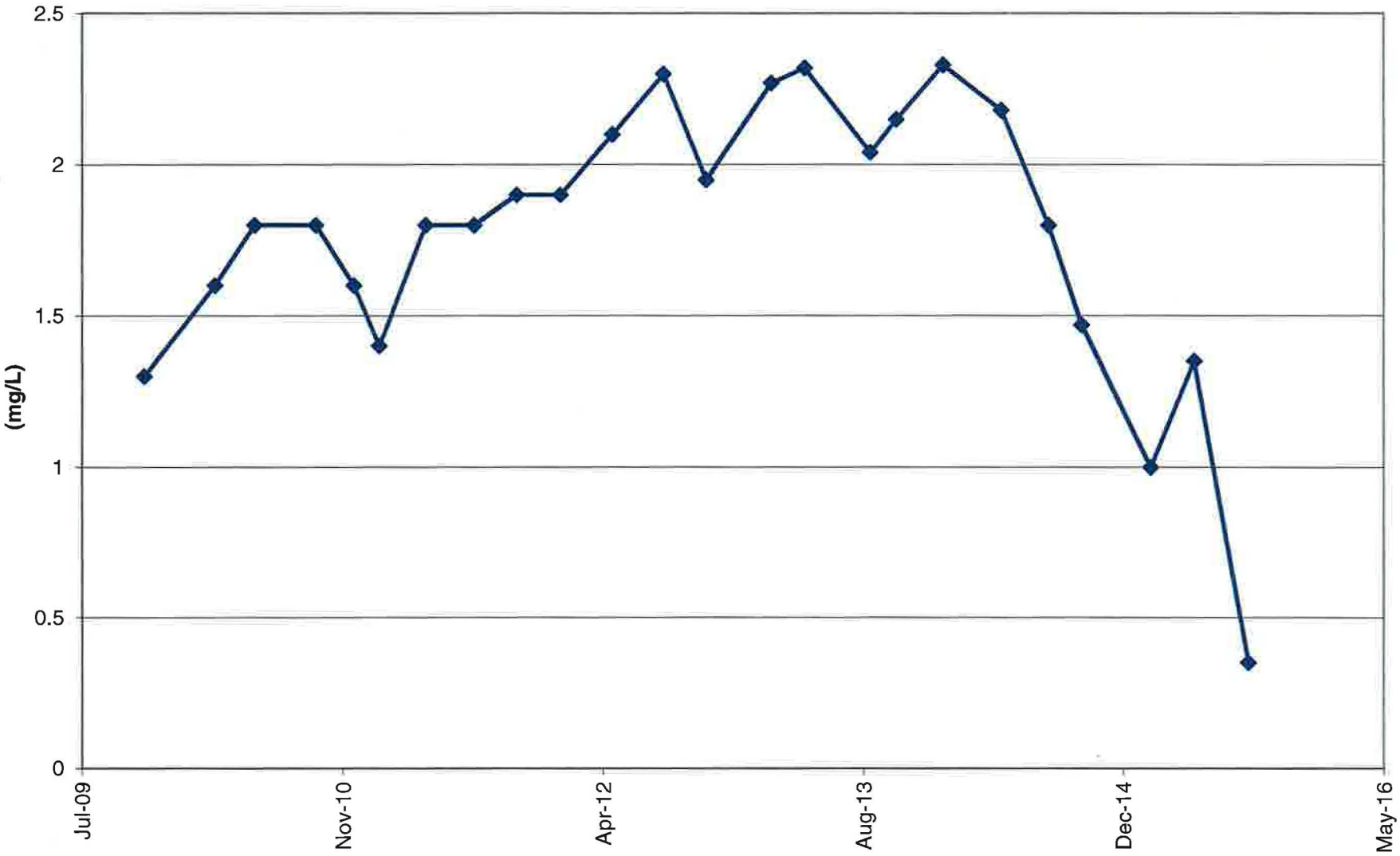


TWN-7 Nitrate Concentrations

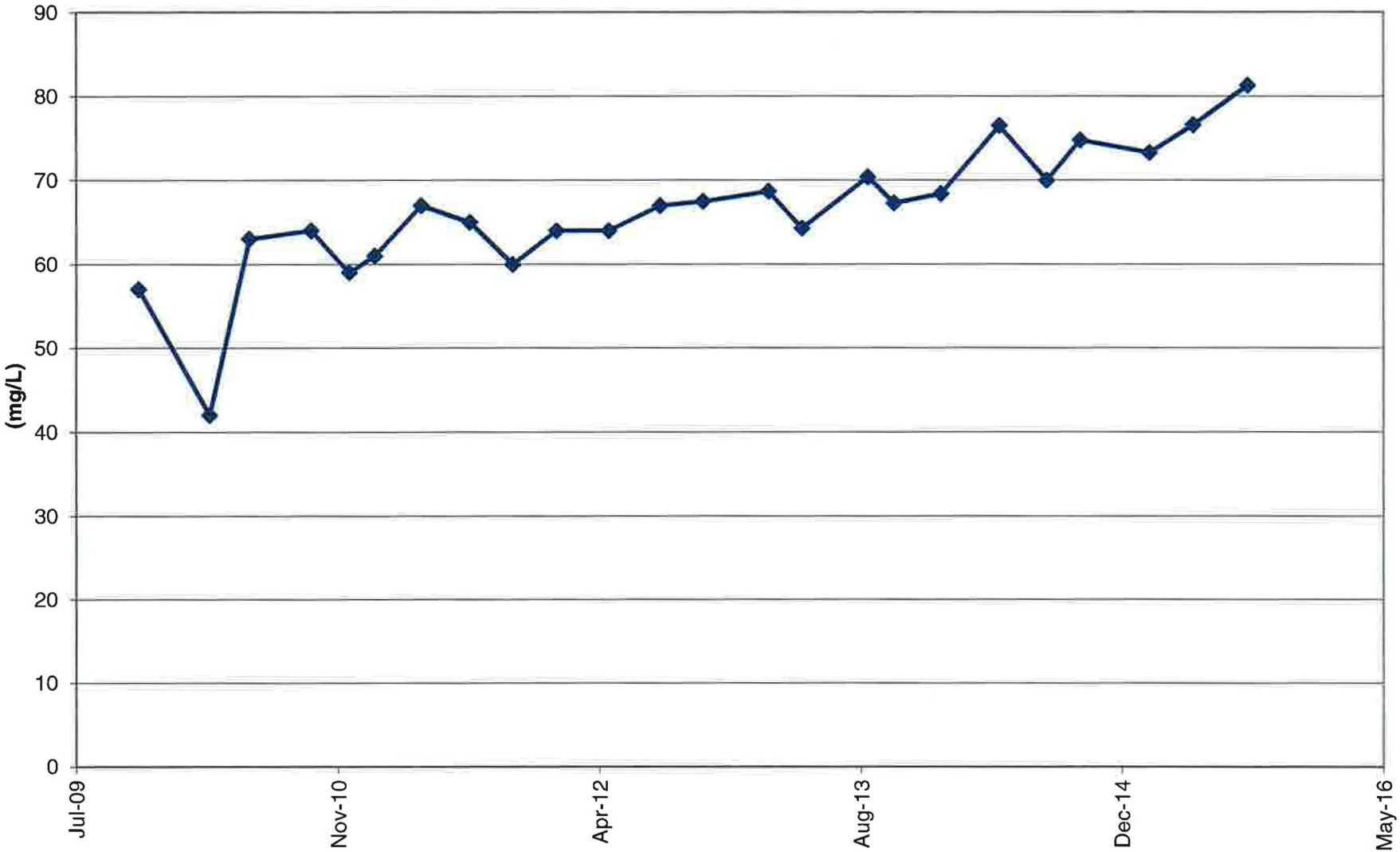


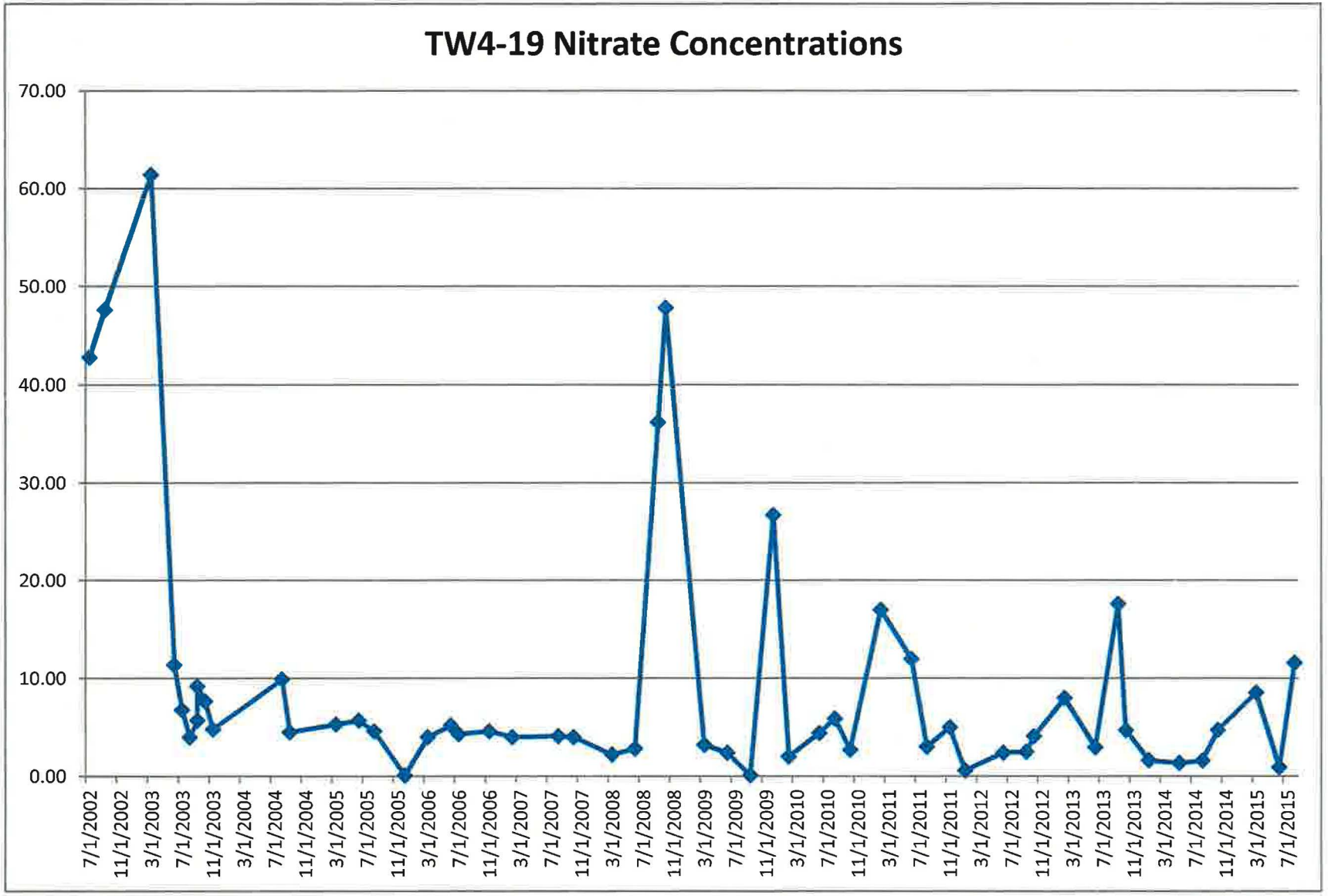

TWN-7 Chloride Concentrations
12.00
10.00
8.00
6.00
4.00
2.00
0.00
(mg/L)
Feb-08
Jul-09
Nov-10
Apr-12
Aug-13
Dec-14
May-16

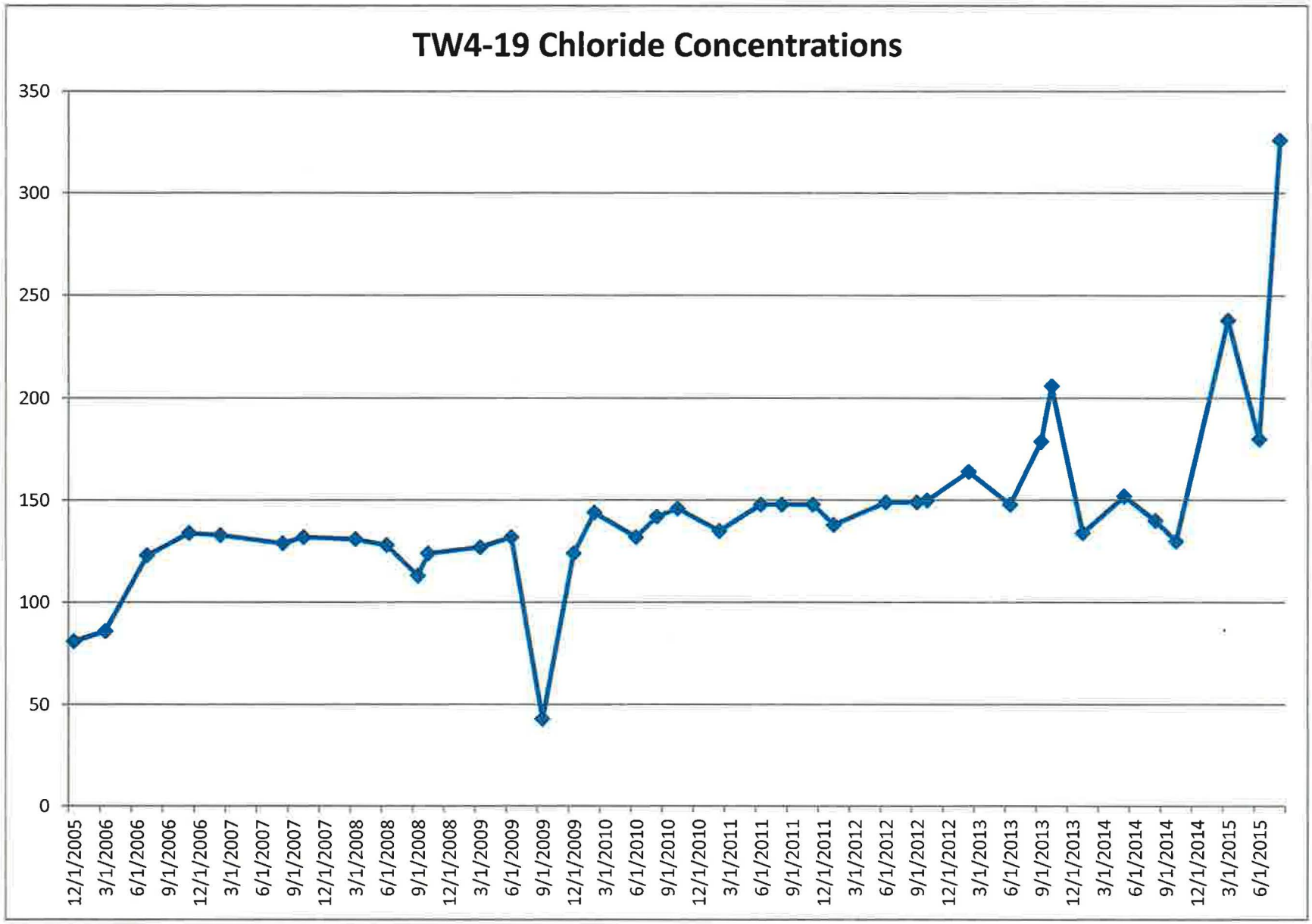
TWN-18 Nitrate Concentrations

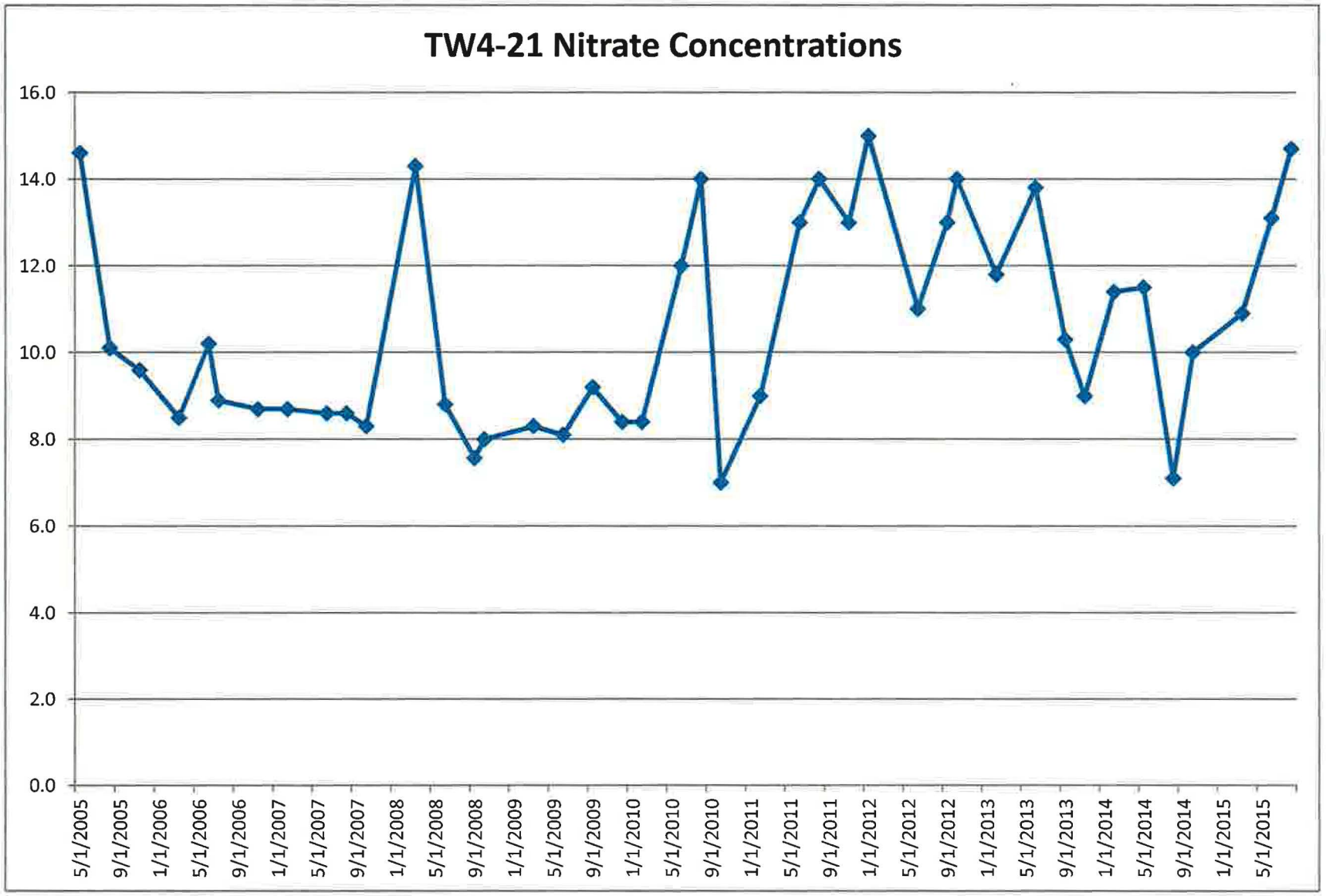


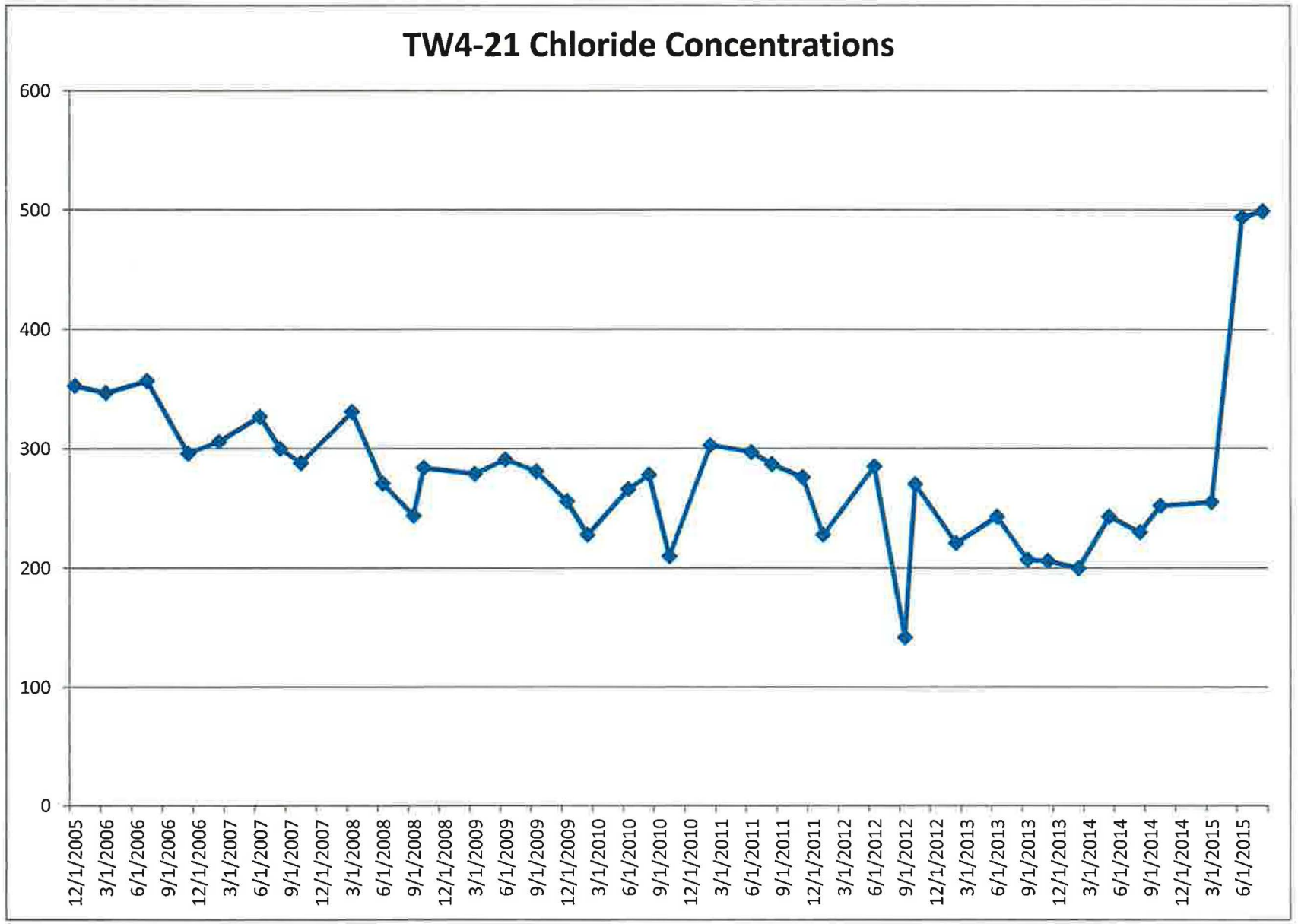
TWN-18 Chloride Concentrations

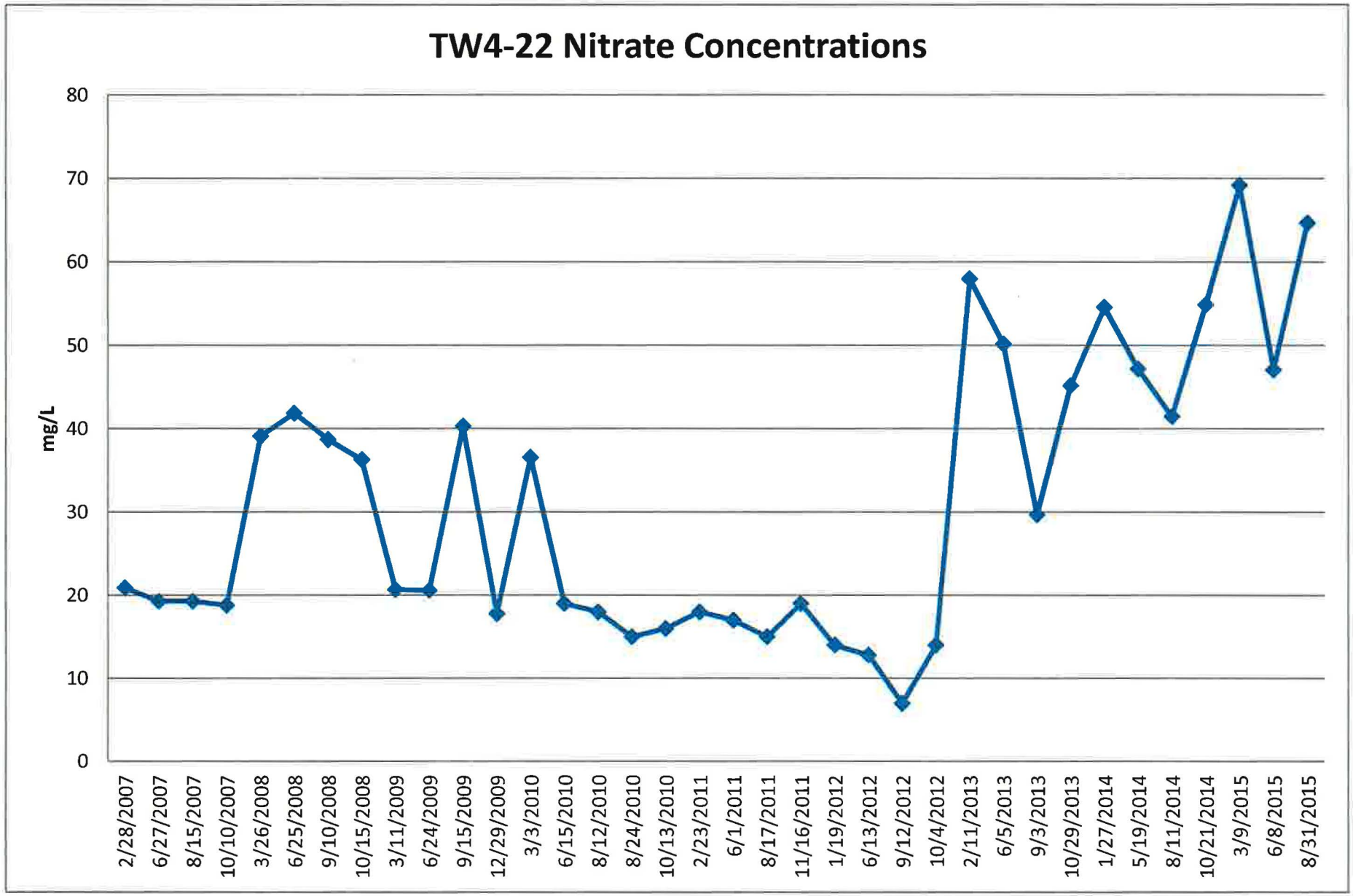


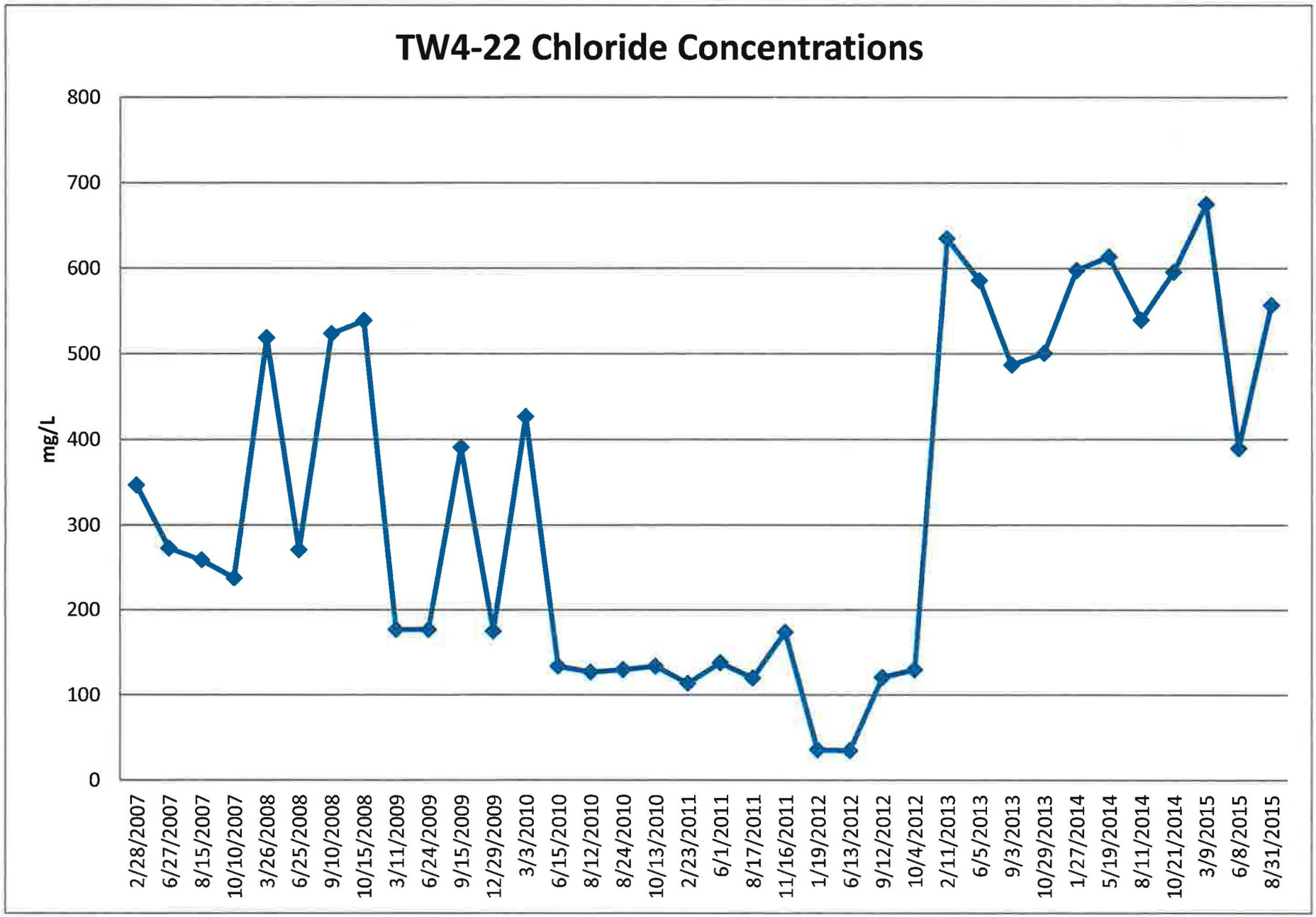

TW4-19 Nitrate Concentrations
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
7/1/2002
11/1/2002
3/1/2003
7/1/2003
11/1/2003
3/1/2004
7/1/2004
11/1/2004
3/1/2005
7/1/2005
11/1/2005
3/1/2006
7/1/2006
11/1/2006
3/1/2007
7/1/2007
11/1/2007
3/1/2008
7/1/2008
11/1/2008
3/1/2009
7/1/2009
11/1/2009
3/1/2010
7/1/2010
11/1/2010
3/1/2011
7/1/2011
11/1/2011
3/1/2012
7/1/2012
11/1/2012
3/1/2013
7/1/2013
11/1/2013
3/1/2014
7/1/2014
11/1/2014
3/1/2015
7/1/2015

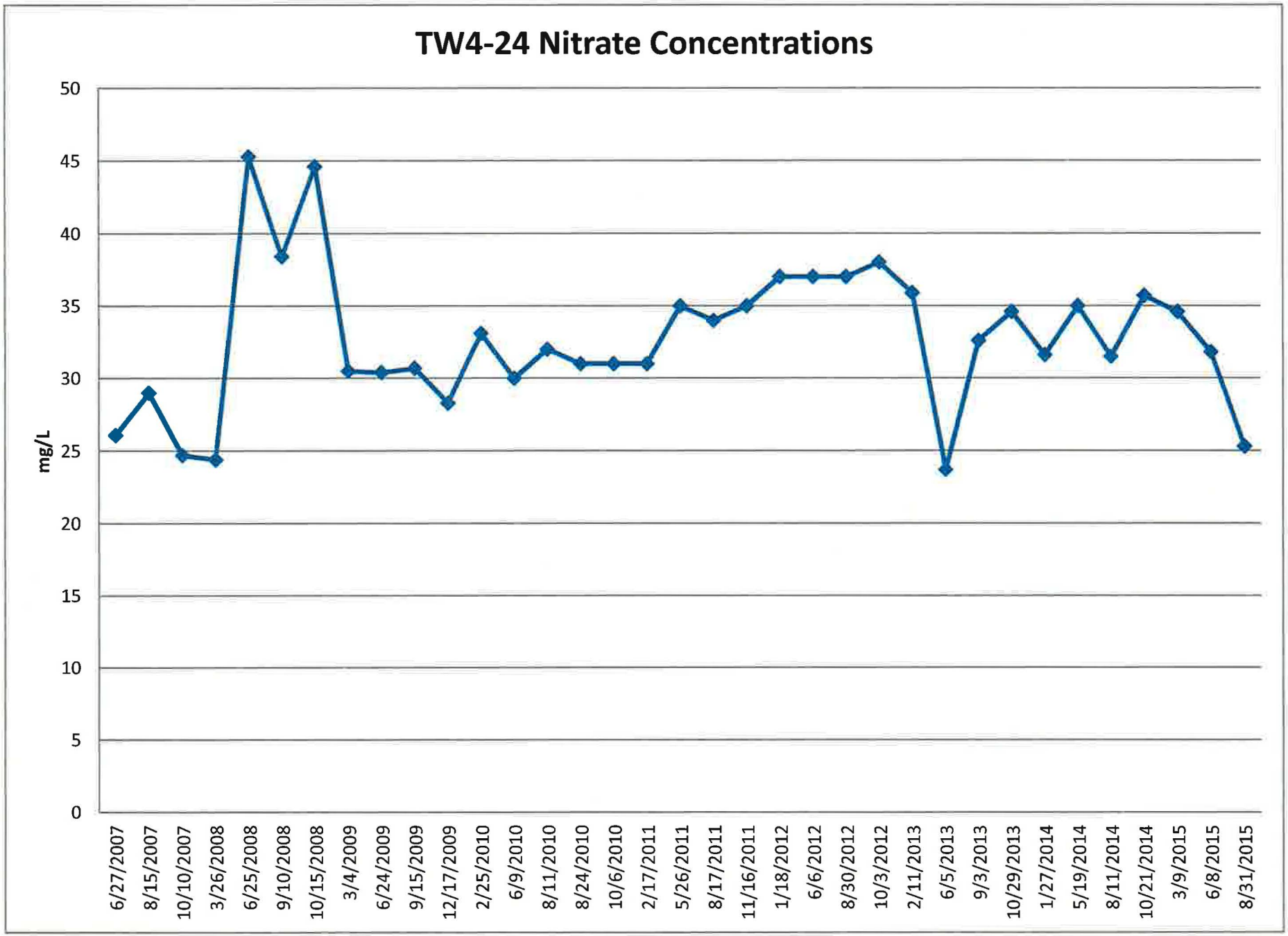

TW4-19 Chloride Concentrations
350
300
250
200
150
100
50
0
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013
9/1/2013
12/1/2013
3/1/2014
6/1/2014
9/1/2014
12/1/2014
3/1/2015
6/1/2015

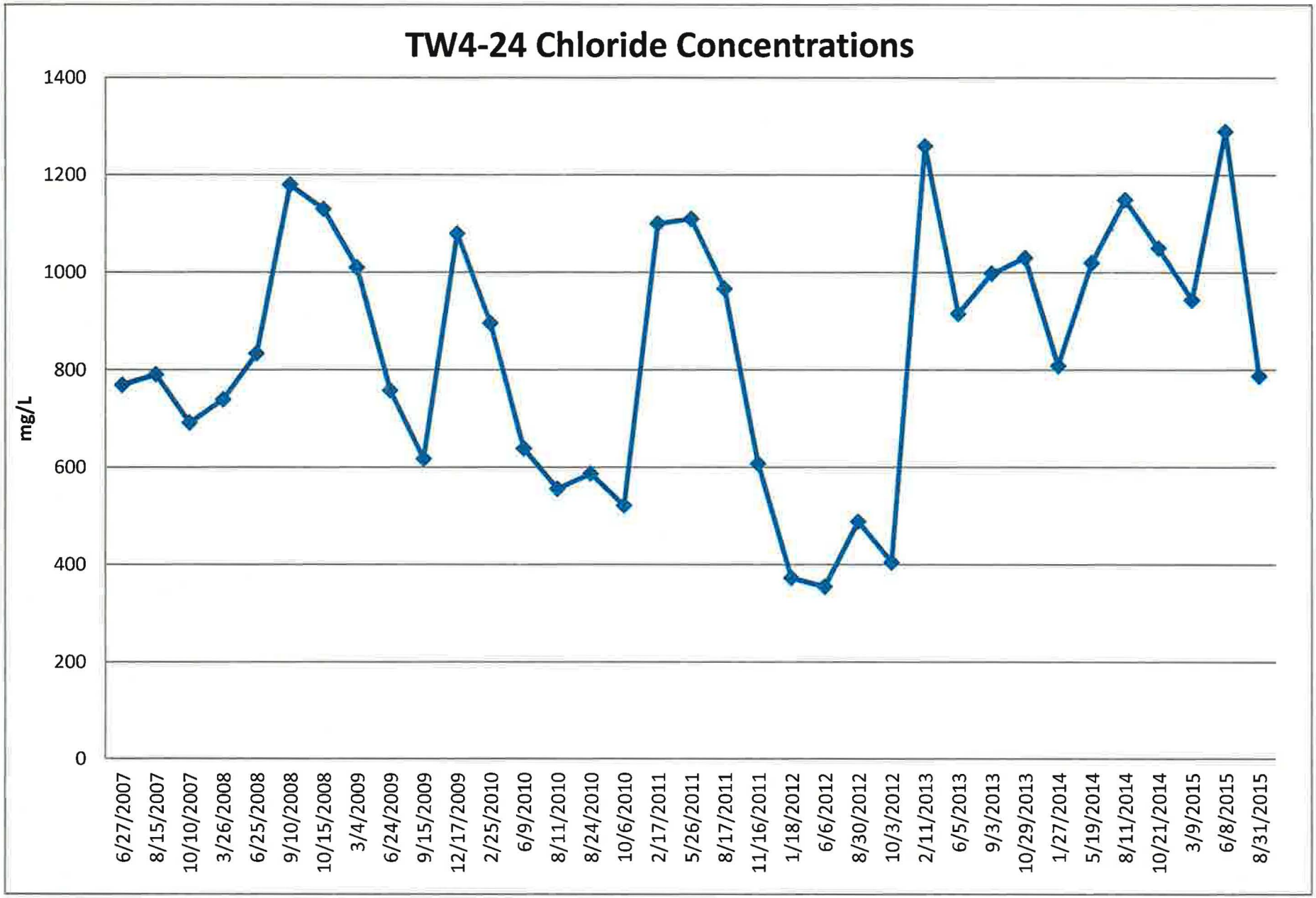

TW4-21 Nitrate Concentrations
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
5/1/2005
9/1/2005
1/1/2006
5/1/2006
9/1/2006
1/1/2007
5/1/2007
9/1/2007
1/1/2008
5/1/2008
9/1/2008
1/1/2009
5/1/2009
9/1/2009
1/1/2010
5/1/2010
9/1/2010
1/1/2011
5/1/2011
9/1/2011
1/1/2012
5/1/2012
9/1/2012
1/1/2013
5/1/2013
9/1/2013
1/1/2014
5/1/2014
9/1/2014
1/1/2015
5/1/2015

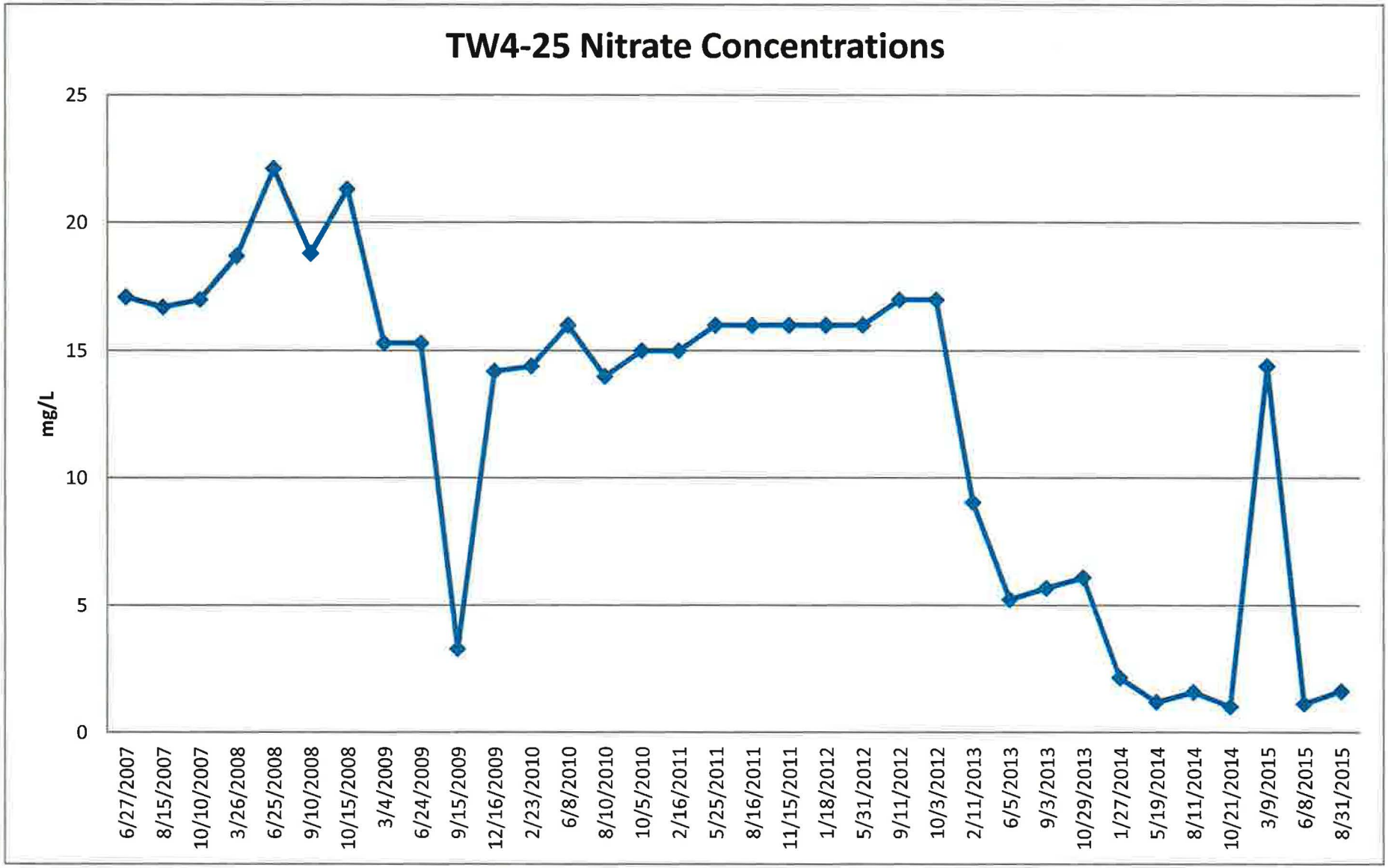

TW4-21 Chloride Concentrations
600
500
400
300
200
100
0
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013
9/1/2013
12/1/2013
3/1/2014
6/1/2014
9/1/2014
12/1/2014
3/1/2015
6/1/2015

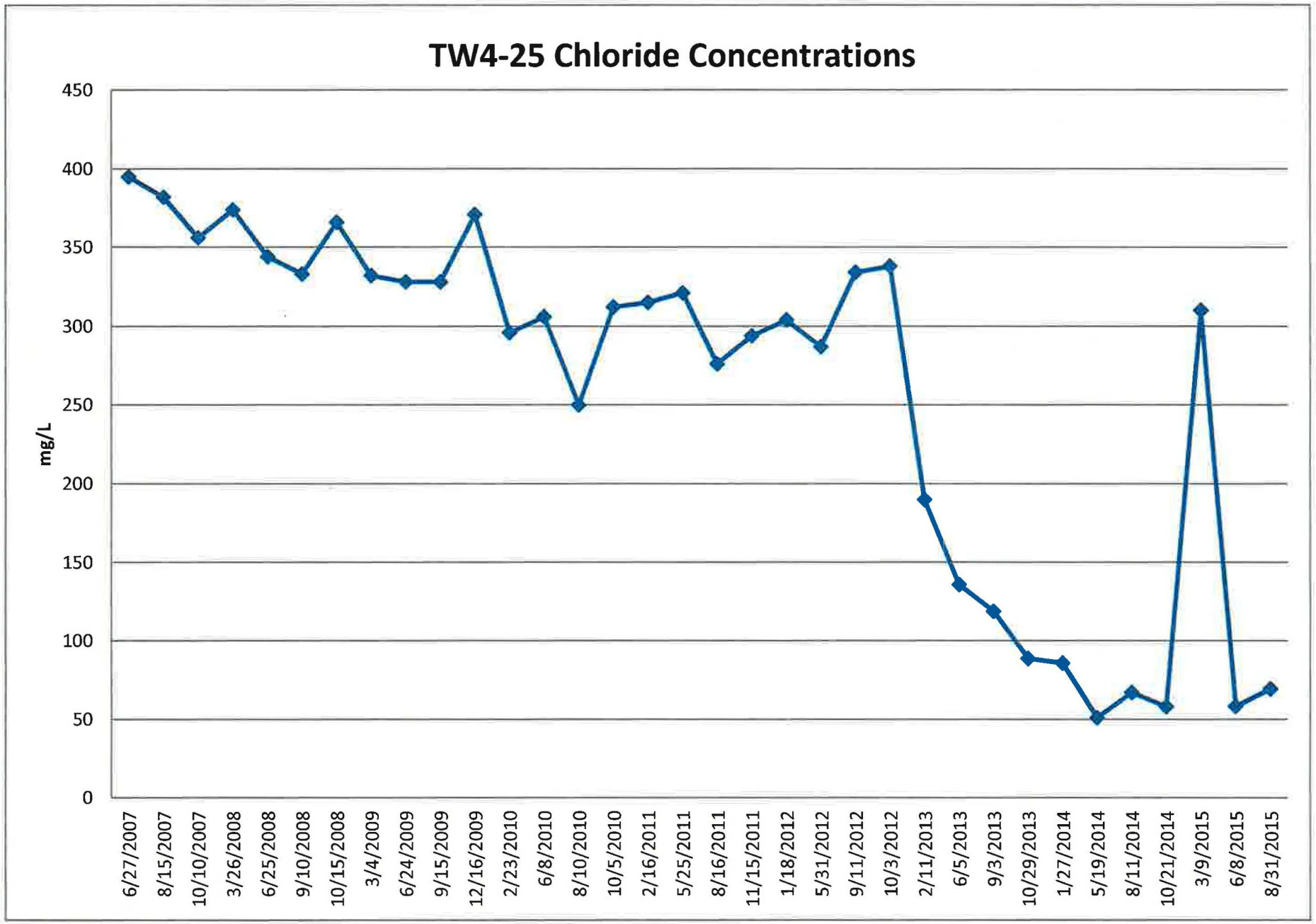

TW4-22 Nitrate Concentrations
mg/L
80
70
60
50
40
30
20
10
0
2/28/2007
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/11/2009
6/24/2009
9/15/2009
12/29/2009
3/3/2010
6/15/2010
8/12/2010
8/24/2010
10/13/2010
2/23/2011
6/1/2011
8/17/2011
11/16/2011
1/19/2012
6/13/2012
9/12/2012
10/4/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015

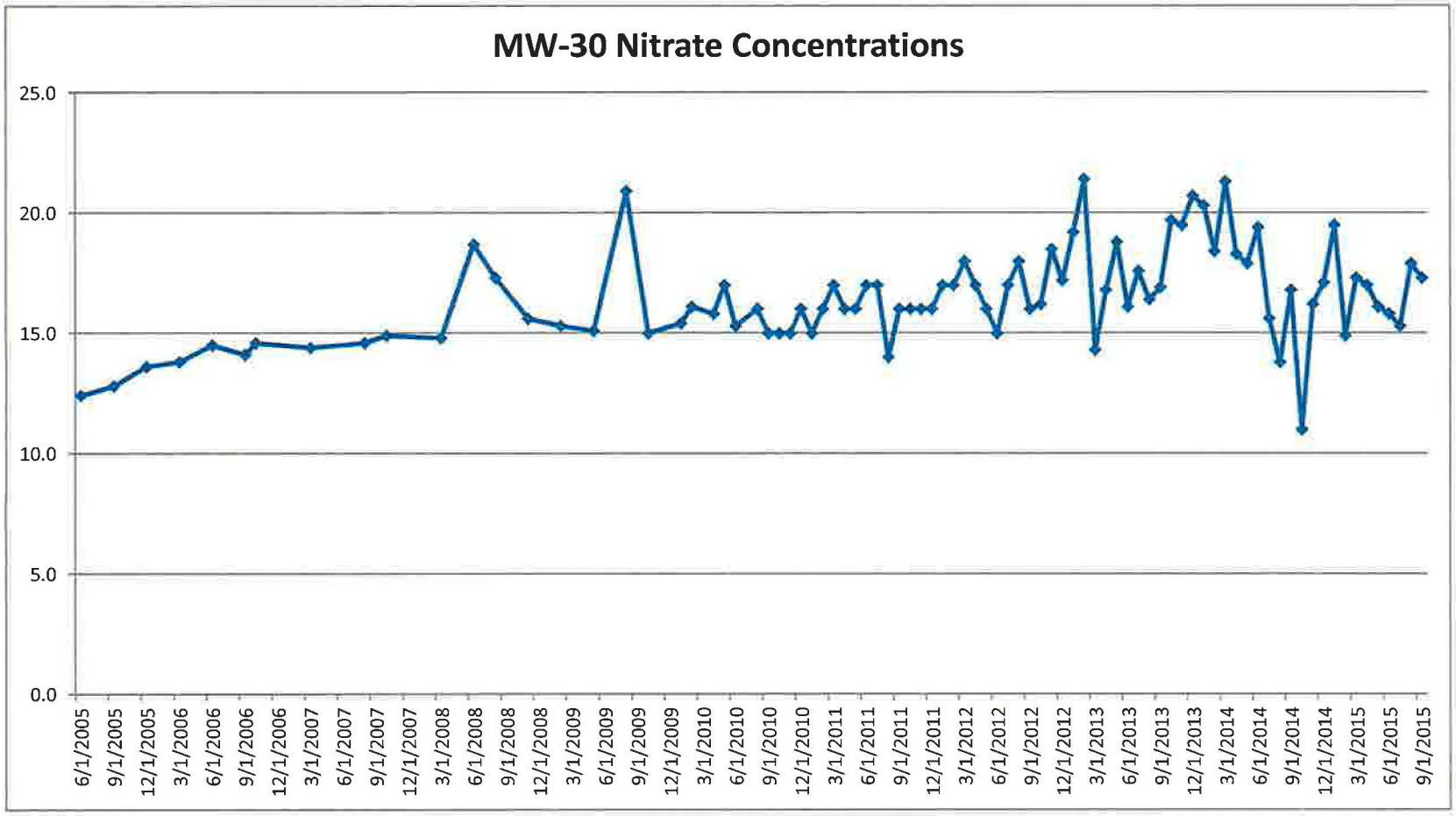

TW4-22 Chloride Concentrations
mg/L
800
700
600
500
400
300
200
100
0
2/28/2007
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/11/2009
6/24/2009
9/15/2009
12/29/2009
3/3/2010
6/15/2010
8/12/2010
8/24/2010
10/13/2010
2/23/2011
6/1/2011
8/17/2011
11/16/2011
1/19/2012
6/13/2012
9/12/2012
10/4/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015

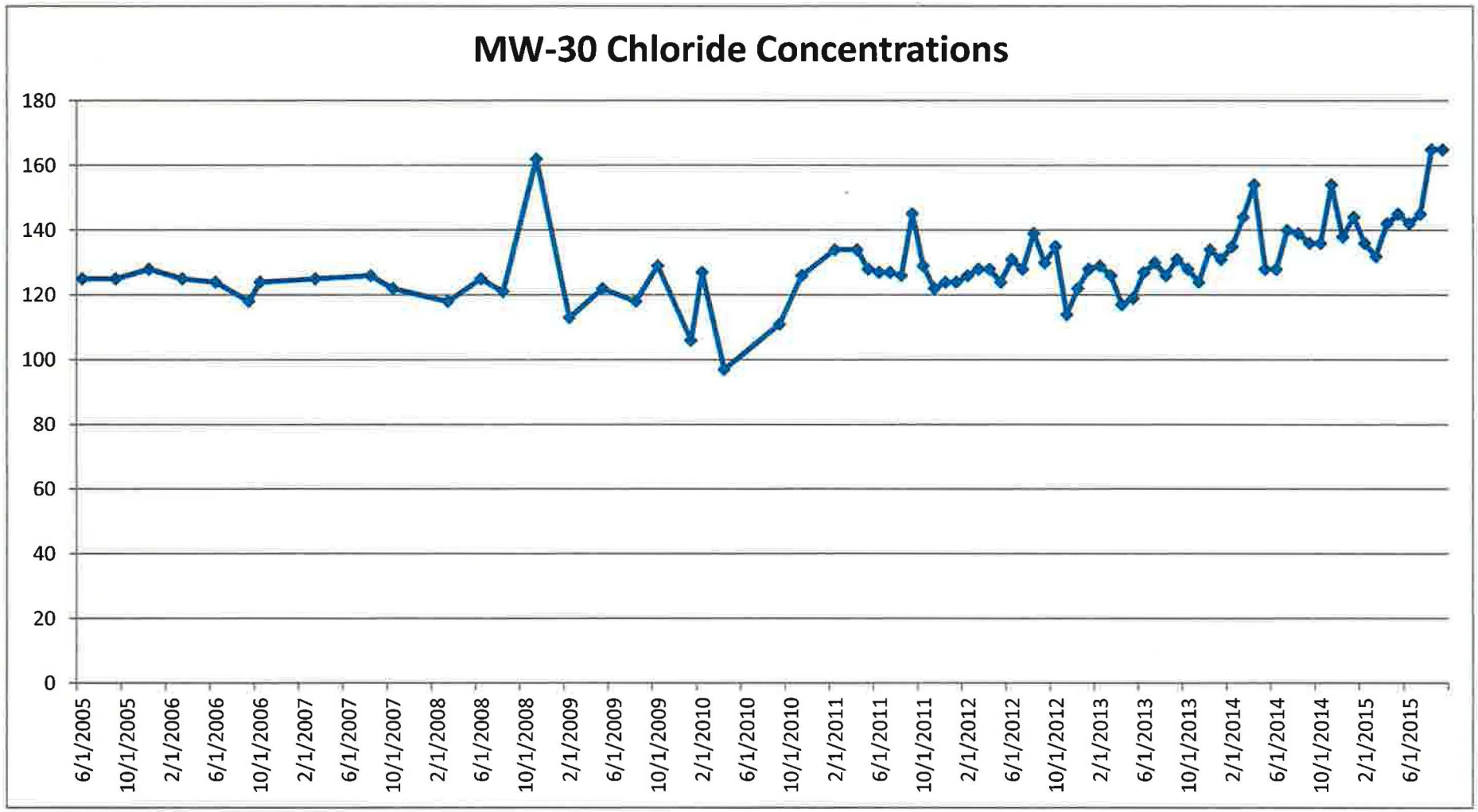

TW4-24 Nitrate Concentrations
mg/L
50
45
40
35
30
25
20
15
10
5
0
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/4/2009
6/24/2009
9/15/2009
12/17/2009
2/25/2010
6/9/2010
8/11/2010
8/24/2010
10/6/2010
2/17/2011
5/26/2011
8/17/2011
11/16/2011
1/18/2012
6/6/2012
8/30/2012
10/3/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015

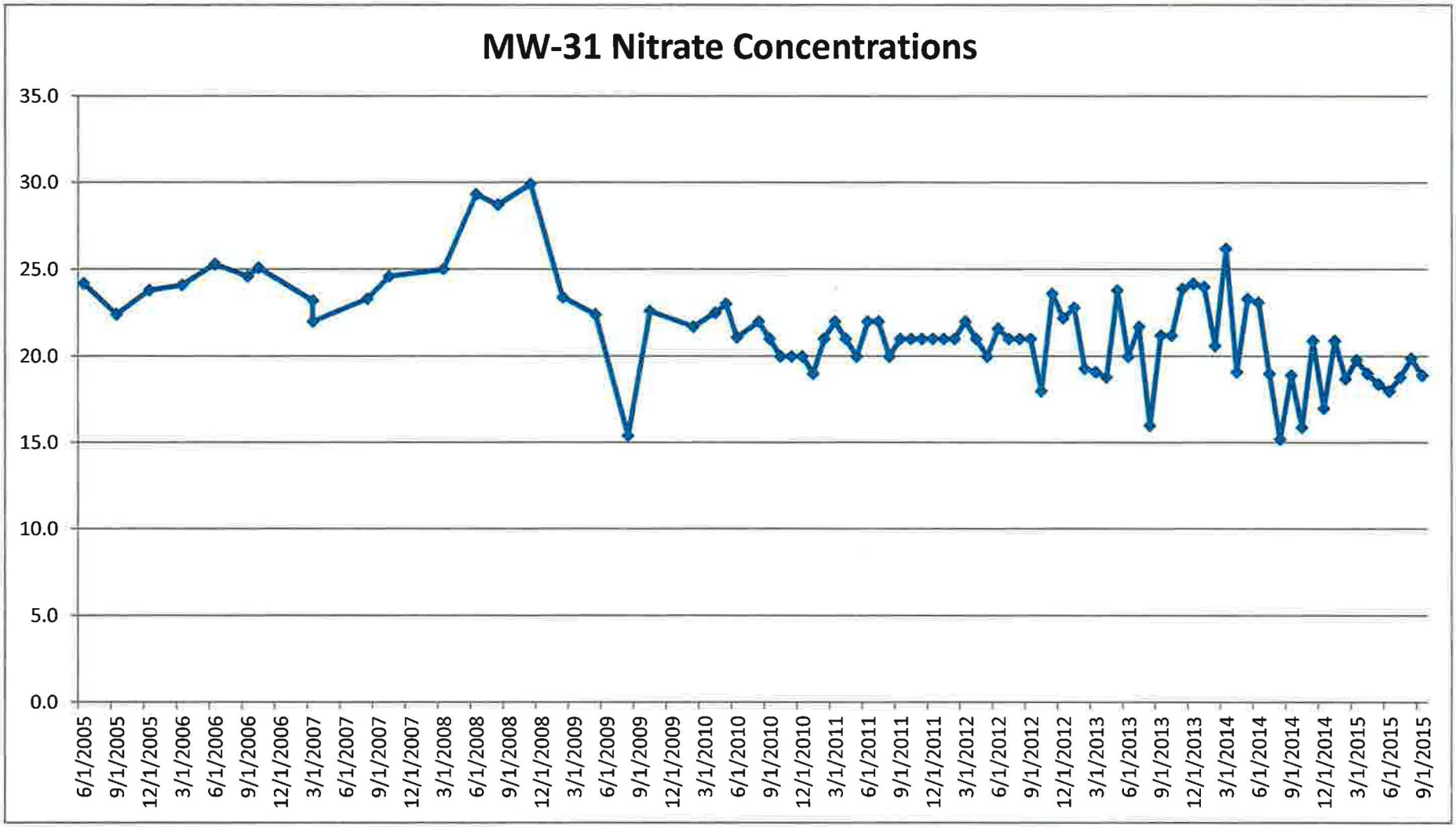

TW4-24 Chloride Concentrations
mg/L
1400
1200
1000
800
600
400
200
0
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/4/2009
6/24/2009
9/15/2009
12/17/2009
2/25/2010
6/9/2010
8/11/2010
8/24/2010
10/6/2010
2/17/2011
5/26/2011
8/17/2011
11/16/2011
1/18/2012
6/6/2012
8/30/2012
10/3/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015

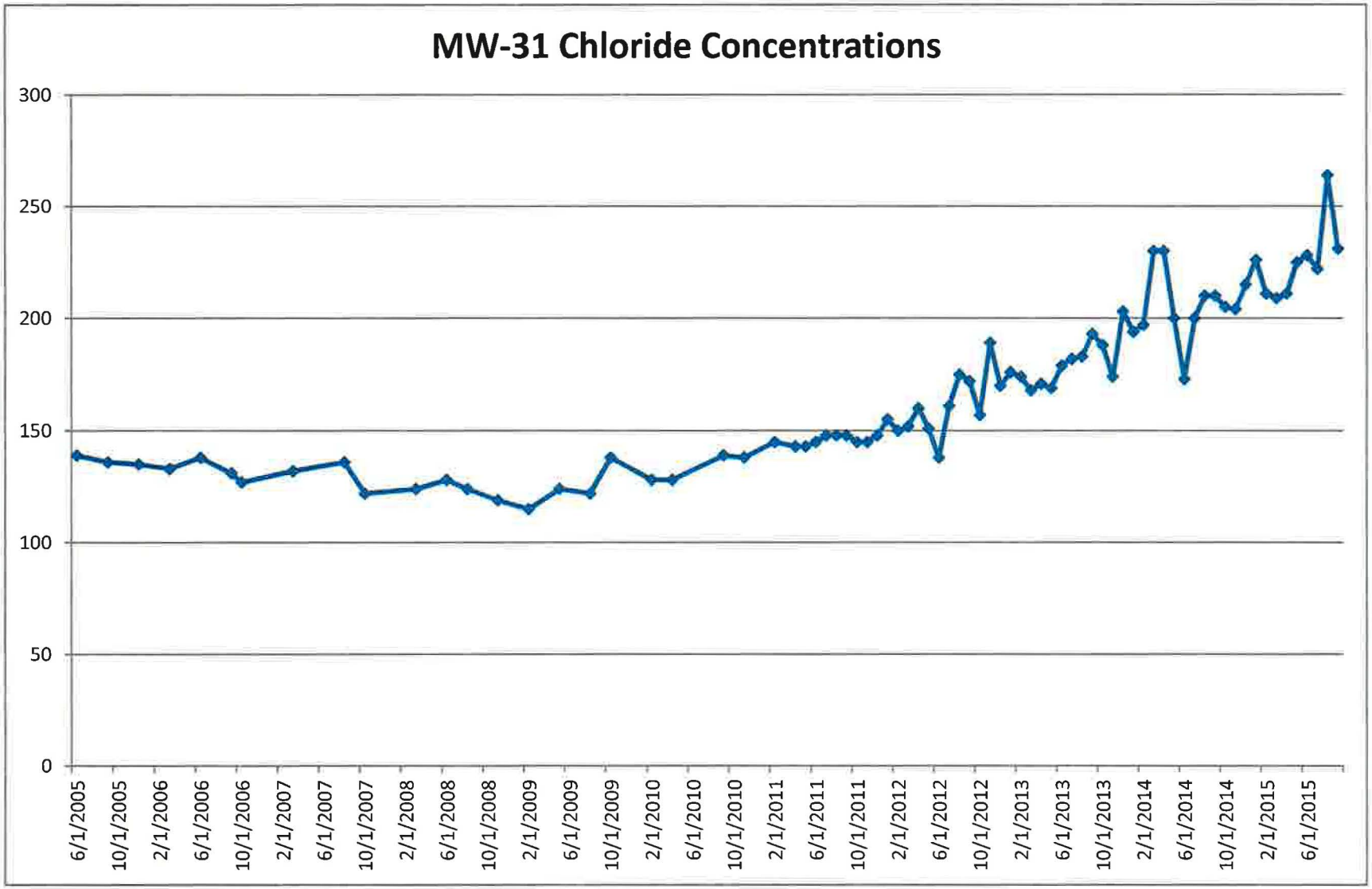

TW4-25 Nitrate Concentrations
mg/L
25
20
15
10
5
0
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/4/2009
6/24/2009
9/15/2009
12/16/2009
2/23/2010
6/8/2010
8/10/2010
10/5/2010
2/16/2011
5/25/2011
8/16/2011
11/15/2011
1/18/2012
5/31/2012
9/11/2012
10/3/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015


TW4-25 Chloride Concentrations
mg/L
450
400
350
300
250
200
150
100
50
0
6/27/2007
8/15/2007
10/10/2007
3/26/2008
6/25/2008
9/10/2008
10/15/2008
3/4/2009
6/24/2009
9/15/2009
12/16/2009
2/23/2010
6/8/2010
8/10/2010
10/5/2010
2/16/2011
5/25/2011
8/16/2011
11/15/2011
1/18/2012
5/31/2012
9/11/2012
10/3/2012
2/11/2013
6/5/2013
9/3/2013
10/29/2013
1/27/2014
5/19/2014
8/11/2014
10/21/2014
3/9/2015
6/8/2015
8/31/2015


MW-30 Nitrate Concentrations
25.0
20.0
15.0
10.0
5.0
0.0
6/1/2005
9/1/2005
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013
9/1/2013
12/1/2013
3/1/2014
6/1/2014
9/1/2014
12/1/2014
3/1/2015
6/1/2015
9/1/2015


MW-30 Chloride Concentrations
180
160
140
120
100
80
60
40
20
0
6/1/2005
10/1/2005
2/1/2006
6/1/2006
10/1/2006
2/1/2007
6/1/2007
10/1/2007
2/1/2008
6/1/2008
10/1/2008
2/1/2009
6/1/2009
10/1/2009
2/1/2010
6/1/2010
10/1/2010
2/1/2011
6/1/2011
10/1/2011
2/1/2012
6/1/2012
10/1/2012
2/1/2013
6/1/2013
10/1/2013
2/1/2014
6/1/2014
10/1/2014
2/1/2015
6/1/2015


MW-31 Nitrate Concentrations
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
6/1/2005
9/1/2005
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013
9/1/2013
12/1/2013
3/1/2014
6/1/2014
9/1/2014
12/1/2014
3/1/2015
6/1/2015
9/1/2015


MW-31 Chloride Concentrations
300
250
200
150
100
50
0
6/1/2005
10/1/2005
2/1/2006
6/1/2006
10/1/2006
2/1/2007
6/1/2007
10/1/2007
2/1/2008
6/1/2008
10/1/2008
2/1/2009
6/1/2009
10/1/2009
2/1/2010
6/1/2010
10/1/2010
2/1/2011
6/1/2011
10/1/2011
2/1/2012
6/1/2012
10/1/2012
2/1/2013
6/1/2013
10/1/2013
2/1/2014
6/1/2014
10/1/2014
2/1/2015
6/1/2015

Tab L

CSV Transmittal Letter

Kathy Weinel

From: Kathy Weinel
Sent: Monday, November 23, 2015 11:59 AM
To: 'Phillip Goble'
Cc: 'Dean Henderson'; Harold Roberts; David Frydenlund; Jaime Massey; David Turk; Scott Bakken; Logan Shumway
Subject: Transmittal of CSV Files White Mesa Mill 2015 Q3 Nitrate Monitoring
Attachments: 1508568-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 third quarter of 2015, 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

Energy Fuels Resources (USA) Inc.

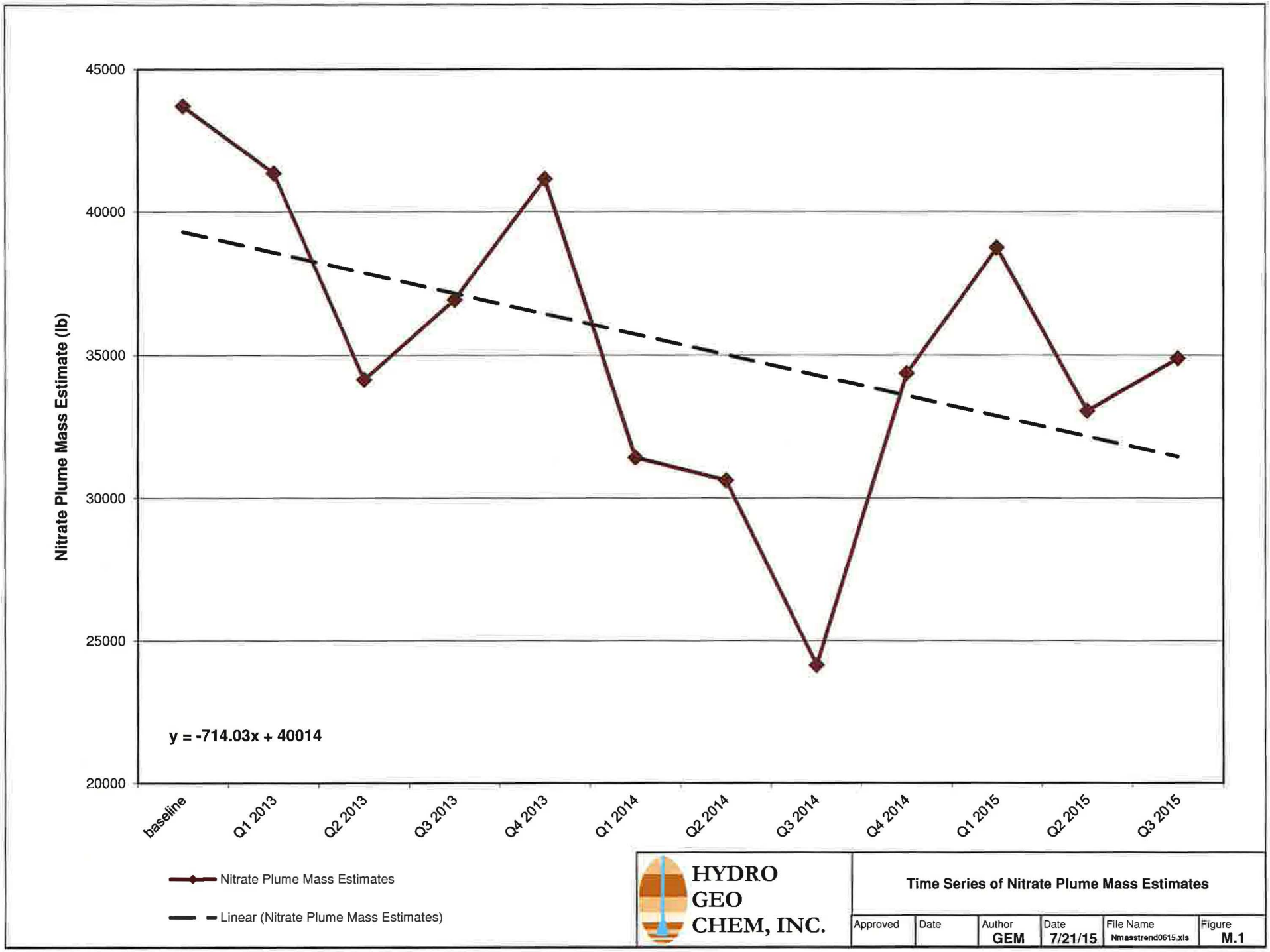
Kathy Weinel
Quality Assurance Manager

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

http://www.energyfuels.com

Tab M Residual Mass Estimate Analysis Figures and Tables

Tab M – Figures



HYDRO GEO CHEM, INC.

Time Series of Nitrate Plume Mass Estimates

Approved	Date	Author	Date	File Name	Figure
		GEM	7/21/15	Nmasstrend0615.xls	M.1

H:\718000\nov15\nitrate\mass estimate\Nmtrend0915: 8x11 LS Color

Tab M - Tables

The Residual Mass Estimate Analysis Tables are updated annually and included in the fourth quarter report. This tab has been intentionally left blank.

Tab N Evaluation of Productivity at TW4-19 and TW4-24

ATTACHMENT N

EVALATION OF REDUCED PRODUCTIVITY AT TW4-19 AND TW4-24 AND CALCULATION OF NEW 'BACKGROUND' FLOW THROUGH THE NITRATE PLUME

1.0 INTRODUCTION AND OVERVIEW

This analysis considers nitrate and chloroform program data up through the second quarter of 2015. As shown in Figures N.1 and N.2, the productivities of chloroform pumping well TW4-19 and nitrate pumping well TW4-24 have dropped since the third quarter of 2014. The decreases in average pumping rates at these wells have caused reductions in pumped chloroform and nitrate masses at each well.

As per the nitrate and chloroform CAPs, reductions in productivity of nitrate and chloroform pumping wells requires an evaluation to determine the likely causes and, depending on the results of the evaluation, a decision to either take no additional action, or to take action that may include rehabilitation or replacement of the affected wells, or installation of additional wells. Although under the chloroform CAP such an evaluation is only required as part of the 2-year review process (two-year Corrective Action Comprehensive Monitoring Evaluation ["CACME"]), to be proactive, and because the chloroform and nitrate pumping systems overlap, the evaluation of both systems is commencing at the present time.

Lost productivity may result from several causes. Likely causes at the Mill include: interference between relatively large numbers of closely spaced extraction wells; reductions in hydraulic gradients resulting from reduced wildlife pond recharge; reduced transmissivities as saturated thicknesses decline due to reduced wildlife pond recharge and increases in the number of pumping wells; potentially lower average hydraulic conductivity related to saturated thickness declines (that presumably have resulted in dewatering of relatively shallow zones of higher permeability); and losses in well efficiency.

Reduced productivity at TW4-24 doesn't significantly affect chloroform mass removal because TW4-24 is primarily a nitrate pumping well and because of low chloroform concentrations. Reduced productivity at TW4-24 is mainly of concern to the nitrate program because of moderately high nitrate concentrations and potentially reduced capture effectiveness. However, potential reductions in capture effectiveness will be mitigated by decreases in saturated thicknesses, decreases in hydraulic gradients, and potentially lower average hydraulic conductivities that in combination will significantly reduce non-pumping 'background' flow through the nitrate plume. Reduced 'background' flow reduces the amount of pumping needed to maintain effective capture.

The impact of reduced productivity at TW4-19 on chloroform mass removal will be mitigated by factors that include: 1) chloroform concentrations at TW4-19 are on average lower than concentrations at nearby chloroform pumping wells; and 2) the recent addition of five wells to the chloroform pumping system: four existing wells (TW4-1, TW4-2, TW4-11, and TW4-21), and one new well (TW4-37). The addition of these wells increases chloroform mass removal rates and reduces the relative importance of TW4-19.

At the present time, because nitrate pumping is likely to be adequate even with reduced pumping at TW4-24, and because of the beneficial impact of adding five wells to the chloroform pumping system (which reduces the relative importance of TW4-19), it is considered too early to commit to any particular course of action other than continuing evaluation of the pumping system.

2.0 CALCULATION OF NEW 'BACKGROUND' FLOW THROUGH THE NITRATE PLUME

Reduced productivity at TW4-24 is likely the result of four factors other than potential losses in well efficiency: 1) smaller saturated thickness (by approx 11%) related to reduced wildlife pond recharge; 2) smaller hydraulic gradients (by approx 26%) also related to reduced wildlife pond recharge; 3) smaller average hydraulic conductivities (by approx 9%, presumably as a result of dewatering relatively shallow zones of higher permeability); and interference between pumping wells. 'Background' flow through the nitrate plume will be affected by the first three factors because it is meant to represent the condition that would arise in the absence of pumping.

The pre-nitrate pumping hydraulic gradient within the nitrate plume was calculated based on water levels at wells TW4-25 and MW-31 and wells TWN-2 and MW-30. These calculations yielded an average hydraulic gradient of 0.025 ft/ft. This is essentially identical to the pre- nitrate pumping hydraulic gradient calculated immediately east of the plume based on pre-nitrate pumping water levels at wells TWN-1 and MW-32.

The hydraulic gradient within the nitrate plume has been reduced by decay of the groundwater mound resulting from cessation of water delivery to the northern wildlife ponds and by pumping. To assess the magnitude of the decrease in hydraulic gradient due only to the decay of the groundwater mound, two methods were employed.

The first used the average decrease in water levels since Q4 2012 (approximately 10 ft) at non-pumping wells TWN-1, TWN-3, TWN-4, MW-19, MW-27, Piez-2 and Piez-3. Q4 2012 was the quarter just prior to the start of nitrate pumping. Water levels at these wells are assumed to have responded primarily to cessation of water delivery to the northern wildlife ponds (Figures N.3 through N.9). The average decrease (approximately 10 ft) was then assumed to represent the decrease in water level that would have occurred at pumping well TW4-25 under non-pumping conditions. The new 'background gradient' for Q2 2015 was then calculated as 0.019 ft/ft based on the water level calculated for TW4-25 (5597 ft amsl -10 ft = 5587 ft amsl) and the water level at MW-31 (5548 ft amsl).

The second assumed that the new 'background' gradient through the nitrate plume is equal to the Q2 2015 gradient between non-pumping wells TWN-1 and MW-25 (0.018 ft/ft). This is nearly identical to the gradient calculated by the first method. The new 'background' gradient is therefore assumed to be the average of the two methods (0.0185 ft/ft), a 26% reduction from the original (0.025 ft/ft).

An assessment of the change in transmissivity (product of saturated thickness and conductivity) was performed based on changes in water levels in non-pumping wells TW4-5, TW4-9, TW4-10, TW4-16, and TW4-18 that resulted from reduced pumping at TW4-19 and TW4-24. Water levels at these wells clearly responded to the reduction in pumping at TW4-19 and TW4-24. As shown in Figures N.10 through N.14, the downward trends in water levels in these wells were halted or reversed once pumping was reduced. These same wells responded to pumping of TW4-19 during the long-term pumping test conducted in year 2003. By superposition, the reduced pumping at TW4-19 and TW4-24 can be simulated as injection of water at these locations at rates equivalent to the decreases in rates of pumping at these locations.

Water level changes (displacements) at non-pumping observation wells in response to reduced pumping were calculated by subtracting out the average downward water level trends at wells TW4-5, TW4-9, TW4-10, TW4-16, and TW4-18. This eliminated the impact of water level reductions resulting from reduced wildlife pond recharge. The data were then analyzed as an equivalent injection test using the well hydraulics interpretation software WHIP (HGC, 1998). The previous use of WHIP at the Mill is described in HGC (2002). WHIP was chosen for the analysis because it is designed to interpret both pumping and injection tests.

Figures N.15 through N.19 provide the results and the fits between measured and simulated displacements at TW4-5, TW4-9, TW4-10, TW4-16, and TW4-18. Transmissivity estimates are similar, but lower, than estimates derived from the long-term pumping test (HGC, 2004). The reduction in transmissivity is primarily related to reduced saturated thickness; however, as shown in Table N.1, compared to the year 2003 analysis, the average reduction in transmissivity is approximately 27% whereas the average reduction in saturated thickness is only 20%. This implies a reduction in average conductivity of approximately 9%.

The reduction in average saturated thickness within the pumped portion of the nitrate plume based on water levels at wells TWN-2, TWN-3, TW4-22, TW4-24, and TW4-25 is approximately 11% as of Q2 2015. This calculation is affected by pumping at the majority of these wells; however the calculated 11% reduction is about the same as the 10% reduction calculated above based on non-pumping wells impacted by reduced wildlife pond recharge.

Assuming that the 9% reduction in conductivity is representative of the nitrate plume area, the reduced hydraulic gradient (-26%), reduced saturated thickness (-11%), and reduced conductivity (-9%) in combination yield a new 'background' flow through the

nitrate plume that is approximately 40% lower than the original calculated range of 1.31 to 2.79 gpm. The new 'background' flow is estimated to range from 0.79 gpm to 1.67 gpm. The current total pumping from the nitrate plume (2.03 gpm) exceeds the high end of this range indicating that pumping is likely adequate even with reduced productivity at TW4-24.

3.0 EVALUATION OF INTERFERENCE BETWEEN PUMPING WELLS

Closely spaced pumping wells will 'interfere' with one another as they 'compete' for groundwater. This 'interference' reduces the productivities of the individual wells. While adding wells will likely increase total pumping, a point will be reached where the gains are negligible.

Reduced productivity at individual wells results in part from reduced saturated thicknesses as overall pumping increases with the addition of wells. Addition of wells also creates stagnation points between wells; by superposition, an effective no-flow boundary is created between pumping wells. Because of the effective creation of a no-flow boundary between pumping wells, it is important to avoid the generation of rectangular grids of wells or triangular patterns of wells. The creation of effective no-flow boundaries increases the rates of drawdowns at individual wells as well as the rates of reductions in saturated thicknesses within pumped areas; both reduce individual well productivities.

A quantitative analysis of interference within the chloroform and nitrate pumping systems is considered premature at this time; nitrate pumping appears adequate even with reduced productivity at TW4-24, and chloroform mass removal rates remain adequate due to the recent addition of five chloroform pumping wells. Additional data collection is considered necessary to evaluate the impacts of these additional wells on long-term pumping well productivities.

4.0 POTENTIAL FUTURE EVALUATION OF TW4-19 AND TW4-24 WELL EFFICIENCIES

Should continued monitoring indicate that the reduced productivities at TW4-19 and TW4-24 need to be addressed, the wells will be tested for reduced efficiency. Reduced efficiency would likely be related to partial clogging of well screens. Step-rate pumping tests would be conducted as part of this evaluation.

5.0 REFERENCES

Hydro Geo Chem, Inc (HGC). 1988. WHIP. Well Hydraulics Interpretation Program, Version 3.22, User's Manual. July, 1988

HGC. 2002. Hydraulic Testing at the White Mesa Uranium Mill Near Blanding, Utah During July, 2002. August 22, 2002.

HGC, 2004. Final Report. Long Term Pumping at MW-4, TW4-15, and TW4-19. White Mesa Uranium Mill Near Blanding, Utah. May 26, 2004.

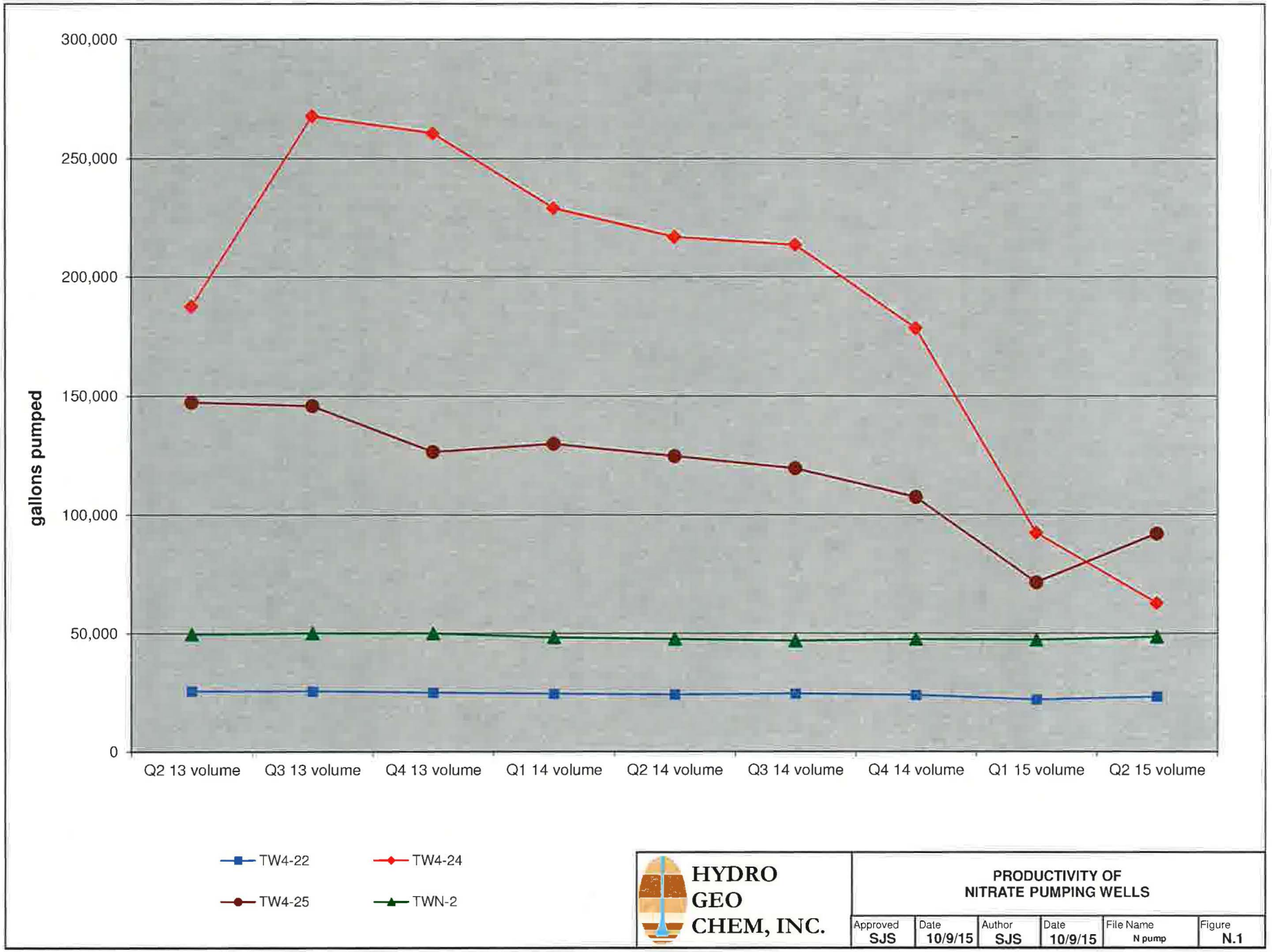
Table N.1
comparison of transmissivity and saturated thickness estimates

observation well	average 2003 saturated thickness (ft)	average 2015 saturated thickness (ft)	% difference	2003 T estimate (ft^2/day)	2015 T estimate (ft^2/day)	% difference
TW4-5	62	48	-23	87	46	-47
TW4-9	63	49	-22	71	51	-28
TW4-10	64	51	-20	46	47	2
TW4-16	79	67	-15	18	9	-50
TW4-18	80	65	-19	74	66	-11
average	**70**	**56**	**-20**	**59**	**44**	**-27**

Notes:

average saturated thickness = average of TW4--19 and observation well saturated thicknesses

T = transmissivity in feet squared per day (assuming confined analysis)

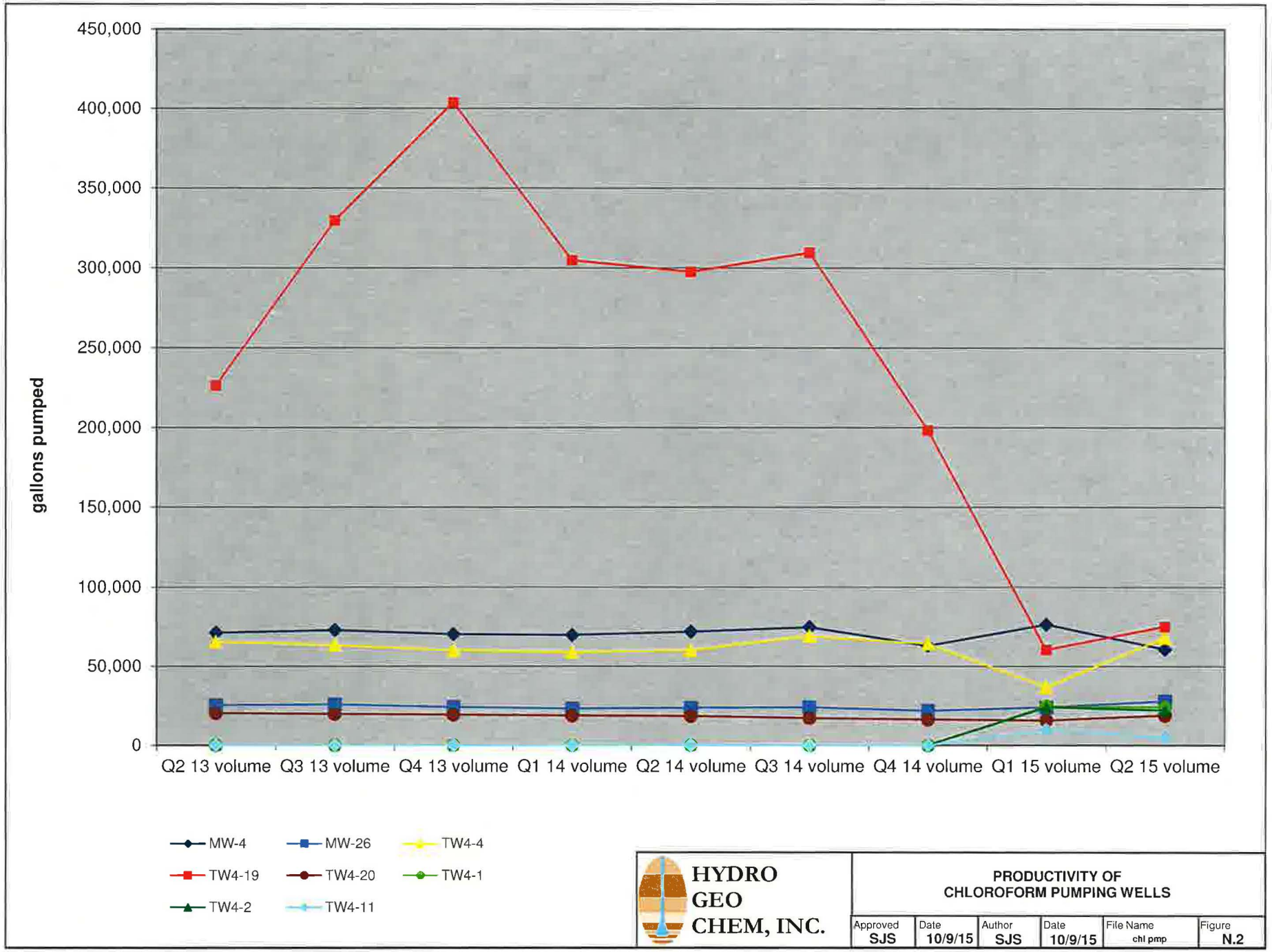


HYDRO GEO CHEM, INC.

PRODUCTIVITY OF NITRATE PUMPING WELLS

Approved	Date	Author	Date	File Name	Figure
SJS	10/9/15	SJS	10/9/15	N pump	N.1

H:\718000\aug15\Nitrate\Pvolume.xls: F1 N pump

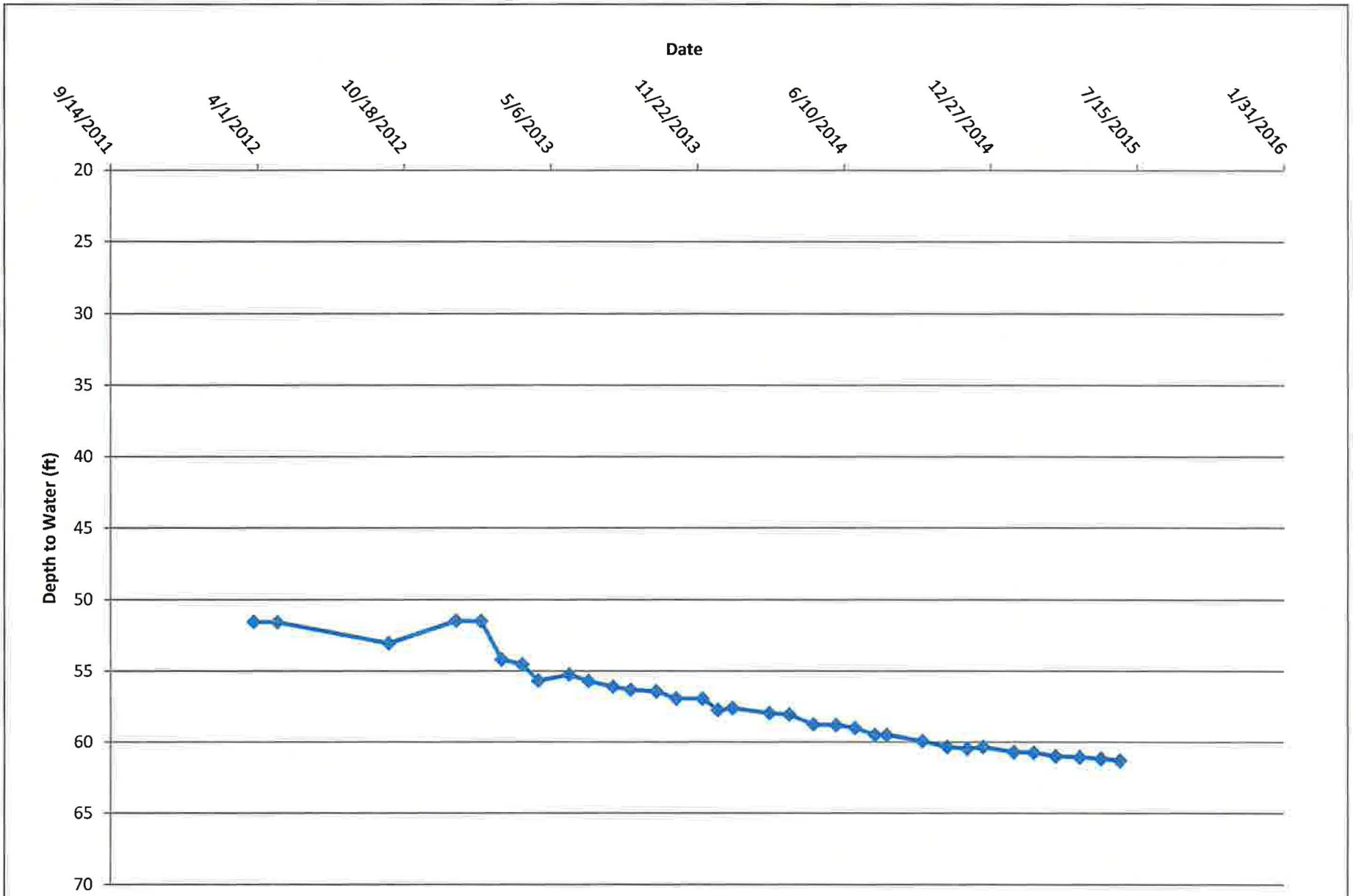


HYDRO GEO CHEM, INC.

PRODUCTIVITY OF CHLOROFORM PUMPING WELLS

Approved	Date	Author	Date	File Name	Figure
SJS	10/9/15	SJS	10/9/15	chl pmp	N.2

H:\718000\aug15\Nitrate\Pvolume.xls: F2 chl pmp

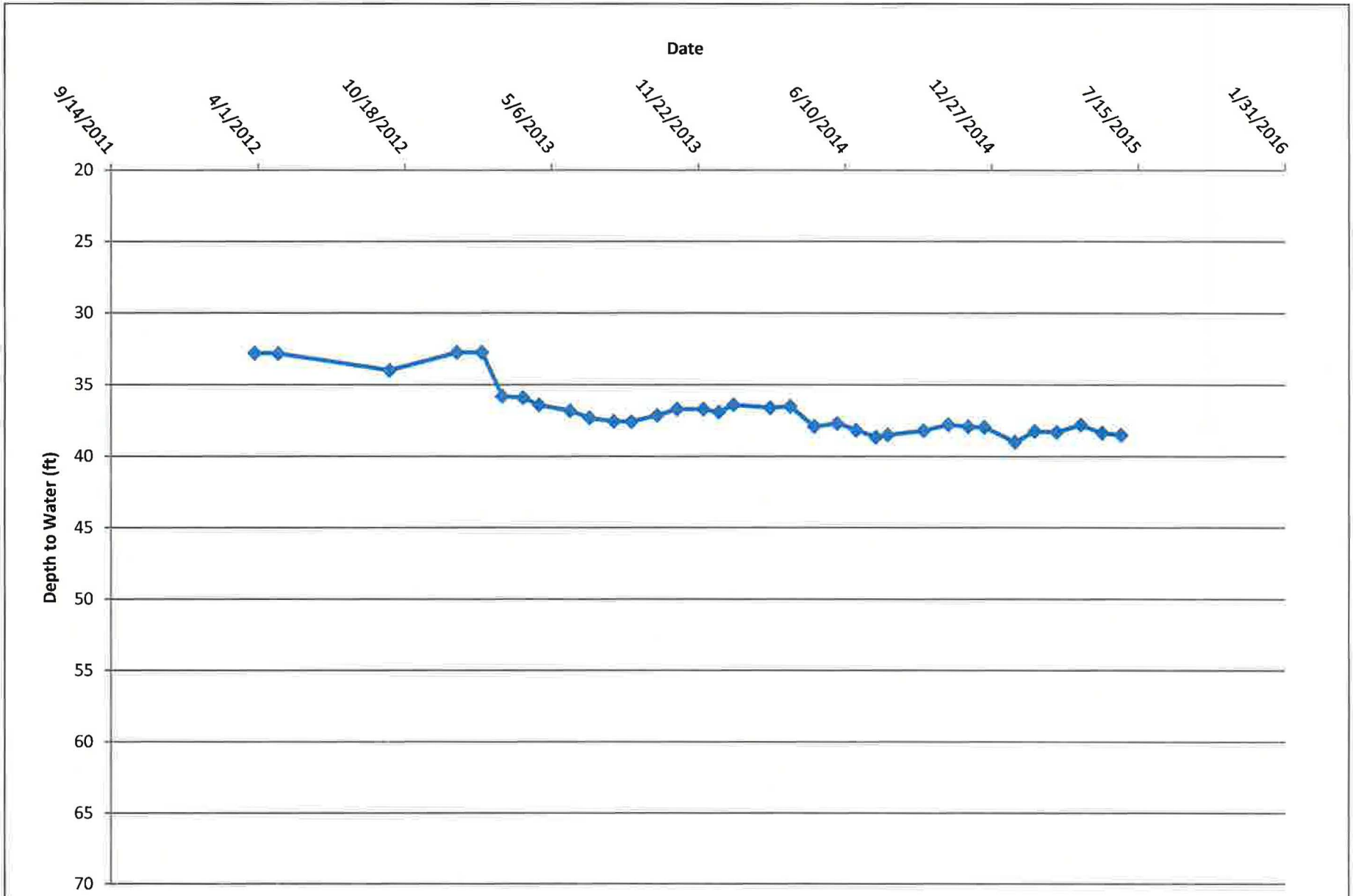


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TWN-1 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.3

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TWN-1

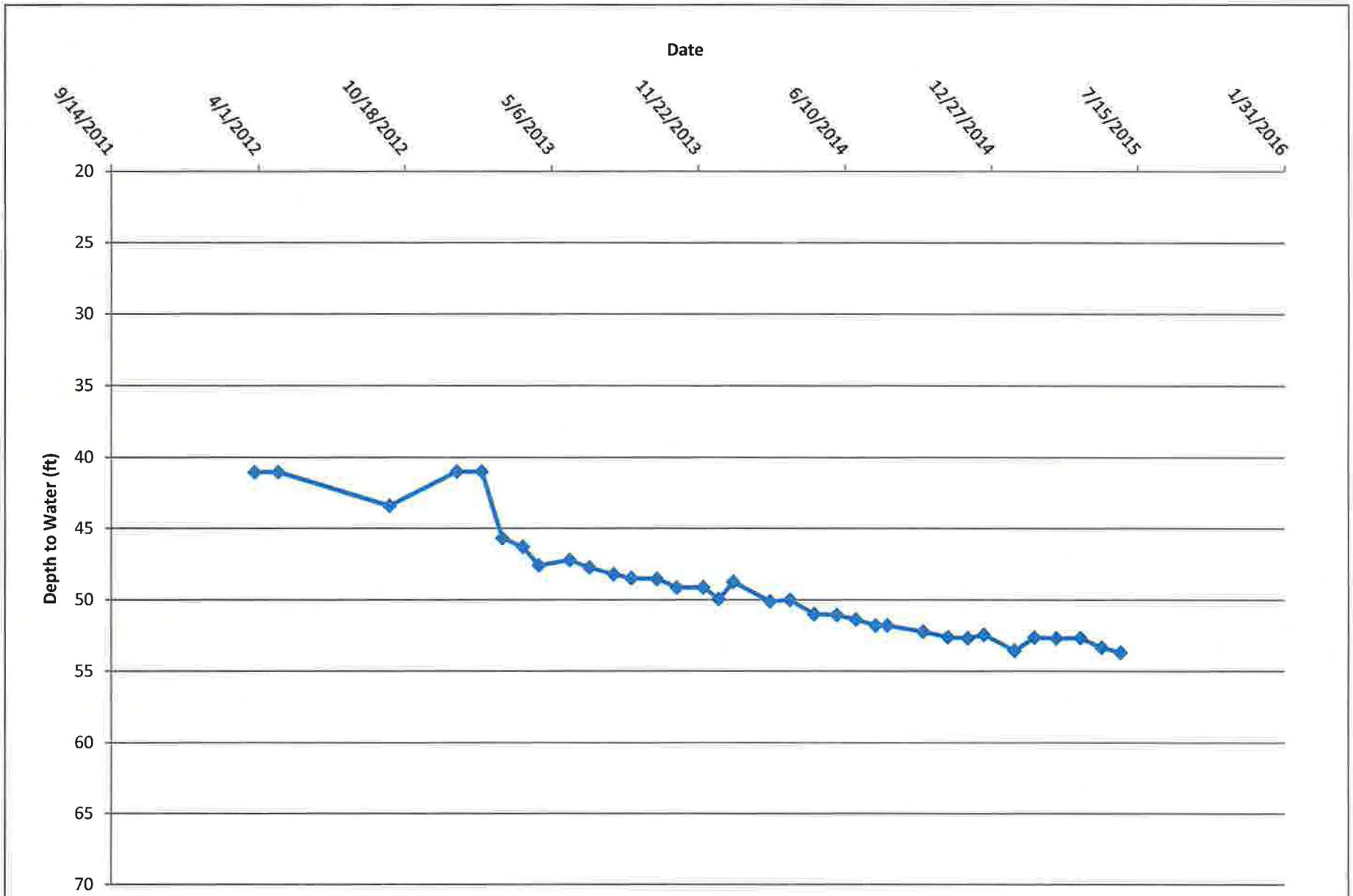


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TWN-3 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.4

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TWN-3

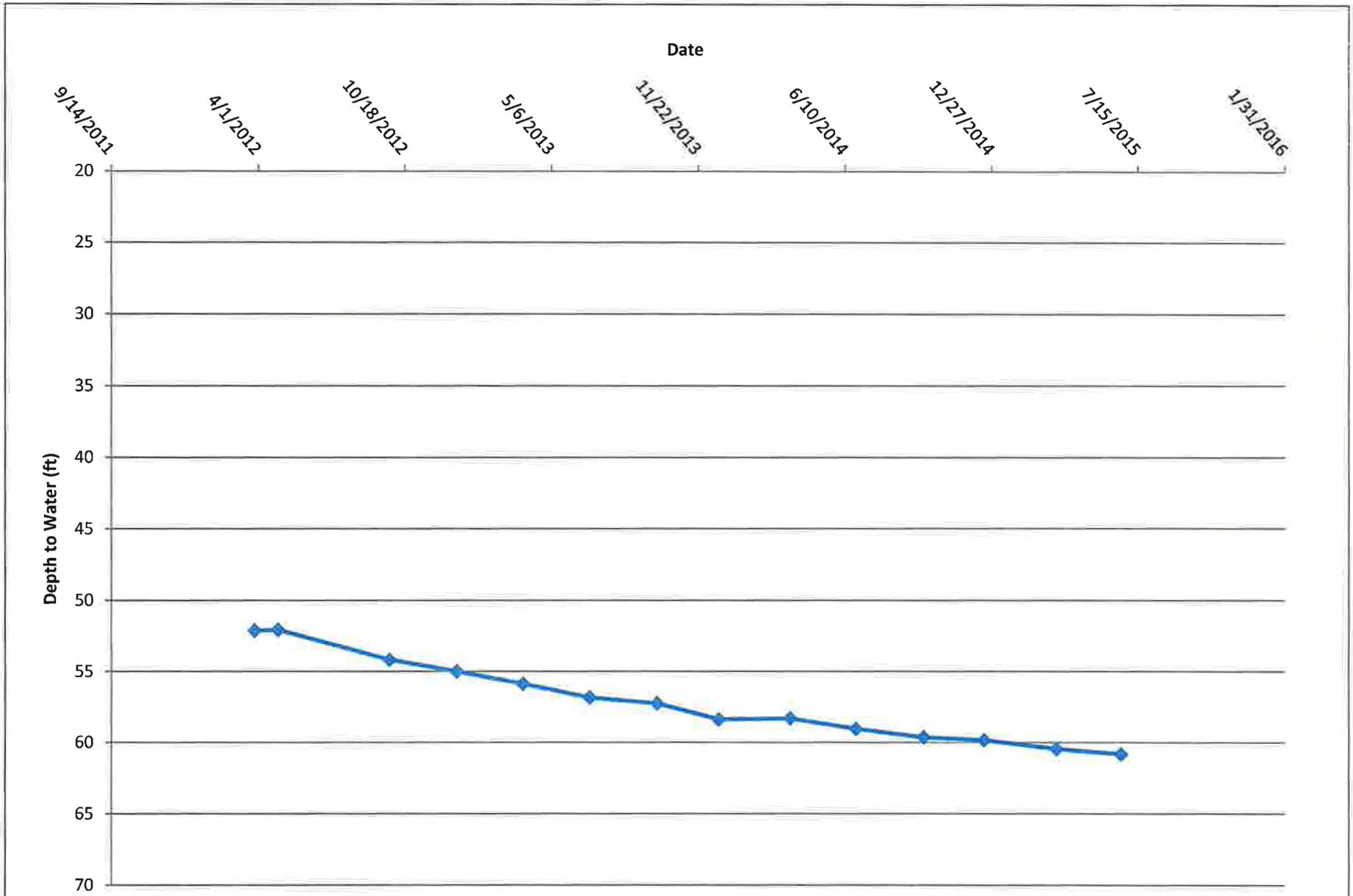


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TWN-4 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.5

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TWN-4

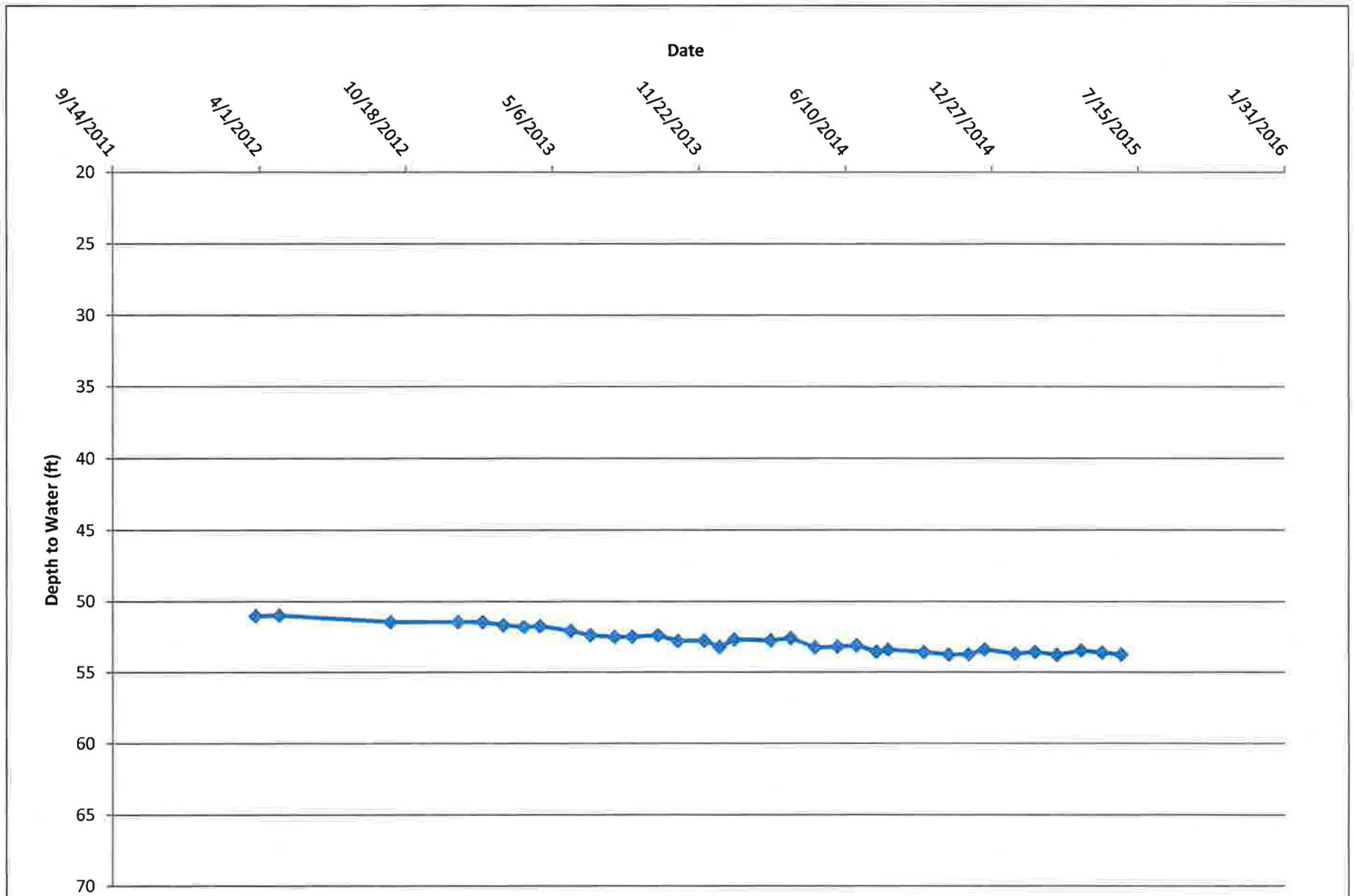


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT MW-19 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.6

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX MW-19

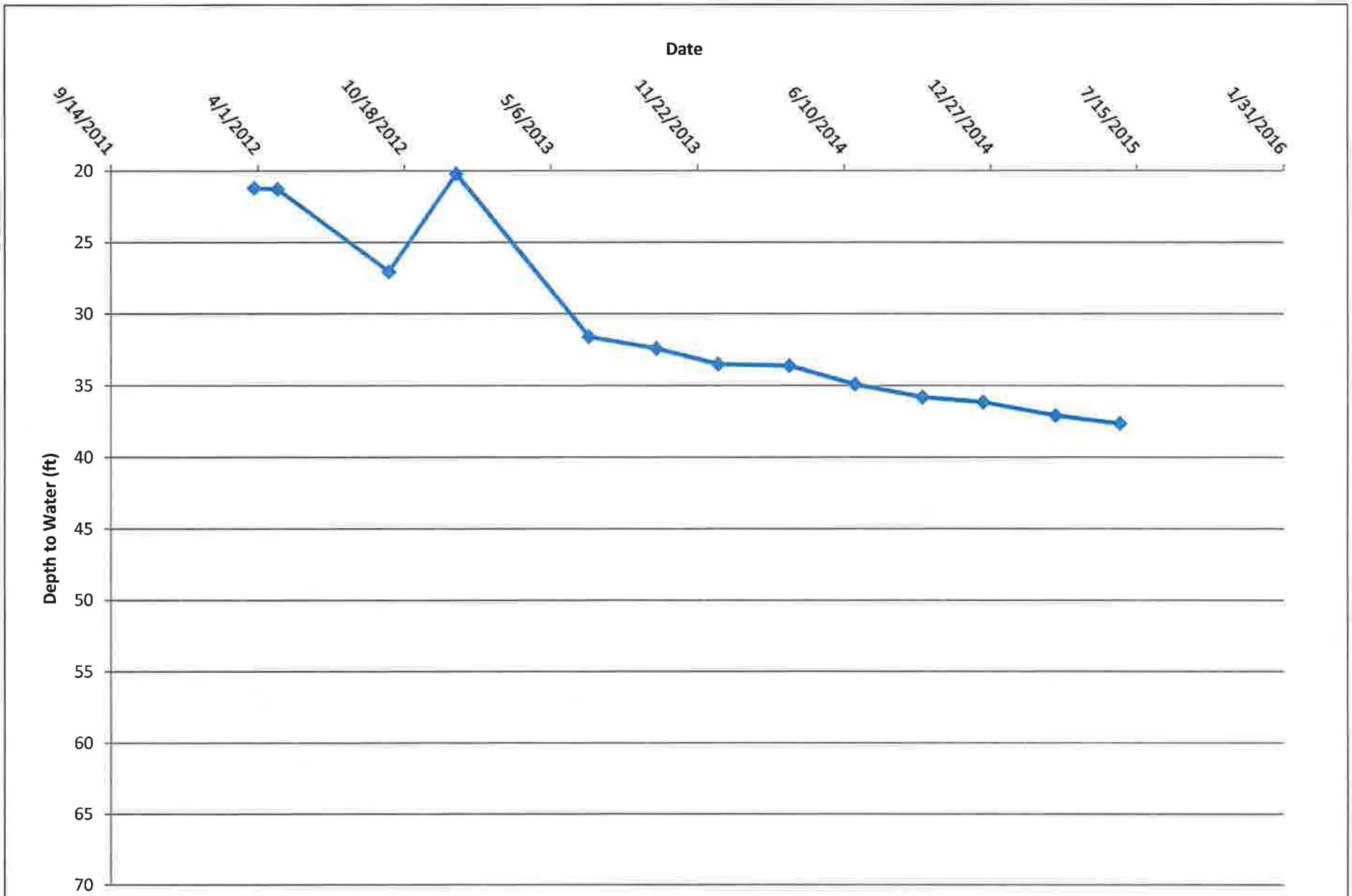


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT MW-27 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.7

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX MW-27

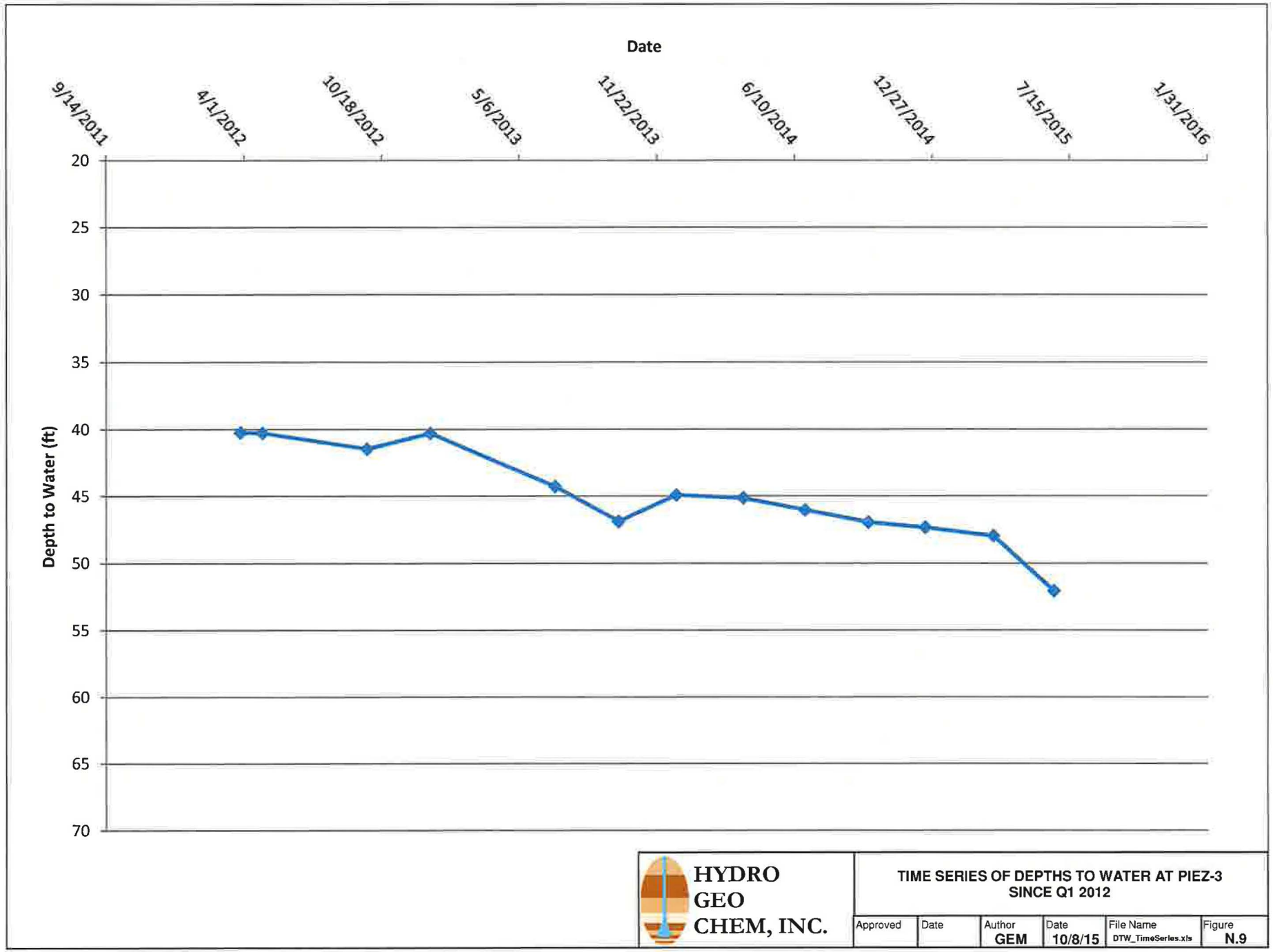


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT PIEZ-2 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.8

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX PIEZ-2

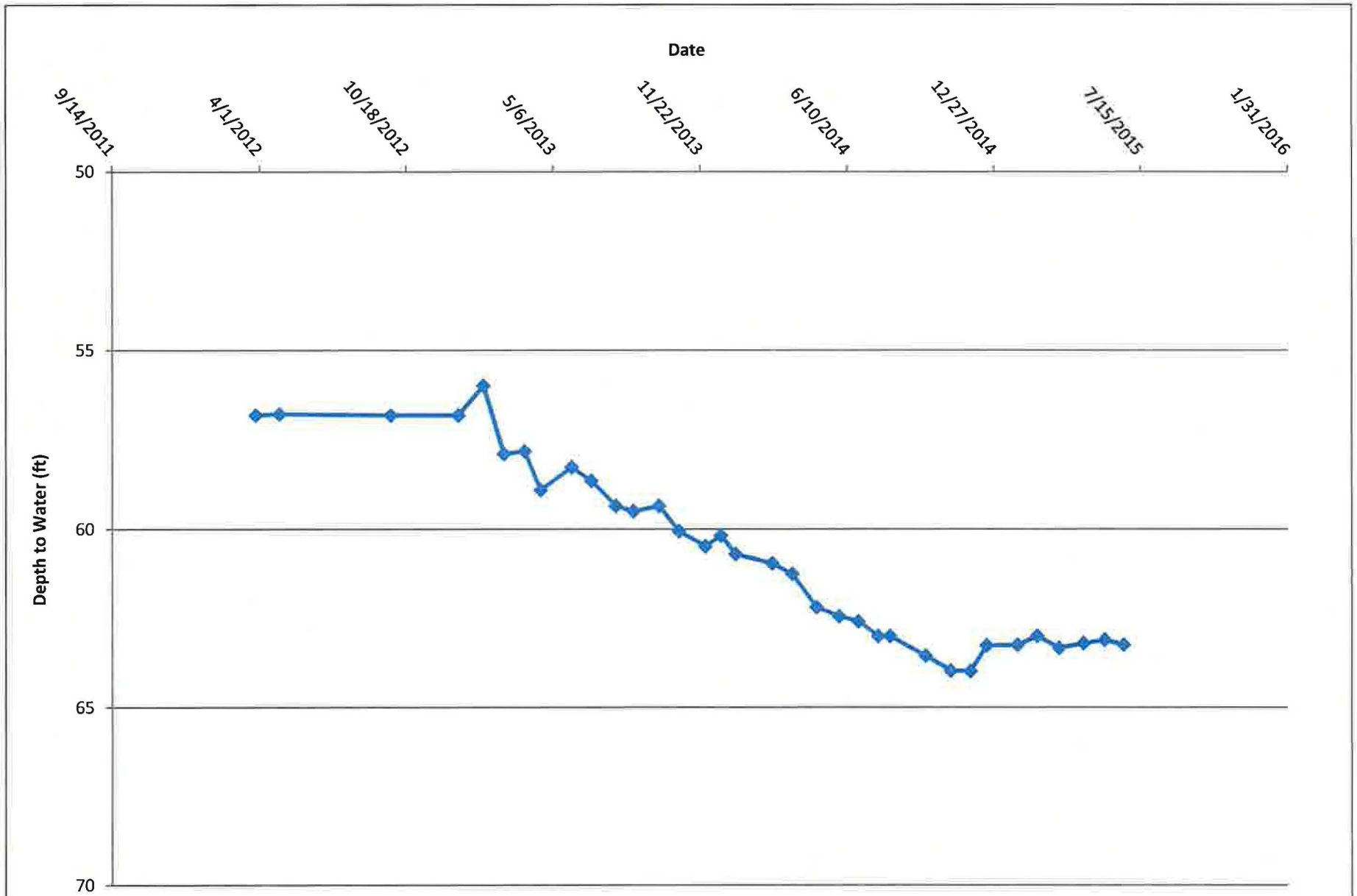


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT PIEZ-3 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15	DTW_TimeSeries.xls	N.9

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX PIEZ-3

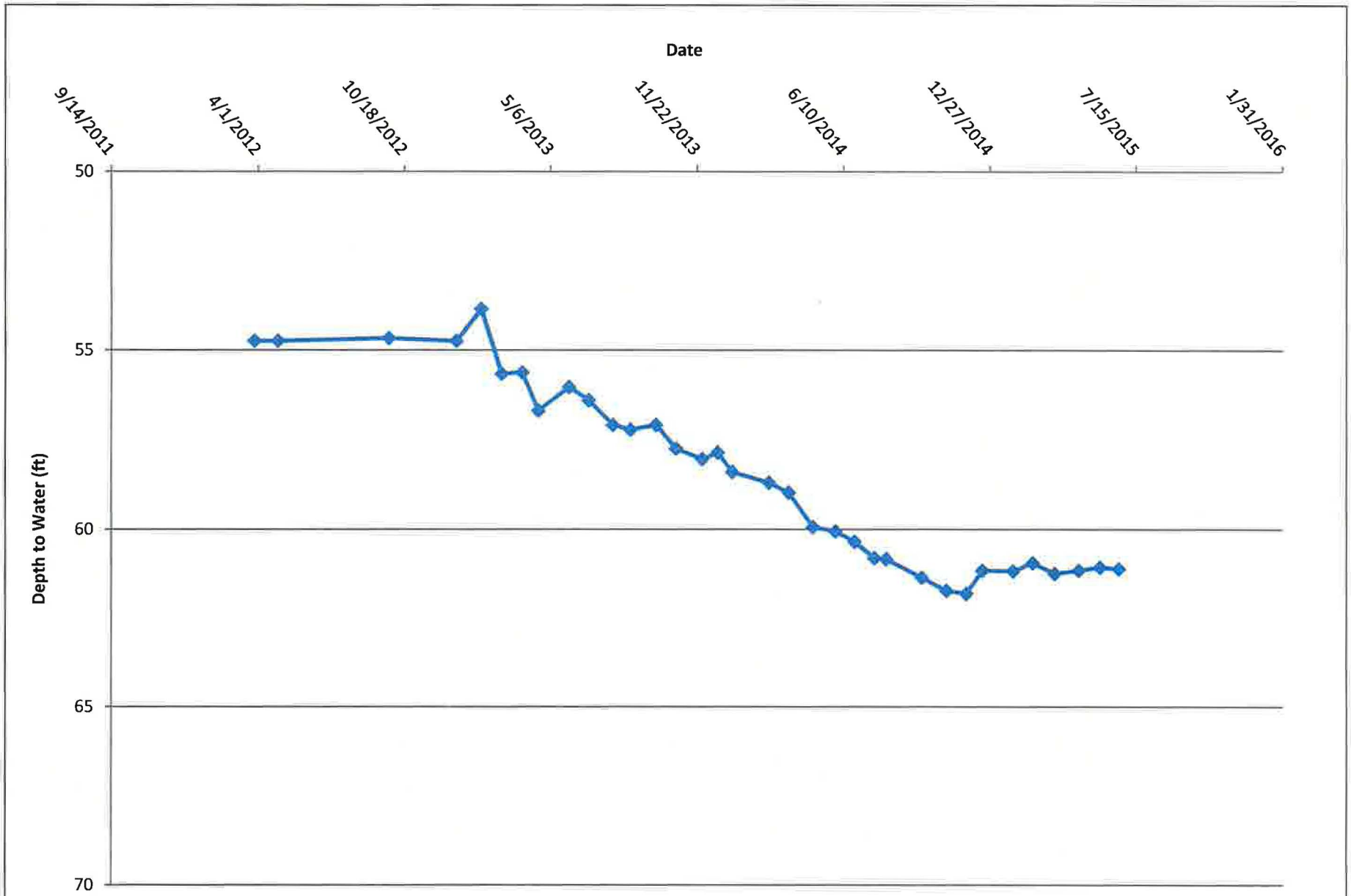


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TW4-5 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/9/15	DTW_TimeSeries.xls	N.10

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TW4-5

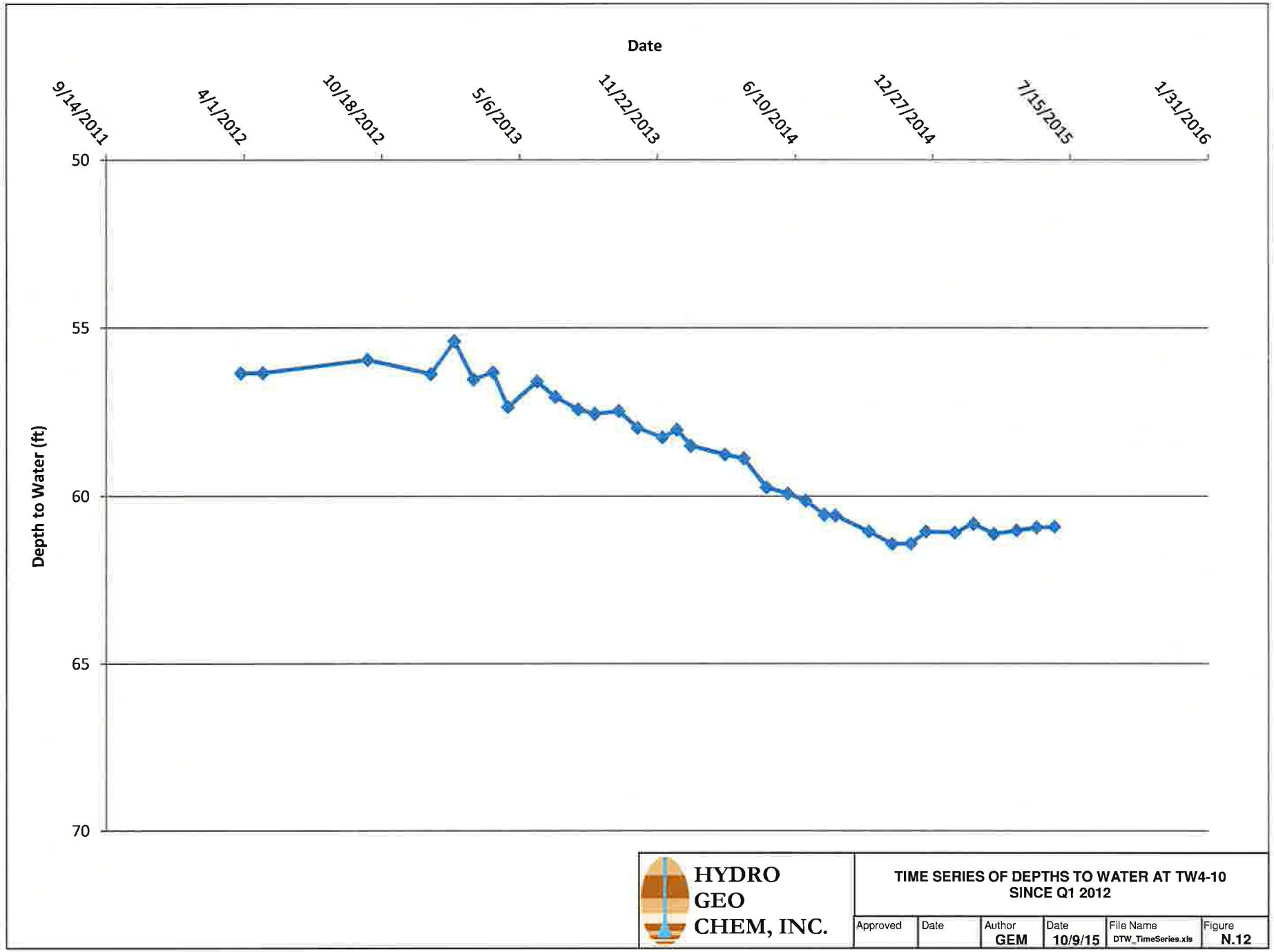


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TW4-9 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/9/15	DTW_TimeSeries.xls	N.11

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TW4-9

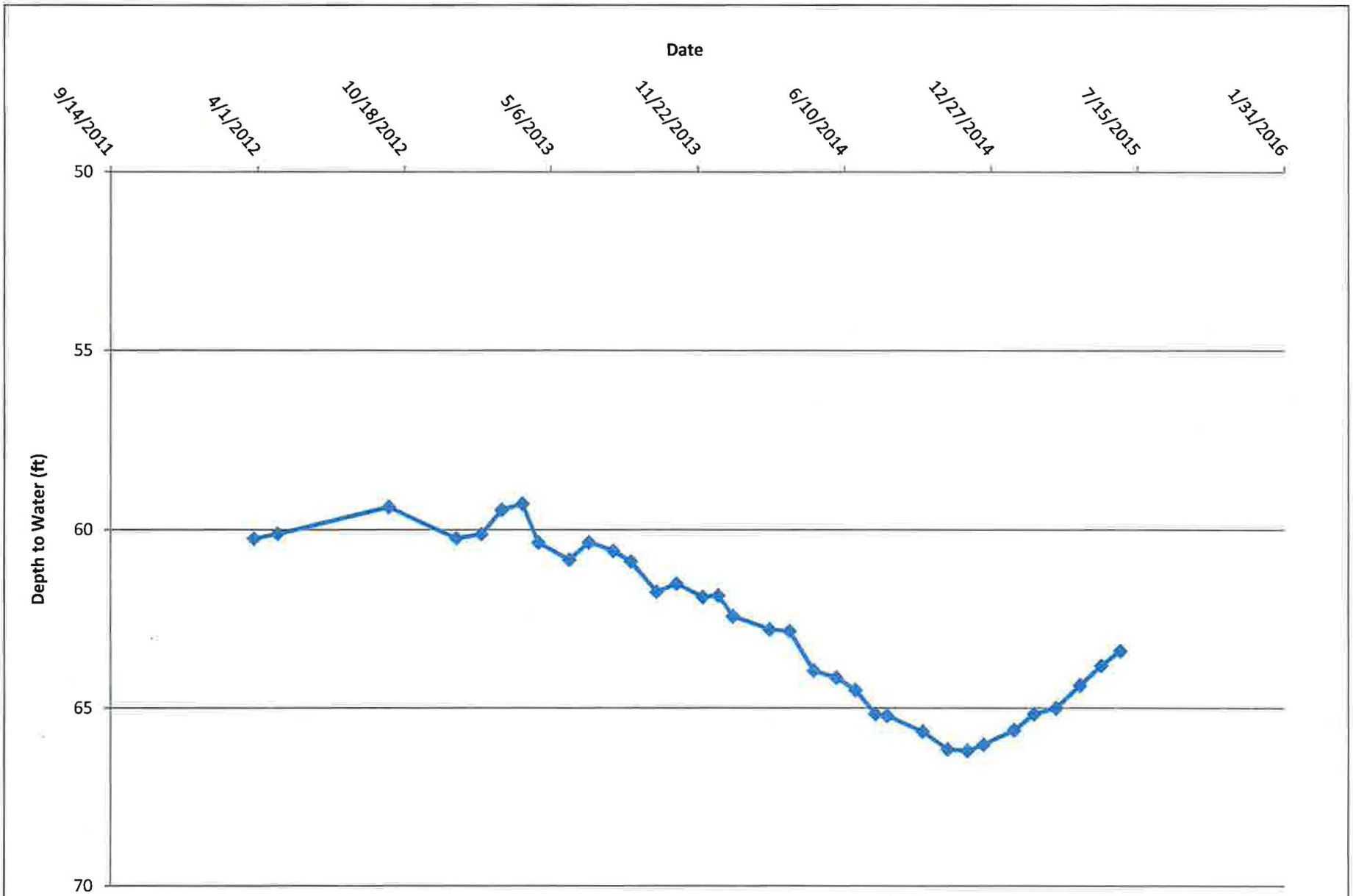


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TW4-10 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/9/15	DTW_TimeSeries.xls	N.12

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TW4-10

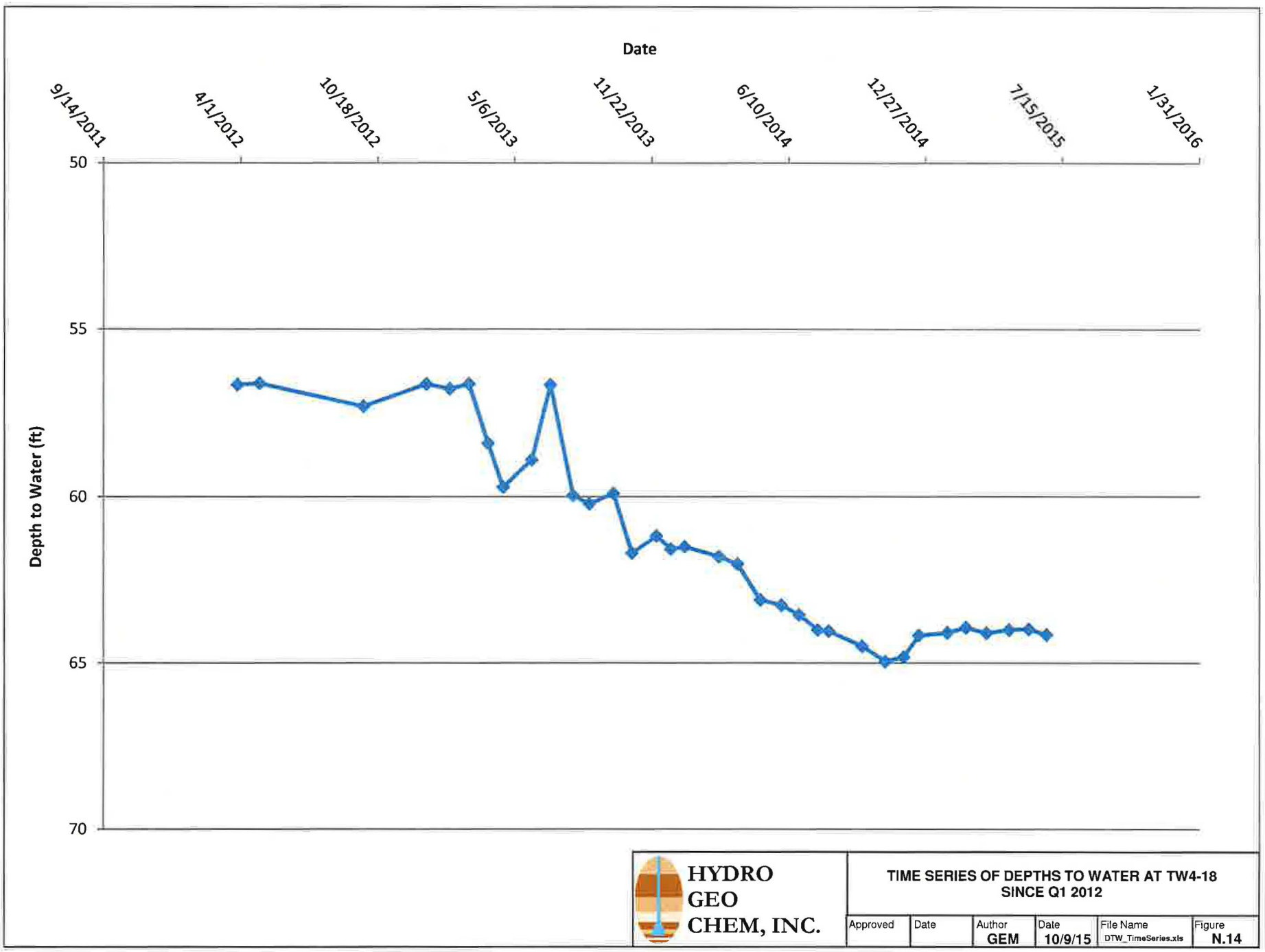


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TW4-16 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/9/15	DTW_TimeSeries.xls	N.13

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TW4-16

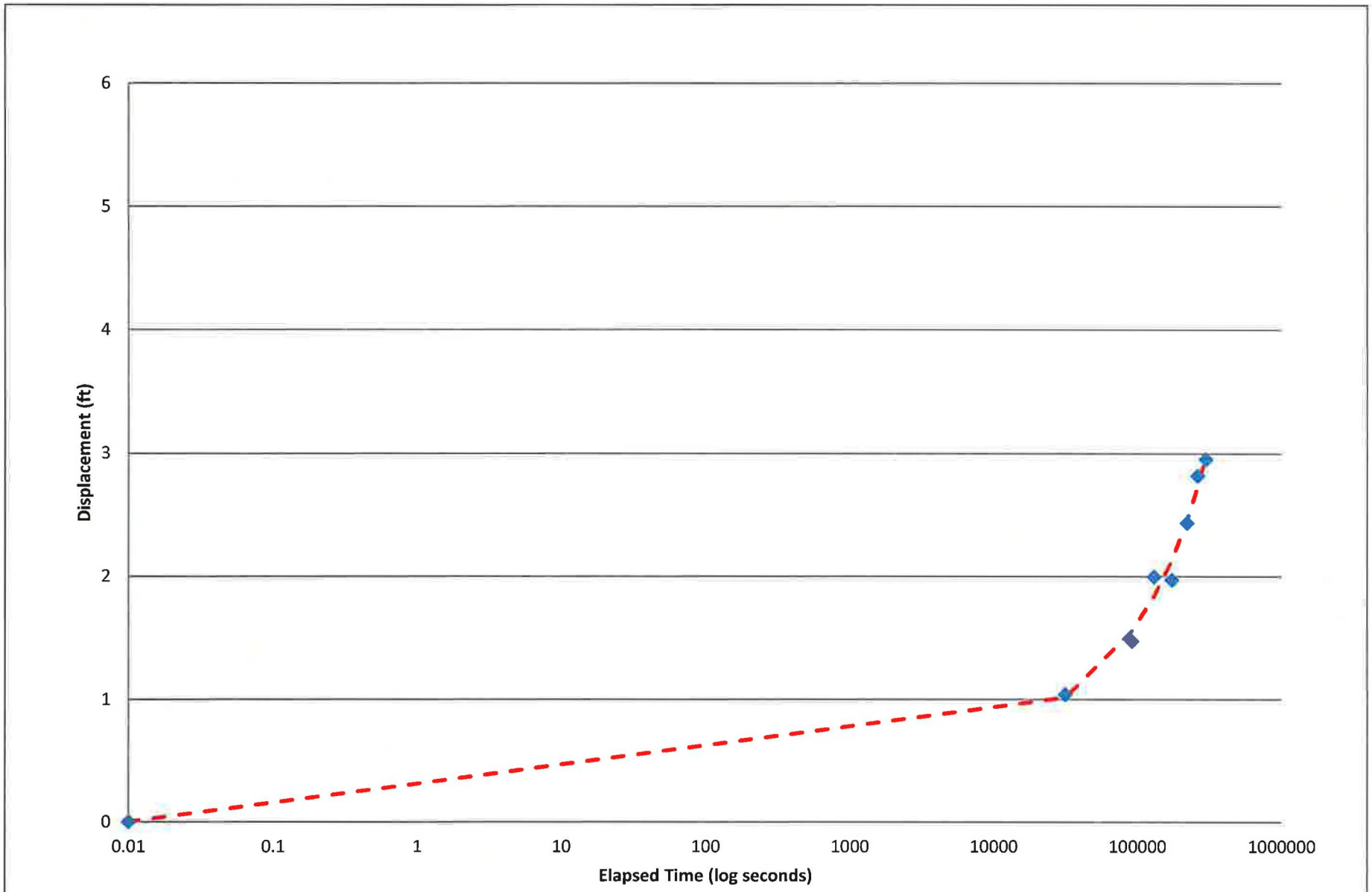


HYDRO GEO CHEM, INC.

TIME SERIES OF DEPTHS TO WATER AT TW4-18 SINCE Q1 2012

Approved	Date	Author	Date	File Name	Figure
		GEM	10/9/15	DTW_TimeSeries.xls	N.14

H:\718000\aug15\Nitrate\DTW_TimeSeries.xls: FX TW4-18



Results
Transmissivity = 45.9 ft^2/d
Storativity = 2.86E-04

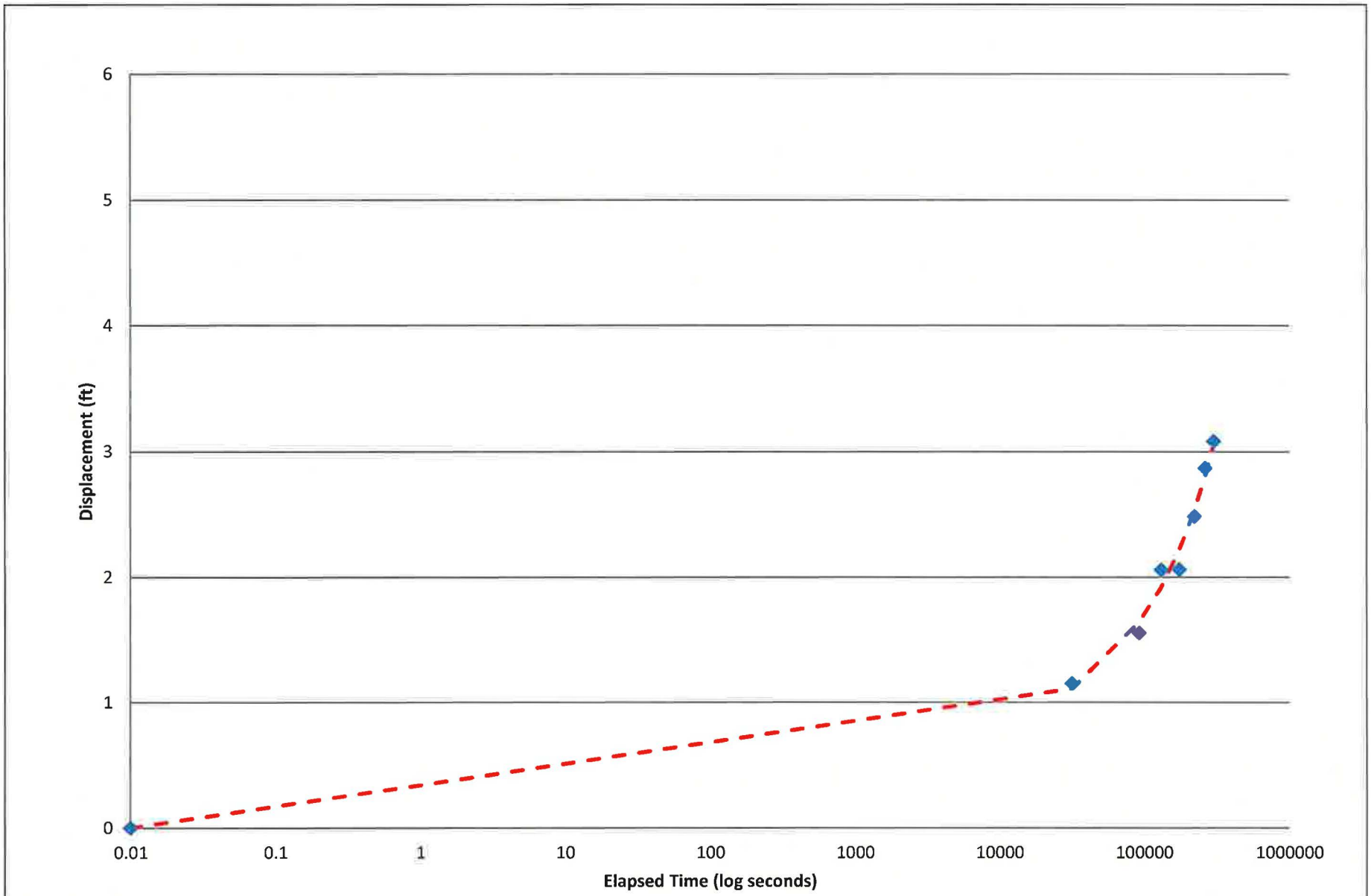
◆ Observed
Simulated

HYDRO GEO CHEM, INC.

OBSERVED AND SIMULATED WATER LEVEL DISPLACEMENTS IN TW4-5 SINCE Q4 2014

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/15		N.15

H:\718000\aug15\Nitrate\WHIP\WHIP_Fits.xls: Fig X TW4-5



Results

Transmissivity = 50.8 ft²/d

Storativity = 1.23E-04

◆ Observed

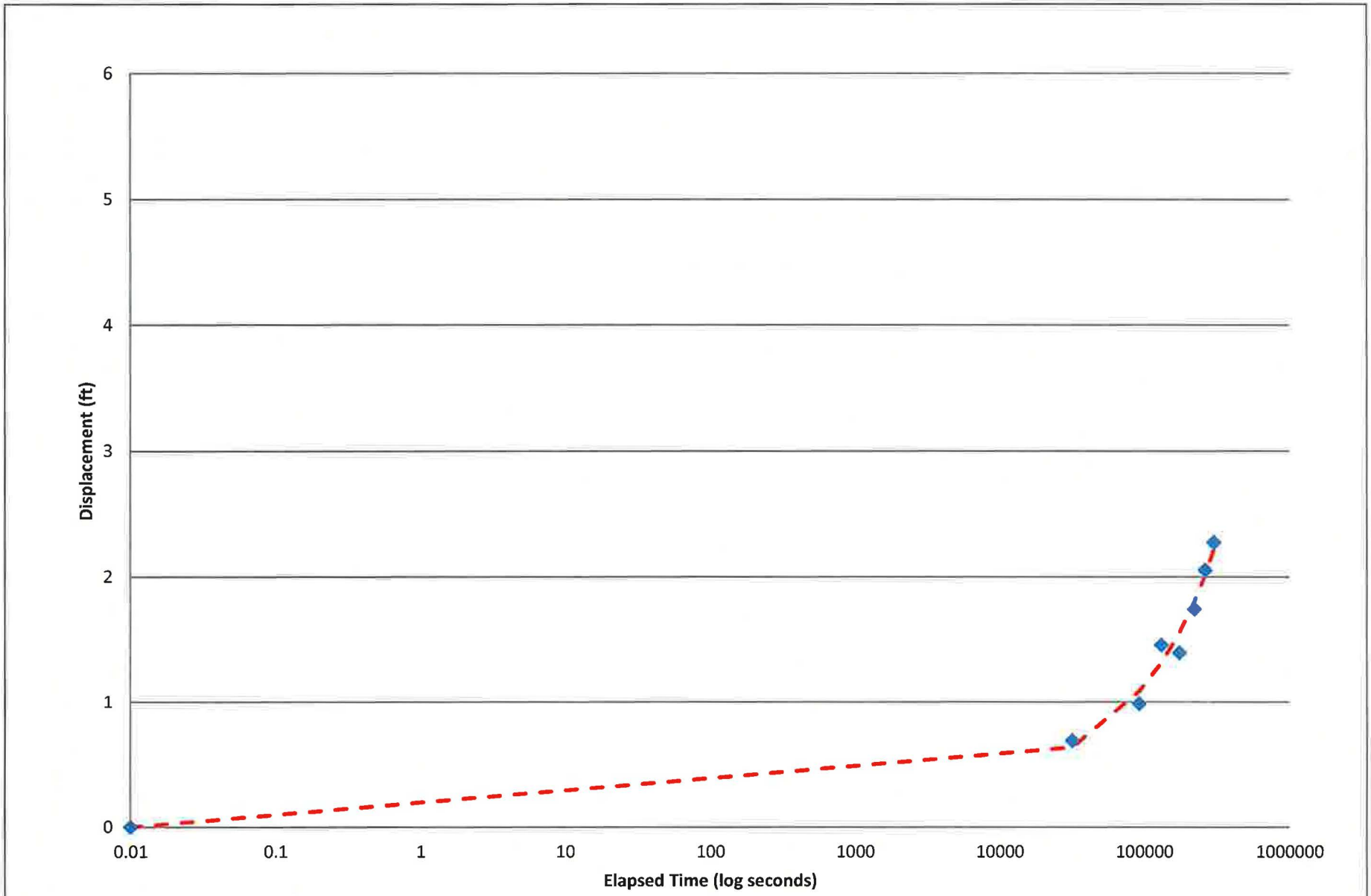
— — Simulated

HYDRO GEO CHEM, INC.

OBSERVED AND SIMULATED WATER LEVEL DISPLACEMENTS IN TW4-9 SINCE Q4 2014

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/2015		N.16

H:\718000\aug15\Nitrate\WHIP\WHIP_Fits.xls: Fig X TW4-9



Results

Transmissivity = 47.4 ft^2/d

Storativity = 8.98E-04

◆ Observed

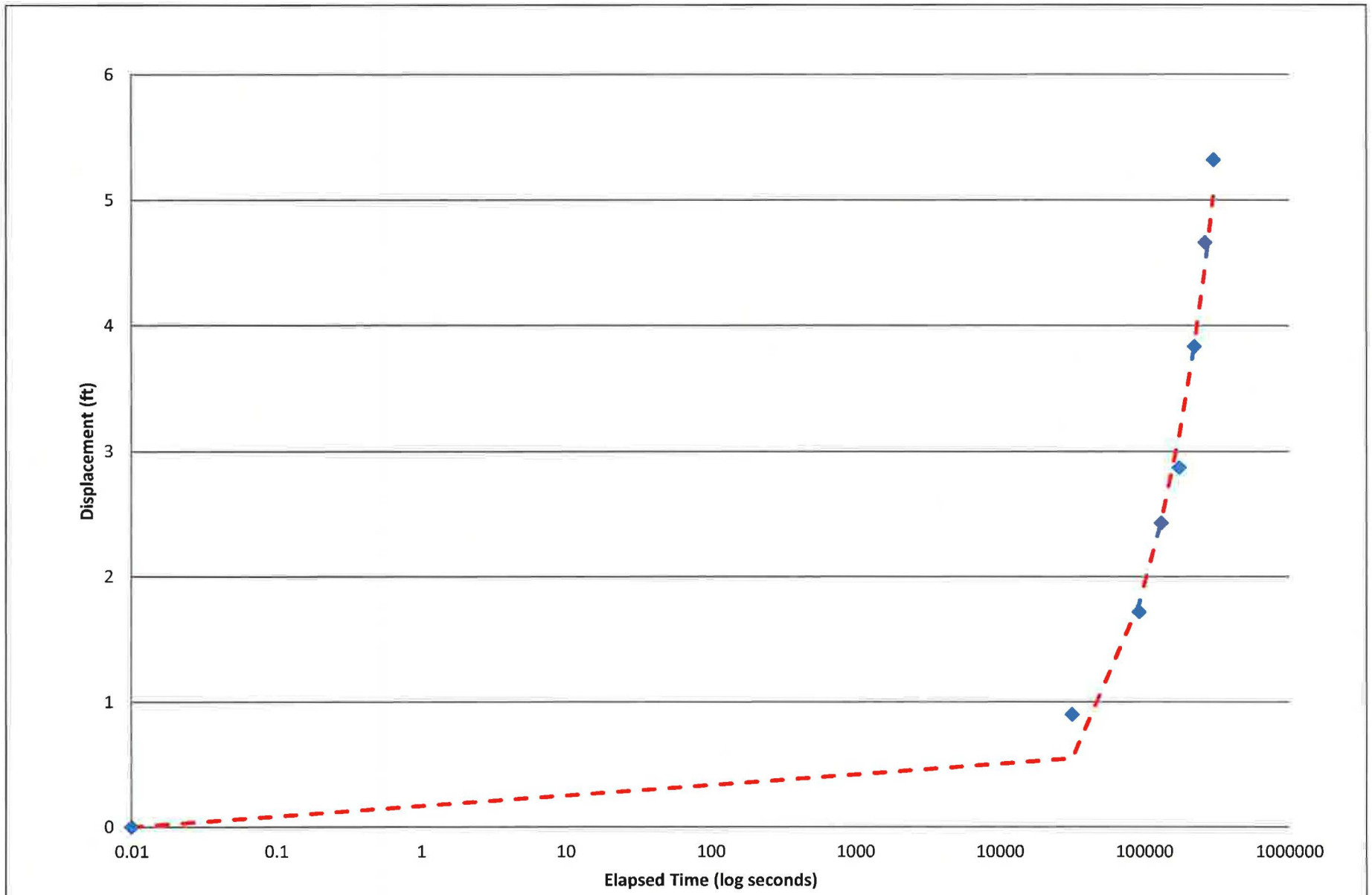
– – Simulated

HYDRO GEO CHEM, INC.

OBSERVED AND SIMULATED WATER LEVEL DISPLACEMENTS IN TW4-10 SINCE Q4 2014

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/2015		N.17

H:\718000\aug15\Nitrate\WHIP\WHIP_Fits.xls: Fig X TW4-10



Results
Transmissivity = 9.2 ft²/d
Storativity = 7.23E-04

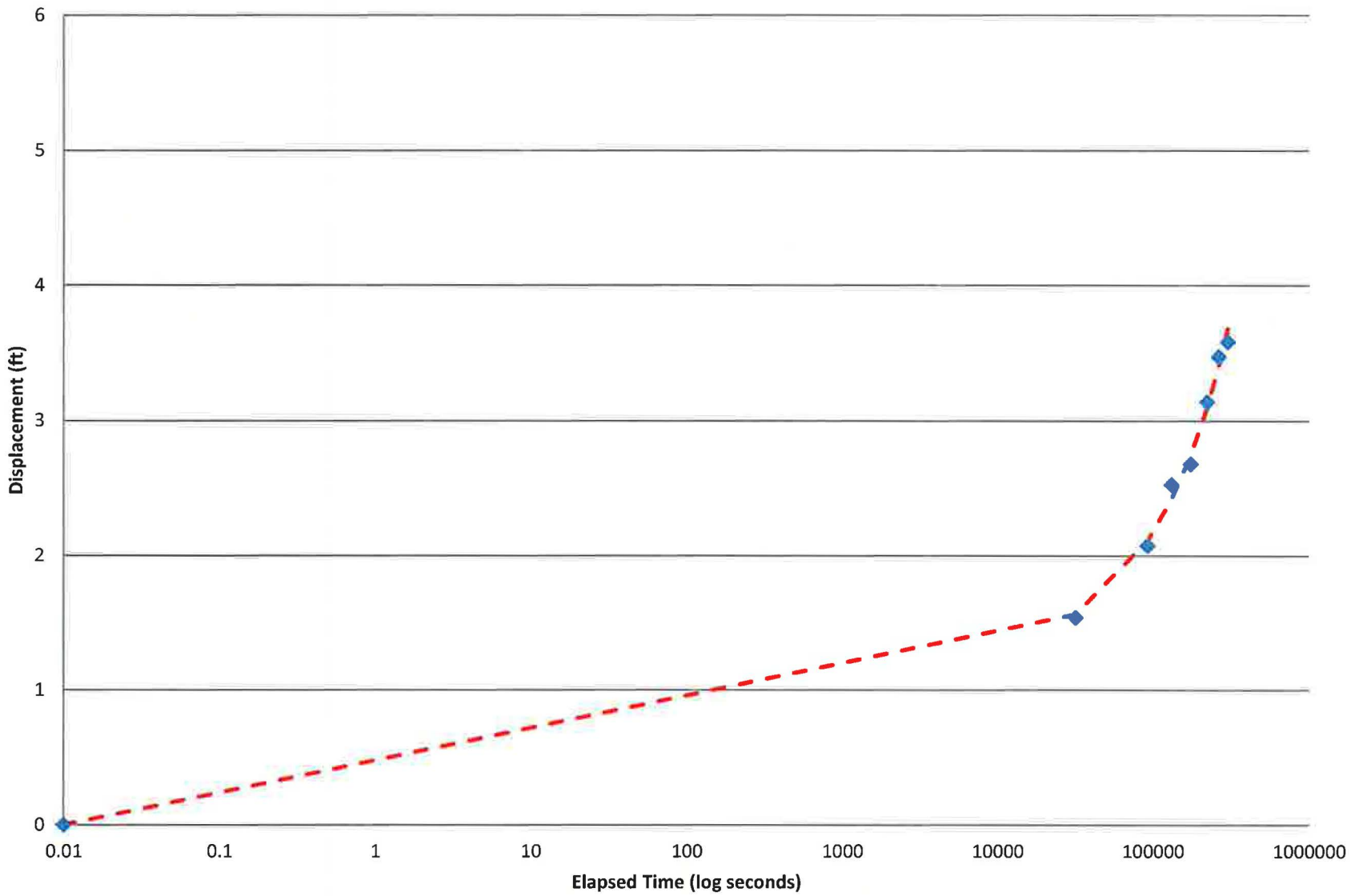
◆ Observed
– – Simulated

HYDRO GEO CHEM, INC.

OBSERVED AND SIMULATED WATER LEVEL DISPLACEMENTS IN TW4-16 SINCE Q4 2014

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/2015		N.18

H:\718000\aug15\Nitrate\WHIP\WHIP_Fits.xls: Fig X TW4-16



Results

Transmissivity = 65.7 ft^2/d

Storativity = 1.29E-05

◆ Observed

– – Simulated

HYDRO GEO CHEM, INC.

OBSERVED AND SIMULATED WATER LEVEL DISPLACEMENTS IN TW4-18 SINCE Q4 2014

Approved	Date	Author	Date	File Name	Figure
		GEM	10/8/2015		N.19

H:\718000\aug15\Nitrate\WHIP\WHIP_Fits.xls: Fig X TW4-18