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August 26, 2013

Sent VIA OVERNIGHT DELIVERY

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

Re: Transmittal of 2nd Quarter 2013 Nitrate Monitoring Report
Stipulation and Consent Order Docket Number UGW12-04 White Mesa Uranium Mill

Dear Mr. Lundberg:

Enclosed are two copies of the White Mesa Uranium Mill Nitrate Monitoring Report for the 2nd Quarter of 2013 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,

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

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

White Mesa Uranium Mill

Nitrate Monitoring Report

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

2nd Quarter
(April through June)
2013

Prepared by:

Energy Fuels Resources (USA) Inc.
225 Union Boulevard, Suite 600
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August 26, 2013

TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 GROUNDWATER NITRATE MONITORING 1
2.1 Samples and Measurements Taken During the Quarter 1
2.1.1 Nitrate Monitoring 2
2.1.2 Parameters Analyzed 3
2.1.3 Groundwater Head and Level Monitoring 3
2.2 Sampling Methodology and Equipment and Decontamination Procedures 4
2.2.1 Well Purging, Sampling and Depth to Groundwater 4
2.3 Field Data 5
2.4 Depth to Groundwater Data and Water Table Contour Map 5
2.5 Laboratory Results 5
2.5.1 Copy of Laboratory Results 5
2.5.2 Regulatory Framework 6
3.0 QUALITY ASSURANCE AND DATA VALIDATION 6
3.1 Field QC Samples 6
3.2 Adherence to Mill Sampling SOPs 7
3.3 Analyte Completeness Review 7
3.4 Data Validation 7
3.4.1 Field Data QA/QC Evaluation 7
3.4.2 Holding Time Evaluation 8
3.4.3 Receipt Temperature Evaluation 8
3.4.4 Analytical Method Checklist 9
3.4.5 Reporting Limit Evaluation 9
3.4.6 QA/QC Evaluation for Sample Duplicates 9
3.4.7 Rinsate Check 9
3.4.8 Other Laboratory QA/QC 9
4.0 INTERPRETATION OF DATA 10
4.1 Interpretation of Groundwater Levels, Gradients and Flow Directions. 10
4.1.1 Current Site Groundwater Contour Map 10
4.1.2 Comparison of Current Groundwater Contour Map to Groundwater Contour Map for Previous Quarter 12
4.1.3 Hydrographs 13
4.1.4 Depth to Groundwater Measured and Groundwater Elevation 13
4.2 Effectiveness of Hydraulic Containment and Capture 13
4.2.1 Hydraulic Containment and Control 13
4.2.2 Current Nitrate and Chloride Isoconcentration Maps 14
4.2.3 Comparison of Areal Extent 14
4.2.4 Nitrate and Chloride Concentration Trend Data and Graphs 14
4.2.5 Interpretation of Analytical Data 14
4.3 Estimation of Pumped Nitrate Mass and Residual Nitrate Mass within the Plume 16
5.0 LONG TERM PUMP TEST AT TWN-02, TW4-22, TW4-24, and TW4-25 OPERATIONS REPORT 17
5.1 Introduction 17
5.2 Pumping Well Data Collection 17

5.3 Water Level Measurements 18
5.4 Pumping Rates and Volumes 18
6.0 CORRECTIVE ACTION REPORT 19
6.1 Assessment of Previous Quarter's Corrective Actions 19
7.0 CONCLUSIONS AND RECOMMENDATIONS 19
8.0 ELECTRONIC DATA FILES AND FORMAT 21
9.0 SIGNATURE AND CERTIFICATION 22

LIST OF TABLES

Table 1 Summary of Well Sampling and Constituents for the Period

Table 2 Nitrate Mass Removal Per Well Per Quarter

Table 3 Nitrate Well Pumping Rates and Volumes

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

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

INDEX OF TABS

Tab A Site Plan and Perched Well Locations White Mesa Site

Tab B Order of Sampling and Field Data Worksheets

Tab C Kriged Current Quarter Groundwater Contour Map and Weekly, Monthly and Quarterly Depth to Water Data

Tab D Kriged Previous Quarter Groundwater Contour Map

Tab E Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

Tab F Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells

Tab G Laboratory Analytical Reports

Tab H Quality Assurance and Data Validation Tables

- H-1 Field Data QA/QC Evaluation
- H-2 Holding Time Evaluation
- H-3 Analytical Method Check
- H-4 Reporting Limit Evaluation
- H-5 QA/QC Evaluation for Sample Duplicates
- H-6 QC Control limits for Analysis and Blanks
- H-7 Receipt Temperature Evaluation
- H-8 Rinsate Evaluation

Tab I Kriged Current Quarter Nitrate and Chloride Isoconcentration Maps

Tab J Analyte Concentration Data Over Time

Tab K Nitrate and Chloride Concentration Trend Graphs

Tab L CSV Transmittal Letter

1.0 INTRODUCTION

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

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

This is the Quarterly Nitrate Monitoring Report, as required under the SCO, State of UDEQ Docket No. UGW12-04 for the 2nd quarter of 2013. This report meets the requirements of SCO, State of UDEQ Docket No. UGW12-04 and is the document which covers nitrate monitoring activities during the 2nd quarter of 2013.

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)

* TW4-22, TW4-24, TW4-25 are chloroform investigation wells 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. Per the CAP and SCO, these wells were not sampled during the this quarter. Additionally, the CAP and SCO 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 will be abandoned in accordance with the DRC-approved Well Abandonment Procedure according to the schedule set by the CAP. TWN-6, TWN-14, TWN-16, and TWN-19 will be 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 all of the nitrate monitoring 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 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 (the "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 which were installed during the Southwest Hydrogeologic Investigation.
- Nitrate wells.
- 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.

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

Depth to groundwater was measured in all of the nitrate wells this quarter. The CAP, which became effective December 12, 2012, approved the abandonment of TWN-5, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-15, and TWN-17 and removed the requirement to measure depth to groundwater in these wells. Since these wells were not abandoned during the quarter, the depth to groundwater was measured. The depth to groundwater measurement data for these wells are provided for information purposes only.

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 non-detect wells and then move to the more contaminated wells in order of nitrate contamination, 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% 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.

Piezometers

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 contaminant investigation monitoring wells, and piezometers identified in Section 2.1.1 above, and Table 1.

2.4 Depth to Groundwater Data and Water Table Contour Map

Depth-to-groundwater measurements which 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

All 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.

Results from analysis of 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 Consent Agreement each triggered a series of actions on EFRI's part. Potential surficial sources of nitrate and chloride have been described in the December 30, 2009 CIR and additional investigations into potential sources were completed and discussed with DRC in 2011. Pursuant to the Consent Agreement, the CAP was submitted to the Director of the Division of Radiation Control (the "Director") on May 7, 2012. The CAP describes activities associated with the nitrate in groundwater. The CAP was approved by the Director on December 12, 2012. This quarterly report documents the monitoring consistent with the program described in the CAP.

3.0 QUALITY ASSURANCE AND DATA VALIDATION

EFRI's QA Manager performed a QA/QC review to confirm compliance of the monitoring program with requirements of the QAP. As required in the QAP, data QA includes preparation and analysis of QC samples in the field, review of field procedures, an analyte completeness review, and 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 ("NELAC") certification and reporting protocol. The Analytical Laboratory QA/QC Summary Reports, including copies of the Mill's Chain of Custody and Analytical Request Record forms for each set of Analytical Results, follow the analytical results under Tab G. Results of 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, all wells conformed to 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.

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.

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

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

3.4.2 Holding Time Evaluation

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

3.4.3 Receipt Temperature Evaluation

Chain of Custody sheets were reviewed to confirm compliance with the QAP requirement in 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.

3.4.4 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.

3.4.5 Reporting Limit Evaluation

All analytical method reporting limits 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.

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

All duplicate results were within a 20% RPD. Results of the RPD test are provided in Tab H.

3.4.7 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.

3.4.8 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.

All 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 all quarterly nitrate samples are within acceptable laboratory limits for all regulated compounds as indicated in Tab H.

The information from the Laboratory QA/QC Summary Reports indicates that the LCS 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 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 RL.

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 (kriged) and plotted in a water table contour map, provided under the same tab. The contour map is based on the current quarter's data for all wells.

The water level contour maps indicate that perched water flow ranges from generally southwesterly beneath the Mill site and tailings cells to generally southerly along the eastern and western margins of White Mesa. Perched water mounding associated with the wildlife ponds locally changes the flow patterns. For example, northeast of the Mill site, mounding associated with wildlife ponds results in locally northerly flow near MW-19. The impact of the mounding associated with the northern ponds, to which water is no longer delivered, is diminishing and is expected to continue to diminish as the mound decays due to reduced recharge. Flow directions are also locally influenced by operation of chloroform pumping wells MW-4, MW-26, TW4-4,

TW4-19, and TW4-20. Well-defined cones of depression are evident in the vicinity of all chloroform pumping wells except TW4-4, which began pumping in the first quarter of 2010. Although operation of TW4-4 has depressed the water table in the vicinity of TW4-4, a well-defined cone of depression is not evident. The lack of a well-defined cone of depression likely results from 1) persistent relatively low water levels at adjacent well TW4-14, and 2) variable permeability conditions in the vicinity of TW4-4.

Flow directions are also locally influenced by the start-up of nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 during the first quarter of 2013. Nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 have not been in operation long enough for well-defined cones of depression to have developed. Although operation of the nitrate pumping system has not yet produced a well-defined impact on water levels, continued operation of the system is expected to produce a well-defined capture zone that will merge with and enhance the capture associated with the chloroform pumping system. The actual impact of nitrate pumping on the chloroform pumping system cannot be evaluated until more data are collected as part of routine monitoring. Furthermore, the persistently low water level at TWN-7 is expected to have an influence on the definition of the capture zone associated with nitrate pumping just as the persistently low water level at TW4-12 has an influence on the definition of capture associated with chloroform pumping well TW4-4.

As discussed above, the lack of a well-defined cone of depression at TW4-4 is due in part to the persistent, relatively low water level at non-pumping well TW4-14, located east of TW4-4 and TW4-6. For the current quarter, the water level at TW4-14 (approximately 5527.02 feet above mean sea level [ft amsl]) is approximately 12 feet lower than the water level at TW4-6 (approximately 5539.46 ft amsl) and nearly 16 feet lower than at TW4-4 (approximately 5543.36 ft amsl) even though TW4-4 is pumping.

The lack of a well-defined cone of depression near TW4-4 also results in part from variable permeability conditions. 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 is approximately 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 a general, long-term increase in water levels in this area due to recharge from the wildlife ponds. Recharge from the southern wildlife pond is expected to continue to have an effect on water levels near TW4-4, but the effects related to recharge from the northern ponds is expected to diminish over time as water is no longer delivered to the northern ponds. Water levels at TW4-4 and TW4-6 increased by nearly 2.7 and 2.9 feet, respectively, between the fourth quarter of 2007 and the fourth quarter of 2009 (just prior to TW4-4 pumping) at rates of approximately 1.2 feet/year and 1.3 feet/year, respectively. However, the increase in water level at TW4-6 has been reduced since the start of pumping at TW4-4 (first quarter of 2010) to less than 0.5 feet/year suggesting that TW4-6 is within the hydraulic influence of TW4-4.

Well TW4-27 (installed south of TW4-14 in the fourth quarter of 2011) has a static water level of approximately 5526.3 ft amsl, similar to TW4-14. 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 was not detected at TW4-14. Chloroform had apparently migrated from TW4-4 to TW4-6 and from TW4-6 to TW4-26 which suggested that TW4-26 was actually downgradient of TW4-6, and TW4-6 was actually downgradient of TW4-4, regardless of the flow direction implied by the low water level at TW4-14. The water level at TW4-26 (5539.0 feet amsl) is, however, lower than water levels at adjacent wells TW4-6 (5539.5 feet amsl), and TW4-23 (5543.2 feet amsl)

Hydraulic tests conducted in November, 2011 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. The similar water levels at TW4-14 and TW4-27, and the low permeability estimate at TW4-27 suggest that both wells are completed in materials having lower permeability than nearby wells. The low permeability condition likely reduces the rate of long-term water level increase at TW4-14 and TW4-27 compared to nearby wells, yielding water levels that appear anomalously low.

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 (first) quarter of 2013 to the water table contour maps for the previous quarter (fourth quarter of 2012) indicates similar patterns of drawdown related to operation of chloroform pumping wells MW-4, MW-26, TW4-4, TW4-19 and TW4-20. Although nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 were brought into operation during the first quarter of 2013, water levels and water level contours for the site have not changed significantly since the last quarter, except for a few locations. As discussed in Section 4.1.1, pumping at 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 yet evident, likely due to variable permeability conditions near TW4-4 and the persistently low water level at adjacent well TW4-14.

Reported decreases in water levels (increases in drawdown) of approximately 7 feet and 2 feet occurred in chloroform pumping wells TW4-19 and MW-4, respectively, and decreases in water levels (increases in drawdown) of approximately 10 feet and 4 feet occurred in nitrate pumping wells TW4-25 and TWN-2, respectively. Changes in water levels at other pumping wells (chloroform pumping wells MW-26, TW4-4 and TW4-20 and nitrate pumping well TW4-22 and TW4-24) 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.

A reported water level increase of nearly 5 feet occurred at MW-23, and a decrease of of approximately 3 feet occurred at MW-20. Water level decreases ranging from approximately 0.5 to 1.5 feet at Piezometers 1, 2, 3, and TWN-4, likely result from cessation of water delivery to the northern wildlife ponds and the consequent continuing decay of the associated perched water

mound. The water level decrease of approximately 1.4 feet reported for TWN-3 is likely related to operation of nitrate pumping well TWN-2, and the decrease of approximately 1.2 feet reported for TWN-1 is likely related to both decay of the perched water mound and operation of nitrate pumping well TW4-25.

The decreases in water levels (increases in drawdown) at chloroform pumping wells MW-4 and TW4-19 have slightly increased the apparent capture of these wells relative to other pumping wells. Overall, the combined capture of chloroform pumping wells MW-4, MW-26, TW4-4, TW4-19, and TW4-20 has been increased slightly since the last quarter.

4.1.3 Hydrographs

Attached under Tab E are hydrographs showing groundwater elevation in each nitrate contaminant investigation monitor well over time.

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.

Water level data will be used to evaluate flow patterns resulting from operation of nitrate pumping wells. Bounding stream tubes defining the capture zone of nitrate pumping wells will be generated from the kriged quarterly perched water level data. Hydraulic containment and control based on water level data will be 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. The CAP requires that EFRI will evaluate the capture zones after four quarters of water level measurements have been taken, and will include the capture zone boundaries on figures in the quarterly nitrate monitoring report following the fourth quarter of water level measurements. The current quarter is the second quarter of data collected after the commencement of pumping the nitrate system. The capture zone maps will be generated after four quarters of data are collected and will be included in the fourth quarter 2013 report which will be submitted on or before March 1, 2014.

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 data, the nitrate plume is under control.

The plume has not migrated downgradient to MW-5 nor MW-11 because nitrate was not detected at MW-5 or MW-11. Between the previous and current quarters, nitrate concentrations decreased slightly in MW-30 and increased slightly in MW-31. Nitrate in MW-30 decreased from 21.4 mg/L to 18.8 mg/L and nitrate in MW-31 increased from 19.3 mg/L to 23.8 mg/L. Changes in both wells were less than 20% suggesting the changes are within the range typical for sampling and analytical error. 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. The relative stability of chloride in these wells also supports minimal plume movement.

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

Although changes in concentration have occurred in wells within the nitrate plume, the boundaries of the plume have not changed significantly since the last quarter, even under the influence of nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 which started pumping during the previous quarter. Nitrate pumping has, however, caused the boundary of the northern portion of the chloroform plume to move slightly to the west toward nitrate pumping well TW4-24. 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.

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 table included under Tab K, 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, and TWN-7;

b) Nitrate concentrations have decreased by more than 20% in the following wells compared to last quarter: TW4-19, TW4-24, and TW4-25;

c) Nitrate concentrations have remained within 20% in the following wells compared to last quarter: MW-27, MW-30, MW-31, TW4-20, TW4-21, TW4-22, TWN-1, TWN-2, TWN-3, TWN-4, and TWN-18;

d) MW-11, MW-25and TW4-16 remained non-detect; and

e) MW-32 increased from non-detect to 0.1 mg/L.

As indicated, nitrate concentrations at many of the wells with detected nitrate were within 20% of the values reported for the wells during the previous quarter, suggesting that variations are within the range typical for sampling and analytical error. Wells MW-26, TW4-18, TW4-19, TW4-24, TW4-25, and TWN-7 had changes in concentration greater than 20%. Of the latter, MW-26 and TW4-19 are chloroform pumping wells, and TW4-24 and TW4-25 are nitrate pumping wells. TW4-18 is located adjacent to nitrate pumping well TW4-19 and TWN-7 is located adjacent to nitrate pumping well TWN-2. Fluctuations in concentrations at pumping wells and wells adjacent to pumping wells likely result in part from the effects of pumping.

Nitrate pumping well TWN-2 had the highest detected nitrate concentration. Since the last quarter, the nitrate concentration in pumping well TWN-2 increased slightly from 57 mg/L to 58 mg/L. The chloroform concentration in nitrate pumping well TW4-22 increased from 10,600 µg/L to 12,500 µg/L. Chloroform increases during the current quarter and the previous quarter are likely in response to the start-up of nitrate pumping in the previous quarter and the presence of historically high chloroform concentrations at adjacent, cross-gradient well TW4-20. MW-27, located west of TWN-2, and TWN-18, located north of TWN-3, bound the nitrate plume to the west and north. 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. MW-25, MW-26, MW-32, TW4-16, TW4-19, TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

Nitrate concentrations outside the nitrate plume exceed 10 mg/L at a few locations: TW4-12 (14.2 mg/L), TW4-26 (13.6 mg/L), TW4-27 (29.4 mg/L), and TW4-28 (14.9 mg/L). All are located southeast of the nitrate plume and are separated from the plume by numerous wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. Concentrations at the above wells are within 20% of their concentrations during the previous quarter.

Chloride concentrations are measured because elevated chloride (greater than 100 mg/L) is associated with the nitrate plume. Chloride concentrations at all measured locations are within 20% of their respective concentrations during the previous quarter except at the following locations: MW-26 (decreased from 77 to 63 mg/L); TW4-24 (decreased from 1,260 mg/L to 916

mg/L); and TW4-25 (decreased from 190 mg/L to 136 mg/L). TW4-24 and TW4-25 are nitrate pumping wells, and MW-26 is a chloroform pumping well. Changes in concentrations in these wells are likely related to the start-up of nitrate pumping during the previous quarter.

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. 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 428 lb of nitrate has been removed from the perched zone since the third quarter of 2010. Prior to the current quarter, 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 92 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 92 lb removed during the current quarter, approximately 78 lb, (or 85%), was removed by the nitrate pumping wells.

Baseline mass and current quarter mass estimates (nitrate + nitrite as N) for the nitrate plume are approximately 43,700 lb and 34,142 lb, respectively. Mass estimates were calculated within the plume boundaries as defined by the kriged 10 mg/L isocons 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 9,558 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).

The mass estimate during the current quarter (34,142 lb) was lower than the mass estimate during the previous quarter (41,350 lb) by 7,208 lb, or 17%. The reasons for the difference were 1) generally lower nitrate concentrations measured in wells within the plume this quarter

compared to last quarter and 2) slightly smaller saturated thicknesses within the plume this quarter compared to last quarter.

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

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

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

5.1 Introduction

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

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

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

The following information documents the operational activities during the quarter.

5.2 Pumping Well Data Collection

Data collected during the quarter included the following:

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

5.3 Water Level Measurements

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

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

Depth to groundwater in all other nitrate contaminant investigation wells was monitored quarterly. As previously stated, depth to groundwater was measured in all of the nitrate wells this quarter. The CAP, which became effective December 12, 2012, approved the abandonment of TWN-5, TWN-8, TWN-9, TWN-10, TWN-11, TWN-12, TWN-13, TWN-15, and TWN-17 and removed the requirement to measure depth to groundwater in these wells. Since these wells were not abandoned during the quarter, the depth to groundwater was measured. The depth to groundwater measurement data are provided for information purposes only.

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

All of 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.

6.0 CORRECTIVE ACTION REPORT

There are no corrective actions resulting from 2nd quarter 2013 nitrate sampling event.

6.1 Assessment of Previous Quarter's Corrective Actions

There were no corrective actions in the 1st quarter 2013 nitrate sampling event.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The water level contour maps for the first quarter, 2013 indicate that operation of the nitrate pumping system has not yet produced a well-defined impact on water levels, and that hydraulic capture associated with the chloroform pumping system has not changed significantly since the previous quarter. As nitrate pumping continues, the hydraulic capture associated with the nitrate pumping wells is expected to merge with the hydraulic capture associated with the chloroform pumping, yielding enhanced capture for both nitrate and chloroform plumes. However, the actual impact of nitrate pumping on the chloroform pumping system cannot be evaluated until more data are collected as part of routine monitoring.

First quarter, 2013 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 wells MW-26, TW4-18, TW4-19, TW4-24, TW4-25, and TWN-7; the concentrations in wells MW-11, MW-25 and TW4-16 remained non-detect; and the concentration in MW-32 increased from non-detect to 0.1 mg/L.

Of the wells showing changes in concentration greater than 20%, MW-26 and TW4-19 are chloroform pumping wells, and TW4-24 and TW4-25 are nitrate pumping wells. TWN-18 is located adjacent to chloroform pumping well TW4-19 and TWN-7 is located adjacent to nitrate pumping well TWN-2. Fluctuations in concentrations at pumping wells and wells adjacent to pumping wells likely result in part from the effects of pumping.

The highest nitrate concentration (58 mg/L) was detected at nitrate pumping well TWN-2. Since the last quarter, the nitrate concentration in TWN-2 increased slightly from 57 mg/L to 58 mg/L. The chloroform concentration in nitrate pumping well TW4-22 increased from 10,600 mg/L to 12,500 mg/L. The increases in chloroform during the current quarter and the previous quarter likely result from the start-up of nitrate pumping in the previous quarter and the historically high chloroform concentrations at adjacent, cross-gradient well TW4-20. MW-27, located west of TWN-2, and TWN-18, located north of TWN-3, bound the nitrate plume to the west and north. 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. MW-25, MW-26, MW-32, TW4-16, TW4-19, TW4-25, TWN-1, and TWN-4 bound the nitrate plume to the east.

Although changes in concentration have occurred in wells within the nitrate plume, the boundaries of the plume have not changed significantly since the last quarter, even under the influence of nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2. Nitrate pumping has, however, caused the boundary of the northern portion of the chloroform plume to move slightly to the west toward nitrate pumping well TW4-24. Nitrate concentrations at the downgradient edge of the plume (MW-30 and MW-31) continue to be relatively stable, suggesting that plume migration is minimal or absent.

The baseline nitrate (nitrate+nitrite as N) plume mass calculated as specified in th CAP (based on second quarter, 2010 data) was approximately 43,700 lb. The nitrate plume mass estimate for the current quarter was calculated as 34,142 lb, which was lower than the previous quarter's estimate of 43,150 lb by 7,208 lb or 17%. The reasons for the difference were 1) generally lower nitrate concentrations measured in wells within the plume this quarter compared to last quarter and 2) slightly smaller saturated thicknesses within the plume this quarter compared to last quarter.

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

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

During the current quarter, a total of approximately 92 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 92 lb removed during the current quarter, approximately 78 lb, or 85%, was removed by the nitrate pumping wells.

Nitrate concentrations outside the nitrate plume exceed 10 mg/L at a few locations: TW4-12 (14.2 mg/L), TW4-26 (13.6 mg/L), TW4-27 (29.4 mg/L), and TW4-28 (14.9 mg/L). All are located southeast of the nitrate plume and are separated from the plume by numerous wells having nitrate concentrations that are either non-detect, or, if detected, are less than 10 mg/L. Concentrations at the above wells have remained within 20% of their concentrations during the previous quarter.

Chloride concentrations at all measured locations are within 20% of their respective concentrations during the previous quarter except at the following locations: MW-26 (decreased

from 77 mg/L to 63 mg/L); TW4-24 (decreased from 1,260 mg/L to 916 mg/L); and TW4-25 (decreased from 190 mg/L to 136 mg/L). TW4-24 and TW4-25 are nitrate pumping wells, and MW-26 is a chloroform pumping well. Changes in concentrations in these wells are likely related to changes in pumping including start-up of nitrate pumping during the previous quarter.

Nitrate mass removal from the perched zone increased substantially by the start-up of nitrate pumping wells TW4-22, TW4-24, TW4-25, and TWN-2 during the previous quarter. 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 reduce nitrate concentrations within the plume and to further reduce or halt downgradient nitrate migration.

8.0 ELECTRONIC DATA FILES AND FORMAT

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

9.0 SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc. on August 26, 2013.

Energy Fuels Resources (USA) Inc.

By:

Harold R. Roberts
Executive Vice President and Chief Operating Officer

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.

Harold R. Roberts
Executive Vice President and Chief Operating Officer
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	4/24/2013	5/14/13 (5/3/13)
Piezometer 02	4/24/2013	5/14/13 (5/3/13)
Piezometer 03	4/24/2013	5/14/13 (5/3/13)
TWN-01	4/23/2013	5/14/13 (5/3/13)
TWN-02	**4/24/2013**	**5/14/13 (5/3/13)**
TWN-03	4/24/2013	5/14/13 (5/3/13)
TWN-04	4/23/2013	5/14/13 (5/3/13)
TWN-07	4/24/2013	5/14/13 (5/3/13)
TWN-07R	4/23/2013	5/14/13 (5/3/13)
TWN-18	4/23/2013	5/14/13 (5/3/13)
TW4-22	**6/5/2013**	**6/18/2013**
TW4-24	**6/5/2013**	**6/18/2013**
TW4-25	**6/5/2013**	**6/18/2013**
TWN-60	4/25/2013	5/14/13 (5/3/13)
TW4-60	6/13/2013	6/24/2013
TWN-65	4/23/2013	5/14/13 (5/3/13)

Note: All wells were sampled for Nitrate and Chloride.

TWN-60 is a DI Field Blank.

TWN-65 is a duplicate of TWN-18.

TW4-60 is the chloroform program DI Field Blank.

Continuously pumped well.

Date in parantheses represents the date the data were originally reported. The data package was resubmitted to correct errors.

Table 2 Nitrate Mass Removal Per Well Per Quarter

Quarter	MW-4 (lbs.)	MW-26 (lbs.)	TW4-19 (lbs.)	TW4-20 (lbs.)	TW4-4 (lbs.)	TW4-22 (lbs.)	TW4-24 (lbs.)	TW4-25 (lbs.)	TWN-02 (lbs.)	Quarter Totals (lbs.)
Q3 2010	3.2	0.3	5.8	1.7	4.7	NA	NA	NA	NA	15.7
Q4 2010	3.8	0.4	17.3	1.4	5.1	NA	NA	NA	NA	28.0
Q1 2011	2.9	0.2	64.5	1.4	4.3	NA	NA	NA	NA	73.3
Q2 2011	3.5	0.1	15.9	2.7	4.7	NA	NA	NA	NA	27.0
Q3 2011	3.5	0.5	3.5	3.9	5.4	NA	NA	NA	NA	16.8
Q4 2011	3.8	0.8	6.2	2.5	6.4	NA	NA	NA	NA	19.7
Q1 2012	3.6	0.4	0.7	5.0	6.0	NA	NA	NA	NA	15.9
Q2 2012	3.7	0.6	3.4	2.1	5.2	NA	NA	NA	NA	15.0
Q3 2012	3.8	0.5	3.6	2.0	4.7	NA	NA	NA	NA	14.7
Q4 2012	3.2	0.4	5.4	1.8	4.2	NA	NA	NA	NA	14.9
Q1 2013	2.5	0.4	14.1	1.4	3.6	8.1	43.4	7.5	14.8	95.7
Q2 2013	2.5	0.5	5.6	1.7	3.5	10.7	37.1	6.4	23.9	91.7
Well Totals (pounds)	**40.0**	**5.2**	**146.0**	**27.7**	**57.8**	**18.8**	**80.5**	**13.9**	**38.7**	**428.4**

Table 3 Nitrate Well Pumping Rates and Volumes

Pumping Well Name	Volume of Water Pumped during the quarter (gals)	Average Pump Rate (gpm)
MW-4	71,187.3	4.3
MW-26	25,343.4	10.2
TW4-4	65,603.4	8.1
TW4-19	226,224.0	14.0
TW4-20	20,252.4	9.7
TW4-22	25,523.2	18.1
TW4-24	187,509.3	18.2
TW4-25	147,310.4	18.1
TWN-2	49,579.3	18.7

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	4.8	4800	302266.7	1450880129	1450.9	3.20	63850.0	0.6	600	241672.3	145003350	145	0.32
Q4 2010	90042.2	5	5000	340809.7	1704048635	1704.0	3.76	60180.0	0.7	700	227781.3	159446910	159	0.35
Q1 2011	76247.6	4.6	4600	288597.2	1327546964	1327.5	2.93	55130.0	0.5	500	208667.1	104333525	104	0.23
Q2 2011	85849.3	4.9	4900	324939.6	1592204042	1592.2	3.51	55800.6	0.3	300	211205.3	63361581	63	0.14
Q3 2011	85327.7	4.9	4900	322965.3	1582530188	1582.5	3.49	65618.0	0.9	900	248364.1	223527717	224	0.49
Q4 2011	89735.0	5.1	5100	339647.0	1732199573	1732.2	3.82	50191.3	2	2000	189974.1	379948141	380	0.84
Q1 2012	90376.4	4.8	4800	342074.7	1641958435	1642.0	3.62	31440.1	1.7	1700	119000.8	202301323	202	0.45
Q2 2012	90916.5	4.9	4900	344118.8	1686181940	1686.2	3.72	26701.2	2.5	2500	101064.1	252660294	253	0.56
Q3 2012	91607.0	5	5000	346732.5	1733662475	1733.7	3.82	25246.0	2.6	2600	95556.1	248445886	248	0.55
Q4 2012	78840.0	4.8	4800	298409.4	1432365120	1432.4	3.16	30797.0	1.46	1460	116566.6	170187302	170	0.38
Q1 2013	62943.7	4.78	4780	238241.9	1138796304	1138.8	2.51	22650.7	2.27	2270	85732.9	194613682	195	0.43
Q2 2013	71187.3	4.22	4220	269443.9	1137053387	1137.1	2.51	25343.4	2.11	2110	95924.8	202401263	202	0.45
Totals Since Q3 2010	992931.75						40.03	512948.3						5.17

Highlighted cells are the total for the current quarter

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	5.9	5900	442463.5	2.611E+09	2611	5.76	39098.3	5.3	5300	147987.1	784331447	784	1.73
Q4 2010	767970.5	2.7	2700	2906768.3	7.848E+09	7848	17.30	36752.5	4.6	4600	139108.2	639897778	640	1.41
Q1 2011	454607.9	17	17000	1720690.9	2.925E+10	29252	64.49	37187.5	4.4	4400	140754.7	619320625	619	1.37
Q2 2011	159238.9	12	12000	602719.2	7.233E+09	7233	15.95	67907.7	4.8	4800	257030.6	1.234E+09	1234	2.72
Q3 2011	141542.6	3	3000	535738.7	1.607E+09	1607	3.54	72311.2	6.5	6500	273697.9	1.779E+09	1779	3.92
Q4 2011	147647.2	5	5000	558844.7	2.794E+09	2794	6.16	72089.3	4.2	4200	272858.0	1.146E+09	1146	2.53
Q1 2012	148747.0	0.6	600	563007.4	337804437	338	0.74	76306.0	7.9	7900	288818.2	2.282E+09	2282	5.03
Q2 2012	172082.0	2.4	2400	651330.5	1.563E+09	1563	3.45	22956.4	11	11000	86890.1	955790963	956	2.11
Q3 2012	171345.0	2.5	2500	648540.8	1.621E+09	1621	3.57	22025.0	10.8	10800	83364.6	900337950	900	1.98
Q4 2012	156653.0	4.1	4100	592931.6	2.431E+09	2431	5.36	20114.0	11	11000	76131.5	837446390	837	1.85
Q1 2013	210908.0	7.99	7990	798286.8	6.378E+09	6378	14.06	18177.0	9.07	9070	68799.9	624015501	624	1.38
Q2 2013	226224.0	2.95	2950	856257.8	2.526E+09	2526	5.57	20252.4	9.76	9760	76655.3	748156060	748	1.65
Totals Since Q3 2010	2873865.3						145.95	505177.3						27.67

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	58.0	58000.0	63124.0	3661189622.0	3661.2	8.07
Q2 2013	65603.4	6.30	6300.00	248308.9	1.6E+09	1564.35	3.45	25523.2	50.2	50200.0	96605.3	4849586662.4	4849.6	10.69
Totals Since Q3 2010	989360.1						57.75	42200.6						18.76

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	35.9	35900.0	548229.2	19681429751.9	19681.4	43.39	99369.9	9.0	9000.0	376115.1	3385035643.5	3385.0	7.46
Q2 2013	**187509.3**	**23.7**	**23700.0**	**709722.7**	**16820428001.9**	**16820.4**	**37.08**	**147310.4**	**5.2**	**5240.0**	**557569.9**	**2921666087.4**	**2921.7**	**6.44**
Totals Since Q3 2010	332351.9						80.47	246680.3						13.90

Highlighted cells are the total for the current quarter

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

	TWN-02							
Quarter	Total Pumped (gal)	Conc (mg/L)	Conc (ug/L)	Total Pumped (liters)	Total (ug)	Total (grams)	Total (pounds)	Total Removed by All Wells (pounds)
Calculations and Data Origination								
Q3 2010	NA	NA	NA	NA	NA	NA	NA	15.69
Q4 2010	NA	NA	NA	NA	NA	NA	NA	27.97
Q1 2011	NA	NA	NA	NA	NA	NA	NA	73.30
Q2 2011	NA	NA	NA	NA	NA	NA	NA	27.01
Q3 2011	NA	NA	NA	NA	NA	NA	NA	16.82
Q4 2011	NA	NA	NA	NA	NA	NA	NA	19.71
Q1 2012	NA	NA	NA	NA	NA	NA	NA	15.86
Q2 2012	NA	NA	NA	NA	NA	NA	NA	15.03
Q3 2012	NA	NA	NA	NA	NA	NA	NA	14.67
Q4 2012	NA	NA	NA	NA	NA	NA	NA	14.92
Q1 2013	31009.4	57.3	57300.0	117370.6	6725334176.7	6725.3	14.83	95.73
Q2 2013	**49579.3**	**57.7**	**57700.0**	**187657.7**	**10827846433.9**	**10827.8**	**23.87**	**91.71**
Totals Since Q3 2010	80588.7						38.70	428.41

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
MW-30	15.8	15	16	16	17	16	16	17	16	17	18.5	21.4	18.8
MW-31	22.5	21	20	21	22	21	21	21	20	21	23.6	19.3	23.8
MW-5	ND	NS	0.2	NS	0.2	NS	0.2	NS	0.1	NS	ND	NS	ND
MW-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not detected
NS = Not Sampled

INDEX OF TABS

Tab A Site Plan and Perched Well Locations White Mesa Site

Tab B Order of Sampling and Field Data Worksheets

Tab C Kriged Current Quarter Groundwater Contour Map and Depth to Water Data

Tab D Kriged Previous Quarter Groundwater Contour Map

Tab E Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

Tab F Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells

Tab G Laboratory Analytical Reports

Tab H Quality Assurance and Data Validation Tables

- H-1 Field Data QA/QC Evaluation
- H-2 Holding Time Evaluation
- H-3 Receipt Temperature Check
- H-4 Analytical Method Check
- H-5 Reporting Limit Evaluation
- H-6 QA/QC Evaluation for Sample Duplicates
- H-7 Rinsate Check
- H-8 QC Control Limits for Analyses and Blanks

Tab I Kriged Current Quarter Isoconcentration Maps

Tab J Analyte Concentration Data Over Time

Tab K Concentration Trend Graphs

Tab L CSV Transmittal Letter

Tab A

Site Plan and Perched Well Locations White Mesa Site

EXPLANATION

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

HYDRO GEO CHEM, INC.

SITE PLAN SHOWING PERCHED WELL AND PIEZOMETER LOCATIONS WHITE MESA SITE

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

Tab B

Order of Sampling and Field Data Worksheets

Nitrate Order
2nd Quarter 2013

Nitrate Samples					
Name	Nitrate Mg/L Previous Qrt.	Date/Purge	sample	Depth	Total Depth
TWN-7	0.591	4/24	0922		105
TWN-1	0.681	4/23	0835		112.5
TWN-4	1.51	4/23	0922		125.7
TWN-18	2.27	4/23	1004		145
TWN-3	22.2	4/24	0935		96
TWN-2	57.3	4/24	0945		96
Duplicate of Rinsate	18	4/23	1004		
Piez 1	0.218	4/24	1000		
Piez 2	8.11	4/24	1013		
Piez 3	1.85	4/24	1025		

Rinsate Samples		
Name	Date	Sample
TWN-7R	4/23	0734
TWN-1R		
TWN-4R		
TWN-18R		
TWN-3R		
TWN-2R		

Samplers: _____

_____

DI 0745 4/25

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

See instruction

Description of Sampling Event: 2nd Quarter Nitrate 2013

Location (well name): Piez-01

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: Piez-01_04242013

Date and Time for Purging: 4/24/2013 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-01

pH Buffer 7.0: 7.0 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 62.28

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

Conductance (avg): 2441

pH of Water (avg): 7.41

Well Water Temp. (avg): 14.38

Redox Potential (Eh): 397

Turbidity: 1.7

Weather Cond.: Partly Cloudy

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

Time	0959	Gal. Purged	0
Conductance	2441	pH	7.41
Temp. °C	14.38		
Redox Potential Eh (mV)	397		
Turbidity (NTU)	1.7		

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: 64.93 Sample Time: 1000

See instruction

Comment

Arrived on site at 0954. Tanner and Garrin present to collect samples. Samples bailed and collected at 1000, water was clear but water had little wood like particles floating. Left site at 1004

Piez-01 04-24-2013 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: 2nd Quarter Nitrate 2013

Location (well name): Piez-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: Piez-02_04242013

Date and Time for Purging: 4/24/2013 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-01

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 μMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 30.62

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

3" Well: 0 (.367h)

Conductance (avg): 681

pH of Water (avg): 7.95

Well Water Temp. (avg): 14.45

Redox Potential (Eh): 384

Turbidity: 2.6

Weather Cond.: Partly Cloudy

Ext'l Amb. Temp. °C (prior sampling event): 8°

Time	1012	Gal. Purged	0
Conductance	681	pH	7.95
Temp. °C	14.45		
Redox Potential Eh (mV)	384		
Turbidity (NTU)	2.6		

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: 35.43 Sample Time: 1013

See instruction

Comment:

Arrived on site at 1004. Tanner and Garrin present to collect samples
Samples collected at 1013 with a bailer. water was clear
Left site at 1016

Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 2nd Quarter Nitrate 2013

Location (well name): Piez-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: Piez-03_04242013

Date and Time for Purging: 4/24/2013 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: ~~TW~~ Piez-02

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 43.06

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

Conductance (avg): 3336

pH of Water (avg): 12.33

Well Water Temp. (avg): 14.81

Redox Potential (Eh): 285

Turbidity: 7.5

Weather Cond.: Partly Cloudy

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

Time: 1024	Gal. Purged: 0	Time:	Gal. Purged:
Conductance: 3336	pH: 12.33	Conductance:	pH:
Temp. °C: 14.81		Temp. °C:	
Redox Potential Eh (mV): 285		Redox Potential Eh (mV):	
Turbidity (NTU): 7.5		Turbidity (NTU):	
Time:	Gal. Purged:	Time:	Gal. Purged:
Conductance:	pH:	Conductance:	pH:
Temp. °C:		Temp. °C:	
Redox Potential Eh (mV):		Redox Potential Eh (mV):	
Turbidity (NTU):		Turbidity (NTU):	

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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: 48.11

Sample Time: 1025

See instruction

Comment:

Arrived on site at 1018. Tanner and Garrin present to collect samples. Samples collected with a bailer at 1025. water was clear. Left site at 1028

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: 2nd Quarter Nitrate 2013

Location (well name): TWN-01

Sampler Name and initials: Tanner Holliday /TH

Field Sample ID: TWN-01_04232013

Date and Time for Purging: 4/23/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: ☒ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: TWN-07

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging: 54.76

Casing Volume (V) 4" Well: 37.70 (.653h)
3" Well: 0 (.367h)

Conductance (avg): ~~75~~ 853

pH of Water (avg): 7.53

Well Water Temp. (avg): 14.67

Redox Potential (Eh): 462

Turbidity: 10.05

Weather Cond.: Cloudy and Windy

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

Time 0832		Gal. Purged	60
Conductance	856	pH	7.34
Temp. °C	14.68		
Redox Potential Eh (mV)	467		
Turbidity (NTU)	9.6		

Time 0833		Gal. Purged	72
Conductance	852	pH	7.56
Temp. °C	14.69		
Redox Potential Eh (mV)	464		
Turbidity (NTU)			

Time 0834		Gal. Purged	84
Conductance	853	pH	7.60
Temp. °C	14.65		
Redox Potential Eh (mV)	461		
Turbidity (NTU)	10.1		

Time 0835		Gal. Purged	96
Conductance	852	pH	7.62
Temp. °C	14.67		
Redox Potential Eh (mV)	458		
Turbidity (NTU)	10.5		

Volume of Water Purged [96] gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = [12]

Time to evacuate two casing volumes (2V)
T = 2V/Q = [6.28]

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 [77.14] Sample Time [0835]

See instruction

Comment

Arrived on site at 0824 Tanner and Garrin present for purge and sampling event. Purge began at 0827. Purged well for a total of 8 minutes. water was clear. Purge ended and samples collected at 0835.
Left site at 0837

TWN-01 04-23-2013 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: 2nd Quarter Nitrate 2013

Location (well name): TWN-02

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-02_04242013

Date and Time for Purging: 4/24/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Continuous

Purging Method Used: ☐ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: TWN-03

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging: 27.70

Casing Volume (V) 4" Well: 44.59 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 3419

pH of Water (avg): 6.79

Well Water Temp. (avg): 14.17

Redox Potential (Eh): 369

Turbidity: 0

Weather Cond.: Partly Cloudy

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

Time	0944	Gal. Purged	0
Conductance	3419	pH	6.79
Temp. °C	14.17		
Redox Potential Eh (mV)	369		
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 = 18.7

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: 78.99 Sample Time: 0945

See instruction

Comment

Arrived on site at 0942. Tanner and Garrin present to collect samples. Samples collected at 1545. Water was clear. Left site at 0948

TWN-02 04-24-2013 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: 2nd Quarter Nitrate 2013

Location (well name): TWN-03

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-03_04242013

Date and Time for Purging: 4/23/2013 and Sampling (if different): 4/24/2013

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: ☒ 2 casings ☐ 3 casings

Sampling Event: 3rd Quarter's Nitrate

Prev. Well Sampled in Sampling Event: TWN-18

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 96.00

Depth to Water Before Purging: 36.30

Casing Volume (V): 4" Well: 38.98 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 2560

pH of Water (avg): 7.47

Well Water Temp. (avg): 14.77

Redox Potential (Eh): 425

Turbidity: 10.1

Weather Cond.: Sunny and Windy

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

Time	1255	Gal. Purged	78		
Conductance	2560	pH	7.47		
Temp. °C	14.77				
Redox Potential Eh (mV)	425				
Turbidity (NTU)	10.1				

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

Time	0935	Gal. Purged	0		
Conductance	2612	pH	7.47		
Temp. °C	14.23				
Redox Potential Eh (mV)					
Turbidity (NTU)					

Before

Time	0937	Gal. Purged	0		
Conductance	2601	pH	7.46		
Temp. °C	14.31				
Redox Potential Eh (mV)					
Turbidity (NTU)					

After

Volume of Water Purged 78 · 54 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 12

Time to evacuate two casing volumes (2V)
T = 2V/Q = 6.49

Number of casing volumes evacuated (if other than two) 1.38

If well evacuated to dryness, number of gallons evacuated 78 · 54

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 94.39 Sample Time 0935

See instruction

Comment

Arrived on site at 1247. Tanner and Garrin present for purge. Purge began at 1251 Purged well for 4 minutes and 30 seconds. Purged well dry! water was clear. Purge ended at 1255. Left site at 1258
Arrived on site at 0931. Tanner and Garrin present to collect samples. Depth to water was 36.68. Samples bailed at 0935. Left site at 0938

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ENERGY FUELS

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

See instruction

Description of Sampling Event: 2nd Quarter Nitrate 2013

Location (well name): TWN-04

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-04_04232013

Date and Time for Purging: 4/23/2013 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: 994 µMHOS/cm Well Depth(0.01ft): 125.70

Depth to Water Before Purging: 46.70 Casing Volume (V) 4" Well: 51.58 (.653h) 3" Well: 0 (.367h)

Conductance (avg): 1070 pH of Water (avg): 6.95

Well Water Temp. (avg): 14.57 Redox Potential (Eh): 418 Turbidity: 5.0

Weather Cond.: Cloudy and Windy Ext'l Amb. Temp. °C (prior sampling event): 6°

Time	0919	Gal. Purged	108
Conductance	1077	pH	6.97
Temp. °C	14.56		
Redox Potential Eh (mV)	418		
Turbidity (NTU)	5.1		

Time	0920	Gal. Purged	120
Conductance	1071	pH	6.95
Temp. °C	14.57		
Redox Potential Eh (mV)	418		
Turbidity (NTU)	5.0		

Time	0921	Gal. Purged	132
Conductance	1066	pH	6.95
Temp. °C	14.60		
Redox Potential Eh (mV)	418		
Turbidity (NTU)	5.0		

Time	0922	Gal. Purged	144
Conductance	1069	pH	6.95
Temp. °C	14.57		
Redox Potential Eh (mV)	418		
Turbidity (NTU)	4.9		

Volume of Water Purged | 144 | gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = | 12 |

Time to evacuate two casing volumes (2V)
T = 2V/Q = | 8.59 |

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 | 47.49 | Sample Time | 0922 |

See instruction

Comment

Arrived on site at 0906 Tanner and Garrin present for purge and sampling event. Purge began at 0910. Purged well for a total of 12 minutes. water was mostly clear throughout purge. Purge ended and samples collected at 0922. Left site at 0925

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ENERGY FUELS

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

See instruction

Description of Sampling Event: 2nd Quarter Nitrate 2013

Location (well name): TWN-07

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-07_04242013

Date and Time for Purging: 4/23/2013 and Sampling (if different): 4/24/2013

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-07R

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 105.00

Depth to Water Before Purging: 87.04

Casing Volume (V) 4" Well: 11.72 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 1266

pH of Water (avg): 7.90

Well Water Temp. (avg): 14.04

Redox Potential (Eh): 458

Turbidity: 21.6

Weather Cond.: cloudy and Windy

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

Time	0959	Gal. Purged	10
Conductance	1266	pH	7.90
Temp. °C	14.04		
Redox Potential Eh (mV)	458		
Turbidity (NTU)	21.6		

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

Time	0921	Gal. Purged	0
Conductance	733	pH	7.53
Temp. °C	15.06		
Redox Potential Eh (mV)	-435		
Turbidity (NTU)	-31		

Time	0923	Gal. Purged	0
Conductance	728	pH	7.55
Temp. °C	15.01		
Redox Potential Eh (mV)			
Turbidity (NTU)	.		

Before / After

Volume of Water Purged: 16 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 12

Time to evacuate two casing volumes (2V)
T = 2V/Q = 1.95

Number of casing volumes evacuated (if other than two): 0. / 1.36

If well evacuated to dryness, number of gallons evacuated: 0. / 16

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: 103.61 Sample Time: 0922

See instruction

Comment

Arrived on site at 0754. Tanner and Garrin present for purge. Purge began at 0758 Purged well for a total of 1 minute and 20 seconds. Purged well dry! water was mostly clear. Left site at 0802.
Arrived on site at 0918. Tanner and Garrin present to collect samples. Depth to water was 96.17. Samples bailed at 0922. Left site at 0925

TWN-07 04-23-2013 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: 2nd Quarter Nitrate 2013

Location (well name): TWN-07R

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-07R_04232013

Date and Time for Purging: 4/23/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: ☐ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: N/A

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 0

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

Conductance (avg): 2.3

pH of Water (avg): 9.00

Well Water Temp. (avg): 14.87

Redox Potential (Eh): 413

Turbidity: 0

Weather Cond.: Cloudy and Windy

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

Time	0732	Gal. Purged	130
Conductance	2.3	pH	9.00
Temp. °C	14.87		
Redox Potential Eh (mV)	413		
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 = 12

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	☐	☒		☐	☒

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

Final Depth: 0 Sample Time: 0734

See instruction

Comment

Arrived on site at 0715 Tanner and Garrin present for Rinsate. Rinsate began at 0720 pumped 50 Gallons of soap water and 100 Gallons of DI water. Purge ended at 0734. Left site at 0737

TWN-07R 04-23-2013 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: 2nd Quarter Nitrate 2013

Location (well name): TWN-18

Sampler Name and initials: Tanner Holliday TH

Field Sample ID: TWN-18_04232013

Date and Time for Purging: 4/23/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☑ pump or ☐ bailer

Well Pump (if other than Bennet): Grundfos

Purging Method Used: ☑ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: TWN-04

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 145.00

Depth to Water Before Purging: 58.12

Casing Volume (V) 4" Well: 56.73 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 2336

pH of Water (avg): 7.27

Well Water Temp. (avg): 14.18

Redox Potential (Eh): 407

Turbidity: 17.47

Weather Cond.: Cloudy Windy

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

Time	1001	Gal. Purged	108
Conductance	2328	pH	7.21
Temp. °C	14.20		
Redox Potential Eh (mV)	409		
Turbidity (NTU)	18		

Time	1002	Gal. Purged	120
Conductance	2337	pH	7.28
Temp. °C	14.19		
Redox Potential Eh (mV)	407		
Turbidity (NTU)	17.7		

Time	1003	Gal. Purged	132
Conductance	2338	pH	7.34
Temp. °C	14.18		
Redox Potential Eh (mV)	406		
Turbidity (NTU)	17.0		

Time	1004	Gal. Purged	144
Conductance	2341	pH	7.28
Temp. °C	14.16		
Redox Potential Eh (mV)	406		
Turbidity (NTU)	17.2		

Volume of Water Purged [144] gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = [.2] 12

Time to evacuate two casing volumes (2V)
T = 2V/Q = [9.45]

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 [60.07] Sample Time [1004]

See instruction

Comment

Arrived on site at 0948 Tanner and Garrin present for purge and sampling event. Purge began at 0952. Purged well for a total of 12 minutes. water was clear. Purge ended and samples collected at 1004. Left site at 1007

TWN-18 04-23-2013 Do not touch this cell (SheetName)

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

See instruction

Description of Sampling Event: Quarterly Chloroform 2013 2nd Quarter

Location (well name): TW4-22

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-22_06052013

Date and Time for Purging: 6/5/2013 and Sampling (if different): N/A

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

Purging Method Used: ☒ 2 casings ☐ 3 casings

Sampling Event: Quarterly Chloroform Prev. Well Sampled in Sampling Event: TW4-24

pH Buffer 7.0: 7.0 pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/cm Well Depth(0.01ft): 113.50

Depth to Water Before Purging: 57.65 Casing Volume (V) 4" Well: 36.47 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 6188 pH of Water (avg): 7.23

Well Water Temp. (avg): 16.29 Redox Potential (Eh): 278 Turbidity: 0

Weather Cond.: Partly Cloudy Ext'l Amb. Temp. °C (prior sampling event): 13°

Time: 0829	Gal. Purged: 0	Time:	Gal. Purged:
Conductance: 6188	pH: 7.23	Conductance:	pH:
Temp. °C: 16.29		Temp. °C:	
Redox Potential Eh (mV): 278		Redox Potential Eh (mV):	
Turbidity (NTU): 0		Turbidity (NTU):	
Time:	Gal. Purged:	Time:	Gal. Purged:
Conductance:	pH:	Conductance:	pH:
Temp. °C:		Temp. °C:	
Redox Potential Eh (mV):		Redox Potential Eh (mV):	
Turbidity (NTU):		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 = 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	☒	☐
Nutriens	☒	☐	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: 104.11 Sample Time: 0830

See instruction

Comment:

Arrived on site at 0821 Tanner present to collect samples. Samples collected at 0830 water was clear. Left site at 0833

Continuous Pumping well

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: 2nd Quarter Chloroform 2013

Location (well name): TW4-24

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-24_06052013

Date and Time for Purging: 6/5/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Continuous

Purging Method Used: ☒ 2 casings ☐ 3 casings

Sampling Event: Quarterly Chloroform

Prev. Well Sampled in Sampling Event: TW4-25

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 112.50

Depth to Water Before Purging: 63.51

Casing Volume (V) 4" Well: 31.99 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 8118

pH of Water (avg): 6.99

Well Water Temp. (avg): 15.71

Redox Potential (Eh): 271

Turbidity: 1.3

Weather Cond.: Partly Cloudy

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

Time	0811	Gal. Purged	0
Conductance	8118	pH	6.99
Temp. °C	15.71		
Redox Potential Eh (mV)	271		
Turbidity (NTU)	1.3		

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 = 17.80

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: 67.11 Sample Time: 0812

See instruction

Comment

Arrived on site at 0805 Tanner present to collect samples. samples collected at 0812 water was clear. Left site at 0820

Continuous Pumping Well

TW4-24 06-05-2013 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: 2nd Quarter Chloroform 2013

Location (well name): TW4-25

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-25_06052013

Date and Time for Purging: 6/5/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

Well Pump (if other than Bennet): Continuous

Purging Method Used: ☒ 2 casings ☐ 3 casings

Sampling Event: Quarterly Chloroform

Prev. Well Sampled in Sampling Event: TW4-27

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 134.8

Depth to Water Before Purging: 58.80

Casing Volume (V) 4" Well: 49.62 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 3162

pH of Water (avg): 7.14

Well Water Temp. (avg): 15.57

Redox Potential (Eh): 367

Turbidity: 5.3

Weather Cond.: Partly Cloudy

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

Time	0751	Gal. Purged	0
Conductance	3162	pH	7.14
Temp. °C	15.57		
Redox Potential Eh (mV)	367		
Turbidity (NTU)	5.3		

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 = 18.0

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:

Sample Time: 0752

See instruction

Comment

Arrived on site at 0747 Tanner present to collect samples. samples collected at 0752 water was clear. Left site at 0759

Continuous Pumping Well

TW4-25 06-05-2013 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: 2nd Quarter Chloroform 2013

Location (well name): TW4-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TW4-60_06132013

Date and Time for Purging: 6/13/2013 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: 999 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 0

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

Conductance (avg): 0.5

pH of Water (avg): 7.42

Well Water Temp. (avg): 23.08

Redox Potential (Eh): 3

Turbidity: 0

Weather Cond.: Sunny

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

Time	0829	Gal. Purged	0
Conductance	0.5	pH	7.42
Temp. °C	23.08		
Redox Potential Eh (mV)	301		
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: 0830

See instruction

Comment

Arrived in Lab at 0825. Tanner present to collect a D.I Sample. Samples collected at 0830. Left site at 0833

D.I. Sample

TW4-60 06-13-2013 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: 2nd Quarter Nitrate 2013

Location (well name): TWN-60

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-60_04252013

Date and Time for Purging: 4/25/2013 and Sampling (if different): N/A

Well Purging Equip Used: ☒ pump or ☐ bailer

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

Purging Method Used: ☐ 2 casings ☐ 3 casings

Sampling Event: Quarterly Nitrate

Prev. Well Sampled in Sampling Event: Piez 03

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 0

Depth to Water Before Purging: 0

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

Conductance (avg): 3.6

pH of Water (avg): 5.98

Well Water Temp. (avg): 18.60

Redox Potential (Eh): 169

Turbidity: 0

Weather Cond.: Clear

Ext'l Amb. Temp. °C (prior sampling event): 19°

Time	0744	Gal. Purged	
Conductance	3.6	pH	5.98
Temp. °C	18.60		
Redox Potential Eh (mV)	169		
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: 0745

See instruction

Comment

DI Sample

TWN-60 04-25-2013 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: 2nd Quarter Nitrate 2013

Location (well name): TWN-65

Sampler Name and initials: Tanner Holliday/TH

Field Sample ID: TWN-65_04232013

Date and Time for Purging: 4/23/2013 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-04

pH Buffer 7.0: 7.0

pH Buffer 4.0: 4.0

Specific Conductance: 999 µMHOS/ cm

Well Depth(0.01ft): 145.00

Depth to Water Before Purging: 58.12

Casing Volume (V) 4" Well: 56.73 (.653h)
3" Well: 0 (.367h)

Conductance (avg): 2336

pH of Water (avg): 7.27

Well Water Temp. (avg): 14.18

Redox Potential (Eh): 407

Turbidity: 17.47

Weather Cond.: Cloudy and Windy

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

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: 144 gallon(s)

Pumping Rate Calculation

Flow Rate (Q), in gpm.
S/60 = 12

Time to evacuate two casing volumes (2V)
T = 2V/Q = 9.45

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: 60.01 Sample Time: 1004

See instruction

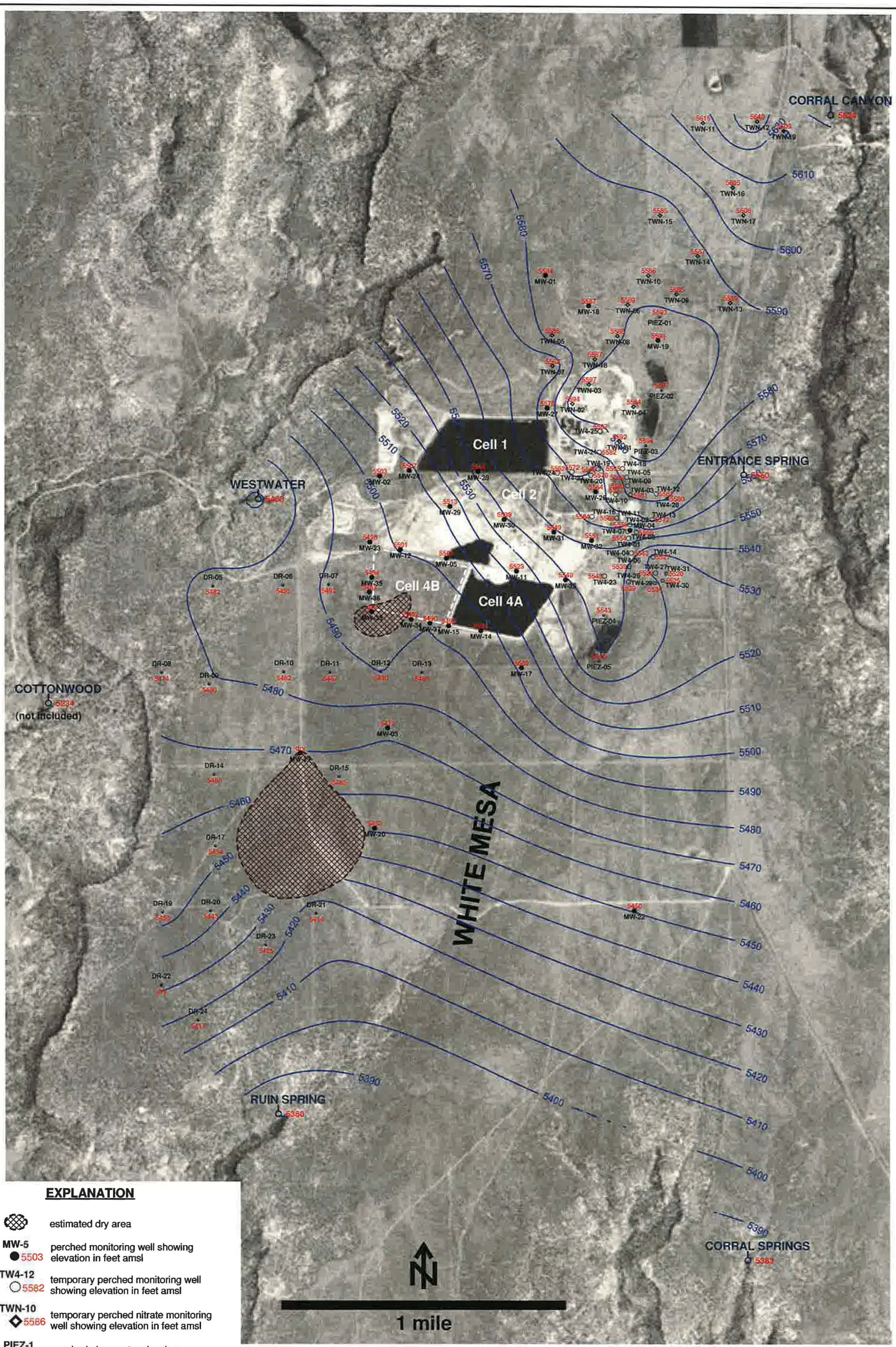
Comment

Duplicate of TWN-18

TWN-65 04-23-2013 Do not touch this cell (SheetName)

Tab C

Kriged Current Quarter Groundwater Contour Map and Depth to Water Summary



EXPLANATION

- estimated dry area
- **MW-5** ● 5503 — perched monitoring well showing elevation in feet amsl
- **TW4-12** ○ 5582 — temporary perched monitoring well showing elevation in feet amsl
- **TWN-10** ◇ 5586 — temporary perched nitrate monitoring well showing elevation in feet amsl
- **PIEZ-1** ◒ 5593 — perched piezometer showing elevation in feet amsl
- **TW4-28** ☼ 5580 — temporary perched monitoring well installed March, 2013 showing elevation in feet amsl
- **RUIN SPRING** 5380 — seep or spring showing elevation in feet amsl

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

HYDRO GEO CHEM, INC.

KRIGED 2nd QUARTER, 2013 WATER LEVELS WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug13/Uwl0613.srf	C-1

NAME: Garrin Palmer, Tanner Holliday

DATE: 6/27/2013

TIME	WELL	Static level
837	MW-1	63.93
934	MW-2	109.89
844	MW-3	83.05
846	MW-3A	85.09
924	MW-5	106.37
918	MW-11	87.35
928	MW-12	108.59
911	MW-14	103.75
908	MW-15	106.50
724	MW-17	73.48
831	MW-18	70.55
756	MW-19	56.84
745	MW-20	89.10
750	MW-22	67.00
931	MW-23	114.50
1001	MW-24	114.21
915	MW-25	73.28
950	MW-26	61.90
901	MW-27	52.39
958	MW-28	76.25
937	MW-29	101.85
940	MW-30	75.45
942	MW-31	67.50
945	MW-32	73.97
858	MW-33	Dry
903	MW-34	108.00
855	MW-35	112.51
857	MW-36	110.60
905	MW-37	109.31

TIME	WELL	Static Level
1033	MW-4	72.15
1031	TW4-1	64.14
1034	TW4-2	65.51
1038	TW4-3	51.35
1030	TW4-4	70.13
1040	TW4-5	58.65
1029	TW4-6	69.32
1032	TW4-7	65.03
1036	TW4-8	65.05
1039	TW4-9	56.40
1037	TW4-10	57.05
1035	TW4-11	57.30
1014	TW4-12	41.98
1018	TW4-13	47.50
1020	TW4-14	85.78
950	TW4-15	61.90
947	TW4-16	60.36
1004	TW4-17	74.90
1000	TW4-18	56.65
906	TW4-19	65.39
951	TW4-20	59.60
857	TW4-21	57.56
953	TW4-22	56.55
1026	TW4-23	64.14
955	TW4-24	63.20
853	TW4-25	57.30
1027	TW4-26	62.68
1026	TW4-27	81.65
1016	TW4-28	36.70
1022	TW4-29	72.20
1024	TW4-30	78.02
1029	TW4-31	84.22

TIME	WELL	Static Level
800	PIEZ-1	62.87
754	PIEZ-2	31.60
843	PIEZ-3	44.30
1006	PIEZ-4	48.70
1008	PIEZ-5	44.25
854	TWN-1	55.71
851	TWN-2	32.37
846	TWN-3	37.32
841	TWN-4	47.75
835	TWN-5	69.61
826	TWN-6	75.93
833	TWN-7	87.05
828	TWN-8	63.01
802	TWN-9	62.05
824	TWN-10	80.87
818	TWN-11	69.33
816	TWN-12	28.70
805	TWN-13	45.53
807	TWN-14	62.10
822	TWN-15	91.66
812	TWN-16	47.59
809	TWN-17	33.91
849	TWN-18	58.50
956	TWN-19	52.48

TIME	WELL	Static Level
NA	DR-1	ABANDON
NA	DR-2	ABANDON
823	DR-5	83.21
826	DR-6	94.33
852	DR-7	92.36
836	DR-8	51.07
833	DR-9	86.70
830	DR-10	78.18
734	DR-11	98.43
731	DR-12	89.55
728	DR-13	69.96
817	DR-14	76.54
741	DR-15	93.07
na	DR-16	ABANDON
813	DR-17	64.95
na	DR-18	ABANDON
803	DR-19	63.20
800	DR-20	55.29
855	DR-21	107.31
	DR-22	DRY
756	DR-23	70.77
807	DR-24	44.10
na	DR-25	ABANDON

Some times may be the same since we split up to complete depth checks.

Weekly Inspection Form

Date 4/1/2013 **Name** Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1401	MW-4	68.42	Flow 4.3	Yes No
			Meter 64190.21	Yes No
1358	MW-26	59.10	Flow 10.3	Yes No
			Meter 313132.38	Yes No
1450	TW4-19	59.13	Flow 14.0	Yes No
			Meter 1033735.00	Yes No
1352	TW4-20	57.71	Flow 8.9	Yes No
			Meter 553165.53	Yes No
1404	TW4-4	69.95	Flow 8.1	Yes No
			Meter 64077.8	Yes No
1345	TWN-2	26.13	Flow 18.6	Yes No
			Meter 34855.7	Yes No
1349	TW4-22	55.30	Flow 18.4	Yes No
			Meter 18671.3	Yes No
1348	TW4-24	61.20	Flow 18.1	Yes No
			Meter 60384.5	Yes No
1341	TW4-25	57.18	Flow 18.2 GPM	Yes No
			Meter 110819.6	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.

30536 H1

Weekly Inspection Form

Date 4/8/13 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1414	MW-4	68.15	Flow 4.4 GPM	(Yes) No
			Meter 69597.05	(Yes) No
1411	MW-26	58.52	Flow 9.2 GPM	(Yes) No
			Meter 315010.71	(Yes) No
1500	TW4-19	59.99	Flow 14.0	(Yes) No
			Meter 1051378.00	(Yes) No
1407	TW4-20	69.20	Flow 10.0 GPM	(Yes) No
			Meter 554738	(Yes) No
1418	TW4-4	69.91	Flow 8.5 GPM	(Yes) No
			Meter 69181.40	(Yes) No
1356	TWN-2	27.50	Flow 18.7 GPM	(Yes) No
			Meter 38775.41	(Yes) No
1404	TW4-22	76.40	Flow 18.0 GPM	(Yes) No
			Meter 2066.30	(Yes) No
1401	TW4-24	73.16	Flow 19.0 GPM	(Yes) No
			Meter 175382.80	(Yes) No
1352	TW4-25	56.54	Flow 18.3 GPM	(Yes) No
			Meter 122460.50	(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 4/15/2013 **Name** Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1306	MW-4	71.51	Flow 4.3 GPM	(Yes) No
			Meter 74818.50	(Yes) No
1303	MW-26	61.30	Flow 10.1 GPM	(Yes) No
			Meter 316905.72	(Yes) No
1400	TW4-19	59.89	Flow 14.0 GPM	(Yes) No
			Meter 1069021.00	~~Yes~~ No
1300	TW4-20	58.75	Flow 10.5 GPM	(Yes) No
			Meter 556234.20	~~Yes~~ No
1304 ~~0639~~	TW4-4	76.59	Flow 8.3 GPM	(Yes) No
			Meter 74267.6	(Yes) No
1248 ~~55~~	TWN-2	28.30	Flow 18.9 GPM	(Yes) No
			Meter 42566.4	(Yes) No
1250	TW4-22	56.20	Flow 18.0 GPM	(Yes) No
			Meter 22597.3	(Yes) No
1248	TW4-24	61.55	Flow ~~69.95~~ 18.2	(Yes) No
			Meter 1900303	(Yes) No
1242	TW4-25	60.90	Flow 18.1 GPM	(Yes) No
			Meter 133889.1	(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 4/19/2013 **Name** Tanner Holliday Garrin Palmer

Time	Well	Depth*
0918	MW-4	68.58
0925	TW4-1	64.69
0904	TW4-2	66.22
0906	TW4-3	51.78
0926	TW4-4	70.43
0909	TW4-5	58.91
0928	TW4-6	70.16
0920	TW4-7	65.70
0923	TW4-8	65.18
0907	TW4-9	56.69
0912	TW4-10	57.35
0902	TW4-11	57.67
0938	TW4-12	42.45
0942	TW4-13	48.28
0944	TW4-14	86.14
0858	TW4-15	73.23
0900	TW4-16	60.37
1023	TW4-17	74.03
0835	TW4-18	59.71
1051	TW4-19	62.05
0856	TW4-20	60.31
0832	TW4-21	58.09
0855	TW4-22	57.00
0930	TW4-23	64.84
0852	TW4-24	63.90
0830	TW4-25	56.94
0933	TW4-26	63.50
0947	TW4-27	81.84

Time	Well	Depth*
0828	TWN-1	55.68
0849	TWN-2	29.20
0846	TWN-3	36.41
0840	TWN-4	47.60
1014	TWN-7	88.03
0843	TWN-18	58.46
1034	MW-27	51.75
1004	MW-30	76.45
1002	MW-31	68.40

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

0939 TW4-28 37.41
0949 TW4-29 72.35
0951 TW4-30 78.15
0953 TW4-31 85.30

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 4/22/13 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1228	MW-4	72.30	Flow 4.3 GPM	(Yes) No
			Meter 80191.93	(Yes) No
1221	MW-26	61.49	Flow 10.2 GPM	(Yes) No
			Meter 318651.30	(Yes) No
1248	TW4-19	59.43	Flow 14.0 GPM	(Yes) No
			Meter 1085488.06	(Yes) No
1218	TW4-20	58.70	Flow 9.3 GPM	(Yes) No
			Meter 557742.30	(Yes) No
1225	TW4-4	76.88	Flow 8.4 GPM	(Yes) No
			Meter 79282.43	(Yes) No
1207	TWN-2	65.80	Flow 18.1 GPM	(Yes) No
			Meter 46042.18	(Yes) No
1214	TW4-22	56.79	Flow 18.0 GPM	(Yes) No
			Meter 2456.88	(Yes) No
1211	TW4-24	63.10	Flow 18.4 GPM	(Yes) No
			Meter 20471.11	(Yes) No
1204	TW4-25	85.30	Flow 17.6 GPM	(Yes) No
			Meter 145050.80	(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.

3194091

Weekly Inspection Form

Date 4/29/13 **Name** Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1157	MW-4	72.19	Flow 4.3 GPM	Yes No
			Meter 85507.20	Yes No
1153	MW-26	63.40	Flow 10.2 GPM	Yes No
			Meter 320752.48	Yes No
1230 1153	TW4-19	59.40	Flow 14.0 GPM	Yes No
			Meter ~~320752.48~~ 1162022.04	Yes No
1150	TW4-20	58.68	Flow 9.3 GPM	Yes No
			Meter 559251.52	Yes No
1201	TW4-4	70.01	Flow 8.4 GPM	Yes No
			Meter 84381.2	Yes No
1139	TWN-2	28.19	Flow 18.5 GPM	Yes No
			Meter 50013.3	Yes No
1147	TW4-22	57.04	Flow 18.0 GPM	Yes No
			Meter 26410.4	Yes No
1144	TW4-24	63.11	Flow 18.3 GPM	Yes No
			Meter 219207.9	Yes No
1135	TW4-25	58.23	Flow 17.3 GPM	Yes No
			Meter 156204.2	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 5/6/2013 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1216	MW-4	68.65	Flow 4.3 GPM	(Yes) No
			Meter 91099.02	(Yes) No
1220	MW-26	66.01	Flow 10.1 GPM	(Yes) No
			Meter 322703.50	(Yes) No
1301	TW4-19	68.48	Flow 14.0 GPM	(Yes) No
			Meter 1119359.05	(Yes) No
1226	TW4-20	58.80	Flow 9.8 GPM	(Yes) No
			Meter 560811.43	(Yes) No
1212	TW4-4	69.94	Flow 8.1 GPM	(Yes) No
			Meter 89481.00	(Yes) No
1245	TWN-2	29.70	Flow 19.0 GPM	(Yes) No
			Meter 53897.10	(Yes) No
1232	TW4-22	55.90	Flow 18.1 GPM	(Yes) No
			Meter 28471.80	(Yes) No
1238	TW4-24	68.02	Flow 17.9 GPM	(Yes) No
			Meter 233660.20	(Yes) No
1250	TW4-25	59.95	Flow 18.0 GPM	(Yes) No
			Meter 167767.30	(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 5/13/13 **Name** Garrin Palmer, Tanner Halliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1451	MW-4	68.20	Flow 4.4 GPM	(Yes) No
			Meter 96580.76	(Yes) No
1448	MW-26	81.49	Flow 10.1 GPM	(Yes) No
			Meter 324722.35	(Yes) No
1515	TW4-19	62.18	Flow 14.0 GPM	(Yes) No
			Meter 1137011.00	(Yes) No
1444	TW4-20	61.20	Flow 10.0 GPM	(Yes) No
			Meter 562436.04	(Yes) No
1455	TW4-4	70.08	Flow 8.1 GPM	(Yes) No
			Meter 94565.23	(Yes) No
1428	TWN-2	29.50	Flow 18.5 GPM	(Yes) No
			Meter 57653.01	(Yes) No
1440	TW4-22	56.71	Flow 18.4 GPM	(Yes) No
			Meter 30476.42	(Yes) No
1432	TW4-24	64.85	Flow 18.2 GPM	(Yes) No
			Meter 248028.90	(Yes) No
1425	TW4-25	57.05	Flow 18.6 GPM	(Yes) No
			Meter 178986.80	(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 5/20/13 **Name** Garcia Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1030	MW-4	72.89	Flow 4.3 GPM	(Yes) No
			Meter 101984.57	(Yes) No
1025	MW-26	60.31	Flow 10.5 GPM	(Yes) No
			Meter 326623.91	(Yes) No
1044	TW4-19	61.40	Flow 140 GPM	(Yes) No
			Meter 151317.00	(Yes) No
1020	TW4-20	58.56	Flow 10.0 GPM	(Yes) No
			Meter 564079.80	(Yes) No
1035	TW4-4	72.40	Flow 8.2 GPM	(Yes) No
			Meter 99572.80	(Yes) No
1009	TWN-2	30.20	Flow 19.0 GPM	(Yes) No
			Meter 61377.22	(Yes) No
1018	TW4-22	55.93	Flow 18.0 GPM	(Yes) No
			Meter 32379.90	(Yes) No
1015	TW4-24	62.05	Flow 18.2 GPM	(Yes) No
			Meter 261789.76	(Yes) No
1005	TW4-25	59.05	Flow 17.5 GPM	(Yes) No
			Meter 189674.68	(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 5/28/13 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1010	MW-4	82.64	Flow [redacted] 4.3 GPM	(Yes) No
			Meter 105287.40	(Yes) No
0955	MW-26	60.89	Flow 10.5 GPM	(Yes) No
			Meter 328923.28	(Yes) No
1032	TW4-19	60.02	Flow 14.0 GPM	(Yes) No
			Meter 169140.00	(Yes) No
0950	TW4-20	58.61	Flow 10.2 GPM	(Yes) No
			Meter 565880.50	(Yes) No
1006	TW4-4	72.55	Flow [redacted] 8.0 GPM	(Yes) No
			Meter 108283.84	(Yes) No
0938	TWN-2	30.95	Flow 19.6 GPM	(Yes) No
			Meter 65676.70	(Yes) No
0946	TW4-22	55.40	Flow 18.2 GPM	(Yes) No
			Meter 34208.50	(Yes) No
0942	TW4-24	60.32	Flow ~~60.52~~ 18.0 GPM	(Yes) No
			Meter 277720.40	(Yes) No
0934	TW4-25	63.98	Flow 18.2 GPM	(Yes) No
			Meter 202606.80	(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 5/31/13 **Name** Garvin, Tanner

Time	Well	Depth*
1245	MW-4	70.95
1236	TW4-1	64.60
1232	TW4-2	66.22
1237	TW4-3	51.02
1241	TW4-4	69.98
1233	TW4-5	~~58.29~~ 58.27
1240	TW4-6	69.90
1236	TW4-7	65.80
1234	TW4-8	66.05
1235	TW4-9	56.03
1231	TW4-10	56.59
1230	TW4-11	57.57
1210	TW4-12	42.40
1208	TW4-13	47.71
1206	TW4-14	86.50
1229	TW4-15	64.71
1225	TW4-16	60.85
1218	TW4-17	74.39
1158	TW4-18	58.89
1250	TW4-19	59.65
1227	TW4-20	58.89
1201	TW4-21	57.35
1225	TW4-22	59.61
1212	TW4-23	64.71
1223	TW4-24	62.99
1203	TW4-25	56.97
1242	TW4-26	63.33
1158	TW4-27	82.27

Time	Well	Depth*
1156	TWN-1	55.25
1206	TWN-2	41.20
1208	TWN-3	36.82
1210	TWN-4	47.22
1220	TWN-7	87.09
1213	TWN-18	58.25
1217 ~~1215~~	MW-27	~~52.39~~ 52.09
1220	MW-30	75.85
1222	MW-31	67.95
1212	TW4-28	37.11
1200	TW4-29	72.76
1202	TW4-30	78.57
1204	TW4-31	84.86

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

Some times may be same because we split up to complete count.

* Depth is measured to the nearest 0.01 feet

Weekly Inspection Form

Date 6-3-13 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1034	MW-4	69.60	Flow 4.3 GPM	(Yes) No
			Meter 112849.63	(Yes) No
1031	MW-26	60.00	Flow 10.4 GPM	(Yes) No
			Meter 330661.10	(Yes) No
1250	TW4-19	59.40	Flow 14.0 GPM	(Yes) No
			Meter 1184627.00	(Yes) No
1027	TW4-20	58.75	Flow 10.1 GPM	(Yes) No
			Meter 5671952.20	(Yes) No
1037	TW4-4	69.40	Flow 8.0 GPM	(Yes) No
			Meter 109305.01	(Yes) No
1014	TWN-2	30.65	Flow 18.7 GPM	(Yes) No
			Meter 69010.70	(Yes) No
1022	TW4-22	58.96	Flow 18.4 GPM	(Yes) No
			Meter 36259.30	(Yes) No
1018	TW4-24	63.20	Flow 17.8 GPM	(Yes) No
			Meter 289693.00	(Yes) No
1010	TW4-25	58.78	Flow 18.4 GPM	(Yes) No
			Meter 212110.50	(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 6/11/13 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
1344	MW-4	72.80	Flow 4.3 GPM	(Yes) No
			Meter 119180.76	(Yes) No
1339	MW-26	60.81	Flow 10.2 GPM	(Yes) No
			Meter 332629.40	(Yes) No
1435	TW4-19	60.41	Flow 14.0 GPM	(Yes) No
			Meter 1205800.01	(Yes) No
1333	TW4-20	58.93	Flow 8.5 GPM	(Yes) No
			Meter 568070.32	(Yes) No
1350	TW4-4	69.80	Flow 8.0 GPM	(Yes) No
			Meter 114921.80	(Yes) No
1305	TWN-2	30.80	Flow 18.5 GPM	(Yes) No
			Meter 73236.60	(Yes) No
1317	TW4-22	56.13	Flow 17.8 GPM	(Yes) No
			Meter 38423.70	(Yes) No
1311	TW4-24	62.13	Flow 18.0 GPM	(Yes) No
			Meter 30524.41	(Yes) No
1250	TW4-25	69.50	Flow 18.5 GPM	(Yes) No
			Meter 225026.30	(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 6/17/13 **Name** Garrin Palmer

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
0942	MW-4	67.65	Flow 4.4 GPM	(Yes) No
			Meter 123575.59	(Yes) No
0938	MW-26	62.04	Flow 10.2 GPM	(Yes) No
			Meter 334424.75	(Yes) No
0941 1140	TW4-19	60.32	Flow 14.0 GPM	(Yes) No
			Meter 1220635.00	(Yes) No
0934	TW4-20	59.31	Flow 10.0 GPM	(Yes) No
			Meter 570129.25	(Yes) No
0945	TW4-4	70.02	Flow 8.1 GPM	(Yes) No
			Meter 118059.30	(Yes) No
0921	TWN-2	34.13	Flow 18.6 GPM	(Yes) No
			Meter 76456.70	(Yes) No
0930	TW4-22	56.40	Flow 18.0 GPM	(Yes) No
			Meter 40156.80	(Yes) No
0926	TW4-24	~~57.40~~	Flow 18.0 GPM	(Yes) No
		57.40	Meter 317069.30	(Yes) No
0917	TW4-25	89.80	Flow 18.7 GPM	(Yes) No
			Meter 234350.00	(Yes) No

Operational Problems (Please list well number): _____

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

* Depth is measured to the nearest 0.01 feet.

Weekly Inspection Form

Date 6/25/13 **Name** Garrin Palmer, Tanner Holliday

Time	Well	Depth*	Comments	System Operational (If no note any problems/corrective actions)
0719	MW-4	75.71	Flow 4.4 GPM	(Yes) No
			Meter 129693.40	(Yes) No
0715	MW-26	61.07	Flow 10.2 GPM	(Yes) No
			Meter 336561.24	(Yes) No
0730	TW4-19	62.19	Flow 14.0 GPM	(Yes) No
			Meter 1240864.00	(Yes) No
0711	TW4-20	59.06	Flow 10.0 GPM	(Yes) No
			Meter 571890.35	(Yes) No
0723	TW4-4	69.86	Flow 7.4 GPM	(Yes) No
			Meter 124320.20	(Yes) No
0729	TWN-2	33.30	Flow 18.7 GPM	(Yes) No
			Meter 80588.68	(Yes) No
0708	TW4-22	56.30	Flow 18.1 GPM	(Yes) No
			Meter 42200.61	(Yes) No
0650	TW4-24	62.70	Flow 18.0 GPM	(Yes) No
			Meter 332351.90	(Yes) No
0724	TW4-25	58.56	Flow 18.0 GPM	(Yes) No
			Meter 246680.30	(Yes) No

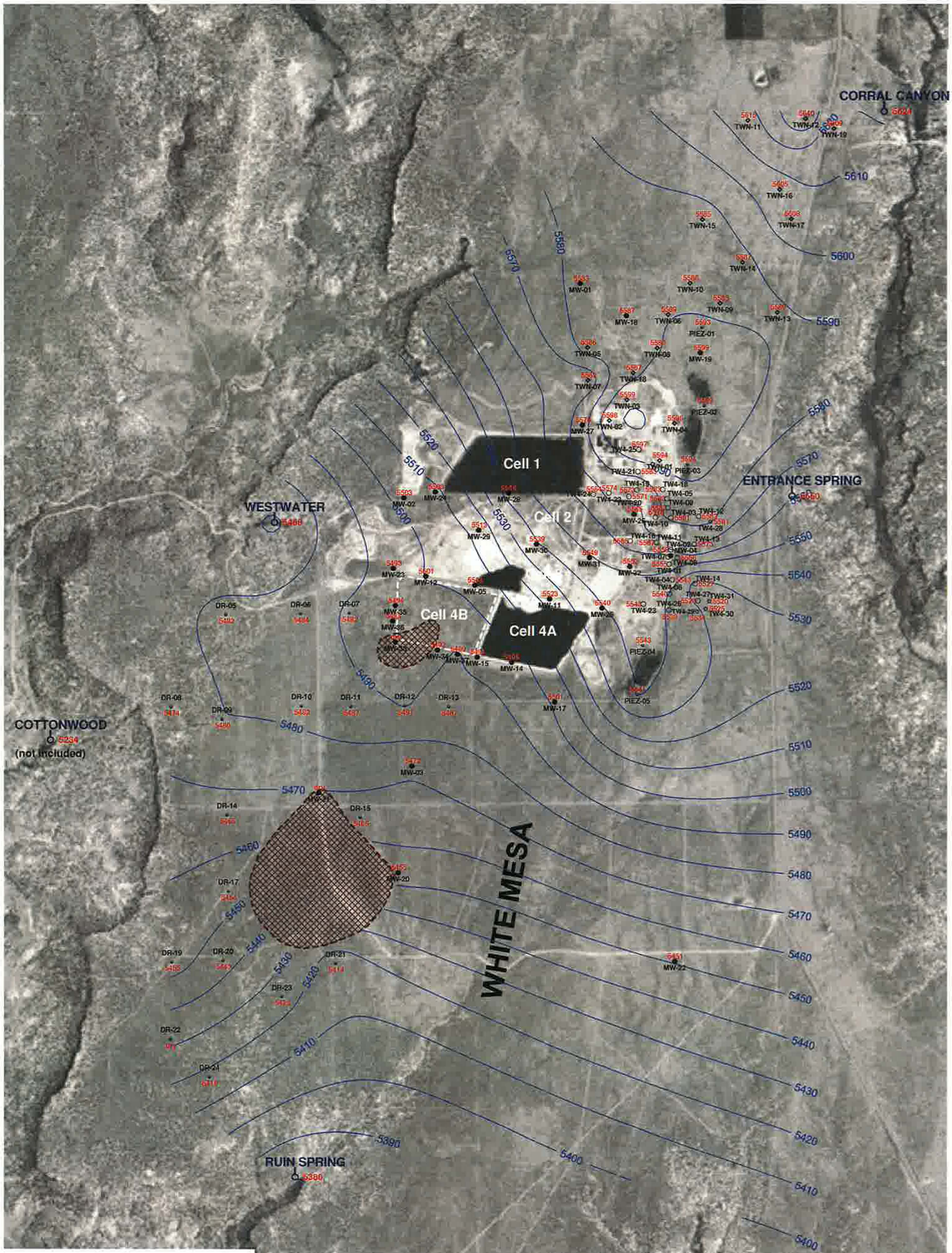
Operational Problems (Please list well number): _____

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

* Depth is measured to the nearest 0.01 feet.

Tab D

Kriged Previous Quarter Groundwater Contour Map



EXPLANATION

- estimated dry area
- **MW-5** ● 5503 — perched monitoring well showing elevation in feet amsl
- **TW4-12** ○ 5583 — temporary perched monitoring well showing elevation in feet amsl
- **TWN-10** ◇ 5586 — temporary perched nitrate monitoring well showing elevation in feet amsl
- **PIEZ-1** ◒ 5593 — perched piezometer showing elevation in feet amsl
- **TW4-28** ☼ 5581 — temporary perched monitoring well installed March, 2013 showing elevation in feet amsl
- **RUIN SPRING** 5380 — seep or spring showing elevation in feet amsl

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

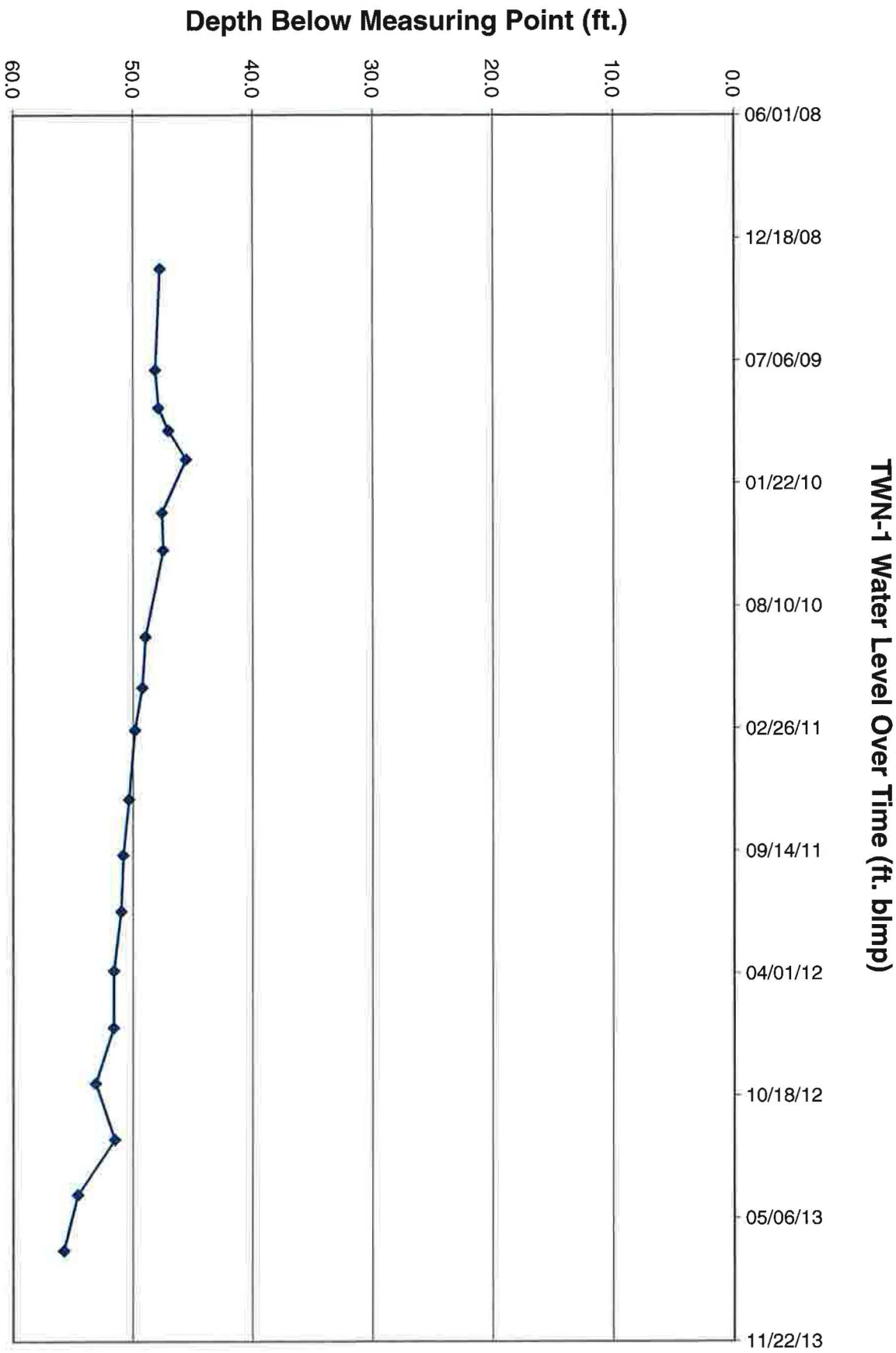
HYDRO GEO CHEM, INC.

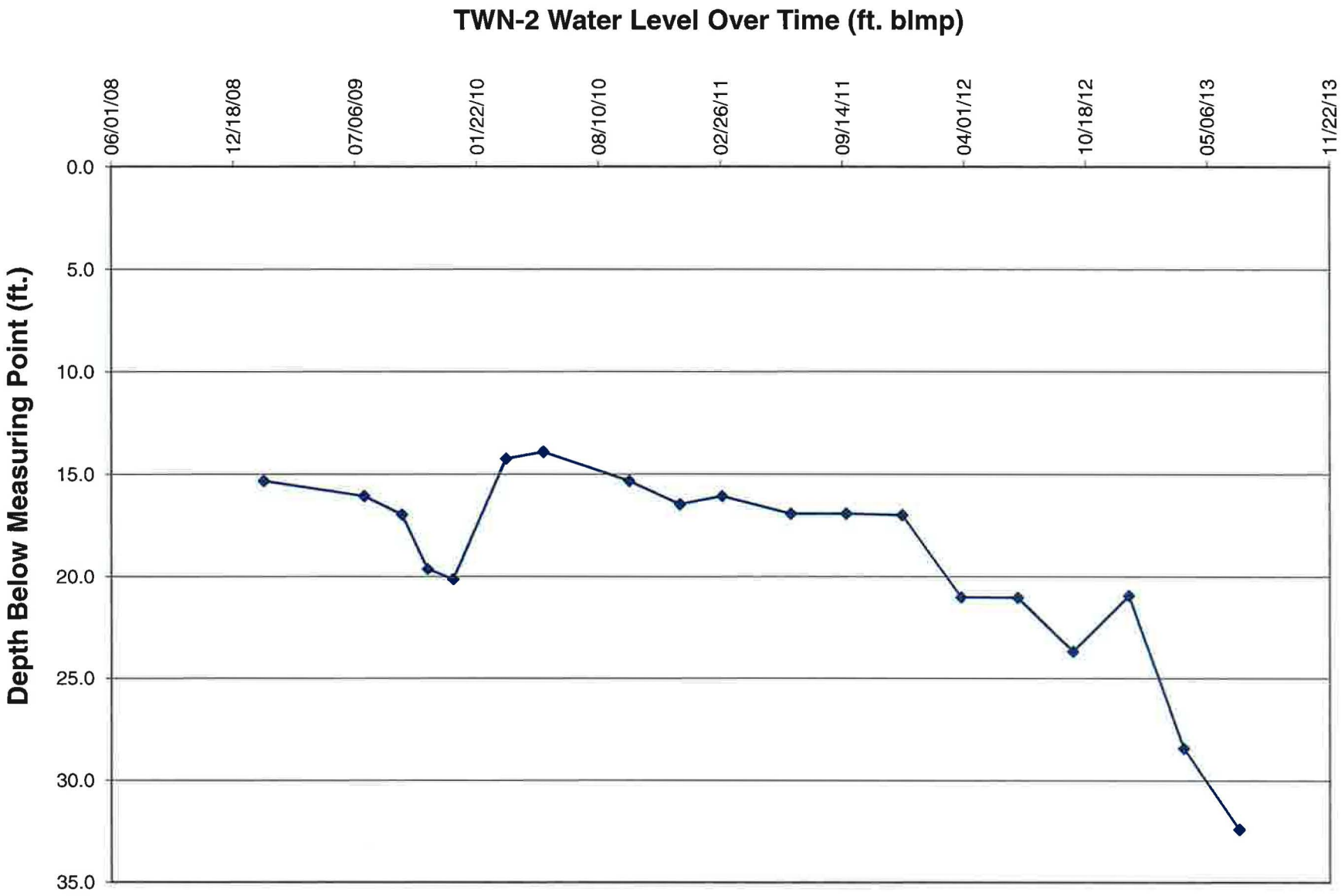
KRIGED 1st QUARTER, 2013 WATER LEVELS WHITE MESA SITE

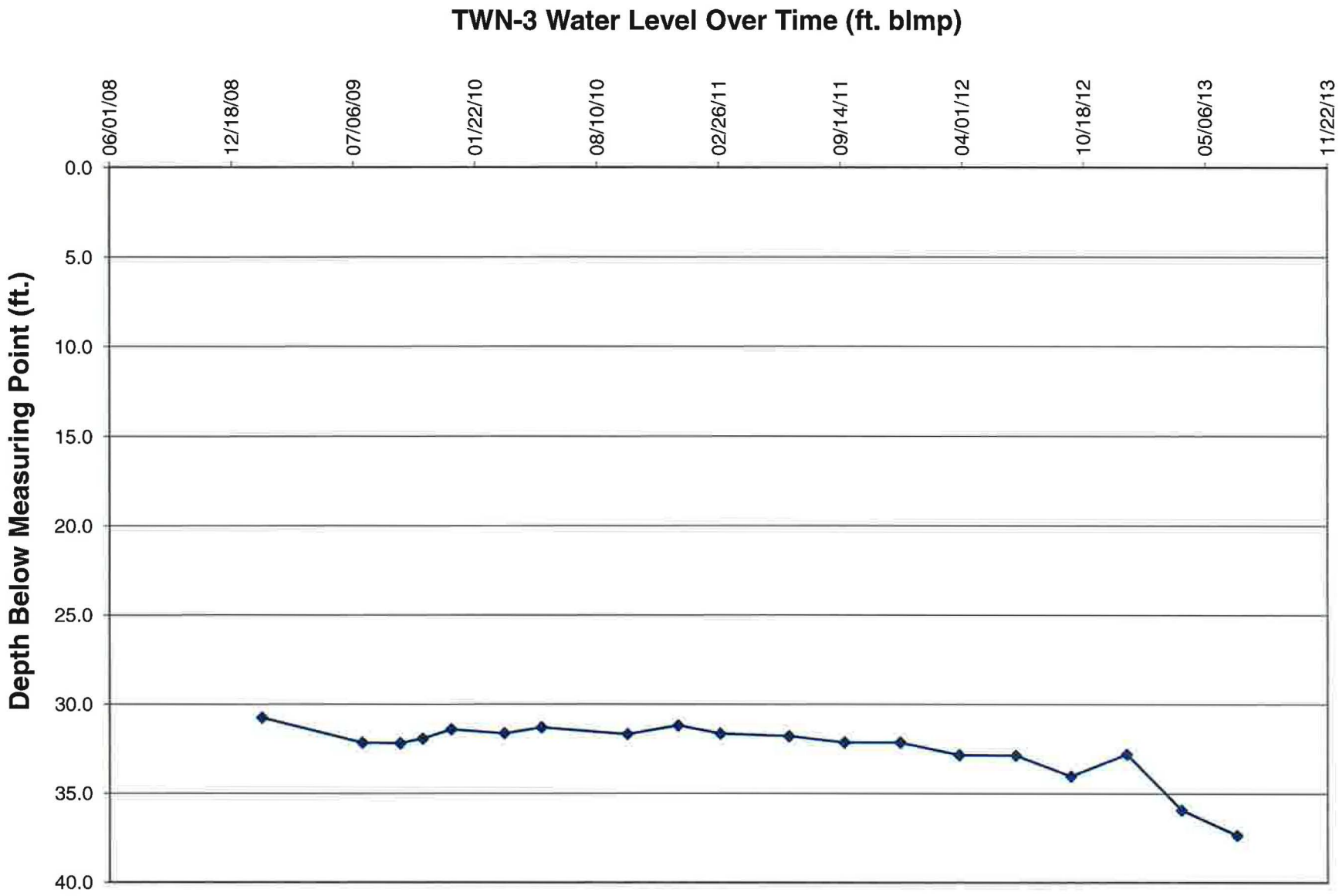
APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/may13/Uwl0313.srf	D-1

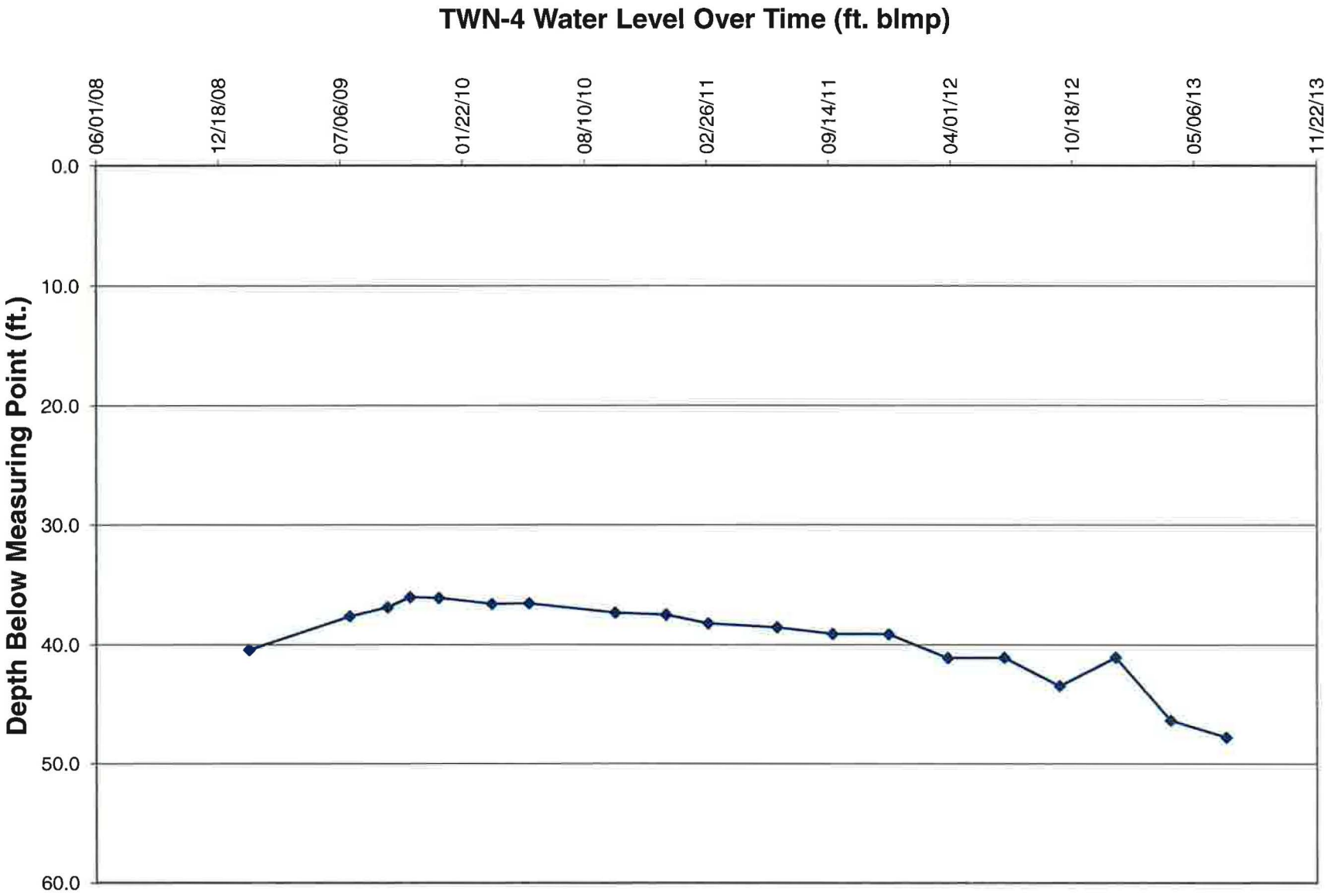
Tab E

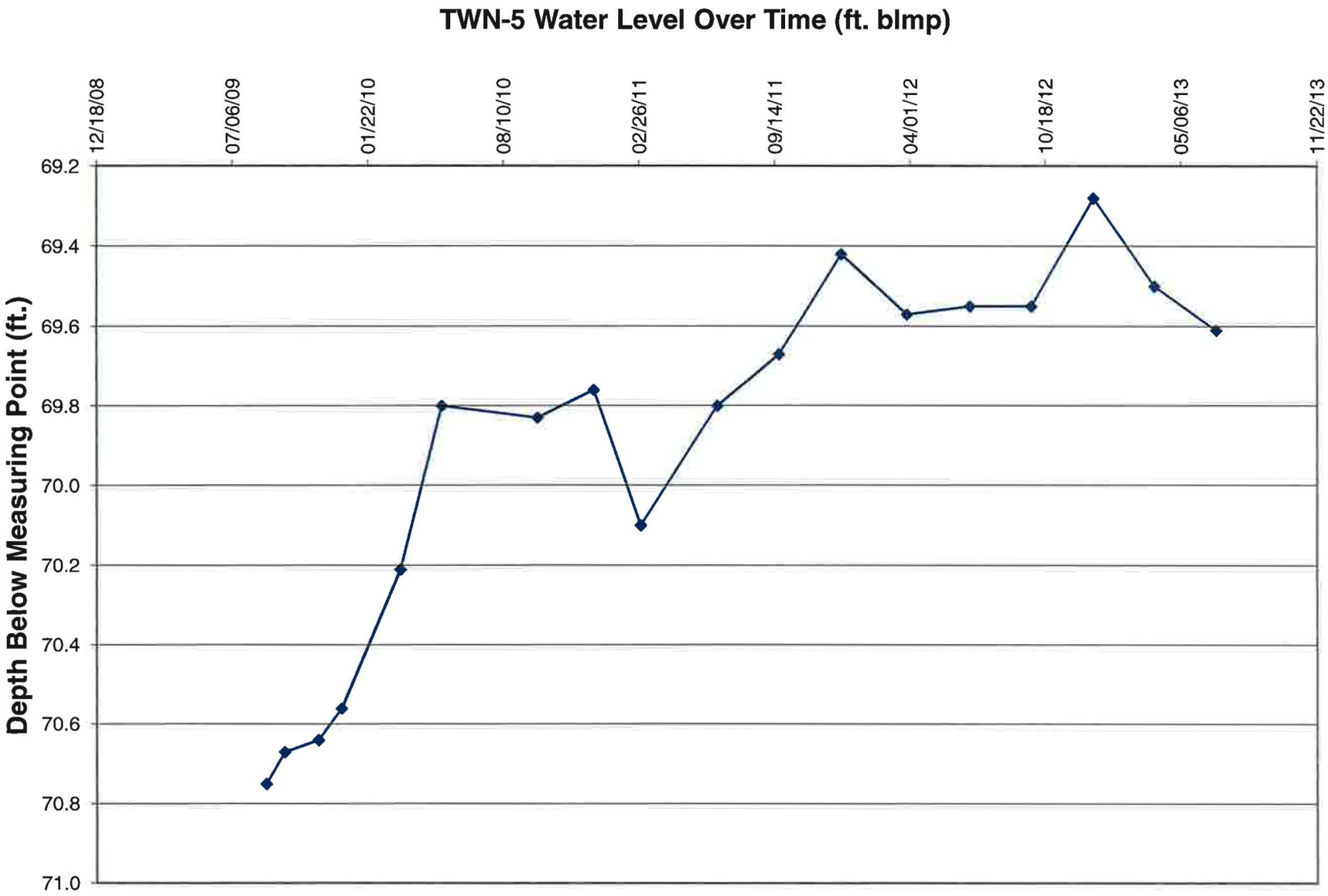
Hydrographs of Groundwater Elevations Over Time for Nitrate Monitoring Wells

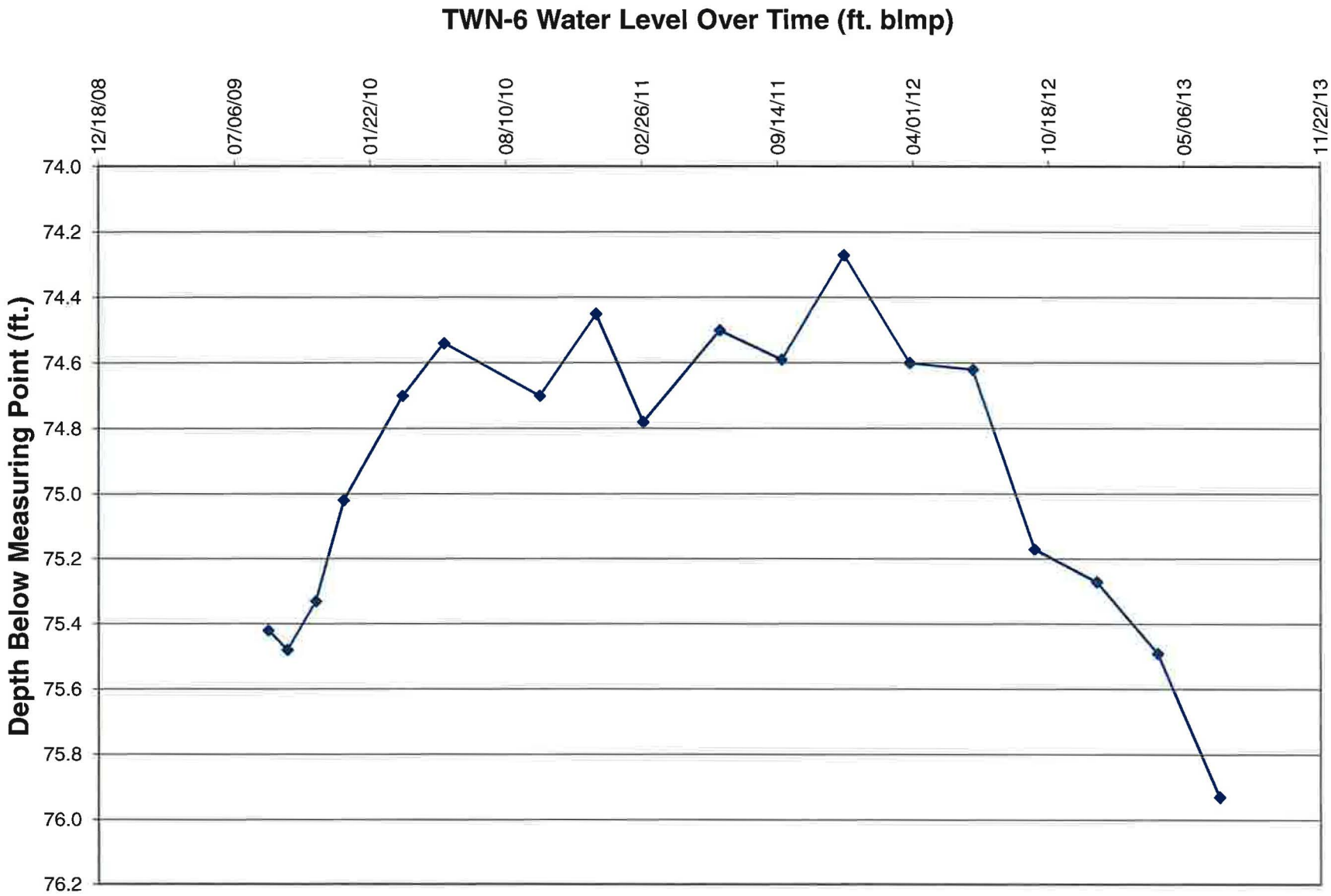

Depth Below Measuring Point (ft.)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
06/01/08
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
TWN-1 Water Level Over Time (ft. blmp)

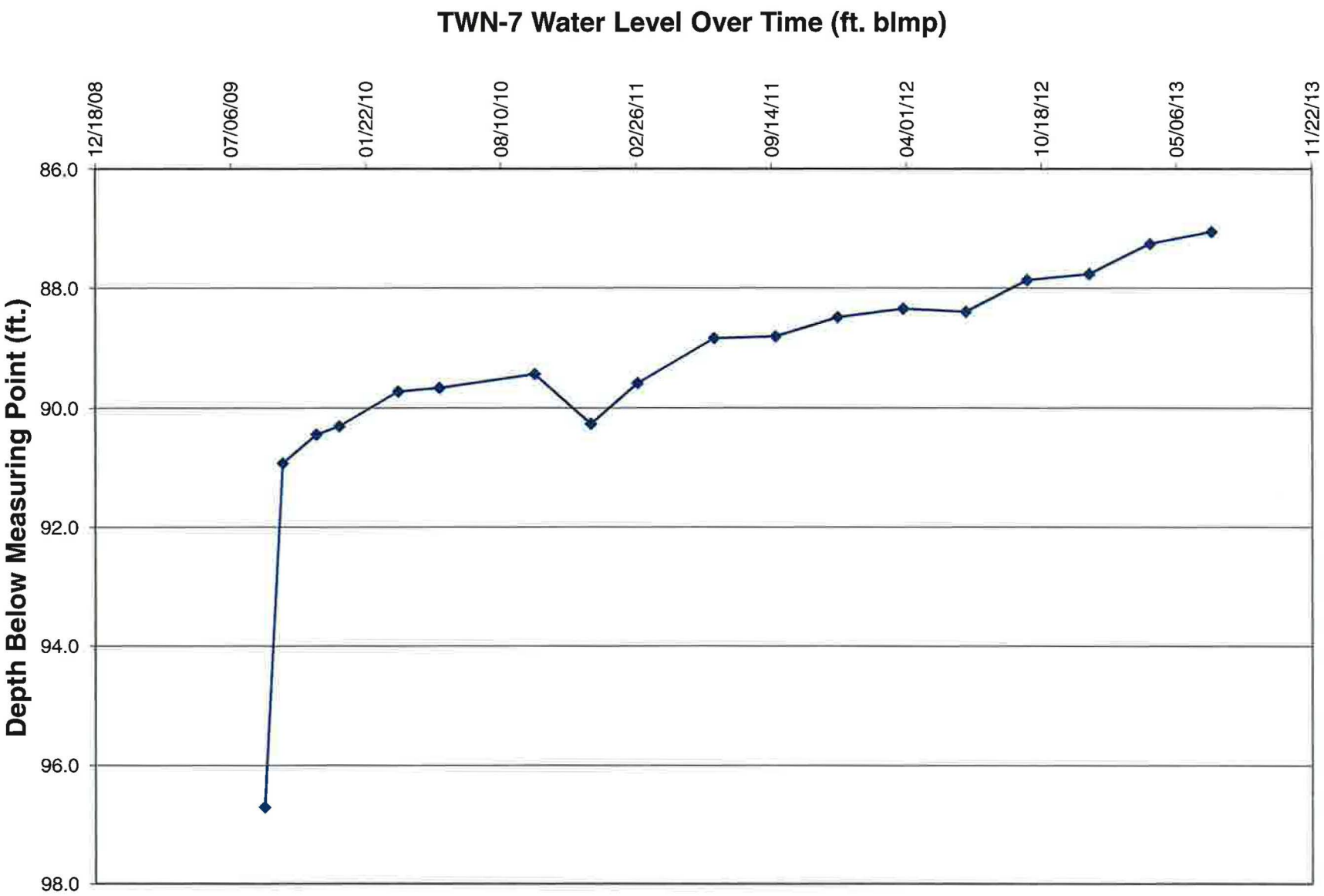

TWN-2 Water Level Over Time (ft. bImp)
Depth Below Measuring Point (ft.)
06/01/08
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0

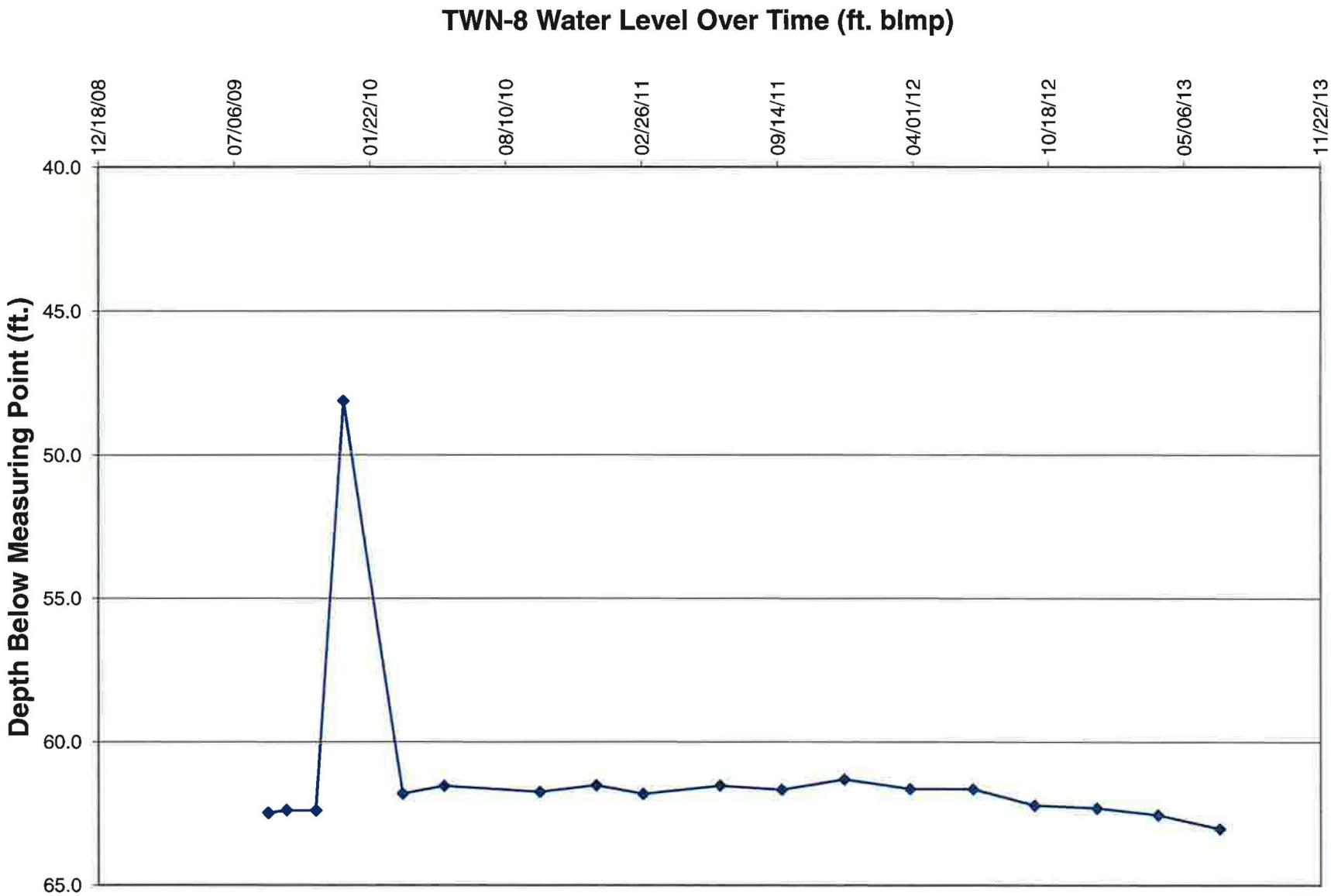

TWN-3 Water Level Over Time (ft. bImp)
Depth Below Measuring Point (ft.)
06/01/08
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0

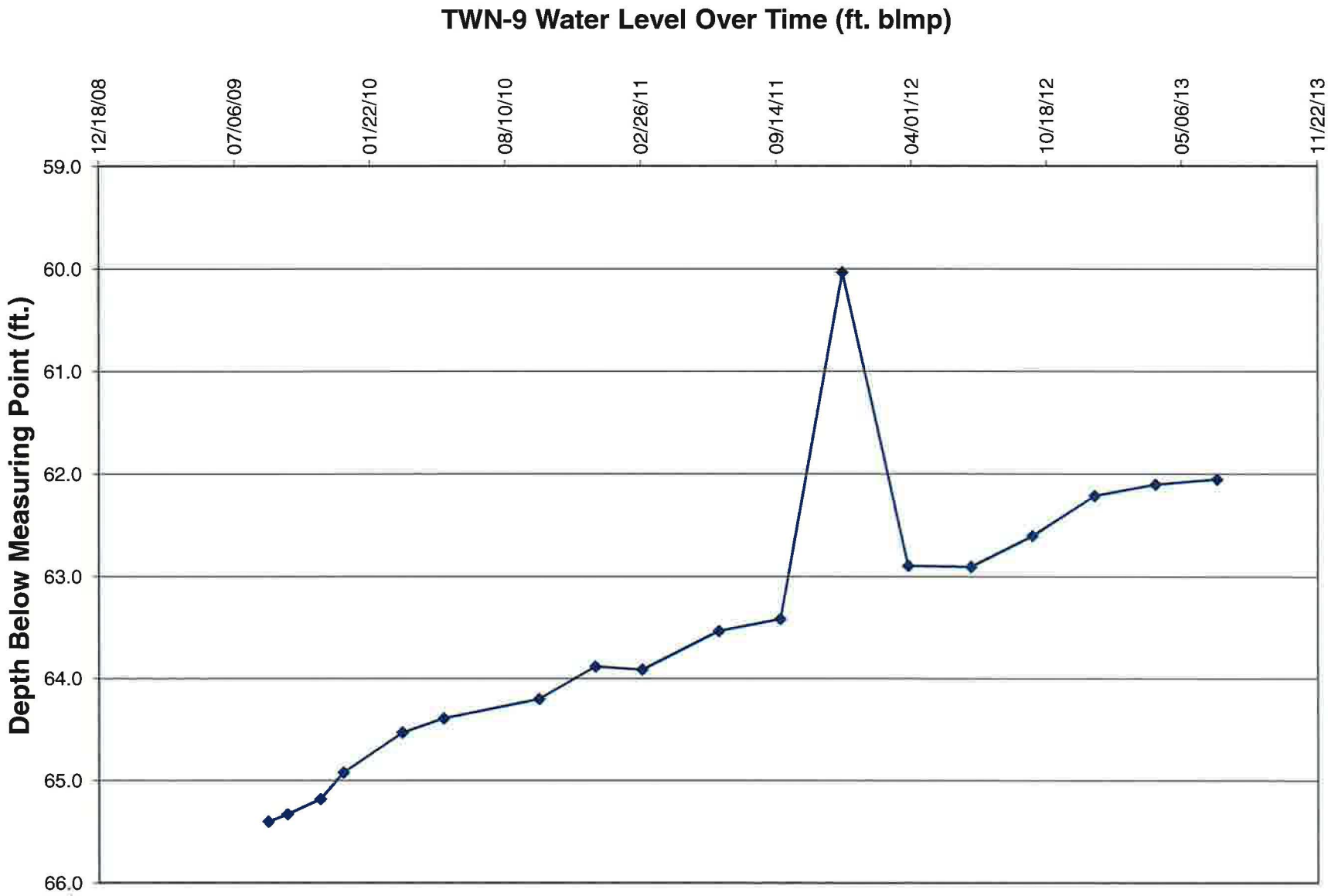

TWN-4 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
06/01/08
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
0.0
10.0
20.0
30.0
40.0
50.0
60.0

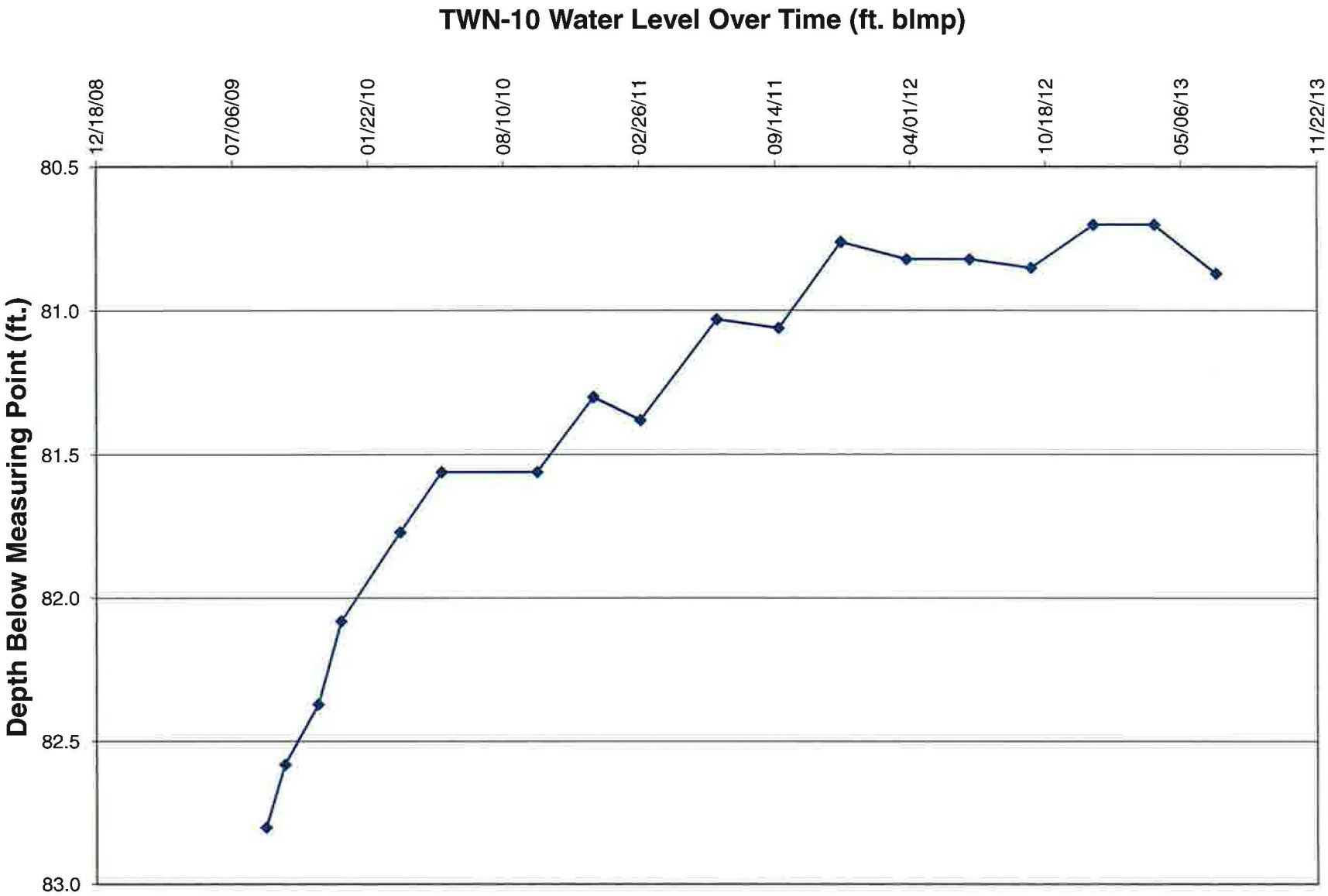

TWN-5 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
69.2
69.4
69.6
69.8
70.0
70.2
70.4
70.6
70.8
71.0

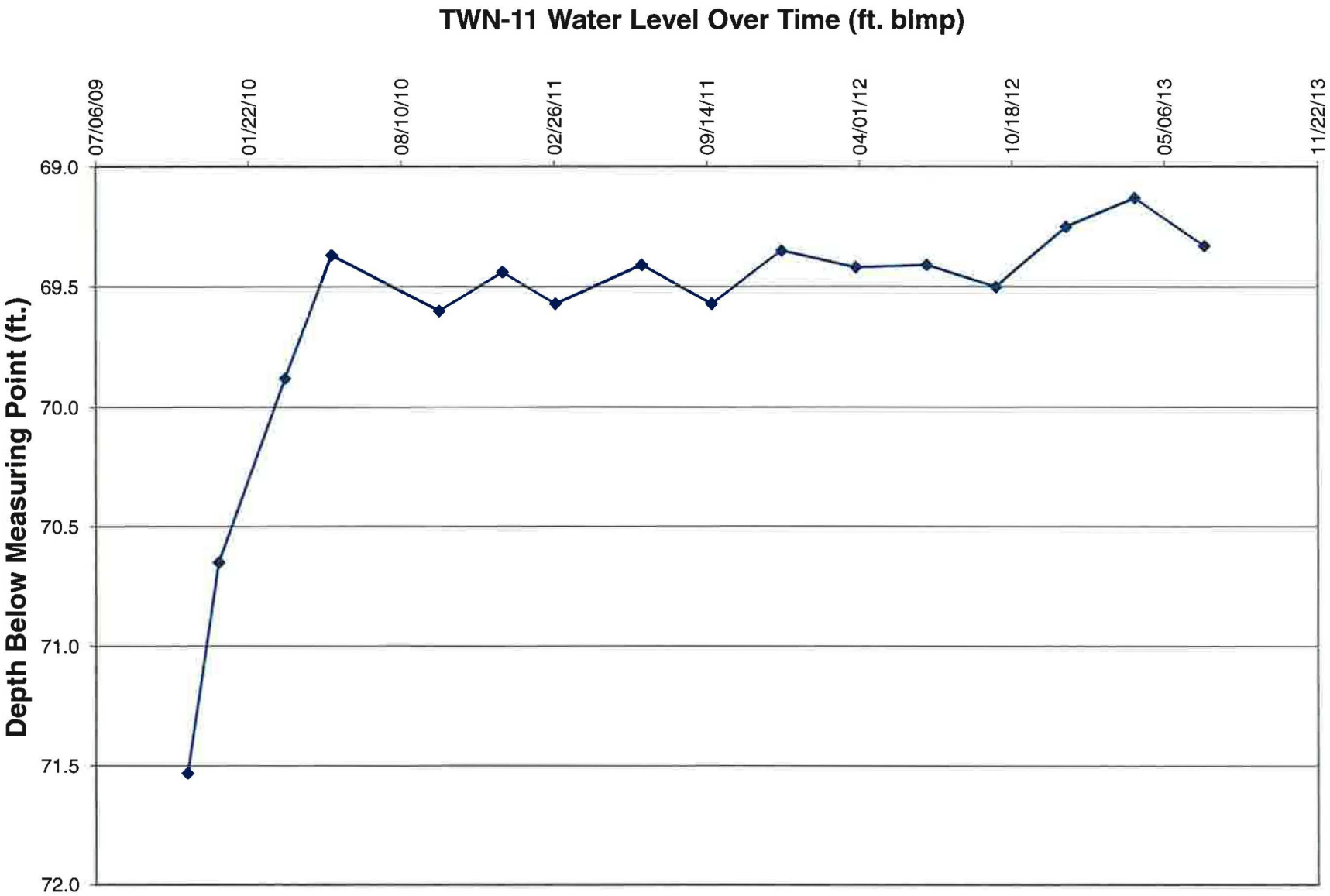

TWN-6 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
74.0
74.2
74.4
74.6
74.8
75.0
75.2
75.4
75.6
75.8
76.0
76.2


TWN-7 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
86.0
88.0
90.0
92.0
94.0
96.0
98.0


TWN-8 Water Level Over Time (ft. blmp)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
Depth Below Measuring Point (ft.)
40.0
45.0
50.0
55.0
60.0
65.0


TWN-9 Water Level Over Time (ft. blmp)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
Depth Below Measuring Point (ft.)
59.0
60.0
61.0
62.0
63.0
64.0
65.0
66.0

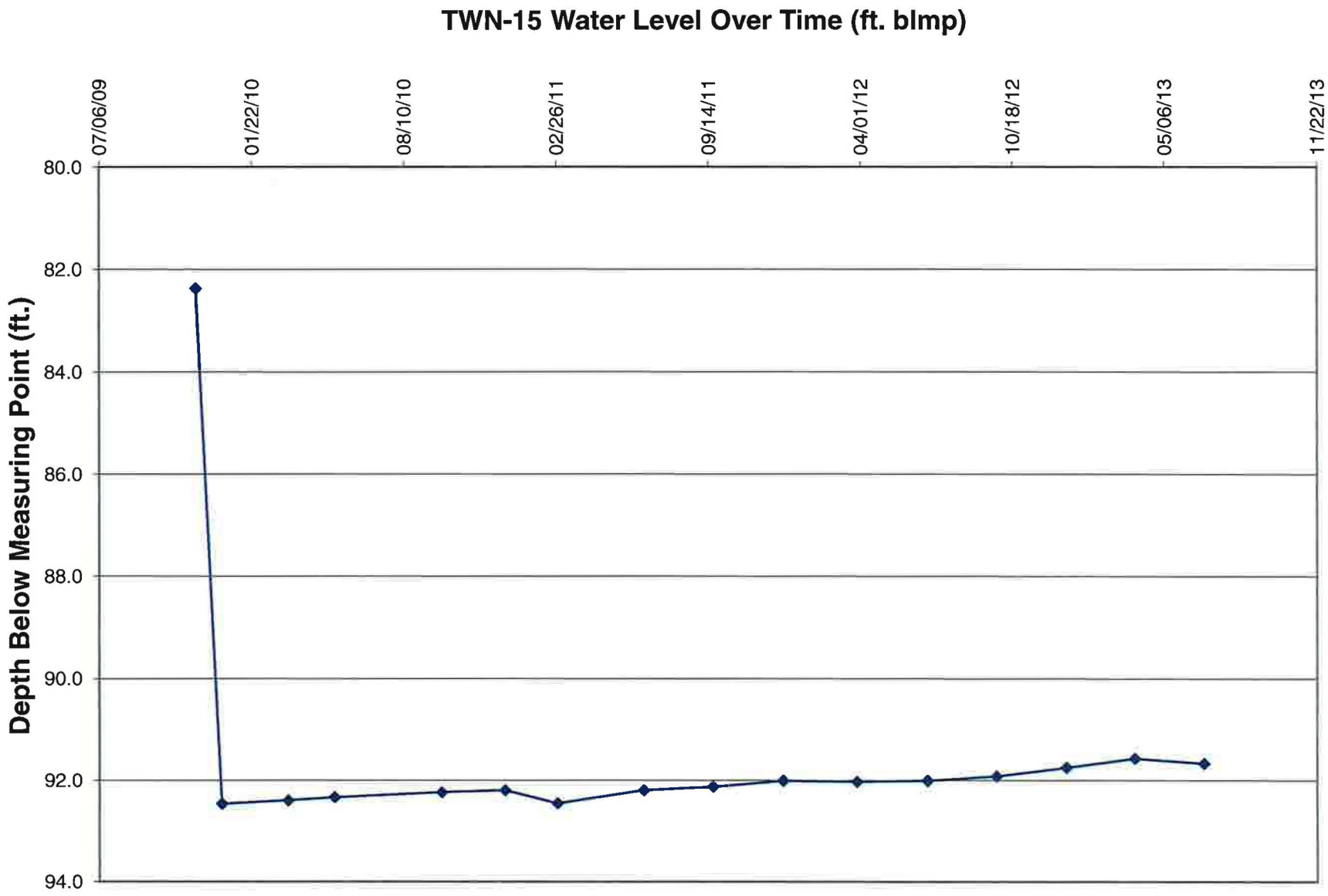

TWN-10 Water Level Over Time (ft. bImp)
12/18/08
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
80.5
81.0
81.5
82.0
82.5
83.0
Depth Below Measuring Point (ft.)

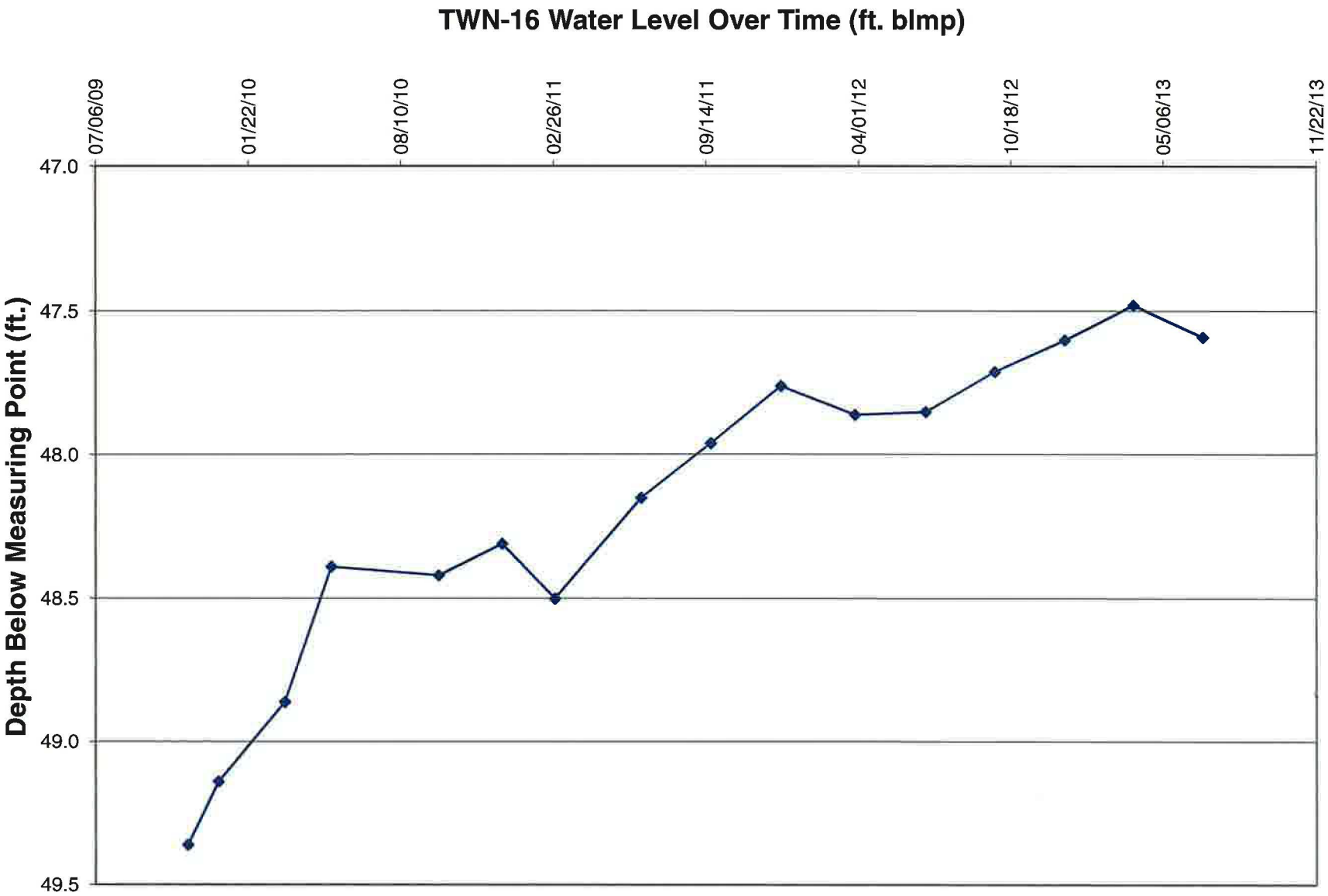

TWN-11 Water Level Over Time (ft. bImp)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
69.0
69.5
70.0
70.5
71.0
71.5
72.0
Depth Below Measuring Point (ft.)

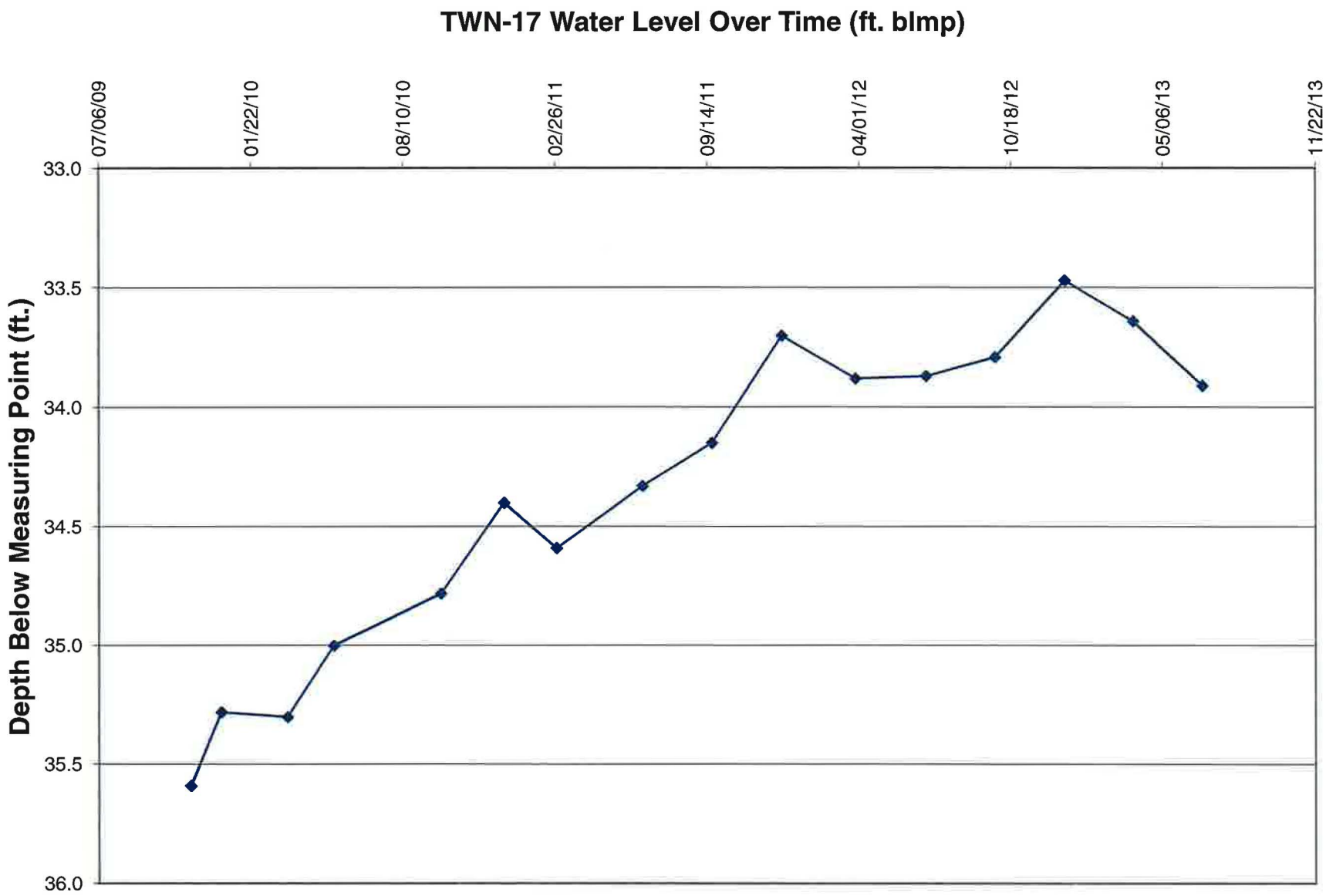

TWN-12 Water Level Over Time (ft. bimp)
Depth Below Measuring Point (ft.)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0

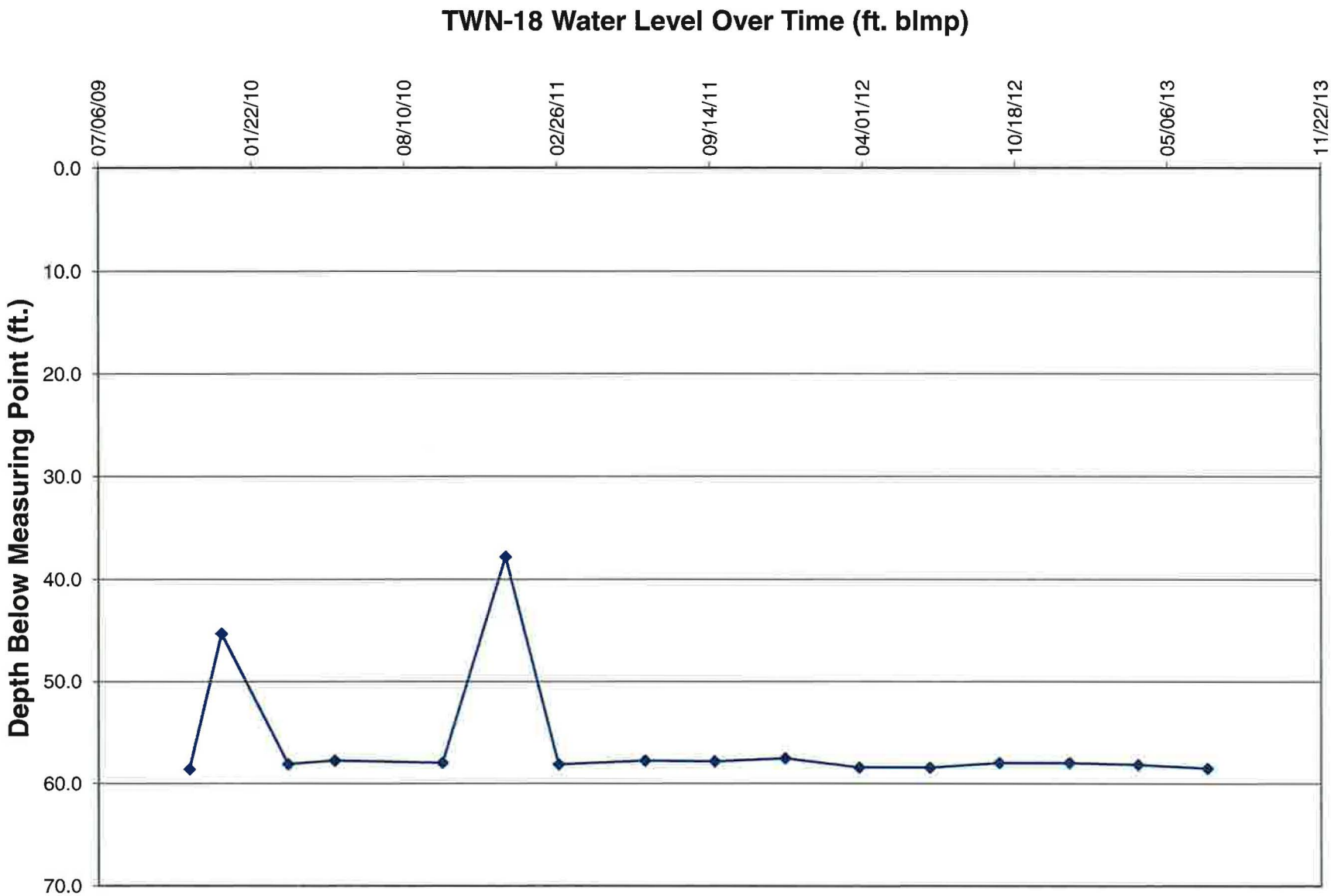

TWN-13 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
45.0
45.5
46.0
46.5
47.0
47.5


TWN-14 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
62.0
62.2
62.4
62.6
62.8
63.0
63.2
63.4
63.6

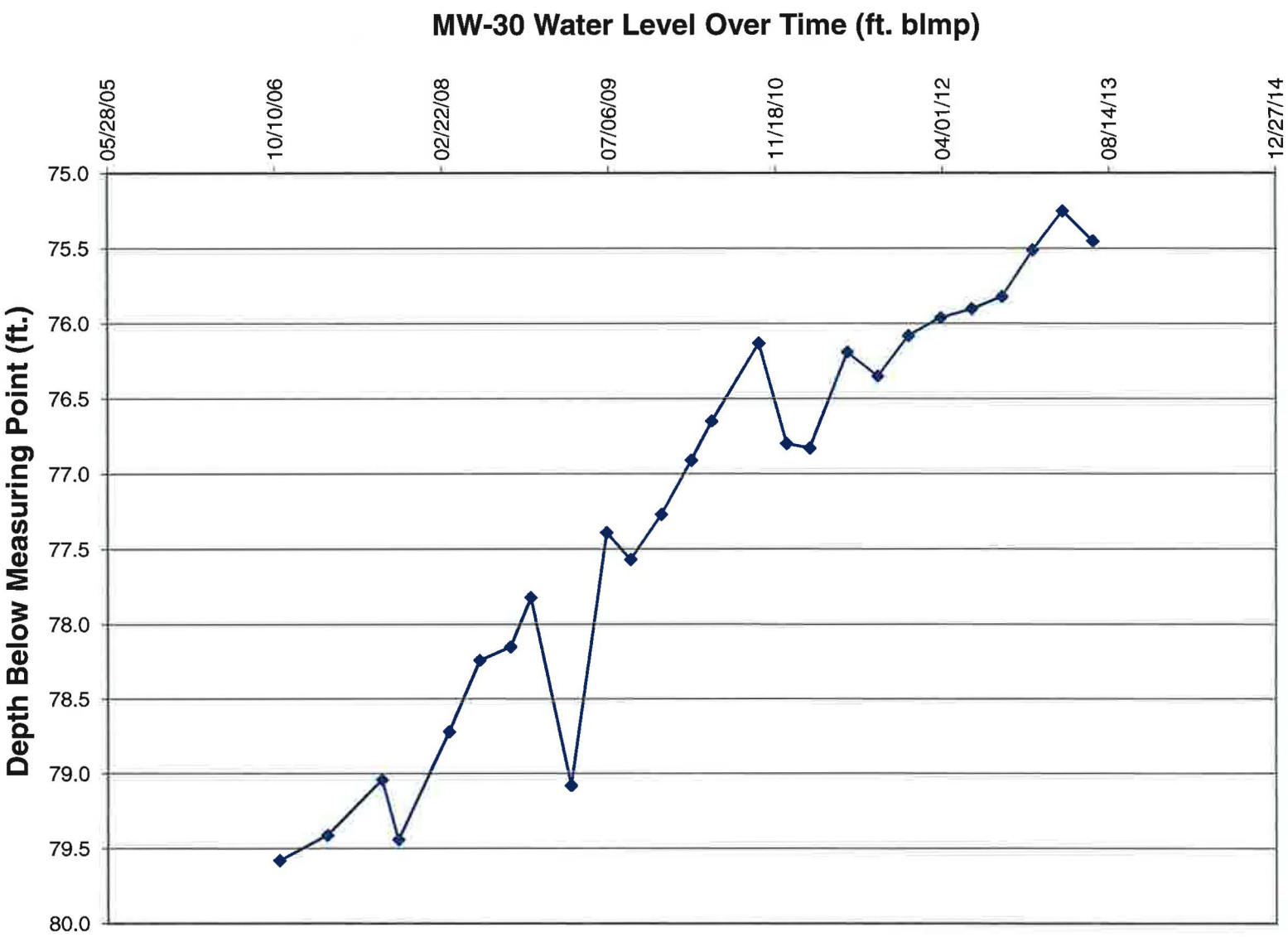

TWN-15 Water Level Over Time (ft. blmp)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
80.0
82.0
84.0
86.0
88.0
90.0
92.0
94.0
Depth Below Measuring Point (ft.)


TWN-16 Water Level Over Time (ft. blmp)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
47.0
47.5
48.0
48.5
49.0
49.5
Depth Below Measuring Point (ft.)

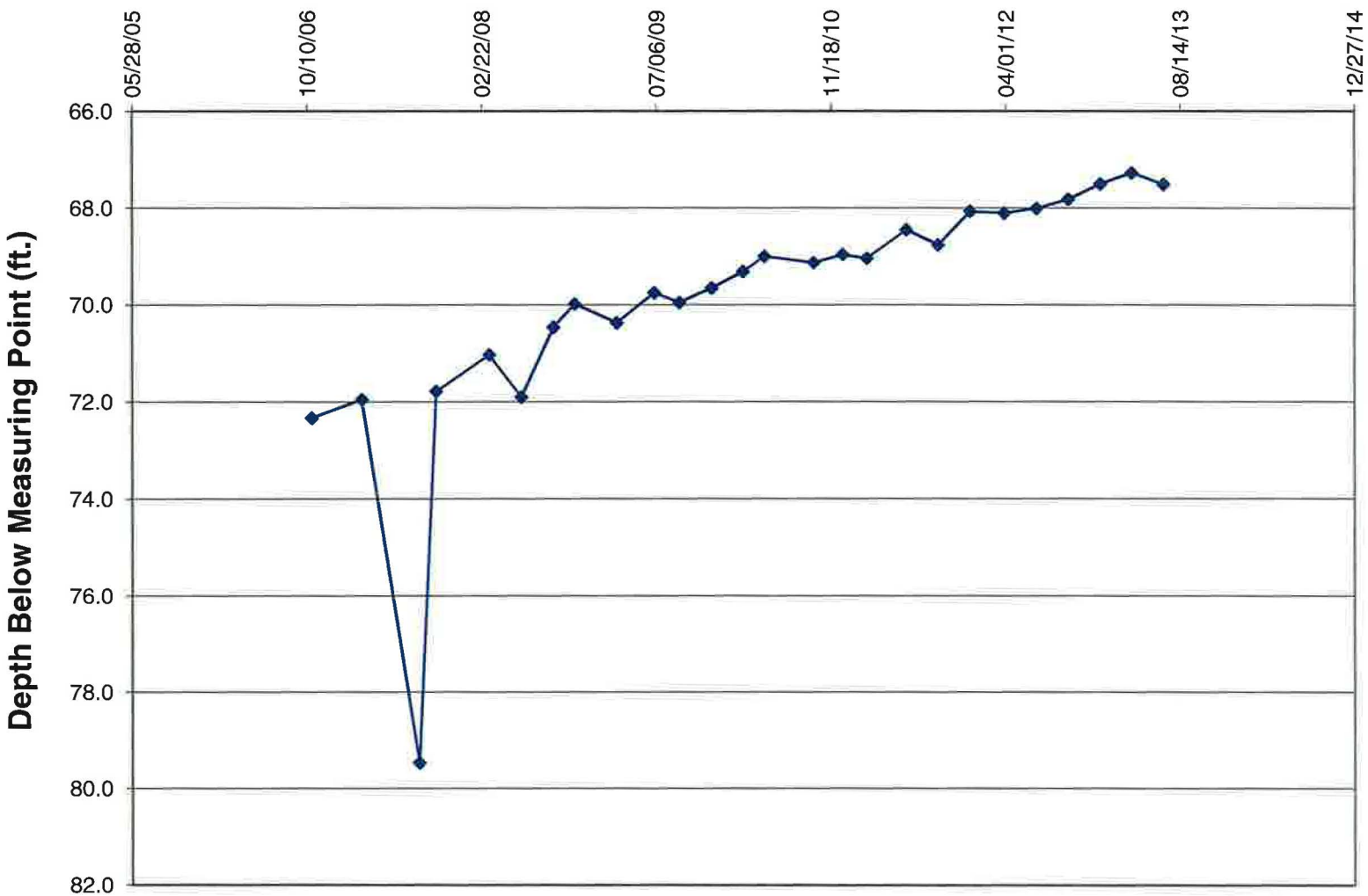

TWN-17 Water Level Over Time (ft. blmp)
Depth Below Measuring Point (ft.)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
33.0
33.5
34.0
34.5
35.0
35.5
36.0


TWN-18 Water Level Over Time (ft. bImp)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
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. blmp)
Depth Below Measuring Point (ft.)
07/06/09
01/22/10
08/10/10
02/26/11
09/14/11
04/01/12
10/18/12
05/06/13
11/22/13
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
75.0
75.5
76.0
76.5
77.0
77.5
78.0
78.5
79.0
79.5
80.0

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



Tab F

Depths to Groundwater and Elevations Over Time for Nitrate Monitoring Wells

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

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

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	

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	

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	

Water Levels and Data over Time
White Mesa Mill - Well TWN-5

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
	5,653.70	5,655.18	1.48				155
5,584.43				08/25/09	70.75	69.27	
5,584.51				09/21/09	70.67	69.19	
5,584.54				11/10/09	70.64	69.16	
5,584.62				12/14/09	70.56	69.08	
5,584.97				03/11/10	70.21	68.73	
5,585.38				05/11/10	69.80	68.32	
5,585.35				09/29/10	69.83	68.35	
5,585.42				12/21/10	69.76	68.28	
5,585.08				02/28/11	70.10	68.62	
5,585.38				06/21/11	69.80	68.32	
5,585.51				09/20/11	69.67	68.19	
5,585.76				12/21/11	69.42	67.94	
5,585.61				03/27/12	69.57	68.09	
5,585.63				06/28/12	69.55	68.07	
5,585.63				09/27/12	69.55	68.07	
5,585.90				12/28/12	69.28	67.80	
5,585.68				03/28/13	69.50	68.02	
5,585.57				06/27/13	69.61	68.13	

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	

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	

Water Levels and Data over Time
White Mesa Mill - Well TWN-8

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
	5,649.35	5,651.48	2.13				160
5,589.01				08/25/09	62.47	60.34	
5,589.10				09/21/09	62.38	60.25	
5,589.09				11/03/09	62.39	60.26	
5,603.38				12/14/09	48.10	45.97	
5,589.68				03/11/10	61.80	59.67	
5,589.95				05/11/10	61.53	59.40	
5,589.74				09/29/10	61.74	59.61	
5,589.97				12/21/10	61.51	59.38	
5,589.67				02/28/11	61.81	59.68	
5,589.96				06/21/11	61.52	59.39	
5,589.82				09/20/11	61.66	59.53	
5,590.18				12/21/11	61.30	59.17	
5,589.85				03/27/12	61.63	59.50	
5,589.84				06/28/12	61.64	59.51	
5,589.28				09/27/12	62.20	60.07	
5,589.18				12/28/12	62.30	60.17	
5,588.95				03/28/13	62.53	60.40	
5,588.47				06/27/13	63.01	60.88	

Water Levels and Data over Time
White Mesa Mill - Well TWN-9

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
	5,645.68	5,647.45	1.77				102.5
5,582.05				08/25/09	65.40	63.63	
5,582.12				09/22/09	65.33	63.56	
5,582.27				11/10/09	65.18	63.41	
5,582.53				12/14/09	64.92	63.15	
5,582.92				03/11/10	64.53	62.76	
5,583.06				05/11/10	64.39	62.62	
5,583.25				09/29/10	64.20	62.43	
5,583.57				12/21/10	63.88	62.11	
5,583.54				02/28/11	63.91	62.14	
5,583.92				06/21/11	63.53	61.76	
5,584.04				09/20/11	63.41	61.64	
5,587.42				12/21/11	60.03	58.26	
5,584.56				03/27/12	62.89	61.12	
5,584.55				06/28/12	62.90	61.13	
5,584.85				09/27/12	62.6	60.83	
5,585.24				12/28/12	62.21	60.44	
5,585.35				03/28/13	62.10	60.33	
5,585.40				06/27/13	62.05	60.28	

Water Levels and Data over Time
White Mesa Mill - Well TWN-10

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
	5,664.63	5,666.98	2.35				107.5
5,584.18				08/25/09	82.80	80.45	
5,584.40				09/22/09	82.58	80.23	
5,584.61				11/10/09	82.37	80.02	
5,584.90				12/14/09	82.08	79.73	
5,585.21				03/11/10	81.77	79.42	
5,585.42				05/11/10	81.56	79.21	
5,585.42				09/29/10	81.56	79.21	
5,585.68				12/21/10	81.30	78.95	
5,585.60				02/28/11	81.38	79.03	
5,585.95				06/21/11	81.03	78.68	
5,585.92				09/20/11	81.06	78.71	
5,586.22				12/21/11	80.76	78.41	
5,586.16				03/27/12	80.82	78.47	
5,586.16				06/28/12	80.82	78.47	
5,586.13				09/27/12	80.85	78.50	
5,586.28				12/28/12	80.70	78.35	
5,586.28				03/28/13	80.70	78.35	
5,586.11				06/27/13	80.87	78.52	

Water Levels and Data over Time
White Mesa Mill - Well TWN-11

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
	5,683.16	5,684.53	1.37				147.5
5,613.00				11/03/09	71.53	70.16	
5,613.88				12/14/09	70.65	69.28	
5,614.65				03/11/10	69.88	68.51	
5,615.16				05/11/10	69.37	68.00	
5,614.93				09/29/10	69.60	68.23	
5,615.09				12/21/10	69.44	68.07	
5,614.96				02/28/11	69.57	68.20	
5,615.12				06/21/11	69.41	68.04	
5,614.96				09/20/11	69.57	68.20	
5,615.18				12/21/11	69.35	67.98	
5,615.11				03/27/12	69.42	68.05	
5,615.12				06/28/12	69.41	68.04	
5,615.03				09/27/12	69.50	68.13	
5,615.28				12/28/12	69.25	67.88	
5,615.40				03/28/13	69.13	67.76	
5,615.20				06/27/13	69.33	67.96	

Water Levels and Data over Time
White Mesa Mill - Well TWN-12

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
	5,667.03	5,668.24	1.21				115
5,628.33				11/03/09	39.91	38.70	
5,628.86				12/14/09	39.38	38.17	
5,630.27				03/11/10	37.97	36.76	
5,631.64				05/11/10	36.60	35.39	
5,633.73				09/29/10	34.51	33.30	
5,633.43				12/21/10	34.81	33.60	
5,634.35				02/28/11	33.89	32.68	
5,635.95				06/21/11	32.29	31.08	
5,636.44				09/20/11	31.80	30.59	
5,638.93				12/21/11	29.31	28.10	
5,639.69				03/27/12	28.55	27.34	
5,639.74				06/28/12	28.50	27.29	
5,640.90				09/27/12	27.34	26.13	
5,640.52				12/28/12	27.72	26.51	
5,639.99				03/28/13	28.25	27.04	
5,639.54				06/27/13	28.70	27.49	

Water Levels and Data over Time
White Mesa Mill - Well TWN-13

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
	5,633.04	5,634.32	1.28				120
5,586.95				11/03/09	47.37	46.09	
5,587.22				12/14/09	47.10	45.82	
5,587.45				03/11/10	46.87	45.59	
5,587.64				05/11/10	46.68	45.40	
5,587.37				09/29/10	46.95	45.67	
5,587.77				12/21/10	46.55	45.27	
5,587.64				02/28/11	46.68	45.40	
5,587.89				06/21/11	46.43	45.15	
5,588.03				09/20/11	46.29	45.01	
5,588.30				12/21/11	46.02	44.74	
5,588.32				03/27/12	46.00	44.72	
5,588.30				06/28/12	46.02	44.74	
5,588.51				09/27/12	45.81	44.53	
5,588.71				12/28/12	45.61	44.33	
5,588.87				03/28/13	45.45	44.17	
5,588.79				06/27/13	45.53	44.25	

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	

Water Levels and Data over Time
White Mesa Mill - Well TWN-15

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
	5,675.01	5,676.49	1.48				155
5,594.12				11/10/09	82.37	80.89	
5,584.03				12/14/09	92.46	90.98	
5,584.10				03/11/10	92.39	90.91	
5,584.16				05/11/10	92.33	90.85	
5,584.26				09/29/10	92.23	90.75	
5,584.30				12/21/10	92.19	90.71	
5,584.04				02/28/11	92.45	90.97	
5,584.30				06/21/11	92.19	90.71	
5,584.37				09/20/11	92.12	90.64	
5,584.49				12/21/11	92.00	90.52	
5,584.47				03/27/12	92.02	90.54	
5,584.49				06/28/12	92.00	90.52	
5,584.58				09/27/12	91.91	90.43	
5,584.75				12/28/12	91.74	90.26	
5,584.93				03/28/13	91.56	90.08	
5,584.83				06/27/13	91.66	90.18	

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	

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

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or Measured Depth to Water (blw.MP)	Total Depth to Water (blw.LSD)	Total Depth Of Well
	5,639.73	5,641.55	1.82				100
5,605.96				11/04/09	35.59	33.77	
5,606.27				12/14/09	35.28	33.46	
5,606.25				03/11/10	35.30	33.48	
5,606.55				05/11/10	35.00	33.18	
5,606.77				09/29/10	34.78	32.96	
5,607.15				12/21/10	34.40	32.58	
5,606.96				02/28/11	34.59	32.77	
5,607.22				06/21/11	34.33	32.51	
5,607.40				09/20/11	34.15	32.33	
5,607.85				12/21/11	33.70	31.88	
5,607.67				03/27/12	33.88	32.06	
5,607.68				06/28/12	33.87	32.05	
5,607.76				09/27/12	33.79	31.97	
5,608.08				12/28/12	33.47	31.65	
5,607.91				03/28/13	33.64	31.82	
5,607.64				06/27/13	33.91	32.09	

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

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

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	

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	

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	

Tab G

Laboratory Analytical Reports

INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-010
Client Sample ID: Piez-01_04242013
Collection Date: 4/24/2013 1000h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2146h	E300.0	10.0	**53.3**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 2000h	E353.2	1.00	**8.88**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-011
Client Sample ID: Piez-02_04242013
Collection Date: 4/24/2013 1013h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2210h	E300.0	1.00	**10.3**	
Nitrate/Nitrite (as N)	mg/L		5/7/2013 2232h	E353.2	0.100	**0.172**	^

^ - *Reissue of a previously generated report. Information has been added, updated, or revised. Information herein supersedes that of the previously issued reports.*

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QA Officer

INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-012
Client Sample ID: Piez-03_04242013
Collection Date: 4/24/2013 1025h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2233h	E300.0	5.00	**21.2**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 2003h	E353.2	0.100	**1.83**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-004
Client Sample ID: TWN-01_04232013
Collection Date: 4/23/2013 0835h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 1841h	E300.0	5.00	**17.4**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1947h	E353.2	0.100	**0.840**	

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Jose Rocha
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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-008
Client Sample ID: TWN-02_04242013
Collection Date: 4/24/2013 0945h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2100h	E300.0	10.0	**82.1**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1957h	E353.2	10.0	**57.7**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-007
Client Sample ID: TWN-03_04242013
Collection Date: 4/24/2013 0935h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2037h	E300.0	50.0	**158**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1956h	E353.2	10.0	**27.2**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-005
Client Sample ID: TWN-04_04232013
Collection Date: 4/23/2013 0922h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 1950h	E300.0	5.00	**24.4**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1953h	E353.2	0.100	**1.63**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-003
Client Sample ID: TWN-07_04242013
Collection Date: 4/24/2013 0922h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 1817h	E300.0	1.00	**5.88**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1946h	E353.2	0.100	**1.16**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-001
Client Sample ID: TWN-07R_04232013
Collection Date: 4/23/2013 0734h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 1558h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1943h	E353.2	0.100	< 0.100	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-006
Client Sample ID: TWN-18_04232013
Collection Date: 4/23/2013 1004h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2013h	E300.0	10.0	**64.3**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 2031h	E353.2	1.00	**2.32**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Sample ID: 1306139-007
Client Sample ID: TW4-22_06052013
Collection Date: 6/5/2013 0830h
Received Date: 6/7/2013 1000h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		6/10/2013 2339h	E300.0	100	**586**	
Nitrate/Nitrite (as N)	mg/L		6/13/2013 1752h	E353.2	10.0	**50.2**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Sample ID: 1306139-002
Client Sample ID: TW4-24_06052013
Collection Date: 6/5/2013 0812h
Received Date: 6/7/2013 1000h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		6/10/2013 2056h	E300.0	100	**916**	
Nitrate/Nitrite (as N)	mg/L		6/13/2013 1738h	E353.2	10.0	**23.7**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Sample ID: 1306139-001
Client Sample ID: TW4-25_06052013
Collection Date: 6/5/2013 0752h
Received Date: 6/7/2013 1000h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		6/10/2013 1946h	E300.0	50.0	**136**	
Nitrate/Nitrite (as N)	mg/L		6/13/2013 1737h	E353.2	1.00	**5.24**	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-002
Client Sample ID: TWN-60_04252013
Collection Date: 4/25/2013 0745h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 1708h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 1945h	E353.2	0.100	< 0.100	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Sample ID: 1306288-006
Client Sample ID: TW4-60_06132013
Collection Date: 6/13/2013 830h
Received Date: 6/14/2013 1442h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		6/18/2013 024h	E300.0	1.00	< 1.00	
Nitrate/Nitrite (as N)	mg/L		6/17/2013 1620h	E353.2	0.100	< 0.100	

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INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Sample ID: 1304696-009
Client Sample ID: TWN-65_04232013
Collection Date: 4/23/2013 1004h
Received Date: 4/26/2013 1015h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Chloride	mg/L		4/29/2013 2123h	E300.0	5.00	**66.1**	
Nitrate/Nitrite (as N)	mg/L		4/30/2013 2017h	E353.2	1.00	**2.46**	

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

RE: 2nd Quarter Nitrate

Dear Garrin Palmer: Lab Set ID: 1304696

American West Analytical Laboratories received 12 sample(s) on 4/26/2013 for the analyses presented in the following report.

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

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.

This is a revision to a report orignally issued 5/3/2013. Pages 1, 3, 4, 14, and 16-19 have been revised.

Thank You,

Approved by: Kyle F. Gross

Digitally signed by Kyle F. Gross
DN: cn=Kyle F. Gross, o=AWAL, ou=AWAL-Laboratory Director, email=kyle@awal-labs.com, c=US
Date: 2013.05.14 12:39:24 -06'00'

Laboratory Director or designee

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Set ID: 1304696
Date Received: 4/26/2013 1015h

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Jose Rocha
QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1304696-001A	TWN-07R_04232013	4/23/2013 0734h	Aqueous	Anions, E300.0
1304696-001B	TWN-07R_04232013	4/23/2013 0734h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-002A	TWN-60_04252013	4/25/2013 0745h	Aqueous	Anions, E300.0
1304696-002B	TWN-60_04252013	4/25/2013 0745h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-003A	TWN-07_04242013	4/24/2013 0922h	Aqueous	Anions, E300.0
1304696-003B	TWN-07_04242013	4/24/2013 0922h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-004A	TWN-01_04232013	4/23/2013 0835h	Aqueous	Anions, E300.0
1304696-004B	TWN-01_04232013	4/23/2013 0835h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-005A	TWN-04_04232013	4/23/2013 0922h	Aqueous	Anions, E300.0
1304696-005B	TWN-04_04232013	4/23/2013 0922h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-006A	TWN-18_04232013	4/23/2013 1004h	Aqueous	Anions, E300.0
1304696-006B	TWN-18_04232013	4/23/2013 1004h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-007A	TWN-03_04242013	4/24/2013 0935h	Aqueous	Anions, E300.0
1304696-007B	TWN-03_04242013	4/24/2013 0935h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-008A	TWN-02_04242013	4/24/2013 0945h	Aqueous	Anions, E300.0
1304696-008B	TWN-02_04242013	4/24/2013 0945h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-009A	TWN-65_04232013	4/23/2013 1004h	Aqueous	Anions, E300.0
1304696-009B	TWN-65_04232013	4/23/2013 1004h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-010A	Piez-01_04242013	4/24/2013 1000h	Aqueous	Anions, E300.0
1304696-010B	Piez-01_04242013	4/24/2013 1000h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-011A	Piez-02_04242013	4/24/2013 1013h	Aqueous	Anions, E300.0
1304696-011B	Piez-02_04242013	4/24/2013 1013h	Aqueous	Nitrite/Nitrate (as N), E353.2
1304696-012A	Piez-03_04242013	4/24/2013 1025h	Aqueous	Anions, E300.0
1304696-012B	Piez-03_04242013	4/24/2013 1025h	Aqueous	Nitrite/Nitrate (as N), E353.2

Revised Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Garrin Palmer
Project: 2nd Quarter Nitrate
Lab Set ID: 1304696

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Jose Rocha
QA Officer

Sample Receipt Information:

Date of Receipt: 4/26/2013
Date(s) of Collection: 4/23, 4/24, and 4/25/2013
Sample Condition: Intact
C-O-C Discrepancies: None

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

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

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

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

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

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

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

Corrective Action: None required.

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1304696
Project: 2nd Quarter Nitrate

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-R53633**	Date Analyzed:	04/29/2013 1535h											
Test Code:	300.0-W													
Chloride		4.48	mg/L	E300.0	0.0114	1.00	5.000	0	89.6	90 - 110				§
Lab Sample ID:	**LCS-R53670**	Date Analyzed:	04/30/2013 1936h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		1.03	mg/L	E353.2	0.00252	0.100	1.000	0	103	90 - 110				
Lab Sample ID:	**LCS-R53945**	Date Analyzed:	05/07/2013 2147h											
Test Code:	NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)		1.04	mg/L	E353.2	0.00252	0.100	1.000	0	104	90 - 110				^

^ - Reissue of a previously generated report. Information has been added, updated, or revised. Information herein supersedes that of the previously issued reports.

§ - QC limits are set with an accuracy of two significant figures, therefore the recovery rounds to an acceptable value within the control limits.

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Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1304696
Project: 2nd Quarter Nitrate

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-R53633 Date Analyzed: 04/29/2013 1511h													
Test Code: 300.0-W													
Chloride	< 1.00	mg/L	E300.0	0.0114	1.00								
Lab Sample ID: MB-R53670 Date Analyzed: 04/30/2013 1935h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.100	mg/L	E353.2	0.00252	0.100								
Lab Sample ID: MB-R53945 Date Analyzed: 05/07/2013 2144h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.100	mg/L	E353.2	0.00252	0.100								^

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Jose Rocha
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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1304696
Project: 2nd Quarter Nitrate

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: 1304696-001AMS Date Analyzed: 04/29/2013 1621h													
Test Code: 300.0-W													
Chloride	4.70	mg/L	E300.0	0.0114	1.00	5.000	0	94.0	90 - 110				
Lab Sample ID: 1304696-002AMS Date Analyzed: 04/29/2013 1731h													
Test Code: 300.0-W													
Chloride	4.73	mg/L	E300.0	0.0114	1.00	5.000	0	94.7	90 - 110				
Lab Sample ID: 1304650-003DMS Date Analyzed: 04/30/2013 2021h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.59	mg/L	E353.2	0.00252	0.100	1.000	0.618	97.1	90 - 110				
Lab Sample ID: 1304696-011BMS Date Analyzed: 05/07/2013 2233h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.13	mg/L	E353.2	0.00252	0.100	1.000	0.172	95.7	90 - 110				^

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1304696
Project: 2nd Quarter Nitrate

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: 1304696-001AMSD Date Analyzed: 04/29/2013 1644h													
Test Code: 300.0-W													
Chloride	4.77	mg/L	E300.0	0.0114	1.00	5.000	0	95.4	90 - 110	4.7	1.52	20	
Lab Sample ID: 1304696-002AMSD Date Analyzed: 04/29/2013 1754h													
Test Code: 300.0-W													
Chloride	4.76	mg/L	E300.0	0.0114	1.00	5.000	0	95.1	90 - 110	4.73	0.485	20	
Lab Sample ID: 1304650-003DMSD Date Analyzed: 04/30/2013 2022h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.65	mg/L	E353.2	0.00252	0.100	1.000	0.618	103	90 - 110	1.59	3.48	10	
Lab Sample ID: 1304696-011BMSD Date Analyzed: 05/07/2013 2234h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.14	mg/L	E353.2	0.00252	0.100	1.000	0.172	96.7	90 - 110	1.13	0.935	10	^

^ - *Reissue of a previously generated report. Information has been added, updated, or revised. Information herein supersedes that of the previously issued reports.*

American West Analytical Laboratories

UL

WORK ORDER Summary

Work Order: **1304696**

Client: Energy Fuels Resources, Inc. Due Date: 5/7/2013

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

Project: **2nd Quarter Nitrate** **QC Level:** III WO Type: Project

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

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1304696-001A	**TWN-07R_04232013**	4/23/2013 0734h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-001B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-002A	**TWN-60_04252013**	4/25/2013 0745h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-002B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-003A	**TWN-07_04242013**	4/24/2013 0922h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-003B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-004A	**TWN-01_04232013**	4/23/2013 0835h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-004B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-005A	**TWN-04_04232013**	4/23/2013 0922h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-005B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-006A	**TWN-18_04232013**	4/23/2013 1004h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-006B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-007A	**TWN-03_04242013**	4/24/2013 0935h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-007B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-008A	**TWN-02_04242013**	4/24/2013 0945h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-008B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-009A	**TWN-65_04232013**	4/23/2013 1004h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1

Printed: 4/26/2013 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☑ RT ☑ CN ☑ TAT ☐ QC ☑ HOK HOK_____ HOK_____ COC Emailed_____

WORK ORDER Summary

Work Order: **1304696**

Client: Energy Fuels Resources, Inc.

Due Date: 5/7/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1304696-009B	**TWN-65_04232013**	4/23/2013 1004h	4/26/2013 1015h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous	☑	df - no2/no3	1
1304696-010A	**Piez-01_04242013**	4/24/2013 1000h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-010B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-011A	**Piez-02_04242013**	4/24/2013 1013h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-011B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1304696-012A	**Piez-03_04242013**	4/24/2013 1025h	4/26/2013 1015h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - cl	1
1304696-012B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	

Client: Energy Fuels
Address: 6425 S Hwy 191
Blanding (City) UT (State) 84511 (Zip)
Phone: 435 678 2221 Fax:
Contact: Garrin Palmer
E-mail: gpalmer@energyfuels.com
Project Name: 2nd Quarter Nitrate
Project Number/P.O.#:
Sampler Name: Tanner Holliday

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CHAIN OF CUSTODY

Lab Sample Set # 1304696
Page 1 of 1

Turn Around Time (Circle One)
1 day 2 day 3 day 4 day 5 day (Standard)

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED: Nitrate+Nitrite	TESTS REQUIRED: Chloride	QC LEVEL	COMMENTS
TWN-07R_04232013	4/23/13 0734	W	2	X	X	(3)	
TWN-60_04252013	4/25/13 0745	W	2	X	X		
TWN-07_04242013	4/24/13 0922	W	2	X	X		
TWN-01_04232013	4/23/13 0835	W	2	X	X		
TWN-04_04232013	4/23/13 0922	W	2	X	X		Trip Blank Included 04/25/13
TWN-18_04232013	4/23/13 1004	W	2	X	X		
TWN-03_04242013	4/24/13 0935	W	2	X	X		
TWN-02_04242013	4/24/13 0945	W	2	X	X		
TWN-65_04232013	4/23/13 1004	W	2	X	X		
Piez-01_04242013	4/24/13 1000	W	2	X	X		
Piez-02_04242013	4/24/13 1013	W	2	X	X		
Piez-03_04242013	4/24/13 1025	W	2	X	X		

Relinquished By: Signature	Date	Received By: Signature	Date
Tanner Holliday	4/25/13		
PRINT NAME: Tanner Holliday	Time: 1000	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date 4/26/13
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered (Fed-X)
Notes:
2 Ambient or (Chilled)
Notes:
3 Temperature 2.0
4 Received Broken/Leaking (Improperly Sealed) Y (N)
Notes:
5 Properly Preserved (Y) N
Checked at Bench Y N
Notes:
6 Received Within Holding Times (Y) N
Notes:

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

Discrepancies Between Sample Labels and COC Record? Y (N)
Notes:

Sample Set: 1304696

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	~~Except~~ 1	~~Except~~ 2	~~Except~~ 3	~~Except~~ 4	~~Except~~ 5	~~Except~~ 6	~~Except~~ 7	~~Except~~ 8	~~Except~~ 9	~~Except~~ 10	~~Except~~ 11	~~Except~~ 12	~~Except~~	~~Except~~	~~Except~~
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			
Nutrients	pH <2 H_2SO_4																
O & G	pH <2 HCL																
Phenols	pH <2 H_2SO_4																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H_2SO_4																
TOC	pH <2 H_3PO_4																
TOX	pH <2 H_2SO_4																
T PO_4	pH <2 H_2SO_4																
TPH	pH <2 HCL																

el 4/26/13

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

Frequency: All samples requiring preservation

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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: 2nd Quarter Chloroform 2013

Dear Garrin Palmer: Lab Set ID: 1306139

American West Analytical Laboratories received 9 sample(s) on 6/7/2013 for the analyses presented in the following report.

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

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=Quality Assurance Officer, email=jose@awal-labs.com, c=US
Date: 2013.06.18 14:24:51 -06'00'

Laboratory Director or designee

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Set ID: 1306139
Date Received: 6/7/2013 1000h

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID	Client Sample ID	Date Collected		Matrix	Analysis
1306139-001A	TW4-25_06052013	6/5/2013	0752h	Aqueous	Anions, E300.0
1306139-001B	TW4-25_06052013	6/5/2013	0752h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-001C	TW4-25_06052013	6/5/2013	0752h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-002A	TW4-24_06052013	6/5/2013	0812h	Aqueous	Anions, E300.0
1306139-002B	TW4-24_06052013	6/5/2013	0812h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-002C	TW4-24_06052013	6/5/2013	0812h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-003A	MW-26_06052013	6/5/2013	0855h	Aqueous	Anions, E300.0
1306139-003B	MW-26_06052013	6/5/2013	0855h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-003C	MW-26_06052013	6/5/2013	0855h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-004A	TW4-04_06052013	6/5/2013	0925h	Aqueous	Anions, E300.0
1306139-004B	TW4-04_06052013	6/5/2013	0925h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-004C	TW4-04_06052013	6/5/2013	0925h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-005A	MW-04_06052013	6/5/2013	0910h	Aqueous	Anions, E300.0
1306139-005B	MW-04_06052013	6/5/2013	0910h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-005C	MW-04_06052013	6/5/2013	0910h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-006A	TW4-19_06052013	6/5/2013	1400h	Aqueous	Anions, E300.0
1306139-006B	TW4-19_06052013	6/5/2013	1400h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-006C	TW4-19_06052013	6/5/2013	1400h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-007A	TW4-22_06052013	6/5/2013	0830h	Aqueous	Anions, E300.0
1306139-007B	TW4-22_06052013	6/5/2013	0830h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-007C	TW4-22_06052013	6/5/2013	0830h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-008A	TW4-20_06052013	6/5/2013	0842h	Aqueous	Anions, E300.0
1306139-008B	TW4-20_06052013	6/5/2013	0842h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306139-008C	TW4-20_06052013	6/5/2013	0842h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306139-009A	Trip Blank	6/5/2013		Aqueous	VOA by GC/MS Method 8260C/5030C

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Inorganic Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	2nd Quarter Chloroform 2013
Lab Set ID:	1306139

Sample Receipt Information:

Date of Receipt:	6/7/2013
Date of Collection:	6/5/2013
Sample Condition:	Intact
C-O-C Discrepancies:	None

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

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

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

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

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

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

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

Corrective Action: None required.

Volatile Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	2nd Quarter Chloroform 2013
Lab Set ID:	1306139

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Sample Receipt Information:

Date of Receipt:	6/7/2013
Date of Collection:	6/5/2013
Sample Condition:	Intact
C-O-C Discrepancies:	None
Method:	SW-846 8260C/5030C
Analysis:	Volatile Organic Compounds

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

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

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

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

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

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

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

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306139
Project: 2nd Quarter Chloroform 2013

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-R55412 Date Analyzed: 06/10/2013 1357h													
Test Code: 300.0-W													
Chloride	4.69	mg/L	E300.0	0.0114	1.00	5.000	0	93.8	90 - 110				
Lab Sample ID: LCS-R55537 Date Analyzed: 06/13/2013 1736h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	0.987	mg/L	E353.2	0.00252	0.100	1.000	0	98.7	90 - 110				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306139
Project: 2nd Quarter Chloroform 2013

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-R55412 Date Analyzed: 06/10/2013 1334h													
Test Code: 300.0-W													
Chloride	< 1.00	mg/L	E300.0	0.0114	1.00								
Lab Sample ID: MB-R55537 Date Analyzed: 06/13/2013 1734h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.100	mg/L	E353.2	0.00252	0.100								

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306139
Project: 2nd Quarter Chloroform 2013

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: 1306068-001BMS Date Analyzed: 06/10/2013 1640h													
Test Code: 300.0-W													
Chloride	24,000	mg/L	E300.0	57.0	5,000	25,000	61.3	95.6	90 - 110				
Lab Sample ID: 1306139-001AMS Date Analyzed: 06/10/2013 2010h													
Test Code: 300.0-W													
Chloride	2,500	mg/L	E300.0	5.70	500	2,500	136	94.7	90 - 110				
Lab Sample ID: 1306139-003BMS Date Analyzed: 06/13/2013 1741h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	12.3	mg/L	E353.2	0.0252	1.00	10.00	2.11	102	90 - 110				
Lab Sample ID: 1306188-034AMS Date Analyzed: 06/13/2013 1756h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.10	mg/L	E353.2	0.00252	0.100	1.000	0	110	90 - 110				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306139
Project: 2nd Quarter Chloroform 2013

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: 1306068-001BMSD Date Analyzed: 06/10/2013 1703h													
Test Code: 300.0-W													
Chloride	23,700	mg/L	E300.0	57.0	5,000	25,000	61.3	94.5	90 - 110	24000	1.17	20	
Lab Sample ID: 1306139-001AMSD Date Analyzed: 06/10/2013 2033h													
Test Code: 300.0-W													
Chloride	2,480	mg/L	E300.0	5.70	500	2,500	136	93.8	90 - 110	2500	0.854	20	
Lab Sample ID: 1306139-003BMSD Date Analyzed: 06/13/2013 1743h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.9	mg/L	E353.2	0.0252	1.00	10.00	2.11	97.7	90 - 110	12.3	3.49	10	
Lab Sample ID: 1306188-034AMSD Date Analyzed: 06/13/2013 1758h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.08	mg/L	E353.2	0.00252	0.100	1.000	0	108	90 - 110	1.1	1.96	10	

American West Analytical Laboratories

UL
Denison

WORK ORDER Summary

Work Order: **1306139**

Client: Energy Fuels Resources, Inc. Due Date: 6/18/2013

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

Project: **2nd Quarter Chloroform 2013** **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. EDD-Denison. Email Group.; DB

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1306139-001A	**TW4-25_06052013**	6/5/2013 0752h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306139-001B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306139-001C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306139-002A	**TW4-24_06052013**	6/5/2013 0812h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306139-002B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306139-002C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306139-003A	**MW-26_06052013**	6/5/2013 0855h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306139-003B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306139-003C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306139-004A	**TW4-04_06052013**	6/5/2013 0925h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306139-004B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306139-004C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306139-005A	**MW-04_06052013**	6/5/2013 0910h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306139-005B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306139-005C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306139-006A	**TW4-19_06052013**	6/5/2013 1400h	6/7/2013 1000h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				

Printed: 6/7/2013 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☑ RT ☑ CN ☑ TAT ☑ QC ☑ HOK_____ HOK_____ HOK_____ COC Emailed_____

WORK ORDER Summary

Work Order: **1306139**

Client: Energy Fuels Resources, Inc.

Due Date: 6/18/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1306139-006B	**TW4-19_06052013**	6/5/2013 1400h	6/7/2013 1000h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous	☑	df - no2/no3	1
1306139-006C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3
1306139-007A	**TW4-22_06052013**	6/5/2013 0830h	6/7/2013 1000h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - wc	1
1306139-007B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1306139-007C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3
1306139-008A	**TW4-20_06052013**	6/5/2013 0842h	6/7/2013 1000h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - wc	1
1306139-008B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1306139-008C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3
1306139-009A	**Trip Blank**	6/5/2013	6/7/2013 1000h	**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*	Aqueous	☑	VOCFridge	3

Client Energy Fuels
Address 6425 S Hwy 191
Blanding (City) UT (State) 84511 (Zip)
Phone 435 678 2221 Fax
Contact Garrin Palmer
E-mail gpalmer@energyfuels.com
Project Name 2nd Quarter chloroform 2013
Project Number/P.O.#
Sampler Name Tanner Holliday

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CHAIN OF CUSTODY

Lab Sample Set # 1306139
Page 1 of 1

Turn Around Time (Circle One)
1 day 2 day 3 day 4 day 5 day (Standard)

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED: Nitrate + Nitrite	Chloride	VOCs	QC LEVEL	COMMENTS
TW4-25_06052013	6/5/13 0752	W	5	X	X	X	3	
TW4-24_06052013	6/5/13 0812	W	5	X	X	X		
MW-26_06052013	6/5/13 0855	W	5	X	X	X		
TW4-04_06052013	6/5/13 0925	W	5	X	X	X		
MW-04_06052013	6/5/13 0910	W	5	X	X	X		
TW4-19_06052013	6/5/13 1400	W	5	X	X	X		
TW4-22_06052013	6/5/13 0830	W	5	X	X	X		
TW4-20_06052013	6/5/13 0842	W	5	X	X	X		
Trip Blank	6/5/13					X		
Temp Blank	6/6/13							

QC LEVEL: 1 2 2+ | (3) 3+ 4

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered Notes: Fed X
2 Ambient or Chilled Notes:
3 Temperature 2.2°
4 Received Broken/Leaking (Improperly Sealed) Y (N) Notes:
5 Properly Preserved (Y) N
Checked at Bench Y N Notes:
6 Received Within Holding Times (Y) N Notes:

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

Discrepancies Between Sample Labels and COC Record? Y (N) Notes:

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME Tanner Holliday	Time 1100	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date 6/6/13
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:

6/7/13
DB 6/7/13

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

Sample Set: 1306139

Preservation Check Sheet

DB 6/7/12

Sample Set Extension and pH

Bottle Type	Preservative	All OK	~~Except~~ -001	~~Except~~ -002	~~Except~~ -003	~~Except~~ -004	~~Except~~ -005	~~Except~~ -006	~~Except~~ -007	~~Except~~ -008	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~
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							
Nutrients	pH <2 H_2SO_4																
O & G	pH <2 HCL																
Phenols	pH <2 H_2SO_4																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H_2SO_4																
TOC	pH <2 H_3PO_4																
TOX	pH <2 H_2SO_4																
T PO_4	pH <2 H_2SO_4																
TPH	pH <2 HCL																

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

Frequency: All samples requiring preservation

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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: 2nd Quarter Chloroform 2013

Dear Garrin Palmer: Lab Set ID: 1306288

American West Analytical Laboratories received 9 sample(s) on 6/14/2013 for the analyses presented in the following report.

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

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=Quality Assurance Officer, email=jose@awal-labs.com, c=US
Date: 2013.06.24 16:41:08 -06'00'

Laboratory Director or designee

SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc. **Contact:** Garrin Palmer
Project: 2nd Quarter Chloroform 2013
Lab Set ID: 1306288
Date Received: 6/14/2013 1442h

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1306288-001A	TW4-26_06132013	6/13/2013 702h	Aqueous	Anions, E300.0
1306288-001B	TW4-26_06132013	6/13/2013 702h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-001C	TW4-26_06132013	6/13/2013 702h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-002A	TW4-06_06132013	6/13/2013 712h	Aqueous	Anions, E300.0
1306288-002B	TW4-06_06132013	6/13/2013 712h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-002C	TW4-06_06132013	6/13/2013 712h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-003A	TW4-05_06132013	6/13/2013 730h	Aqueous	Anions, E300.0
1306288-003B	TW4-05_06132013	6/13/2013 730h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-003C	TW4-05_06132013	6/13/2013 730h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-004A	TW4-18_06132013	6/13/2013 740h	Aqueous	Anions, E300.0
1306288-004B	TW4-18_06132013	6/13/2013 740h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-004C	TW4-18_06132013	6/13/2013 740h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-005A	TW4-10_06132013	6/13/2013 750h	Aqueous	Anions, E300.0
1306288-005B	TW4-10_06132013	6/13/2013 750h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-005C	TW4-10_06132013	6/13/2013 750h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-006A	TW4-60_06132013	6/13/2013 830h	Aqueous	Anions, E300.0
1306288-006B	TW4-60_06132013	6/13/2013 830h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-006C	TW4-60_06132013	6/13/2013 830h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-007A	TW4-70_06132013	6/13/2013 702h	Aqueous	Anions, E300.0
1306288-007B	TW4-70_06132013	6/13/2013 702h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-007C	TW4-70_06132013	6/13/2013 702h	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-008A	Trip Blank	6/13/2013	Aqueous	VOA by GC/MS Method 8260C/5030C
1306288-009A	TW4-06R-06122013	6/12/2013 745h	Aqueous	Anions, E300.0
1306288-009B	TW4-06R-06122013	6/12/2013 745h	Aqueous	Nitrite/Nitrate (as N), E353.2
1306288-009C	TW4-06R-06122013	6/12/2013 745h	Aqueous	VOA by GC/MS Method 8260C/5030C

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Inorganic Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	2nd Quarter Chloroform 2013
Lab Set ID:	1306288

Sample Receipt Information:

Date of Receipt:	6/14/2013
Date(s) of Collection:	6/12 & 6/13/2013
Sample Condition:	Intact
C-O-C Discrepancies:	See COC

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

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

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

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

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

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

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

Corrective Action: None required.

Volatile Case Narrative

Client:	Energy Fuels Resources, Inc.
Contact:	Garrin Palmer
Project:	2nd Quarter Chloroform 2013
Lab Set ID:	1306288

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Sample Receipt Information:

Date of Receipt:	6/14/2013
Date(s) of Collection:	6/12 & 6/13/2013
Sample Condition:	Intact
C-O-C Discrepancies:	See COC
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, with the following exception: . The pH of sample 1306288-008A was > 2. Analysis was performed within 7 day holding time. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

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

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

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

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

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

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306288
Project: 2nd Quarter Chloroform 2013

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-R55718 Date Analyzed: 06/17/2013 1944h													
Test Code: 300.0-W													
Chloride	4.66	mg/L	E300.0	0.0114	1.00	5.000	0	93.1	90 - 110				
Lab Sample ID: LCS-R55667 Date Analyzed: 06/17/2013 1612h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.05	mg/L	E353.2	0.00252	0.100	1.000	0	105	90 - 110				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306288
Project: 2nd Quarter Chloroform 2013

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-R55718 Date Analyzed: 06/17/2013 1921h													
Test Code: 300.0-W													
Chloride	< 1.00	mg/L	E300.0	0.0114	1.00								
Lab Sample ID: MB-R55667 Date Analyzed: 06/17/2013 1610h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.100	mg/L	E353.2	0.00252	0.100								

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306288
Project: 2nd Quarter Chloroform 2013

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: 1306288-006AMS Date Analyzed: 06/18/2013 047h													
Test Code: 300.0-W													
Chloride	4.96	mg/L	E300.0	0.0114	1.00	5.000	0.042	98.3	90 - 110				
Lab Sample ID: 1306288-009AMS Date Analyzed: 06/18/2013 221h													
Test Code: 300.0-W													
Chloride	4.94	mg/L	E300.0	0.0114	1.00	5.000	0.044	97.8	90 - 110				
Lab Sample ID: 1306288-002BMS Date Analyzed: 06/17/2013 1621h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.14	mg/L	E353.2	0.00252	0.100	1.000	0.155	98.5	90 - 110				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1306288
Project: 2nd Quarter Chloroform 2013

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: 1306288-006AMSD Date Analyzed: 06/18/2013 111h													
Test Code: 300.0-W													
Chloride	5.03	mg/L	E300.0	0.0114	1.00	5.000	0.042	99.7	90 - 110	4.96	1.36	20	
Lab Sample ID: 1306288-009AMSD Date Analyzed: 06/18/2013 244h													
Test Code: 300.0-W													
Chloride	5.06	mg/L	E300.0	0.0114	1.00	5.000	0.044	100	90 - 110	4.94	2.44	20	
Lab Sample ID: 1306288-002BMSD Date Analyzed: 06/17/2013 1624h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.17	mg/L	E353.2	0.00252	0.100	1.000	0.155	102	90 - 110	1.14	2.98	10	

American West Analytical Laboratories

UL
Denison

WORK ORDER Summary

Work Order: **1306288**

Client: Energy Fuels Resources, Inc. Due Date: 6/25/2013

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

Project: **2nd Quarter Chloroform 2013** **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. EDD-Denison. Email Group.; DB

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1306288-001A	**TW4-26_06132013**	6/13/2013 0702h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306288-001B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306288-001C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306288-002A	**TW4-06_06132013**	6/13/2013 0712h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306288-002B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306288-002C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306288-003A	**TW4-05_06132013**	6/13/2013 0730h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306288-003B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306288-003C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306288-004A	**TW4-18_06132013**	6/13/2013 0740h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306288-004B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306288-004C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306288-005A	**TW4-10_06132013**	6/13/2013 0750h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				
1306288-005B				**NO2/NO3-W-353.2**		☑	df - no2/no3	
				1 SEL Analytes: NO3NO2N				
1306288-005C				**8260-W**		☑	VOCFridge	3
				Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4				
1306288-006A	**TW4-60_06132013**	6/13/2013 0830h	6/14/2013 1442h	**300.0-W**	Aqueous	☑	df - wc	1
				1 SEL Analytes: CL				

Printed: 6/17/2013 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☑ RT ☑ CN ☑ TAT ☑ QC ☑ HOK_____ HOK_____ HOK_____ COC Emailed DB 6/17/13

WORK ORDER Summary

Work Order: **1306288**

Client: Energy Fuels Resources, Inc.

Due Date: 6/25/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1306288-006B	**TW4-60_06132013**	6/13/2013 0830h	6/14/2013 1442h	**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*	Aqueous	☑	df - no2/no3	1
1306288-006C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3
1306288-007A	**TW4-70_06132013**	6/13/2013 0702h	6/14/2013 1442h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - wc	1
1306288-007B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1306288-007C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3
1306288-008A	**Trip Blank**	6/13/2013	6/14/2013 1442h	**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*	Aqueous	☑	VOCFridge	3
1306288-009A	**TW4-06R-06122013**	6/12/2013 0745h	6/14/2013 1442h	**300.0-W** *1 SEL Analytes: CL*	Aqueous	☑	df - wc	1
1306288-009B				**NO2/NO3-W-353.2** *1 SEL Analytes: NO3NO2N*		☑	df - no2/no3	
1306288-009C				**8260-W** *Test Group: 8260-W-Custom; # of Analytes: 4 / # of Surr: 4*		☑	VOCFridge	3

Client Energy Fuels

Address 6425 S Hwy 191

Blanding UT 84511
City State Zip

Phone 435 678 2221 Fax

Contact Garrin Palmer

E-mail gpalmer@energyfuels.com

Project Name 2nd Quarter Chloroform 2013

Project Number/P.O.#

Sampler Name Tanner Holliday

AMERICAN WEST ANALYTICAL LABORATORIES
463 West 3600 South
Salt Lake City, Utah 84115
(801) 263-8686
(888) 263-8686
Fax (801) 263-8687
Email:awal@awal-labs.com

CHAIN OF CUSTODY

Lab Sample Set # 1306258

Page 1 of 1

Turn Around Time (Circle One)

1 day 2 day 3 day 4 day 5 day (Standard)

Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TESTS REQUIRED: Nitrate+Nitrite	Chloride	VOC's	QC LEVEL	COMMENTS
TW4-26_06132013	6/13/2013 0702	W	5	X	X	X		
TW4-06_06132013	6/13/2013 0712	W	5	X	X	X		
TW4-05_06132013	6/13/2013 0730	W	5	X	X	X		
TW4-18_06132013	6/13/2013 0740	W	5	X	X	X		
TW4-10_06132013	6/13/2013 0750	W	5	X	X	X		
TW4-60_06132013	6/13/2013 0830	W	5	X	X	X		
TW4-70_06132013	6/13/2013 0702	W	5	X	X	X		
Trip Blank	6/13/2013					X		
Temp Blank	6/14/2013							
TW4-06R-06122013 *	6/12/13 0745	W	5	X	X	X		emailed client re: extra sample -DB 6/14/13

QC LEVEL: 1 2 2+ (3) 3+ 4

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:

2 Ambient or (Chilled)
Notes:

3 Temperature 3.6°

4 Received Broken/Leaking (Improperly Sealed)
Y (N)
Notes:

5 (Properly Preserved)
Y N
Checked at Bench
Y N
Notes:

6 Received Within Holding Times
(Y) N
Notes:

COC Tape Was:
1 Present on Outer Package
Y N (NA)

2 Unbroken on Outer Package
Y N (NA)

3 Present on Sample
Y N (NA)

4 Unbroken on Sample
Y N (NA)

Discrepancies Between Sample Labels and COC Record?
Y (N)
Notes:

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME Garrin Palmer	Time 1442	PRINT NAME Denise Brown	Time 14:42

Special Instructions:

Sample Set: 1306288

Preservation Check Sheet

Sample Set Extension and pH

DB 6/14/13

Bottle Type	Preservative	All OK	~~Except~~ -001	~~Except~~ -002	~~Except~~ -003	~~Except~~ -004	~~Except~~ -005	~~Except~~ -006	~~Except~~ -007	~~Except~~ -009	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~	~~Except~~
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							
Nutrients	pH <2 H_2SO_4																
O & G	pH <2 HCL																
Phenols	pH <2 H_2SO_4																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H_2SO_4																
TOC	pH <2 H_3PO_4																
TOX	pH <2 H_2SO_4																
T PO_4	pH <2 H_2SO_4																
TPH	pH <2 HCL																

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

Frequency: All samples requiring preservation

Tab H

Quality Assurance and Data Validation Tables

H-1 Field Data QA/QC Evaluation

Location		2x Casing Volume	Volume Pumped	Volume Check	Conductivity		RPD	pH		RPD	Temp		RPD	Redox Potential		RPD	Turbidity		RPD
Piezometer 1		--			2441.0		NC	7.41		NC	14.38		NC	397		NC	1.7		NC
Piezometer 2		--			681.0		NC	7.95		NC	14.45		NC	384		NC	2.6		NC
Piezometer 3		--			3336.0		NC	12.33		NC	14.81		NC	285		NC	7.5		NC
TWN-1	37.70	75.40	96.00	OK	853.0	852.0	0.12	7.60	7.62	0.26	14.65	14.67	0.14	461	458	0.65	10.1	10.5	3.88
TWN-2	NA	Continuously Pumped Well			3419		NC	6.79		NC	14.17		NC	369		NC	0		NC
TWN-3	38.98	77.96	54.00	Pumped Dry	2612.0	2601.0	0.42	7.47	7.46	0.13	14.23	14.31	0.56	NM		NC	NM		NC
TWN-4	51.58	103.16	144.00	OK	1066.0	1069.0	0.28	6.95	6.95	0.00	14.60	14.57	0.21	418	418	0.00	5.0	4.9	2.02
TWN-7	11.72	23.44	16.00	Pumped Dry	733.0	728.0	0.68	7.53	7.55	0.27	15.06	15.01	0.33	NM		NC	NM		NC
TWN-18	56.73	113.46	144.00	OK	2338.0	2341.0	0.13	7.34	7.28	0.82	14.18	14.16	0.14	406	406	0.00	17.0	17.2	1.17
TW4-22	NA	Continuously pumped well			6188		NC	7.23		NC	16.29		NC	278		NC	0		NC
TW4-24	NA	Continuously pumped well			8118		NC	6.99		NC	15.71		NC	271		NC	1.3		NC
TW4-25	NA	Continuously pumped well			3162		NC	7.14		NC	15.57		NC	367		NC	5.3		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.

RPD >10%. Per the revised QAP Revision 7.2, Attachment 2-3, when a well is purged to dryness, only pH, temperature and specific conductance parameters are required to be within 10% RPD. Redox potential and turbidity parameters are measured for information purposes only and as such are not required to meet the 10% RPD criteria used for pH, specific conductance and temperature.

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	4/24/2013	4/29/2013	5	28	OK
PIEZ-01	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
PIEZ-02	Chloride	4/24/2013	4/29/2013	5	28	OK
PIEZ-02	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
PIEZ-03	Chloride	4/24/2013	4/29/2013	5	28	OK
PIEZ-03	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
TWN-01	Chloride	4/23/2013	4/29/2013	6	28	OK
TWN-01	Nitrate/Nitrite (as N)	4/23/2013	4/30/2013	7	28	OK
TWN-02	Chloride	4/24/2013	4/29/2013	5	28	OK
TWN-02	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
TWN-03	Chloride	4/24/2013	4/29/2013	5	28	OK
TWN-03	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
TWN-04	Chloride	4/23/2013	4/29/2013	6	28	OK
TWN-04	Nitrate/Nitrite (as N)	4/23/2013	4/30/2013	7	28	OK
TWN-07	Chloride	4/24/2013	4/29/2013	5	28	OK
TWN-07	Nitrate/Nitrite (as N)	4/24/2013	4/30/2013	6	28	OK
TWN-07R	Chloride	4/23/2013	4/29/2013	6	28	OK
TWN-07R	Nitrate/Nitrite (as N)	4/23/2013	4/30/2013	7	28	OK
TWN-18	Chloride	4/23/2013	4/29/2013	6	28	OK
TWN-18	Nitrate/Nitrite (as N)	4/23/2013	4/30/2013	7	28	OK
TW4-22	Chloride	6/5/2013	6/10/2013	5	28	OK
TW4-22	Nitrate/Nitrite (as N)	6/5/2013	6/13/2013	8	28	OK
TW4-24	Chloride	6/5/2013	6/10/2013	5	28	OK
TW4-24	Nitrate/Nitrite (as N)	6/5/2013	6/13/2013	8	28	OK
TW4-25	Chloride	6/5/2013	6/10/2013	5	28	OK
TW4-25	Nitrate/Nitrite (as N)	6/5/2013	6/13/2013	8	28	OK
TWN-60	Chloride	4/25/2013	4/29/2013	4	28	OK
TWN-60	Nitrate/Nitrite (as N)	4/25/2013	4/30/2013	5	28	OK
TW4-60	Chloride	6/13/2013	6/18/2013	5	28	OK
TW4-60	Nitrate/Nitrite (as N)	6/13/2013	6/17/2013	4	28	OK
TWN-65	Chloride	4/23/2013	4/29/2013	6	28	OK
TWN-65	Nitrate/Nitrite (as N)	4/23/2013	4/30/2013	7	28	OK

H-3: Analytical Method Check

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

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

H-4 Reporting Limit Check

Location	Analyte	Lab Reporting Limit	Units	Qualifier	Required Reporting Limit	Units	RL Check
PIEZ-01	Chloride	10	mg/L		1	mg/L	OK
PIEZ-01	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK
PIEZ-02	Chloride	1	mg/L		1	mg/L	OK
PIEZ-02	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
PIEZ-03	Chloride	5	mg/L		1	mg/L	OK
PIEZ-03	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-01	Chloride	5	mg/L		1	mg/L	OK
TWN-01	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-02	Chloride	10	mg/L		1	mg/L	OK
TWN-02	Nitrate/Nitrite (as N)	10	mg/L		0.1	mg/L	OK
TWN-03	Chloride	50	mg/L		1	mg/L	OK
TWN-03	Nitrate/Nitrite (as N)	10	mg/L		0.1	mg/L	OK
TWN-04	Chloride	5	mg/L		1	mg/L	OK
TWN-04	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-07	Chloride	1	mg/L		1	mg/L	OK
TWN-07	Nitrate/Nitrite (as N)	0.1	mg/L		0.1	mg/L	OK
TWN-07R	Chloride	1	mg/L	U	1	mg/L	OK
TWN-07R	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TWN-18	Chloride	10	mg/L		1	mg/L	OK
TWN-18	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK
TW4-22	Chloride	100	mg/L		1	mg/L	OK
TW4-22	Nitrate/Nitrite (as N)	10	mg/L		0.1	mg/L	OK
TW4-24	Chloride	100	mg/L		1	mg/L	OK
TW4-24	Nitrate/Nitrite (as N)	10	mg/L		0.1	mg/L	OK
TW4-25	Chloride	50	mg/L		1	mg/L	OK
TW4-25	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK
TWN-60	Chloride	1	mg/L	U	1	mg/L	OK
TWN-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TW4-60	Chloride	1	mg/L	U	1	mg/L	OK
TW4-60	Nitrate/Nitrite (as N)	0.1	mg/L	U	0.1	mg/L	OK
TWN-65	Chloride	5	mg/L		1	mg/L	OK
TWN-65	Nitrate/Nitrite (as N)	1	mg/L		0.1	mg/L	OK

H-5 QA/QC Evaluation for Sample Duplicates

Constituent	TWN-18	TWN-65	%RPD
Chloride	64.3	66.1	2.76
Nitrogen	2.32	2.46	5.86

H-6 QC Control Limits for Analysis and Blanks

All QC control limits for the 2nd quarter of 2013 were within acceptable limits.

H-7 Receipt Temperature Evaluation

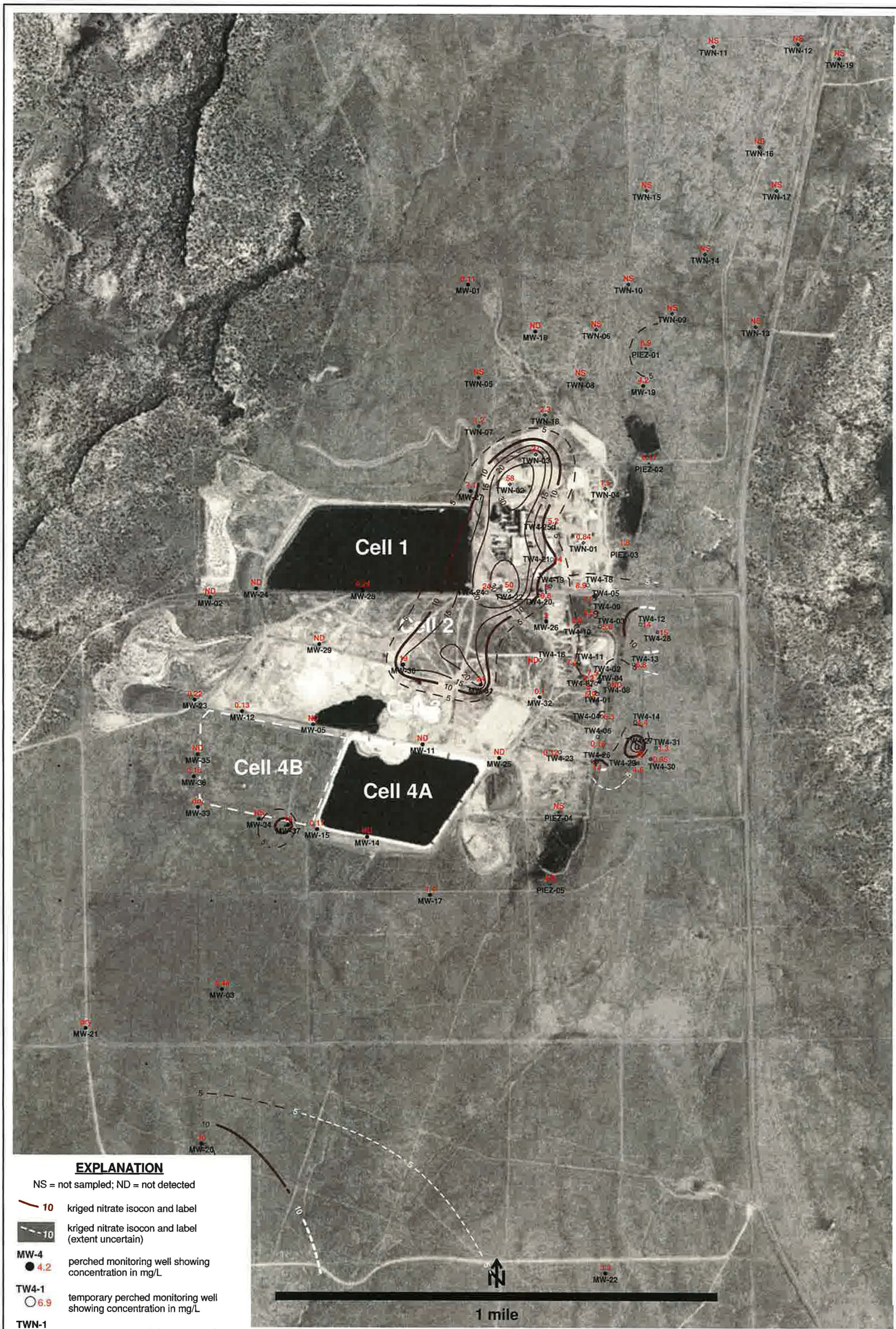
Sample Batch	Wells in Batch	Temperature
1304696	Piezometer 1, Piezometer 2, Piezometer 3, TWN-1, TWN-2, TWN-3, TWN-4, TWN-7, TWN-18, TWN-60, TWN-65	2.0 °C
1306139	TW4-22, TW4-24, TW4-25	2.2 °C
1302239	TW4-60	3.6 °C

H-8 Rinsate Evaluation

All Rinsate and DI Blank samples were non-detect for the 2nd quarter of 2013.

Tab I

Kriged Current Quarter Isoconcentration Maps



EXPLANATION

NS = not sampled; ND = not detected

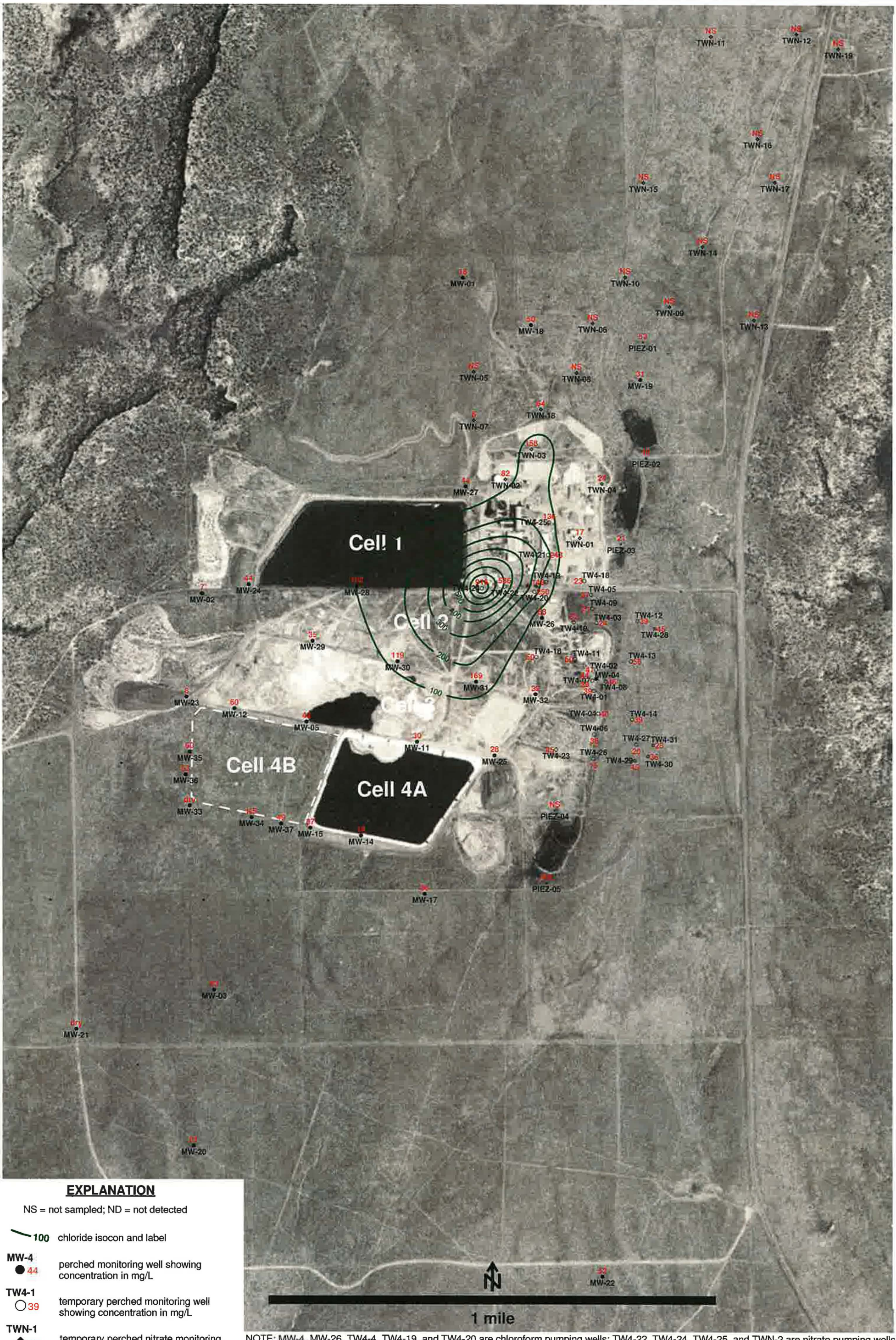
- 10 — kriged nitrate isocon and label
- 10 (extent uncertain) — kriged nitrate isocon and label (extent uncertain)
- MW-4 ● 4.2 — perched monitoring well showing concentration in mg/L
- TW4-1 ○ 6.9 — temporary perched monitoring well showing concentration in mg/L
- TWN-1 ◇ 0.8 — temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 ◒ 8.9 — perched piezometer showing concentration in mg/L
- TW4-28 ☼ 15 — temporary perched monitoring well installed March, 2013

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

HYDRO GEO CHEM, INC.

KRIGED 2nd QUARTER, 2013 NITRATE (mg/L) (NITRATE + NITRITE as N) WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug13/nitrate/Unt0613.srf	I-1



EXPLANATION

NS = not sampled; ND = not detected

- 100 — chloride isocon and label
- MW-4 ● 44 — perched monitoring well showing concentration in mg/L
- TW4-1 ○ 39 — temporary perched monitoring well showing concentration in mg/L
- TWN-1 ◇ 17 — temporary perched nitrate monitoring well showing concentration in mg/L
- PIEZ-1 ◒ 53 — perched piezometer showing concentration in mg/L
- TW4-28 ☼ 45 — temporary perched monitoring well installed March, 2013 (not sampled)

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

HYDRO GEO CHEM, INC.

KRIGED 2nd QUARTER, 2013 CHLORIDE (mg/L) WHITE MESA SITE

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/aug13/chloride/Ucl0613.srf	I-2

Tab J

Analyte Concentrations Over Time

TWN-1

Date	Nitrate (mg/l)	Chloride (mg/l)
2/6/2009	0.7	19
7/21/2009	0.4	17
9/21/2009	0.4	19
10/28/2009	0.5	18
3/17/2010	0.5	17
5/26/2010	0.6	20
9/27/2010	0.6	19
12/7/2010	0.6	14
1/26/2011	0.5	17
4/20/2011	0.5	19
7/26/2011	0.5	14
10/17/2011	0.5	10
1/9/2012	0.6	15
4/18/2012	0.6	17
7/24/2012	0.6	17
10/15/2012	0.432	17.5
2/18/2013	0.681	17.6
4/23/2013	0.84	17.4

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

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

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

TWN-5

Date	Nitrate (mg/l)	Chloride (mg/l)	
8/25/2009	0.22	42	
9/21/2009	0.5	45	
11/10/2009	0.2	48	
3/16/2010	0.3	43	
5/26/2010	0.3	44	
7/12/2010	0.3	43	
12/7/2010	0.3	45	
1/25/2011	0.4	47	
4/20/2011	0.3	44	
7/26/2011	0.3	44	
10/17/2011	0.3	45	
1/9/2012	0.2	45	
4/18/2012	0.3	39	
7/24/2012	0.3	48	
10/15/2012	0.1	43.5	Nitrate ND

TWN-6

Date	Nitrate (mg/l)	Chloride (mg/l)
8/25/2009	3.2	32
9/22/2009	1.6	13
11/3/2009	1.4	21
3/23/2010	1.5	19
6/1/2010	1.4	22
7/13/2010	1.4	73
12/8/2010	1.2	21
1/26/2011	1.1	18
4/20/2011	1.5	22
7/27/2011	1.1	17
10/18/2011	1.4	21
1/10/2012	1.2	20
4/18/2012	1.1	22
7/25/2012	1.4	22
10/15/2012	0.786	20.4

TWN-7

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

TWN-8

Date	Nitrate (mg/l)	Chloride (mg/l)	Notes
8/25/2009	0	11	Nitrate is ND
9/21/2009	0	12	Nitrate is ND
11/10/2009	0	12	Nitrate is ND
3/16/2010	0	11	Nitrate is ND
5/26/2010	0	11	Nitrate is ND
7/12/2010	0	11	Nitrate is ND
12/6/2010	0	9	Nitrate is ND
1/25/2011	0	13	Nitrate is ND
4/18/2011	0	10	Nitrate is ND
7/26/2011	0	18	Nitrate is ND
10/17/2011	0	10	Nitrate is ND
1/9/2012	0	11	Nitrate is ND
4/18/2012	0	15	Nitrate is ND
7/24/2012	0	11	Nitrate is ND
10/15/2012	0	11.1	Nitrate is ND

TWN-9

Date	Nitrate (mg/l)	Chloride (mg/l)
8/25/2009	9.3	169
9/22/2009	8.9	201
11/10/2009	12	205
3/23/2010	7.6	183
6/1/2010	7.6	175
7/15/2010	10.7	210
12/9/2010	8	172
2/1/2011	9.5	217
4/28/2011	10	192
7/29/2011	11	208
10/20/2011	10.9	134
1/12/2012	12.2	202
4/20/2012	10.6	209
7/31/2012	12.3	215
10/15/2012	12.5	194

TWN-10

Date	Nitrate (mg/l)	Chloride (mg/l)
8/25/2009	1.1	19
9/22/2009	1.6	35
11/10/2009	1.4	26
3/23/2010	1.5	54
6/4/2010	1	30
7/14/2010	0.2	21
12/8/2010	1.3	28
1/27/2011	0.3	40
4/21/2011	1.2	28
7/27/2011	0.1	28
10/18/2011	0.2	33
1/10/2012	0.8	44
4/19/2012	0.9	28
7/25/2012	0.6	33
10/16/2012	0.119	30.8

TWN-11

Date	Nitrate (mg/l)	Chloride (mg/l)
11/3/2009	1.3	74
3/17/2010	1.4	73
6/4/2010	1.3	72
9/27/2010	1.4	76
12/8/2010	1.4	72
1/27/2011	1.4	84
4/26/2011	1.4	76
7/27/2011	0.1	76
10/17/2011	1.6	76
1/10/2012	1.6	69
4/19/2012	1.6	71
7/25/2012	1.8	77
10/16/2012	1.84	76.4

TWN-12

Date	Nitrate (mg/l)	Chloride (mg/l)
11/3/2009	0.5	109
3/17/2010	0.7	113
5/26/2010	0.8	106
7/12/2010	0.7	112
12/7/2010	0.7	103
1/26/2011	4.2	87
4/26/2011	1	109
7/26/2011	0.6	102
10/17/2011	1.2	87
1/10/2012	0.9	104
4/18/2012	1.2	106
7/25/2012	1.4	102
10/16/2012	1.41	101

TWN-13

Date	Nitrate (mg/l)	Chloride (mg/l)	Notes
11/4/2009	0.5	83	
3/17/2010	0	47	Nitrate ND
5/26/2010	0.1	49	
9/27/2010	0.2	53	
12/7/2010	0.4	57	
1/25/2011	1.6	103	
4/26/2011	0	49	Nitrate ND
7/26/2011	0.1	49	
10/17/2011	0	48	Nitrate ND
1/9/2012	0	46	Nitrate ND
4/18/2012	0	53	Nitrate ND
7/24/2012	0.1	48	
10/15/2012	0	47.3	Nitrate ND

TWN-14

Date	Nitrate (mg/l)	Chloride (mg/l)
11/4/2009	3.4	32
3/24/2010	2.9	24
6/2/2010	2.9	30
7/15/2010	3.5	26
12/10/2010	4.2	28
1/28/2011	3.7	24
4/27/2011	3.5	30
7/29/2011	3.5	25
10/19/2011	3.9	27
1/11/2012	3.5	26
4/20/2012	3.4	27
7/27/2012	3.7	27
10/17/2012	4.03	27.4

TWN-15

Date	Nitrate (mg/l)	Chloride (mg/l)
11/10/2009	1.1	78
3/18/2010	0.7	43
5/28/2010	1.0	39
7/13/2010	1.0	36
12/9/2010	1.2	38
1/27/2011	1.4	43
4/27/2011	1.6	49
7/28/2011	1.6	47
10/19/2011	1.3	38
1/11/2012	1.5	38
4/20/2012	1.6	46
7/26/2012	2.1	50
10/17/2012	1.8	47

TWN-16

Date	Nitrate (mg/l)	Chloride (mg/l)
11/4/2009	1	39
3/17/2010	1.2	35
5/27/2010	0.2	35
9/27/2010	2.6	35
12/9/2010	2	30
1/27/2011	4.6	34
4/27/2011	1.6	39
7/27/2011	2.4	31
10/18/2011	2.6	34
1/10/2012	2.8	33
4/19/2012	2	50
7/25/2012	2.4	33
10/16/2012	2.5	32.1

TWN-17

Date	Nitrate (mg/l)	Chloride (mg/l)
11/4/2009	6.7	152
3/24/2010	10.4	78
6/3/2010	11	87
7/15/2010	8.9	66
12/10/2010	8	65
2/1/2011	8.6	90
4/28/2011	9	81
7/29/2011	8.5	74
10/20/2011	8.1	71
1/12/2012	8.7	79
4/20/2012	9.1	80
7/27/2012	9.5	85
10/17/2012	9.65	84.8

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

TWN-19

Date	Nitrate (mg/l)	Chloride (mg/l)
11/2/2009	7.4	125
3/23/2010	7.2	118
6/1/2010	6.2	113
9/29/2010	7.2	113
12/9/2010	7	107
2/1/2011	7	114
4/28/2011	6.9	120
7/28/2011	7.1	113
10/18/2011	6.5	108
1/10/2012	7	114
4/19/2012	6.8	117
7/26/2012	7.5	117
10/16/2012	7.7	118

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

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

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

Upper Wildlife Pond

Date	Nitrate (mg/l)	Chloride (mg/l)	Note
9/22/2009	0	5	Nitrate ND
10/27/2009	0	3	Nitrate ND
6/2/2010	0	0	Nitrate and Chloride ND
7/19/2010	0	0	Nitrate and Chloride ND
12/10/2010	0	1	Nitrate ND
1/31/2011	0.1	1	
4/25/2011	0	0	Nitrate and Chloride ND
7/25/2011	0	0	Nitrate and Chloride ND
10/19/2011	0	0	Nitrate and Chloride ND
1/11/2012	0	2	Nitrate ND

TW4-22

Date	Nitrate (mg/l)	Chloride (mg/l)	Notes
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	

TW4-24

Date	Nitrate (mg/l)	Chloride (mg/l)	Notes
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	

TW4-25

Date	Nitrate (mg/l)	Chloride (mg/l)	Notes
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	

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		
1/23/2013	19.2		
2/26/2013	21.4		
3/20/2013	14.3		
4/17/2013	16.8		
5/15/2013	18.8		
6/25/2013	16.1		

Under the groundwater sampling progran, 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		
1/22/2013	22.8		
2/19/2013	19.3		
3/19/2013	19.1		
4/16/2013	18.8		
5/13/2013	23.8		
6/24/2013	20.0		

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.

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		
12/14/2009	26.70		
2/17/2010	2.00		
6/9/2010	4.40		
8/16/2010	5.90		
10/11/2010	2.70		
2/17/2011	17.00		
6/7/2011	12.00		
8/17/2011	3.00		
11/17/2011	5.00		
1/23/2012	0.60		
6/6/2012	2.40		
9/5/2012	2.50		
10/3/2012	4.10		
2/11/2013	7.99		
6/5/2013	2.95		

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

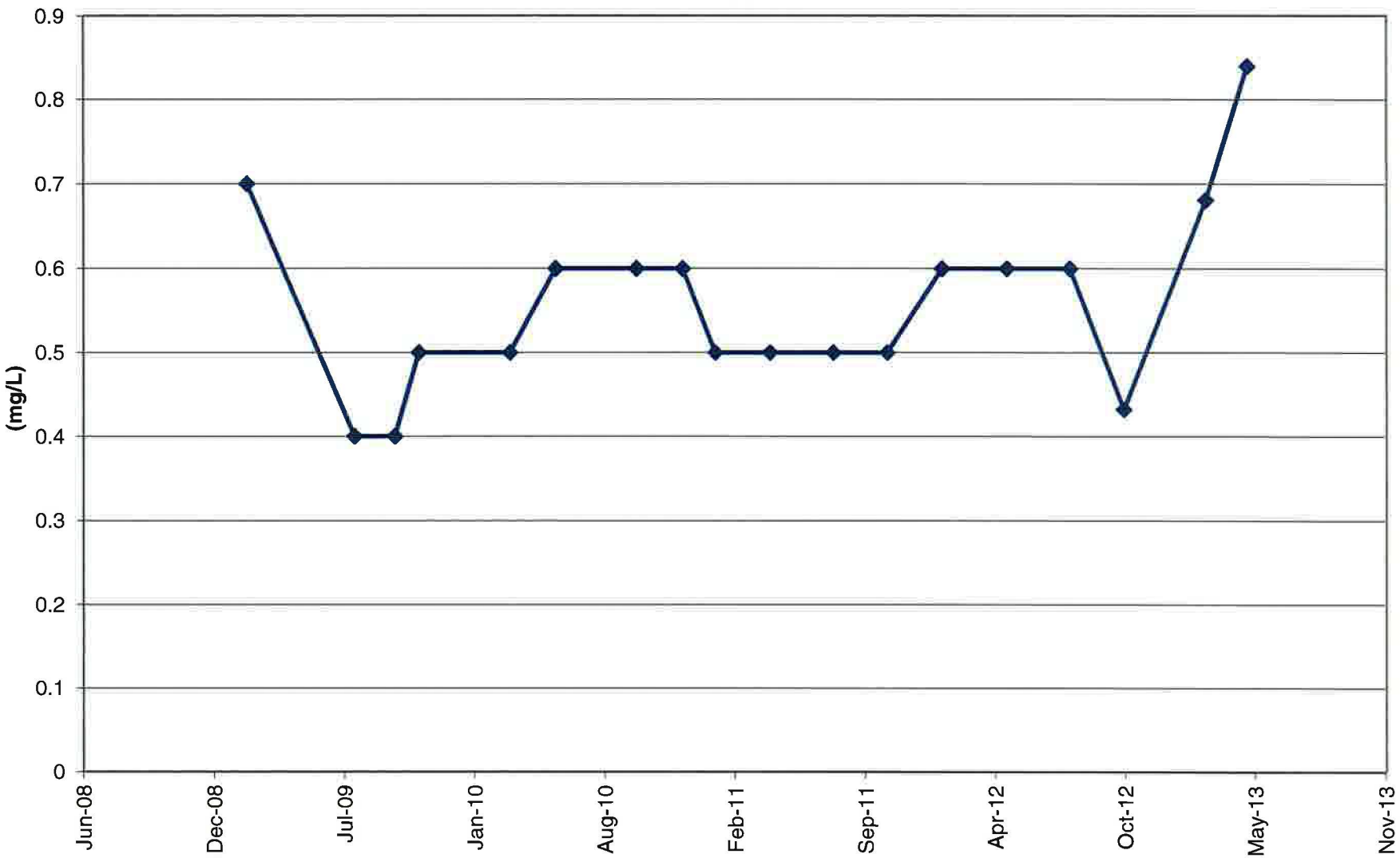
Date	Nitrate (mg/l)	Date	Chloride (mg/l)
5/25/2005	14.6	12/7/2005	353
8/31/2005	10.1	3/9/2006	347
11/30/2005	9.6	7/20/2006	357
3/9/2006	8.5	11/8/2006	296
6/14/2006	10.2	2/28/2007	306
7/20/2006	8.9	6/27/2007	327
11/8/2006	8.7	8/15/2007	300
2/28/2007	8.7	10/10/2007	288
6/27/2007	8.6	3/26/2008	331
8/15/2007	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		
2/13/2013	11.8		
6/18/2013	13.8		

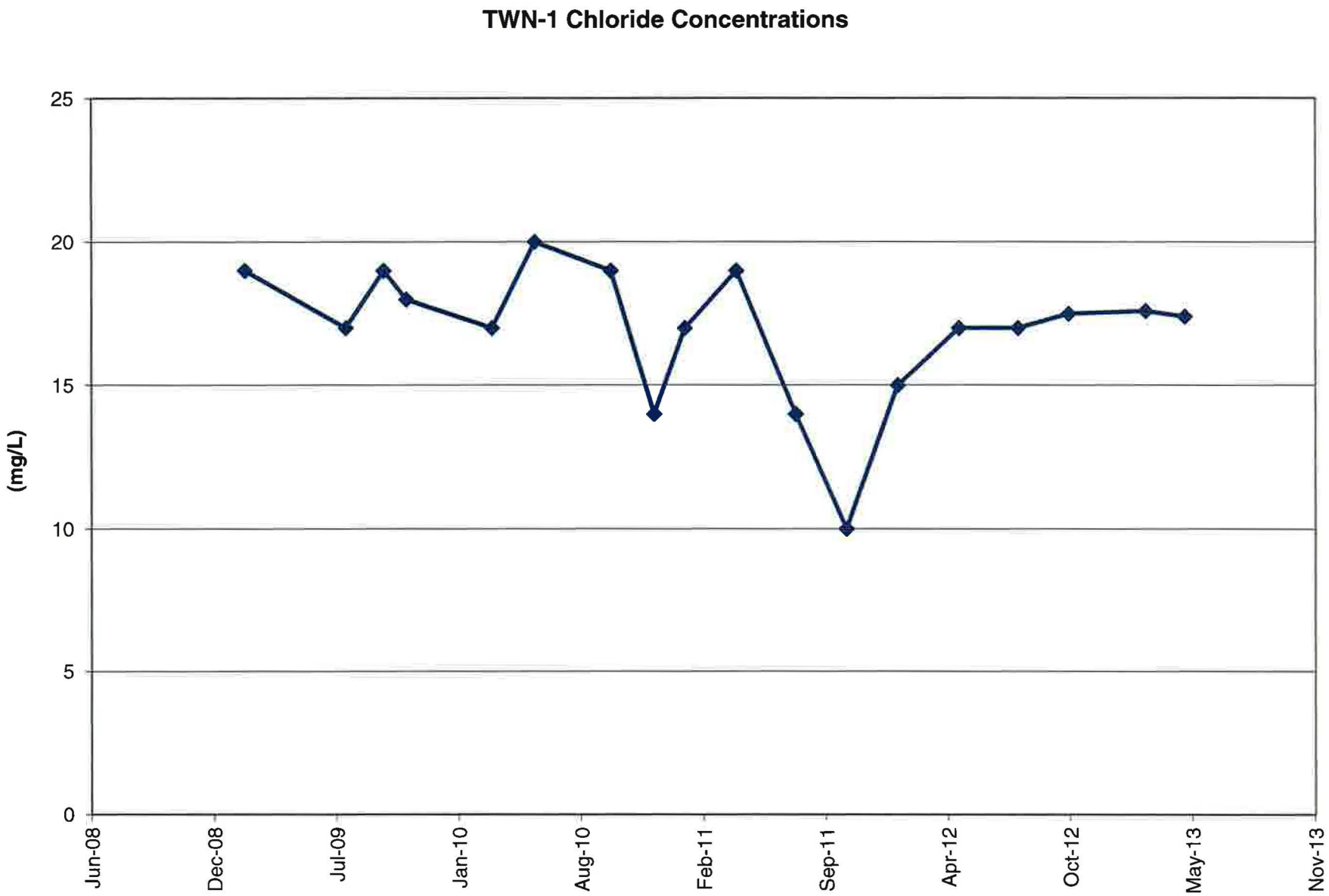
The sampling program for TW4-21 was updated in the fourth quarter of 2005 to include analysis for chloride as well as nitrate. This change accounts for the different number of data points represented above.

Tab K

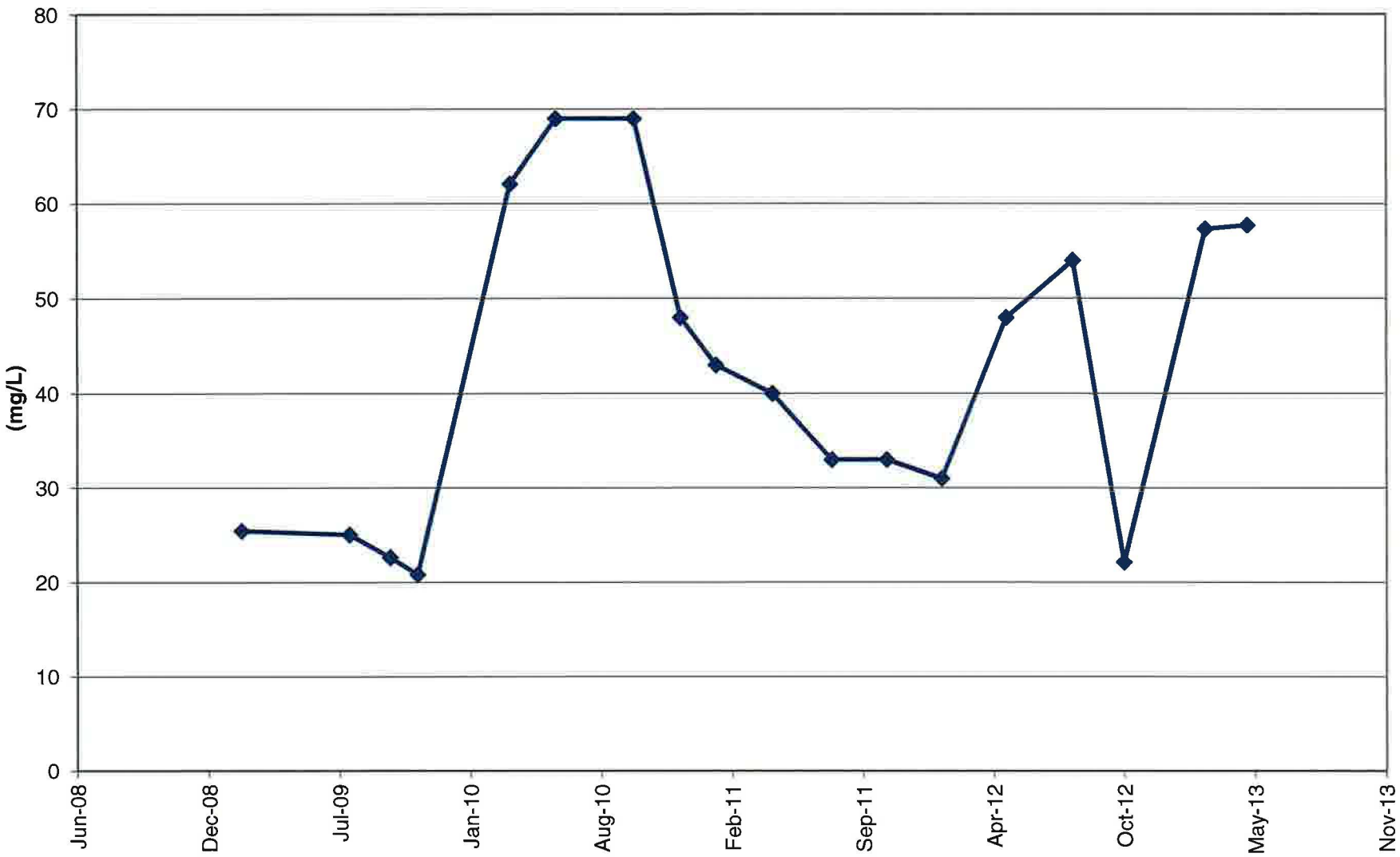
Concentration Trend Graphs

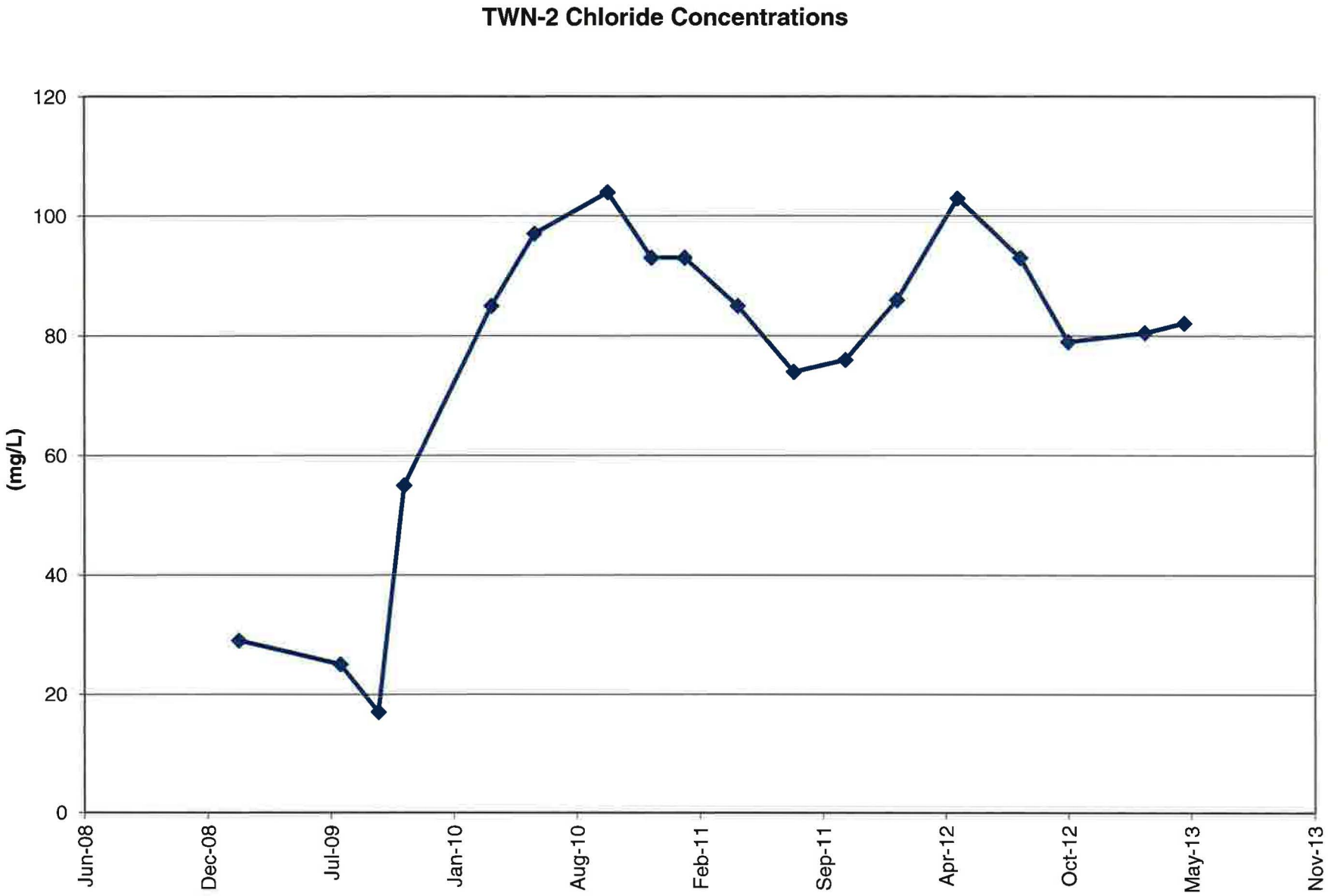
TWN-1 Nitrate Concentrations

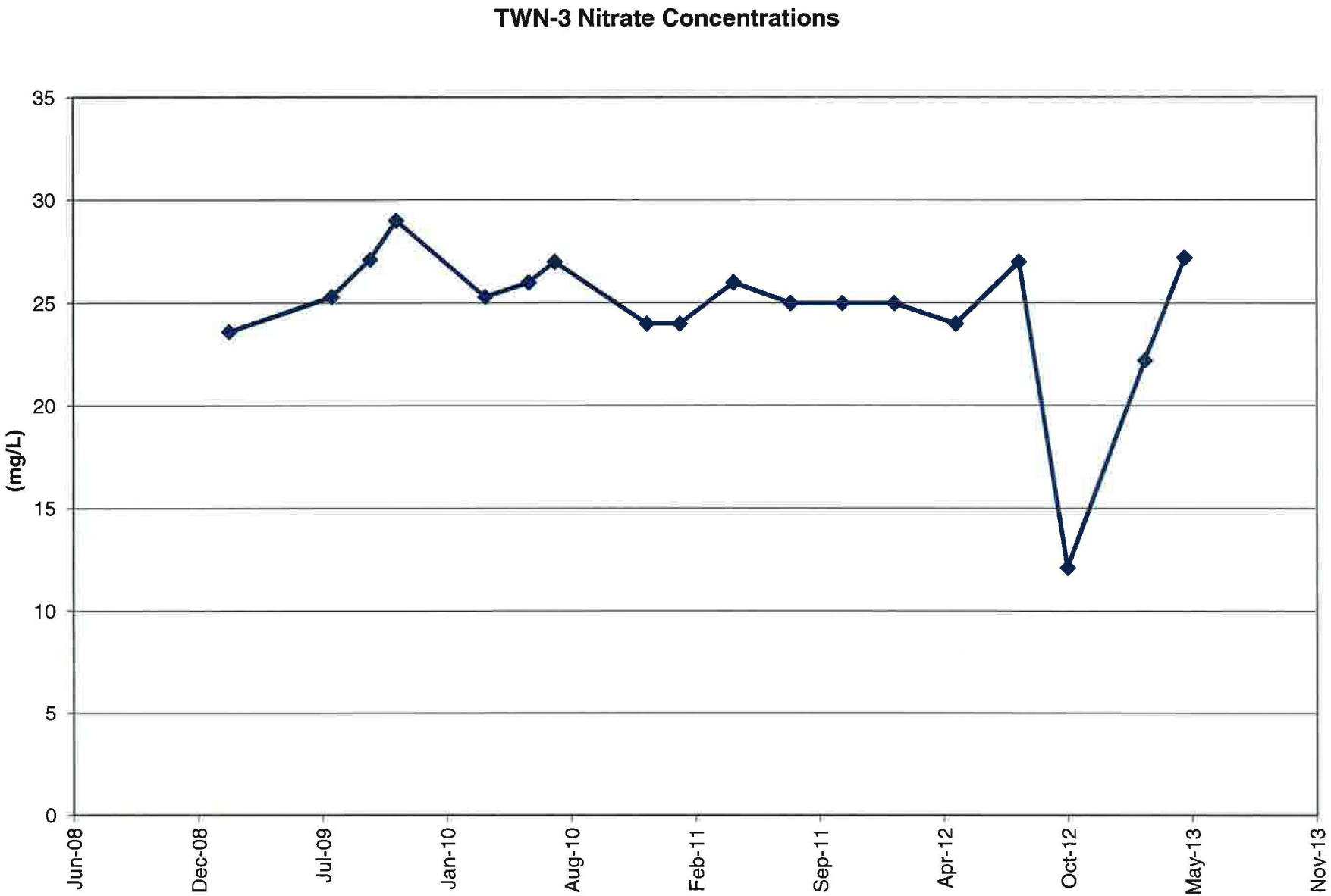



TWN-1 Chloride Concentrations
(mg/L)
25
20
15
10
5
0
Jun-08
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13
Nov-13

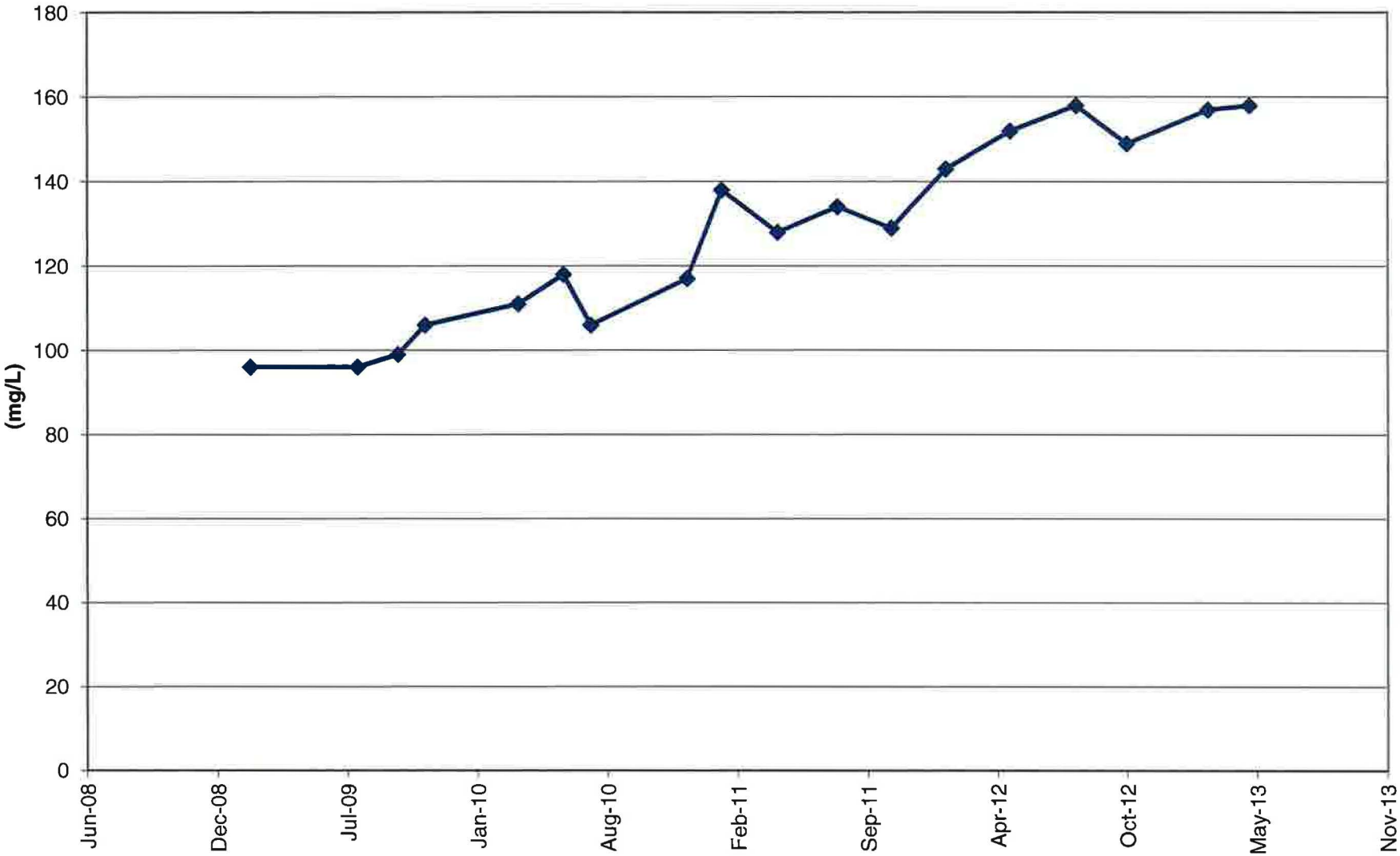
TWN-2 Nitrate Concentrations




TWN-2 Chloride Concentrations
(mg/L)
120
100
80
60
40
20
0
Jun-08
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13
Nov-13

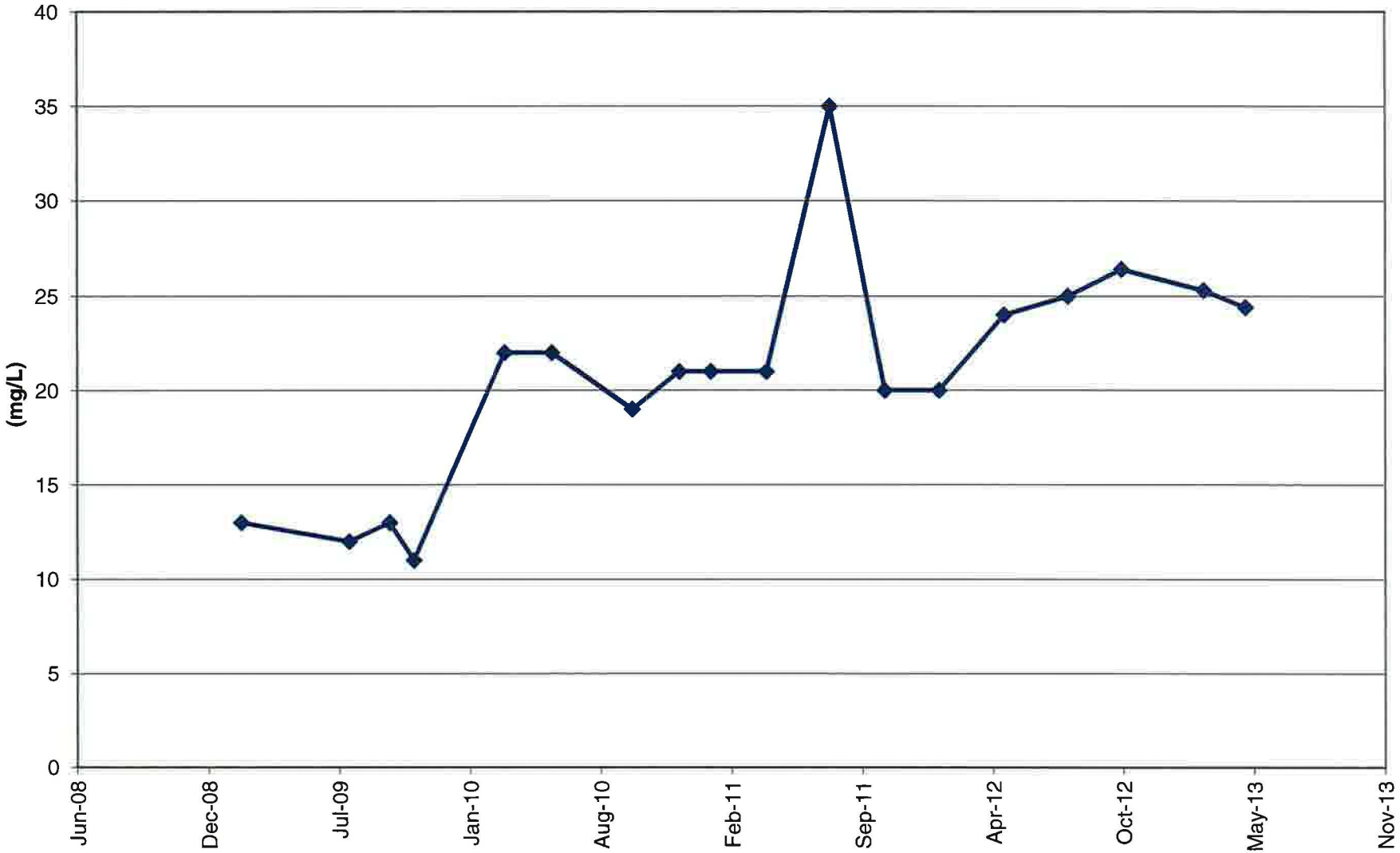

TWN-3 Nitrate Concentrations
(mg/L)
35
30
25
20
15
10
5
0
Jun-08
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13
Nov-13

TWN-3 Chloride Concentrations

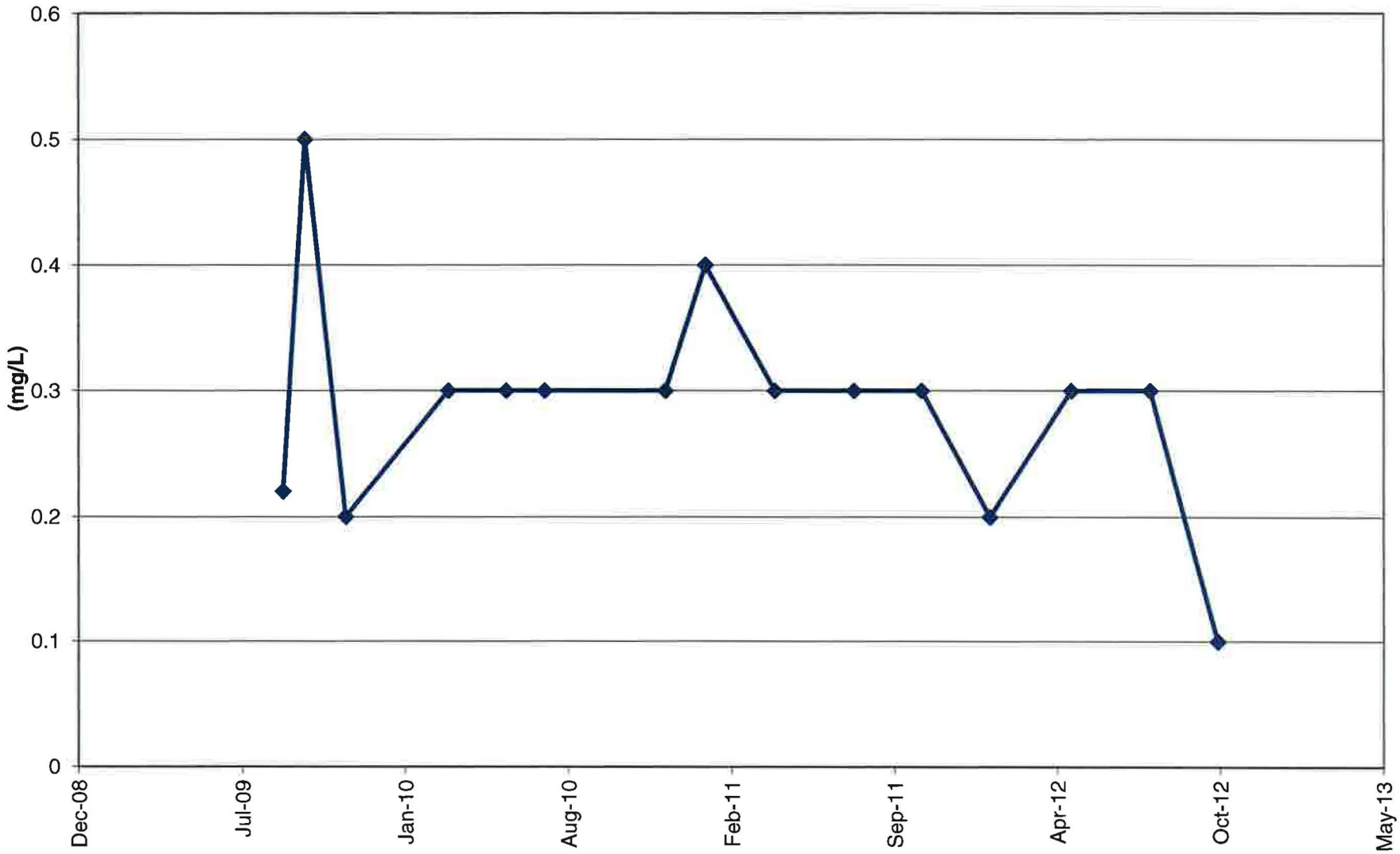


TWN-4 Nitrate Concentrations

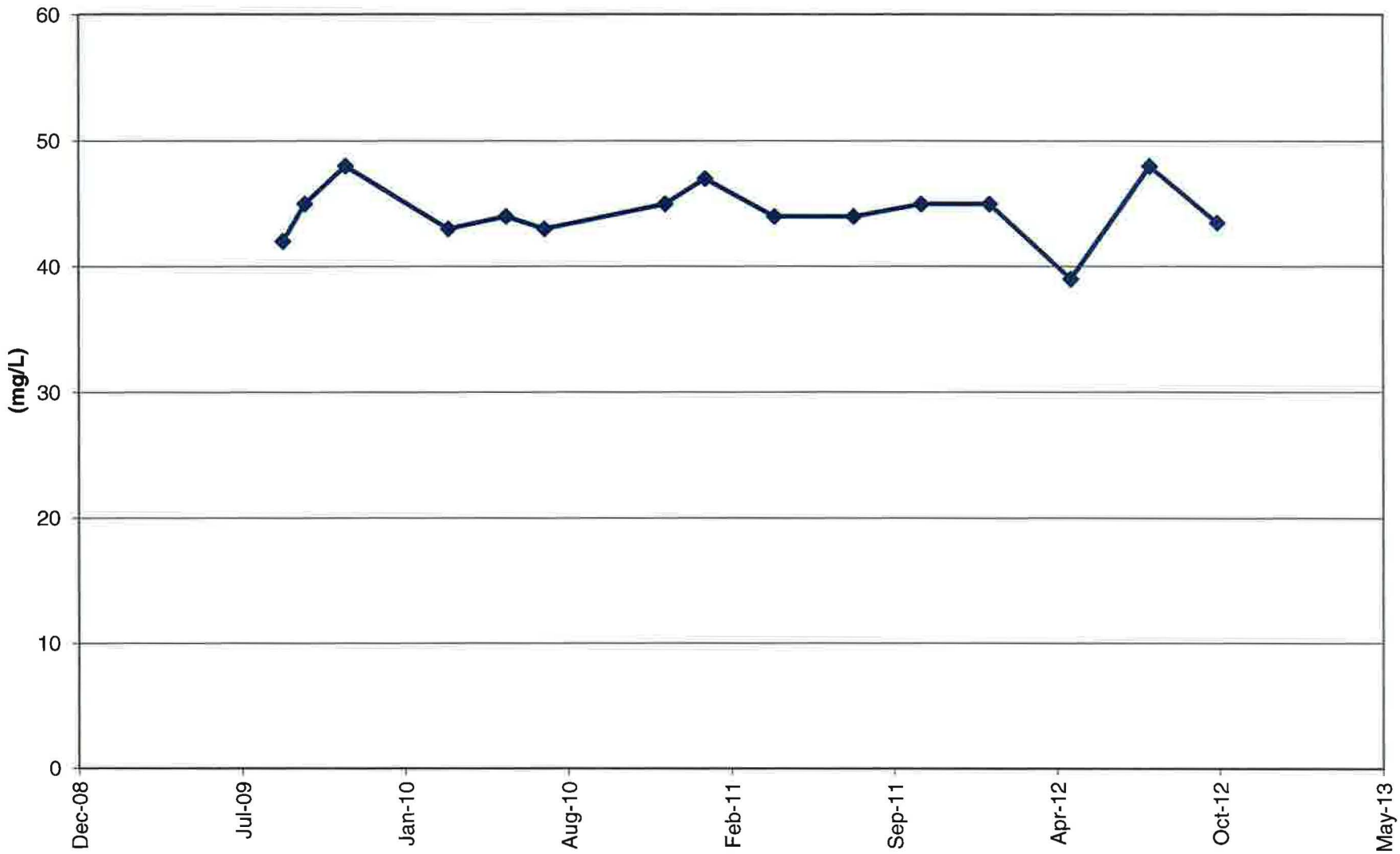
TWN-4 Chloride Concentrations



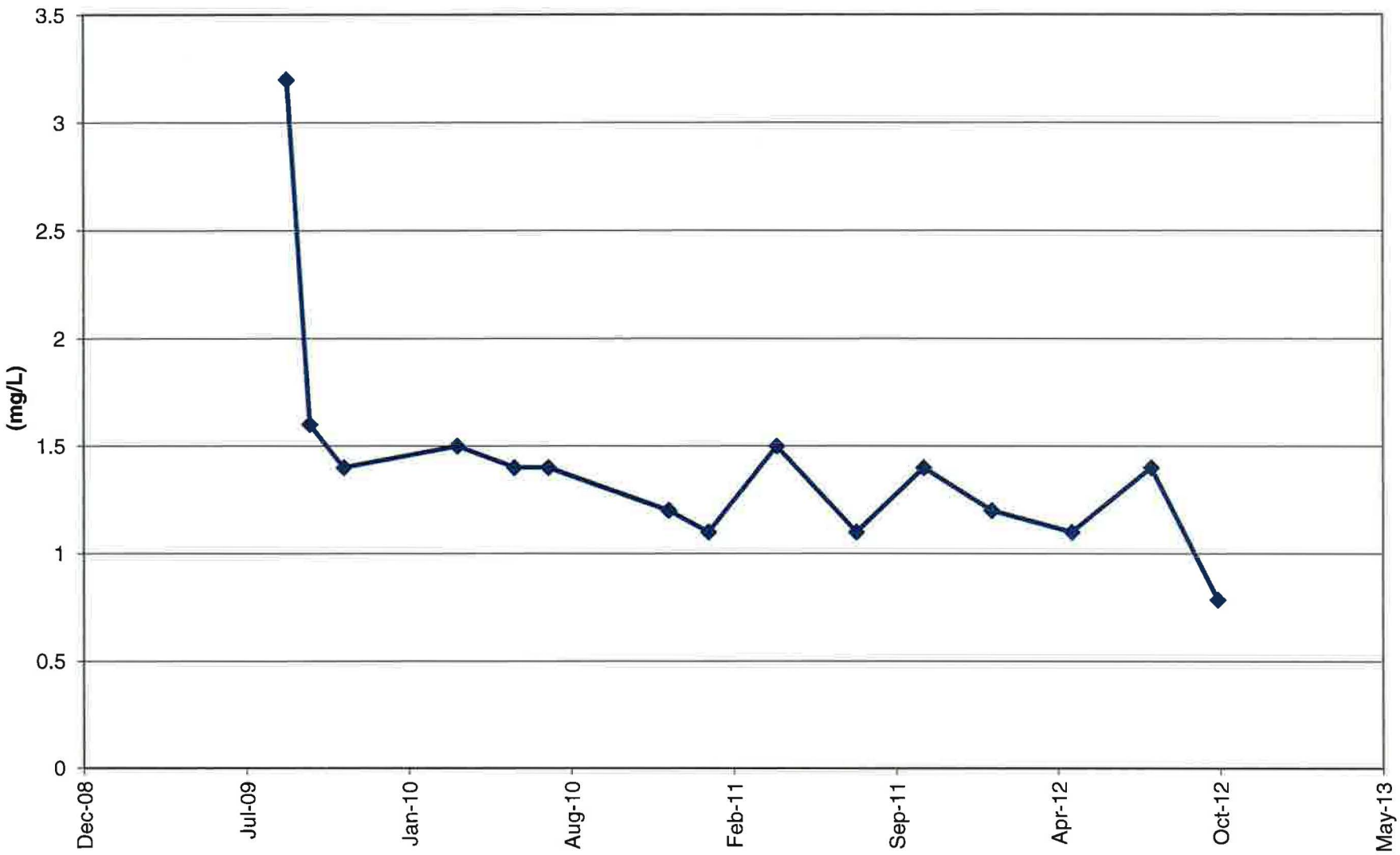
TWN-5 Nitrate Concentrations

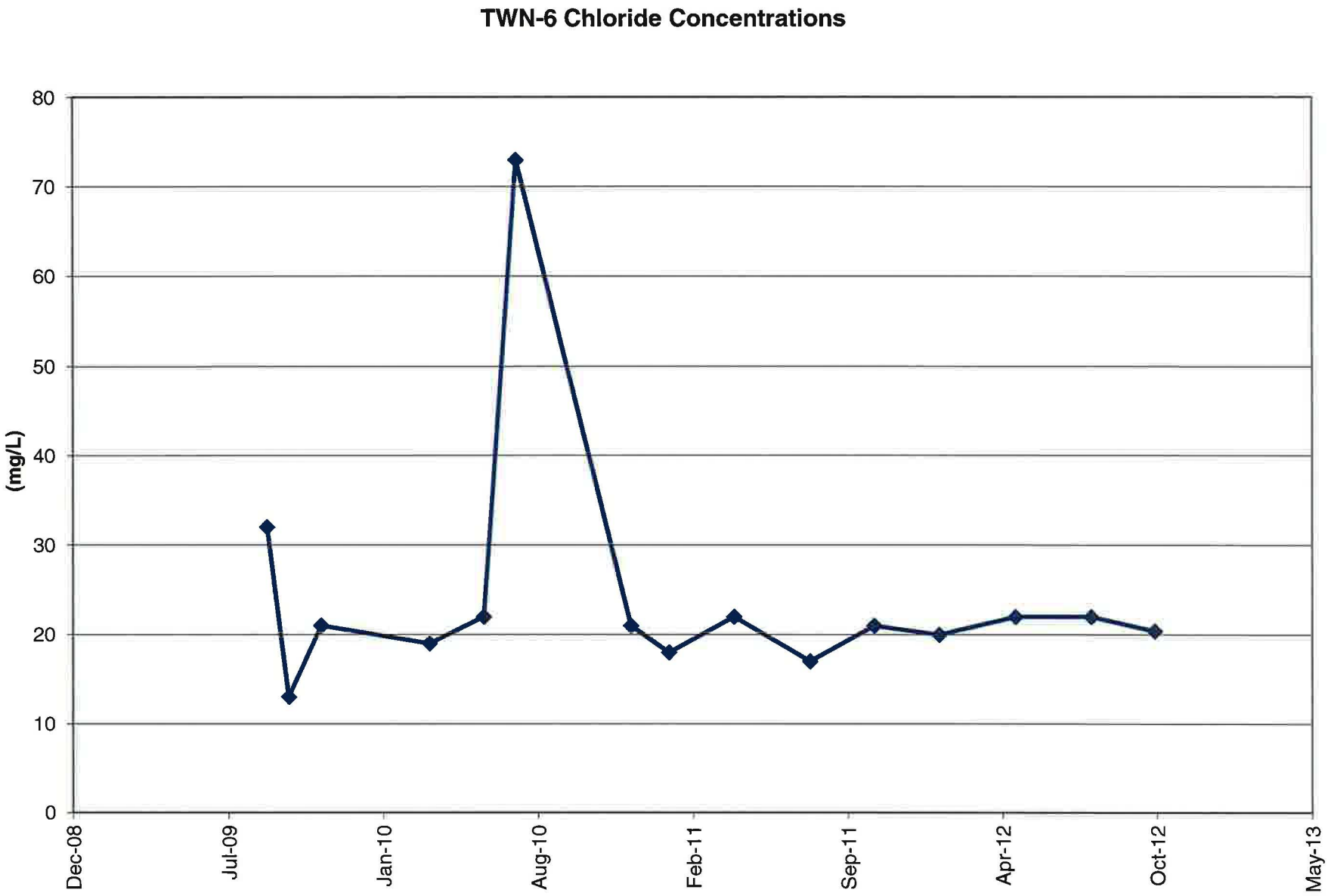


TWN-5 Chloride Concentrations

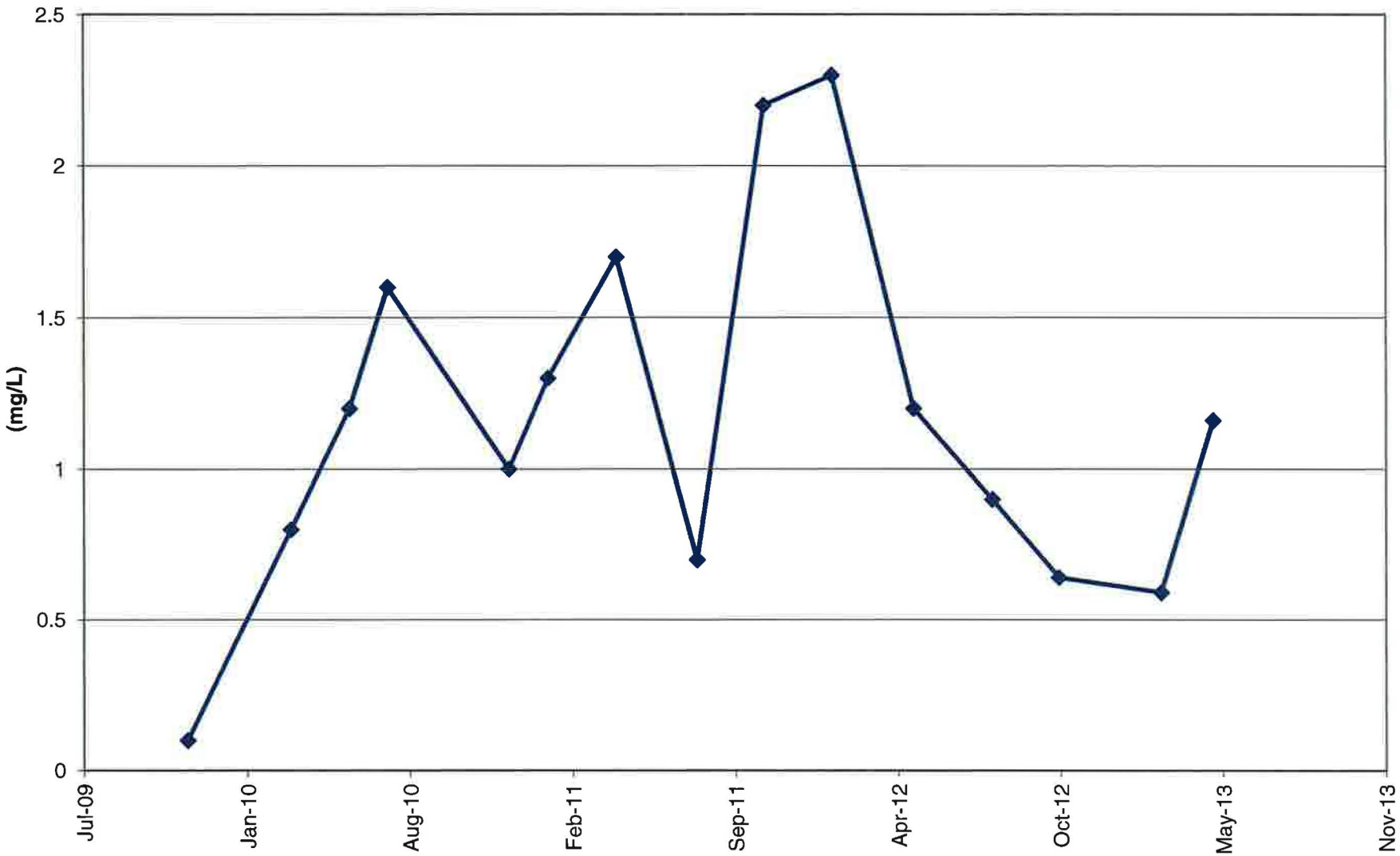


TWN-6 Nitrate Concentrations

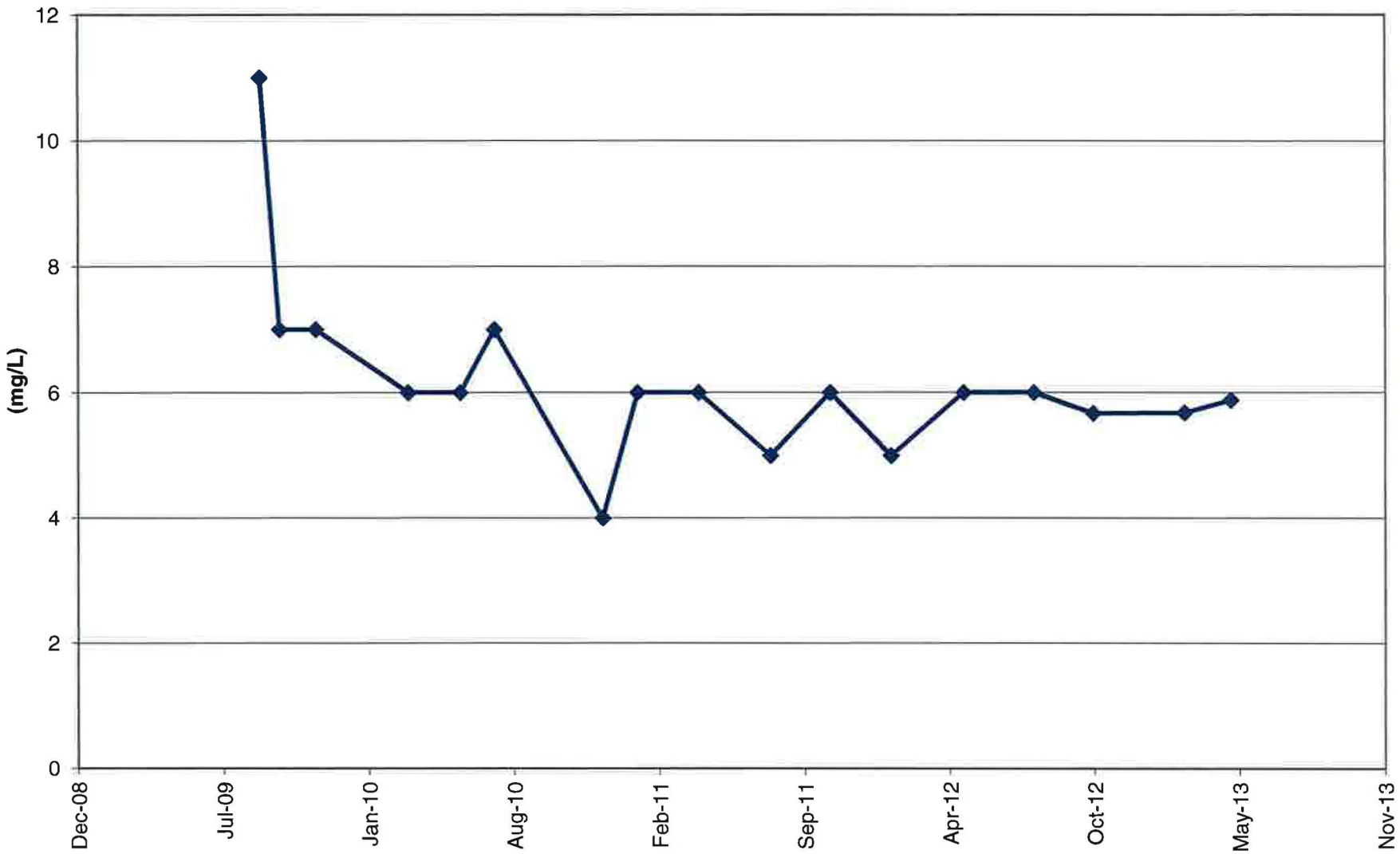



TWN-6 Chloride Concentrations
(mg/L)
80
70
60
50
40
30
20
10
0
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13

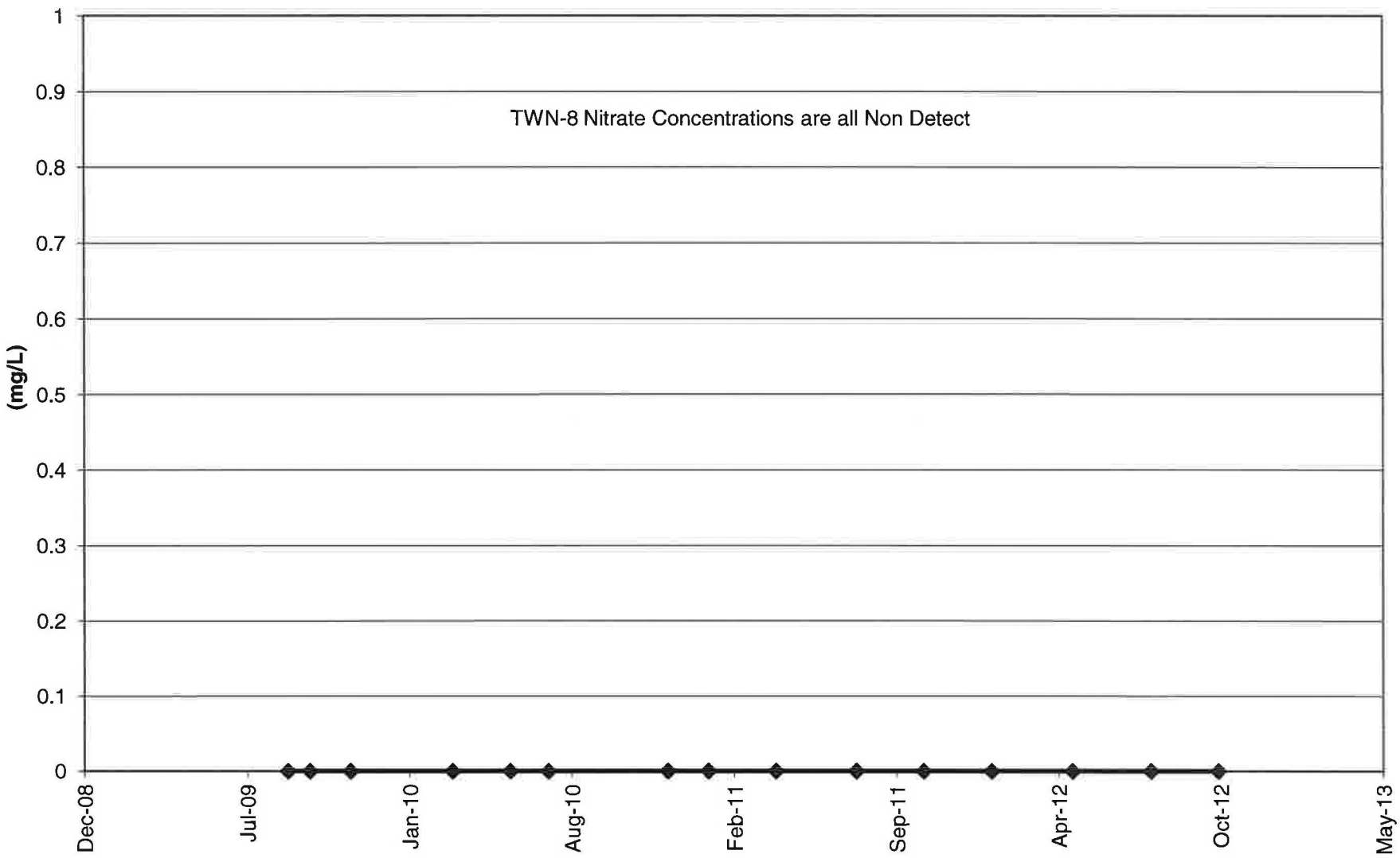
TWN-7 Nitrate Concentrations

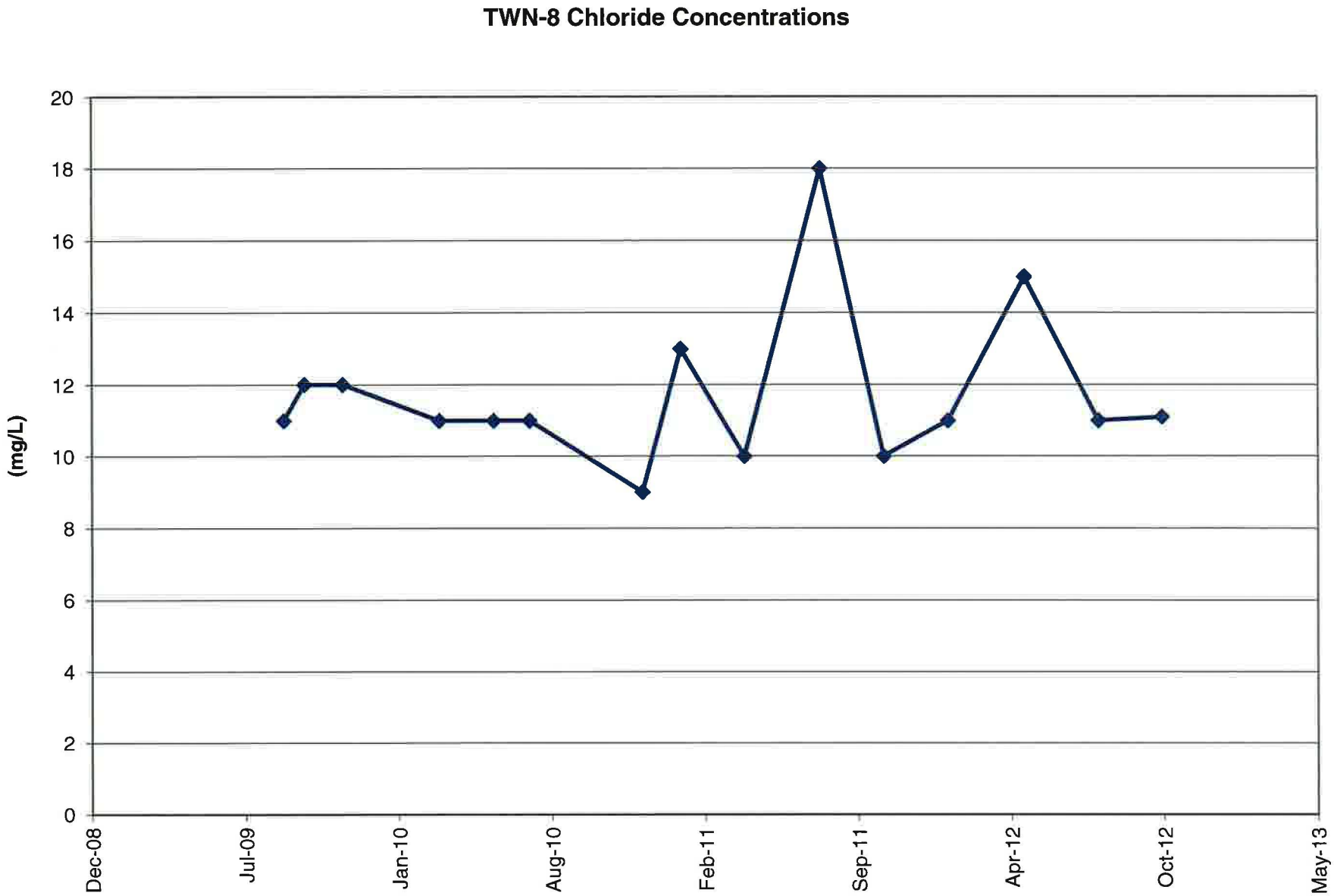


TWN-7 Chloride Concentrations

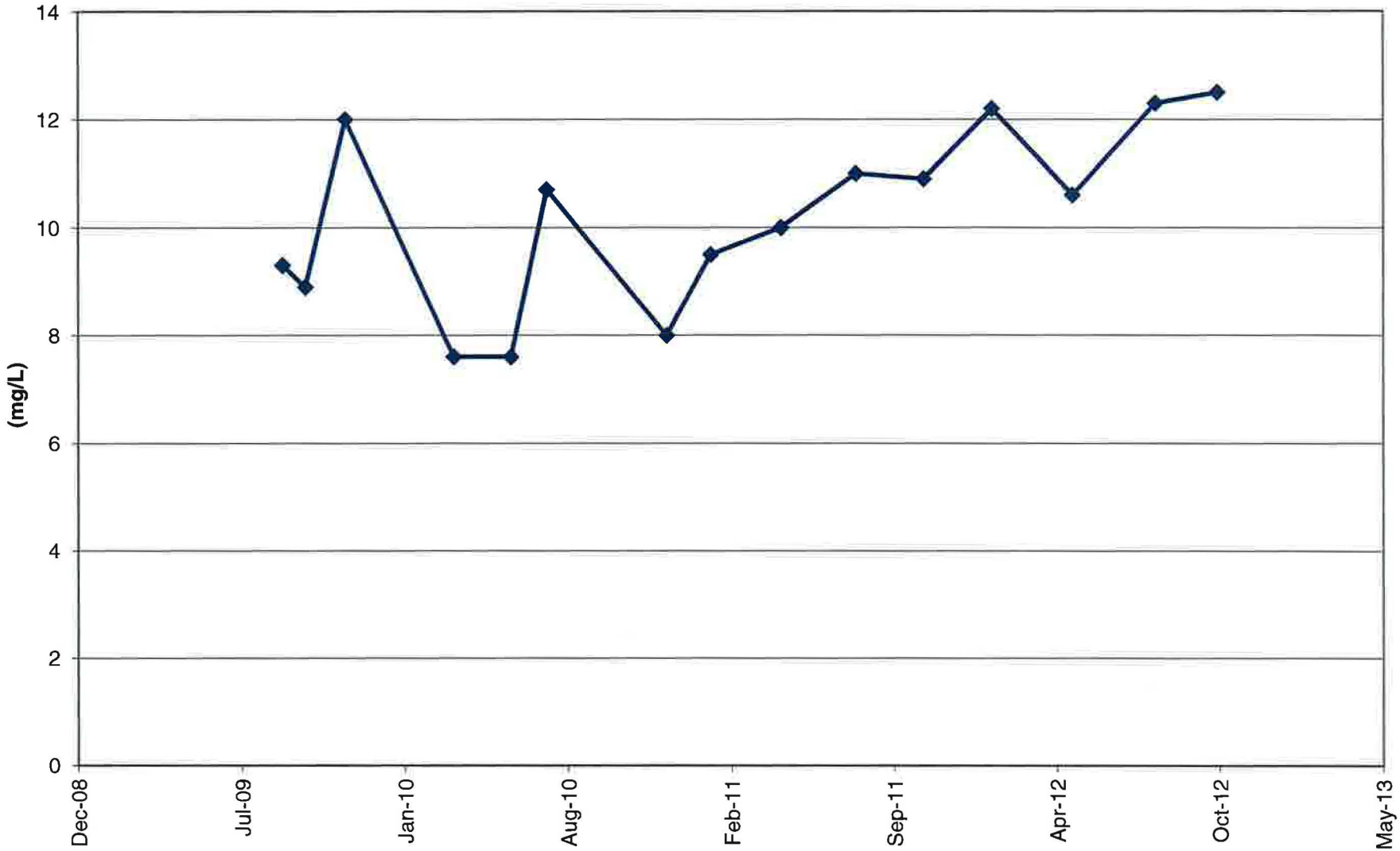


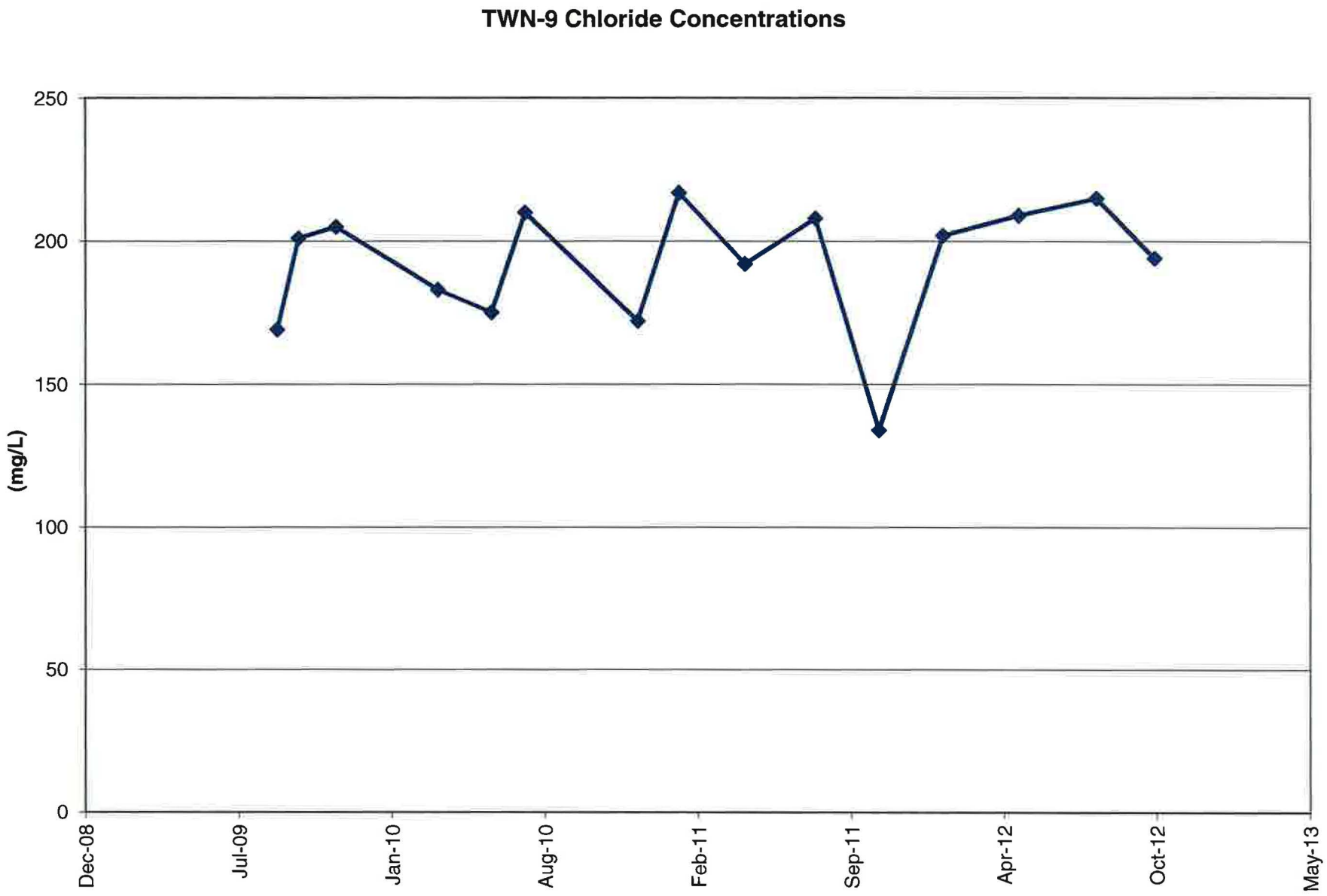
TWN-8 Nitrate Concentrations



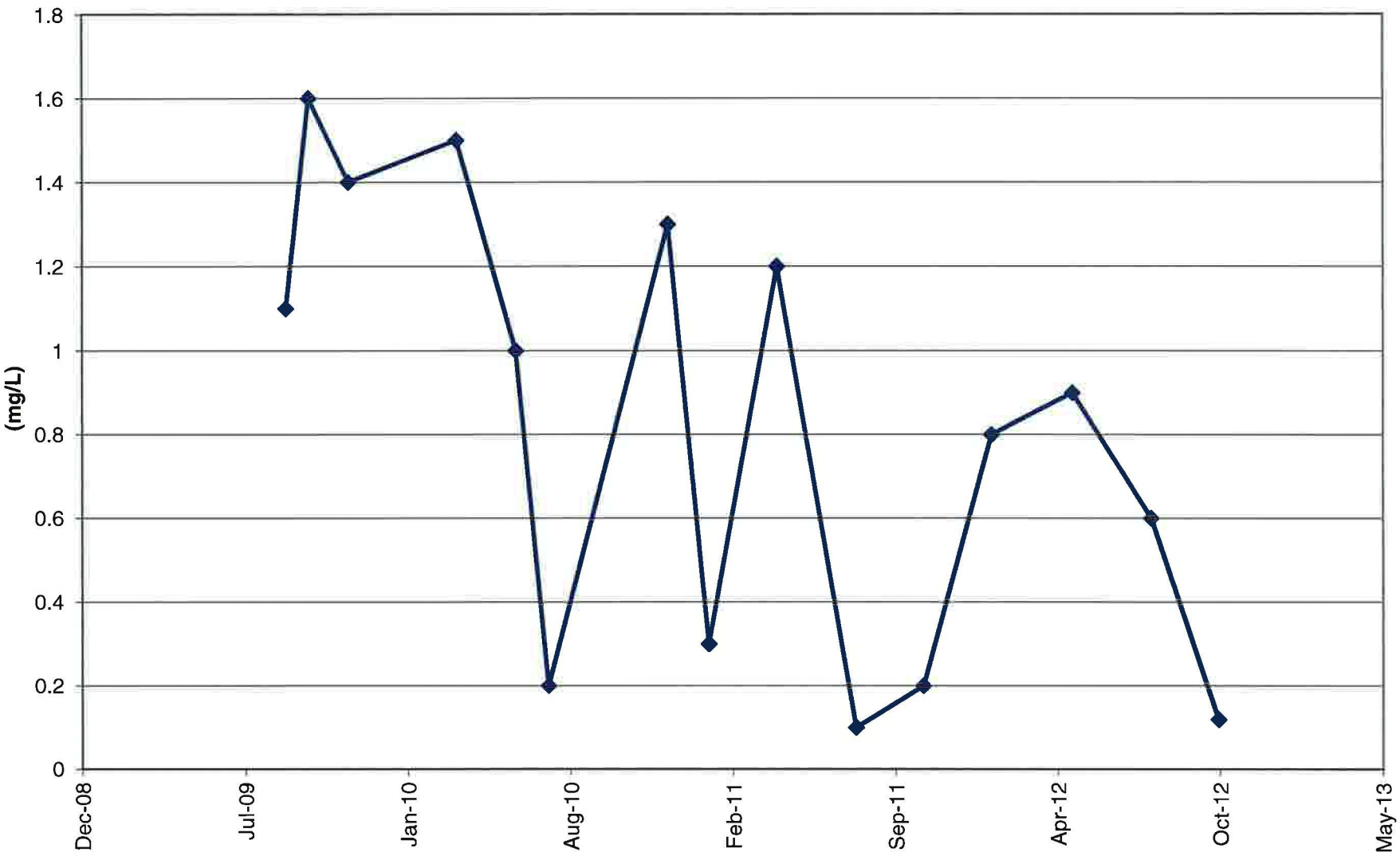

TWN-8 Chloride Concentrations
(mg/L)
20
18
16
14
12
10
8
6
4
2
0
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13

TWN-9 Nitrate Concentrations

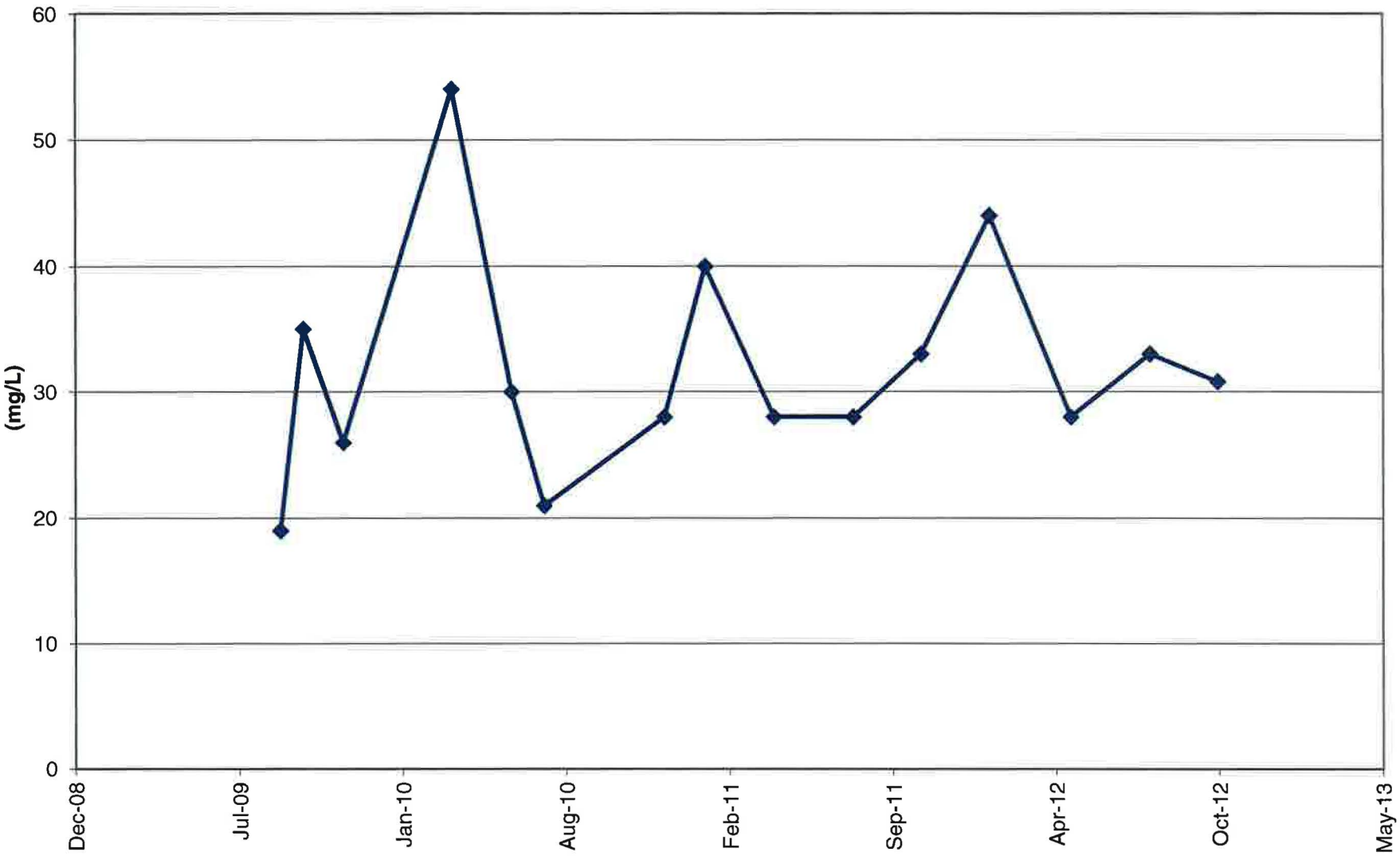



TWN-9 Chloride Concentrations
250
200
150
100
50
0
(mg/L)
Dec-08
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13

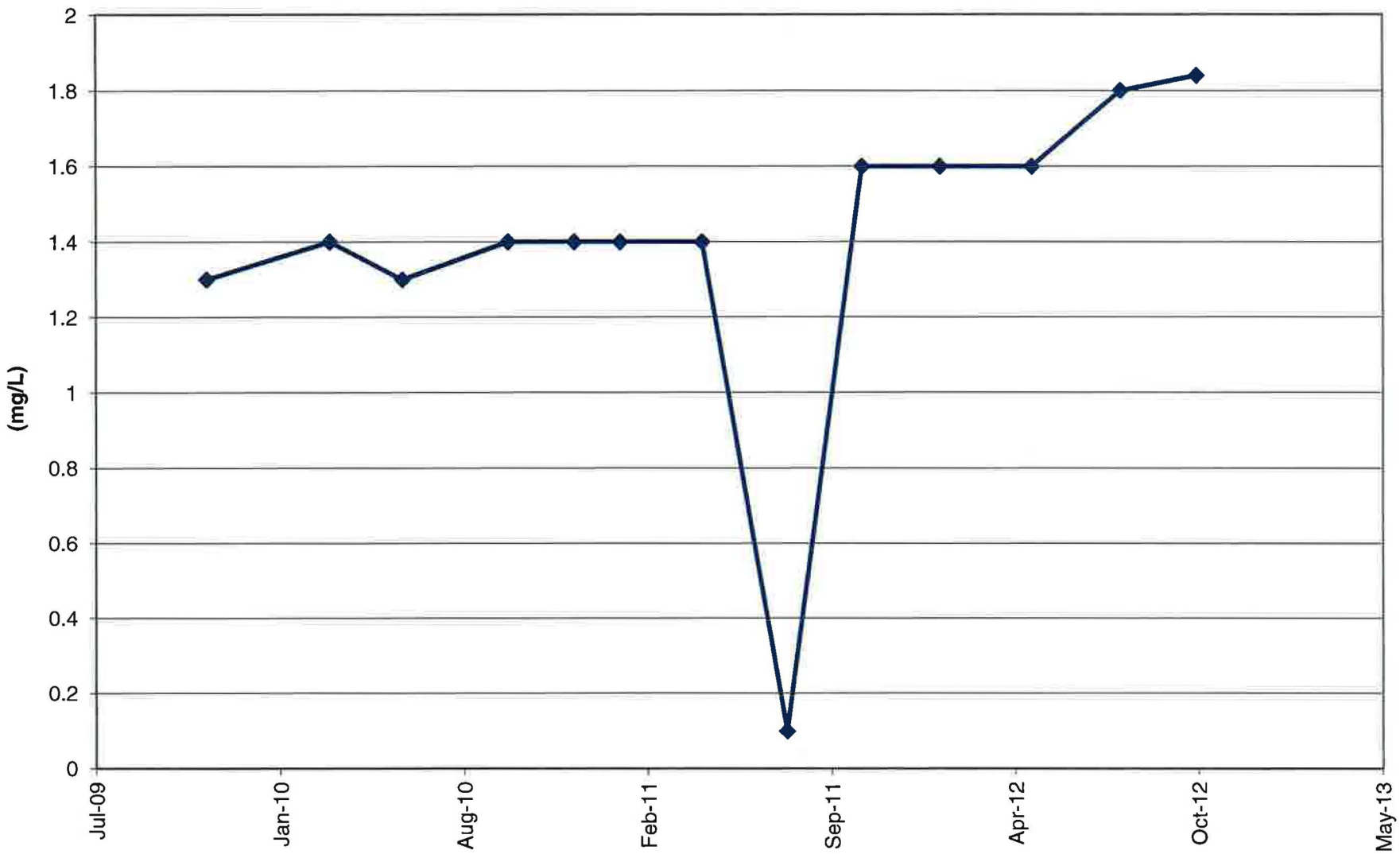
TWN-10 Nitrate Concentrations



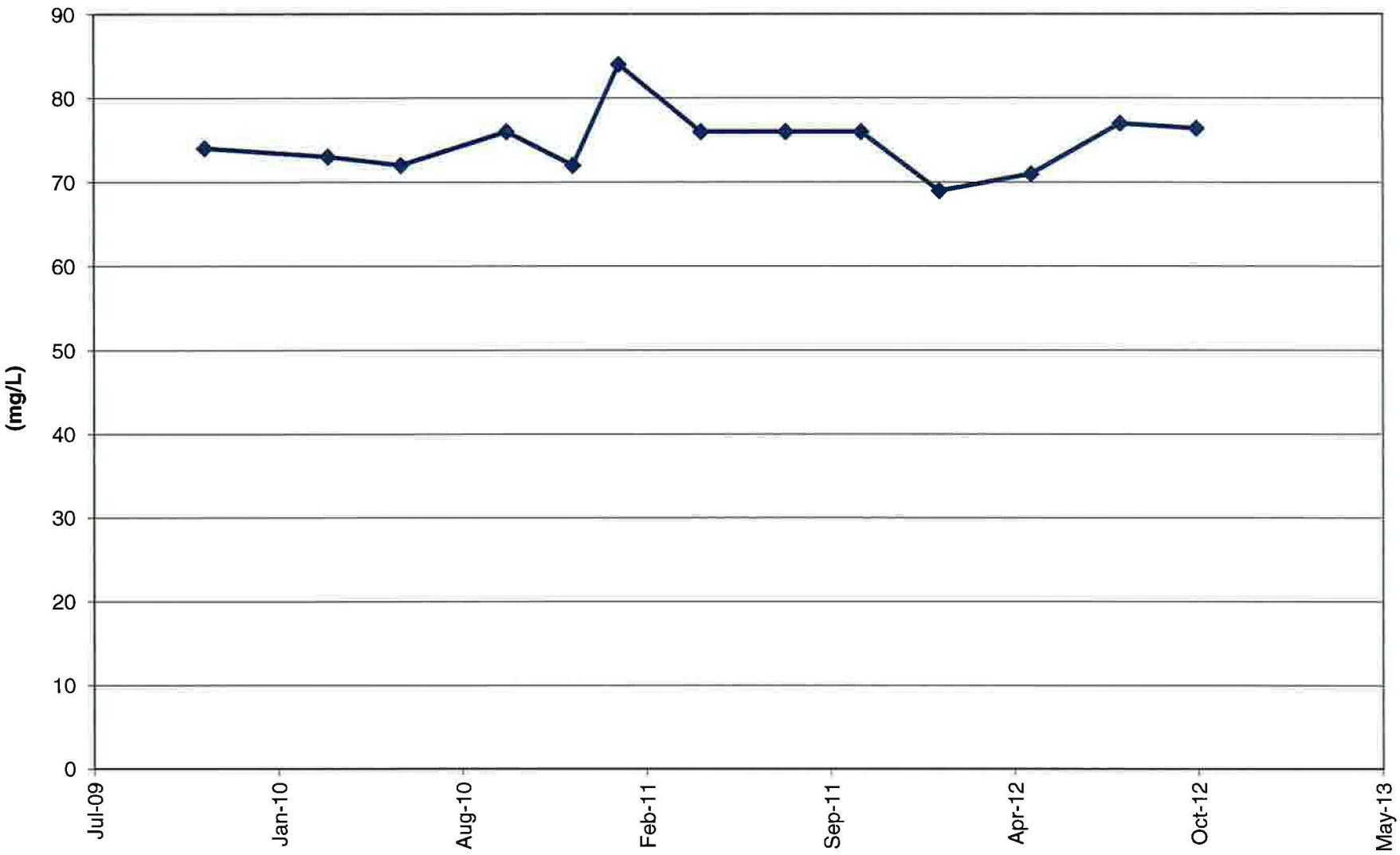
TWN-10 Chloride Concentrations



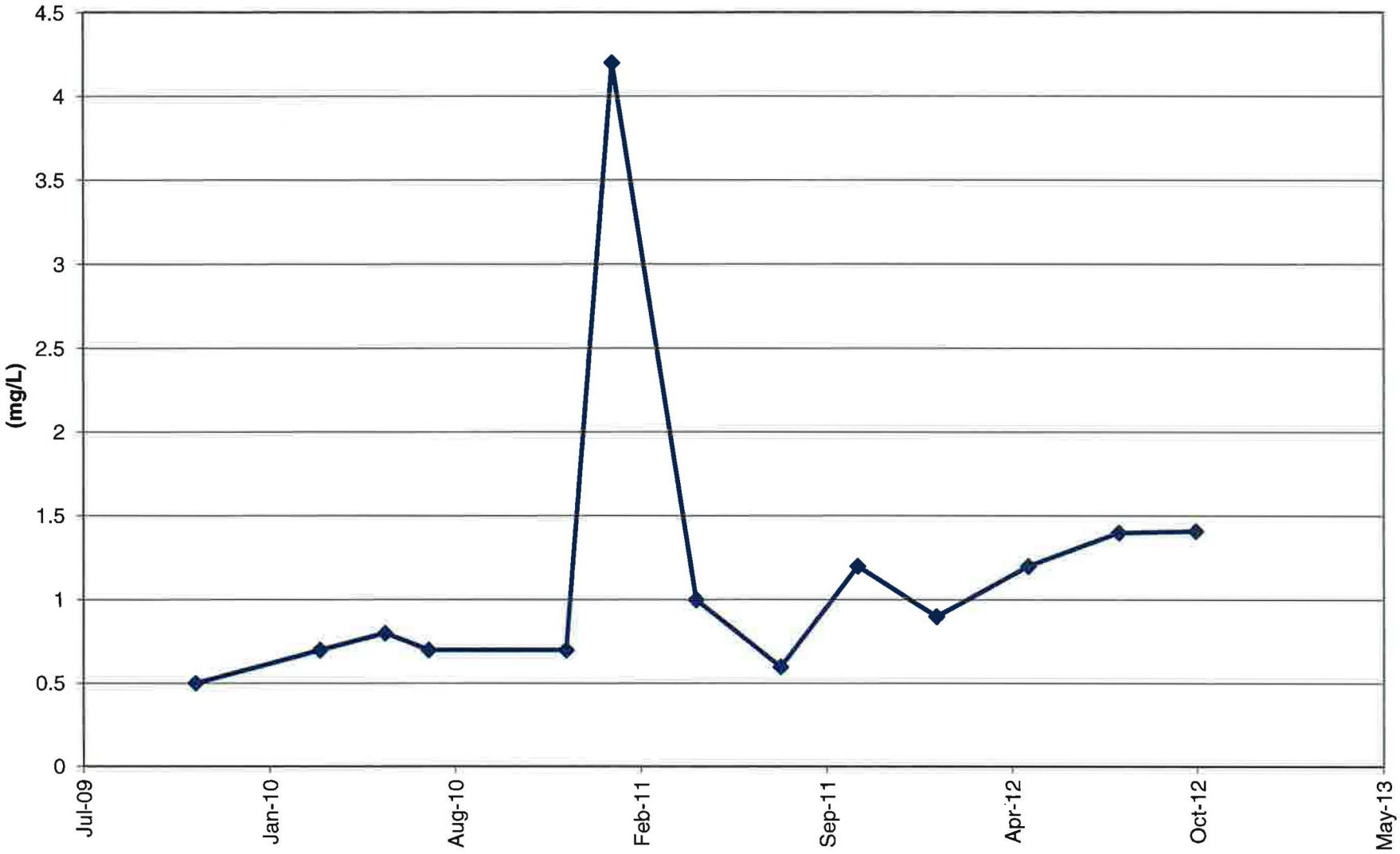
TWN-11 Nitrate Concentrations



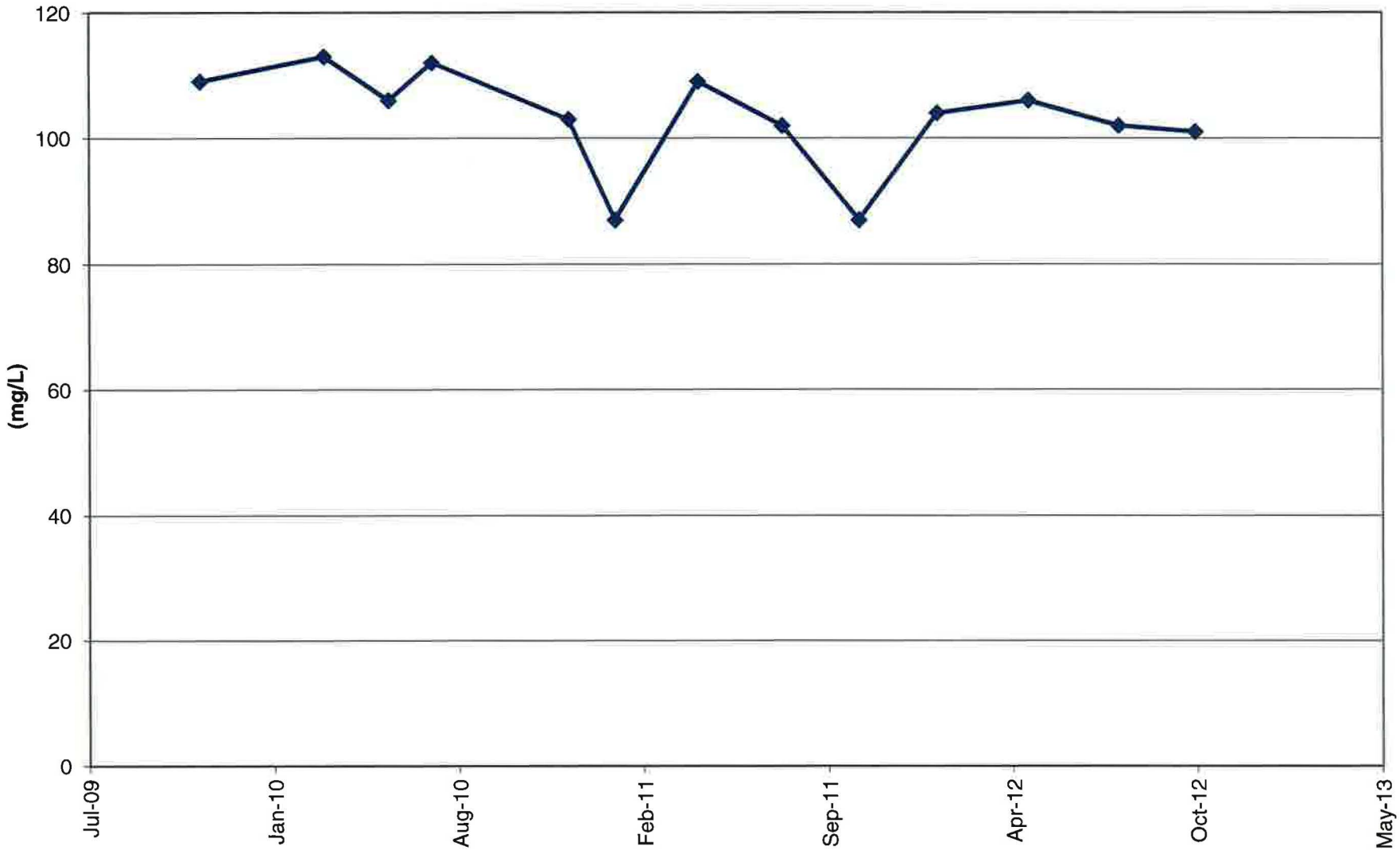
TWN-11 Chloride Concentrations



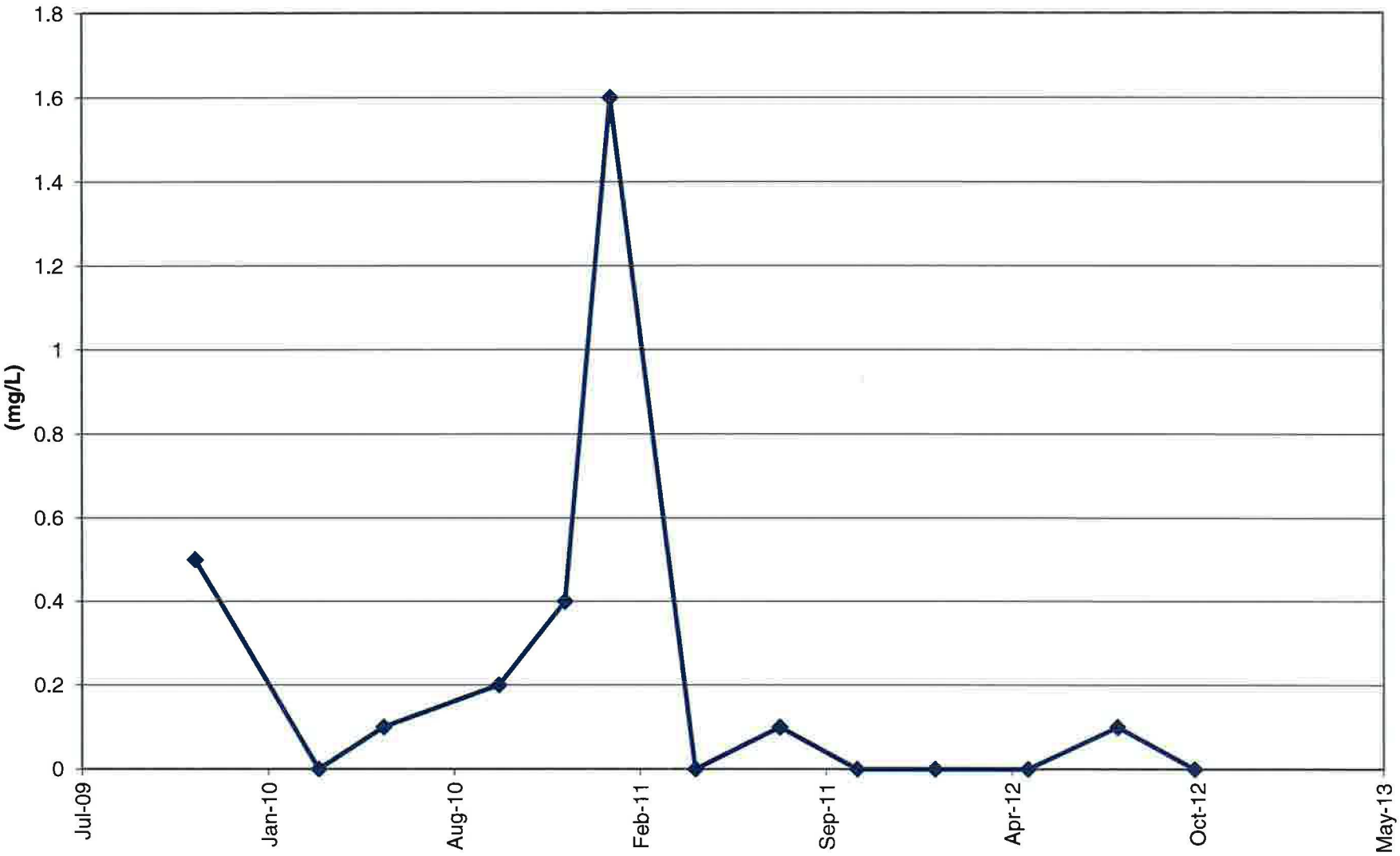
TWN-12 Nitrate Concentrations



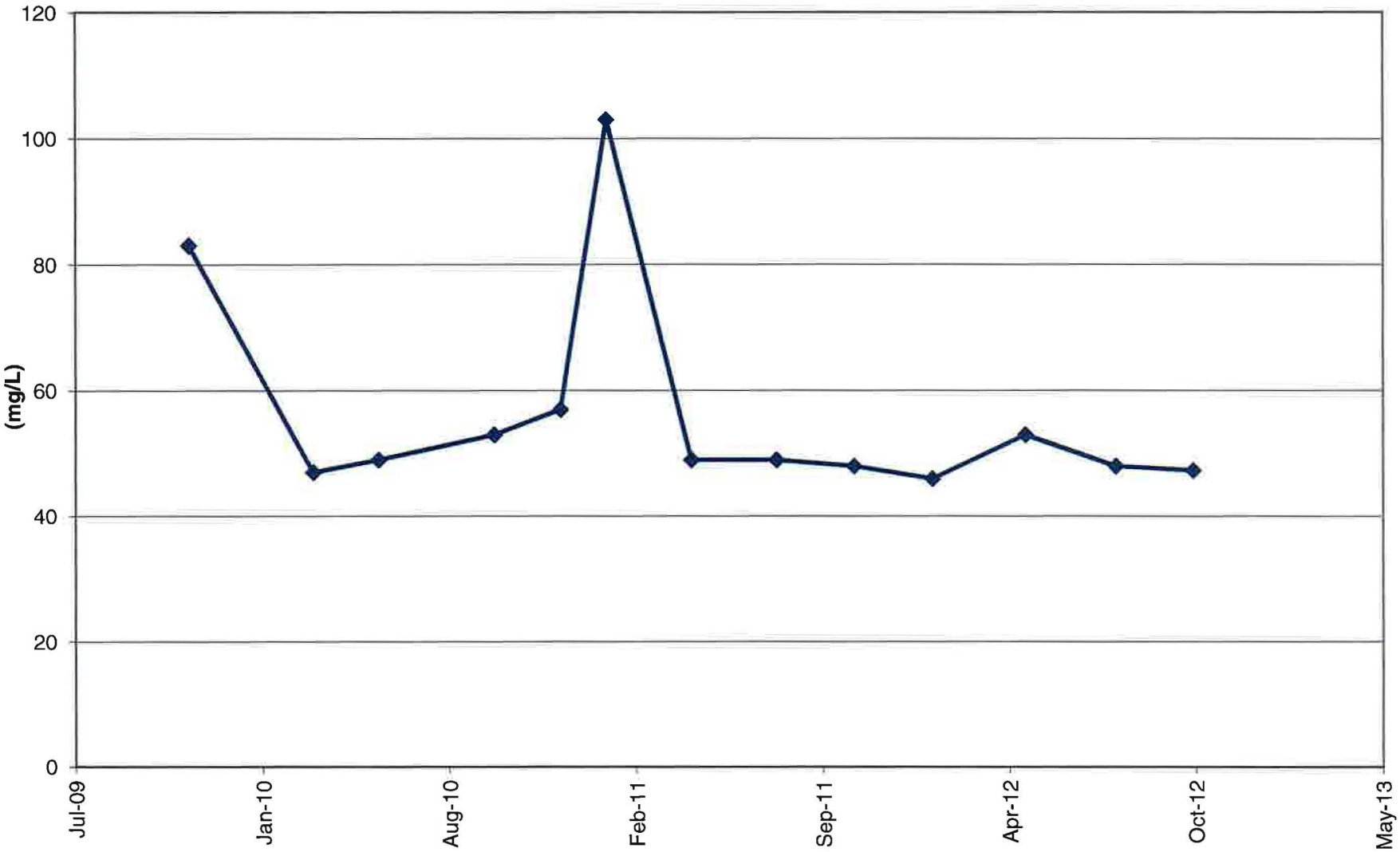
TWN-12 Chloride Concentrations



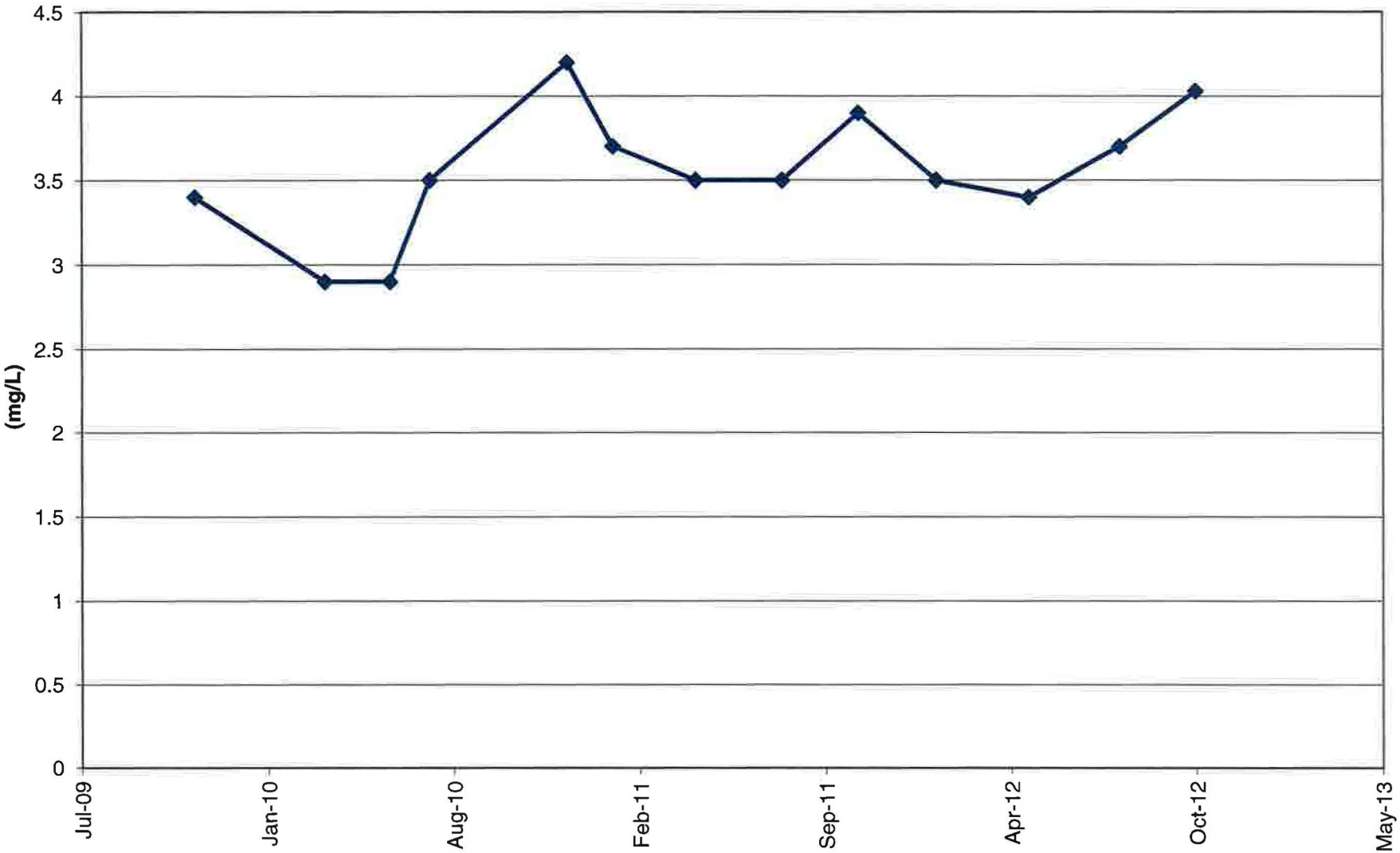
TWN-13 Nitrate Concentrations



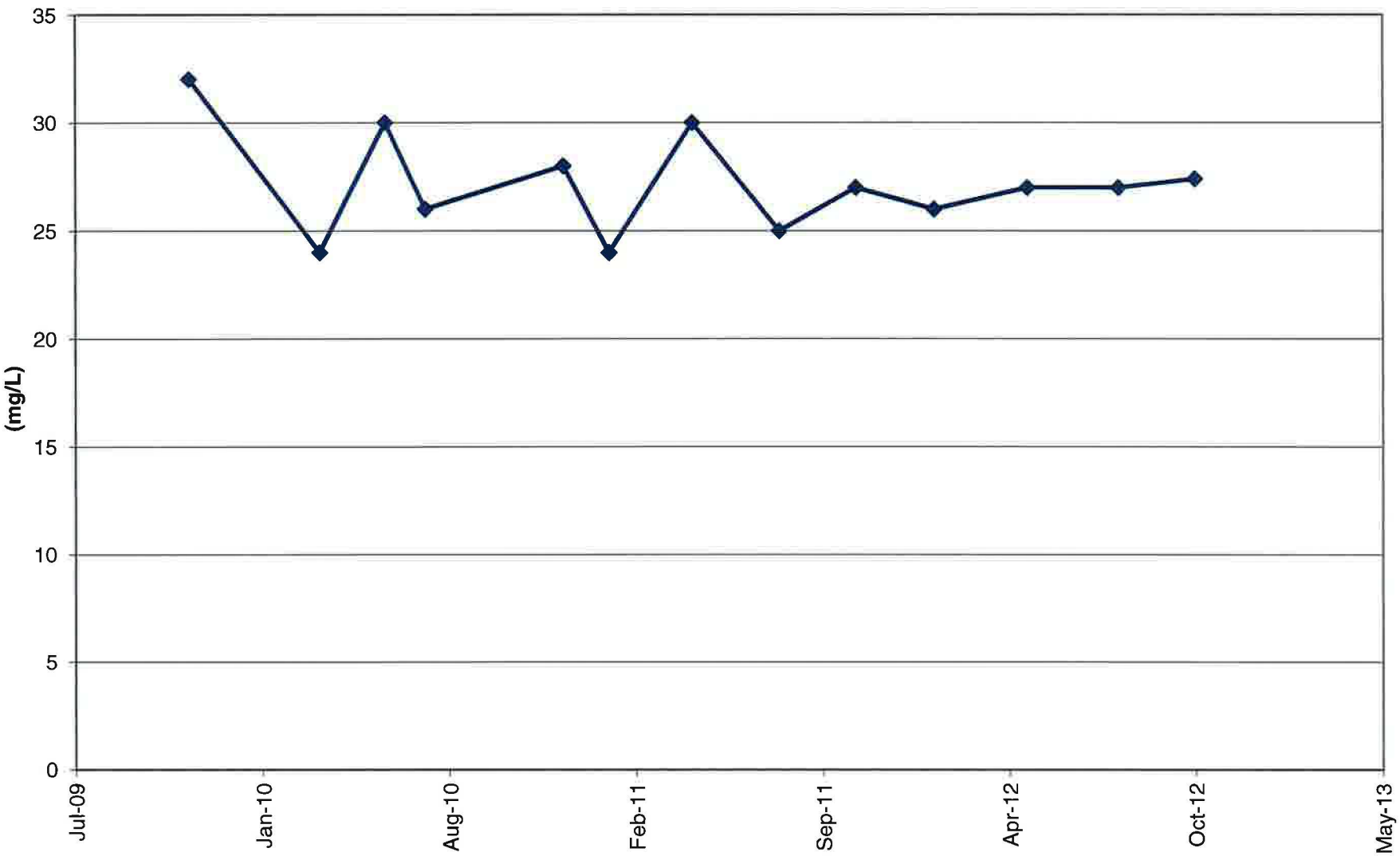
TWN-13 Chloride Concentrations



TWN-14 Nitrate Concentrations

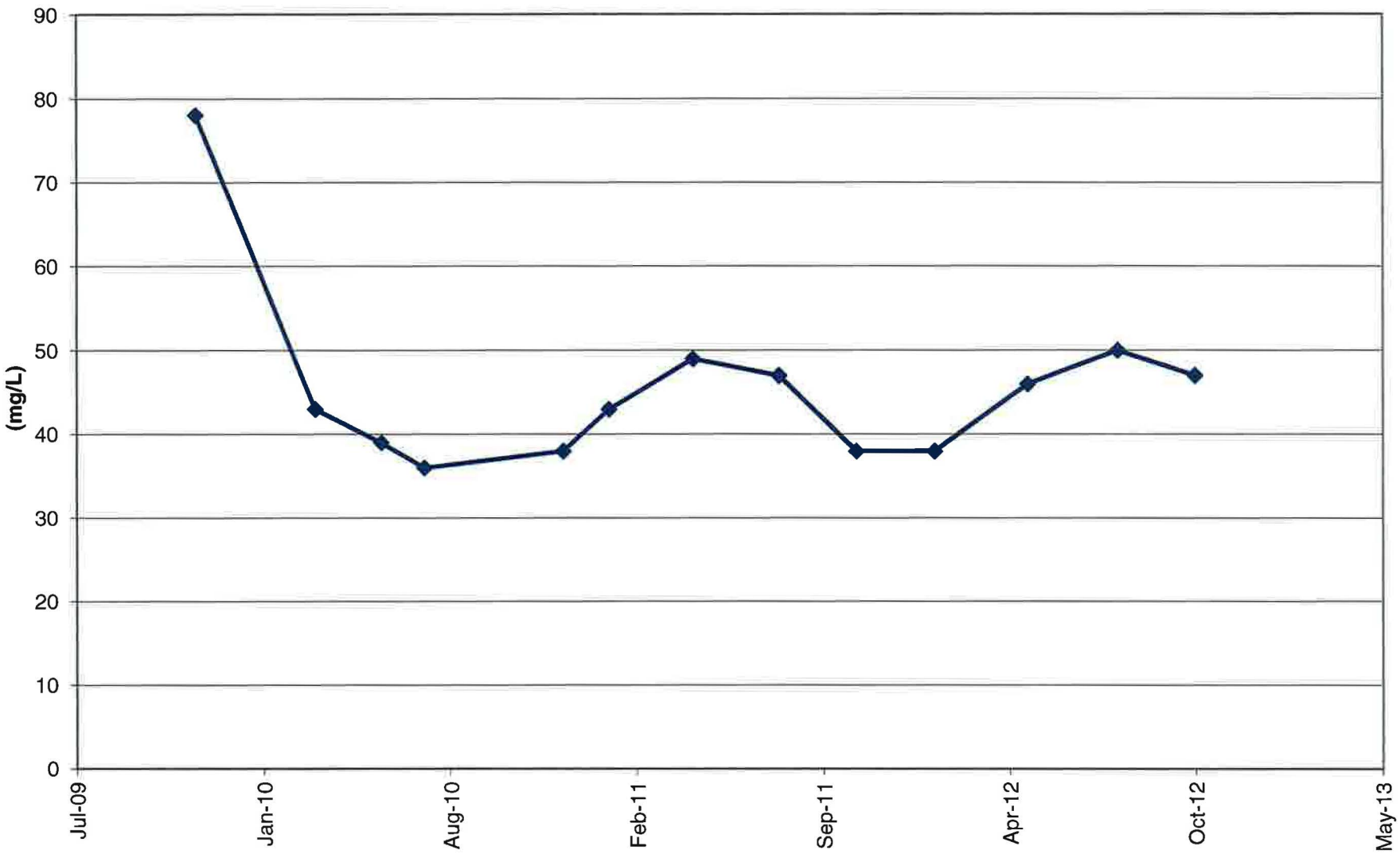


TWN-14 Chloride Concentrations

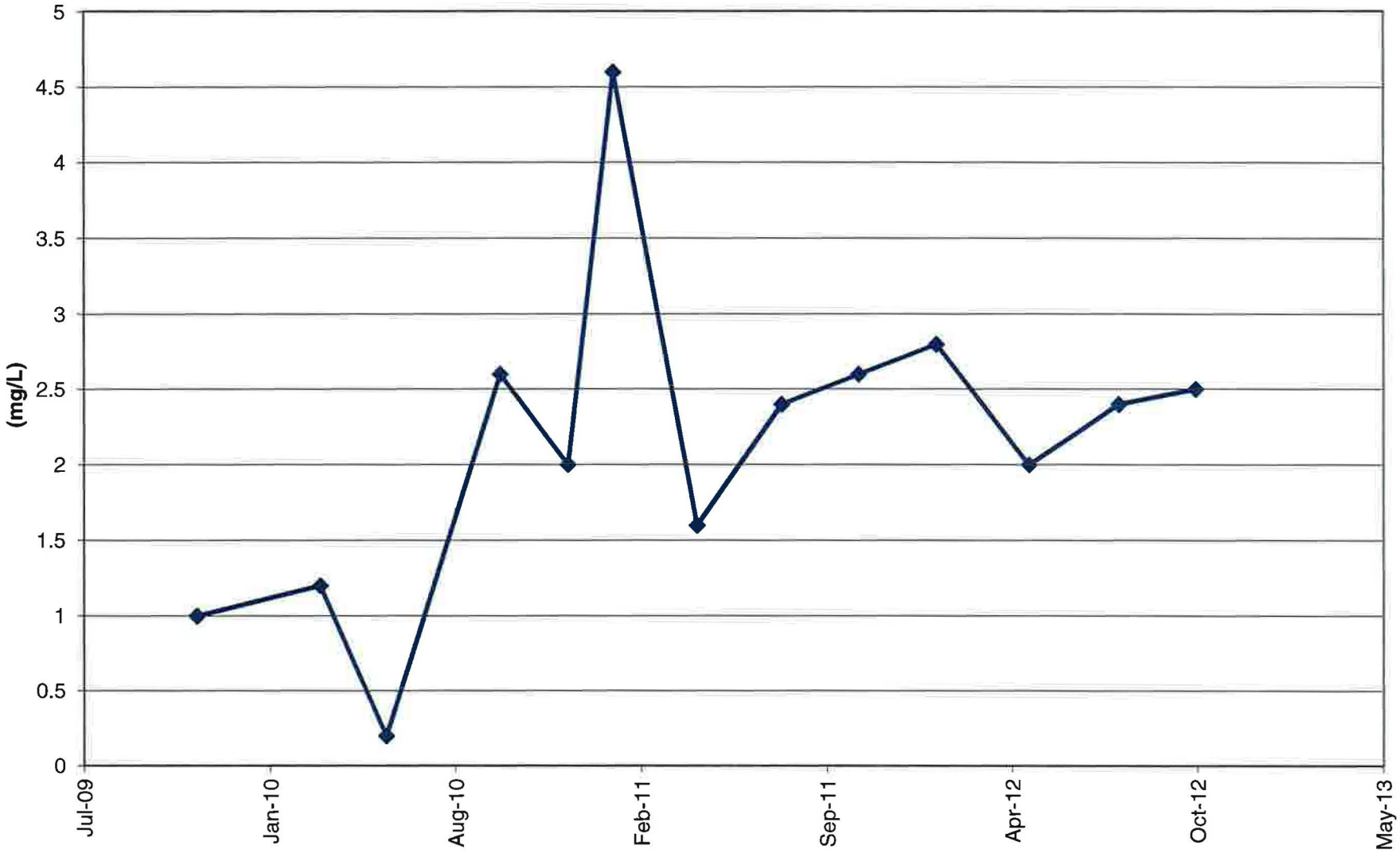


TWN-15 Nitrate Concentrations

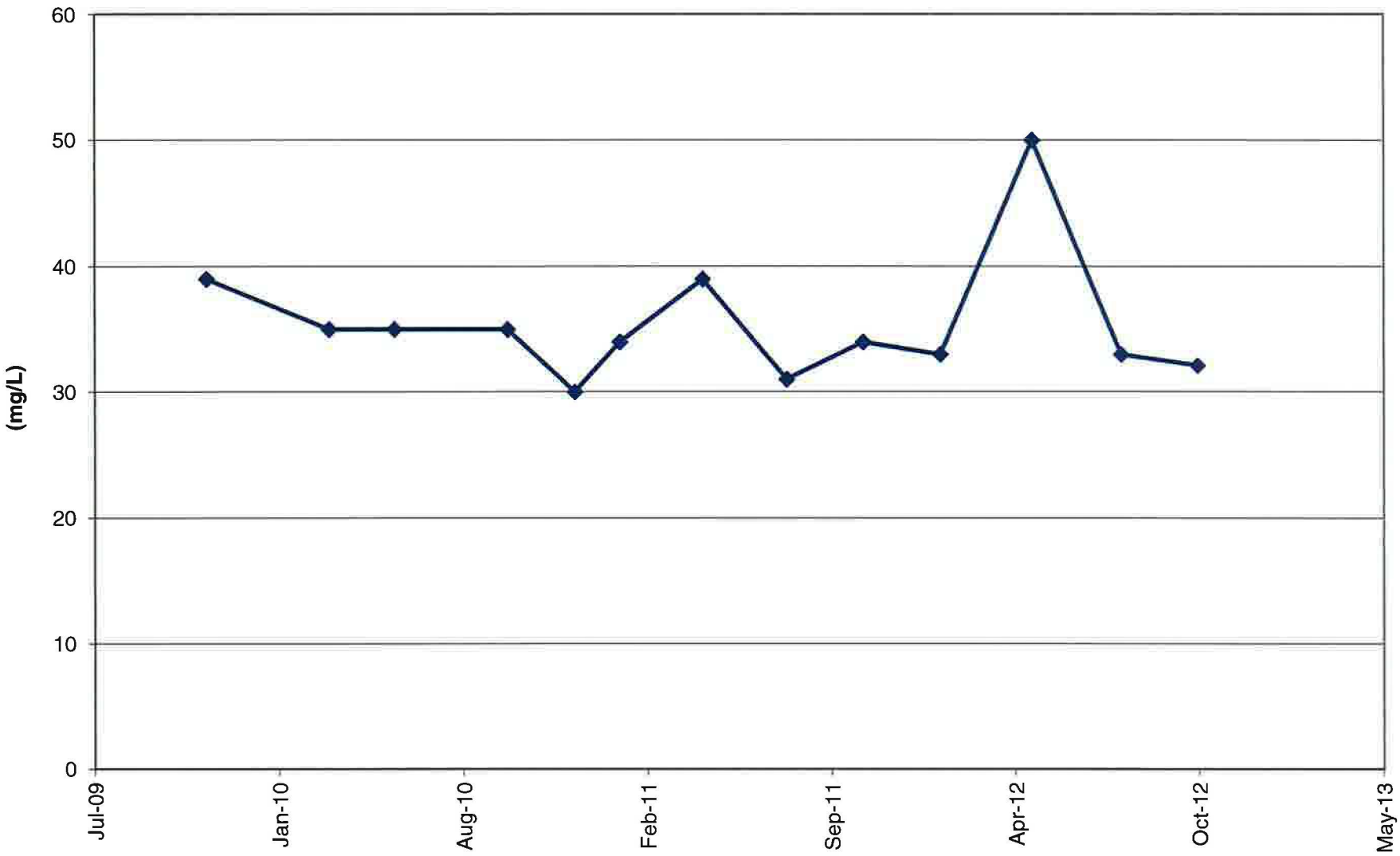
TWN-15 Chloride Concentrations



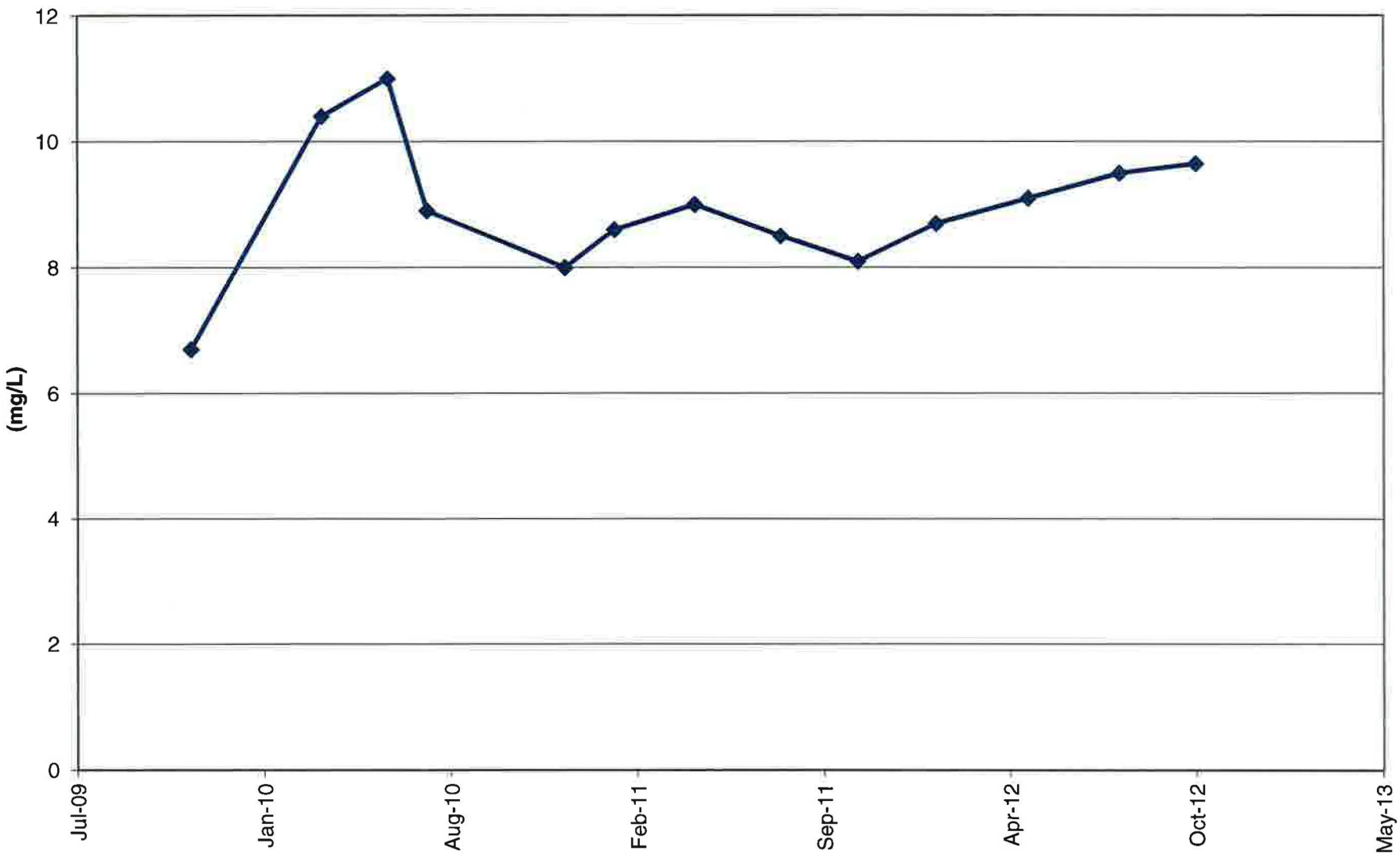
TWN-16 Nitrate Concentrations



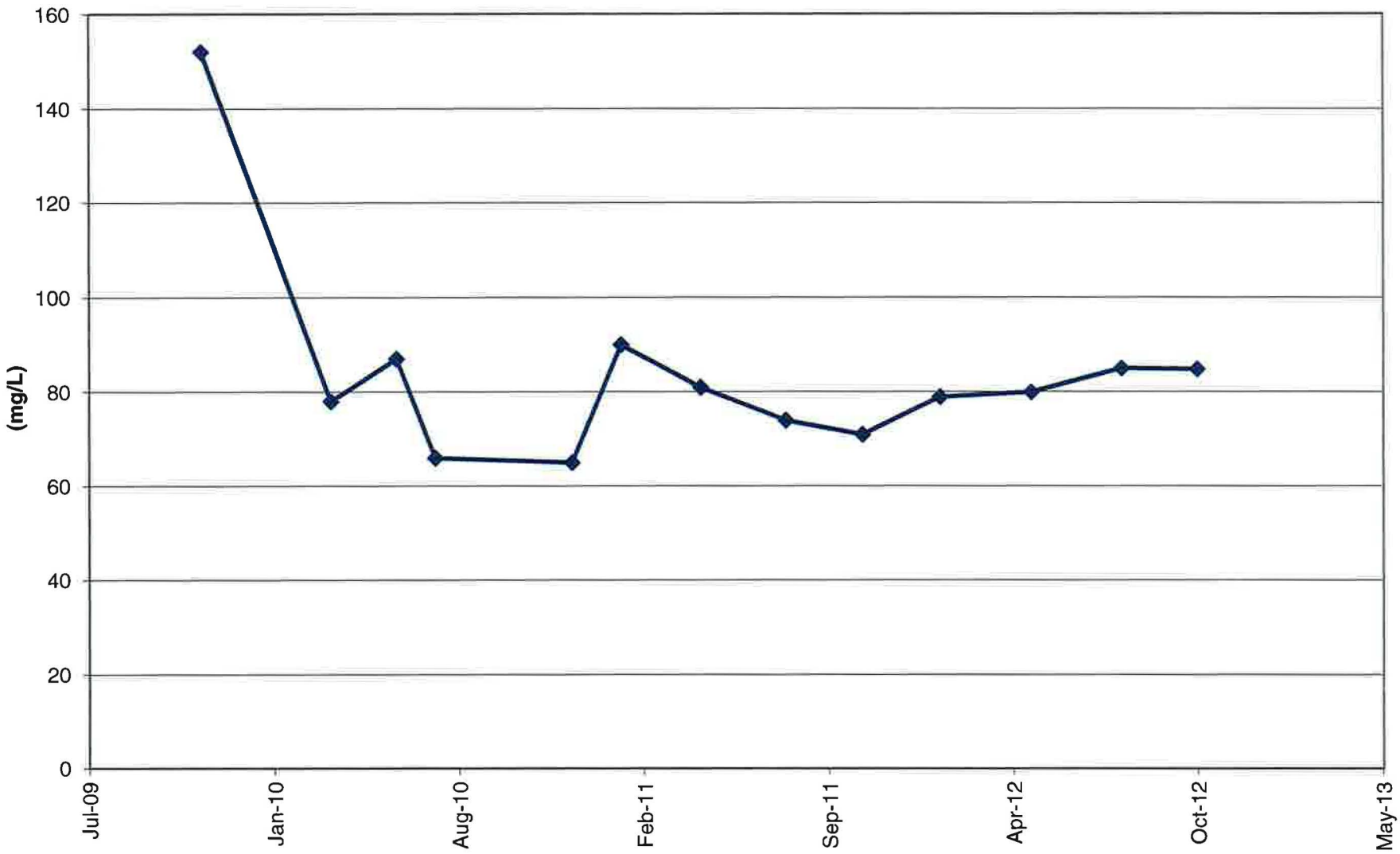
TWN-16 Chloride Concentrations

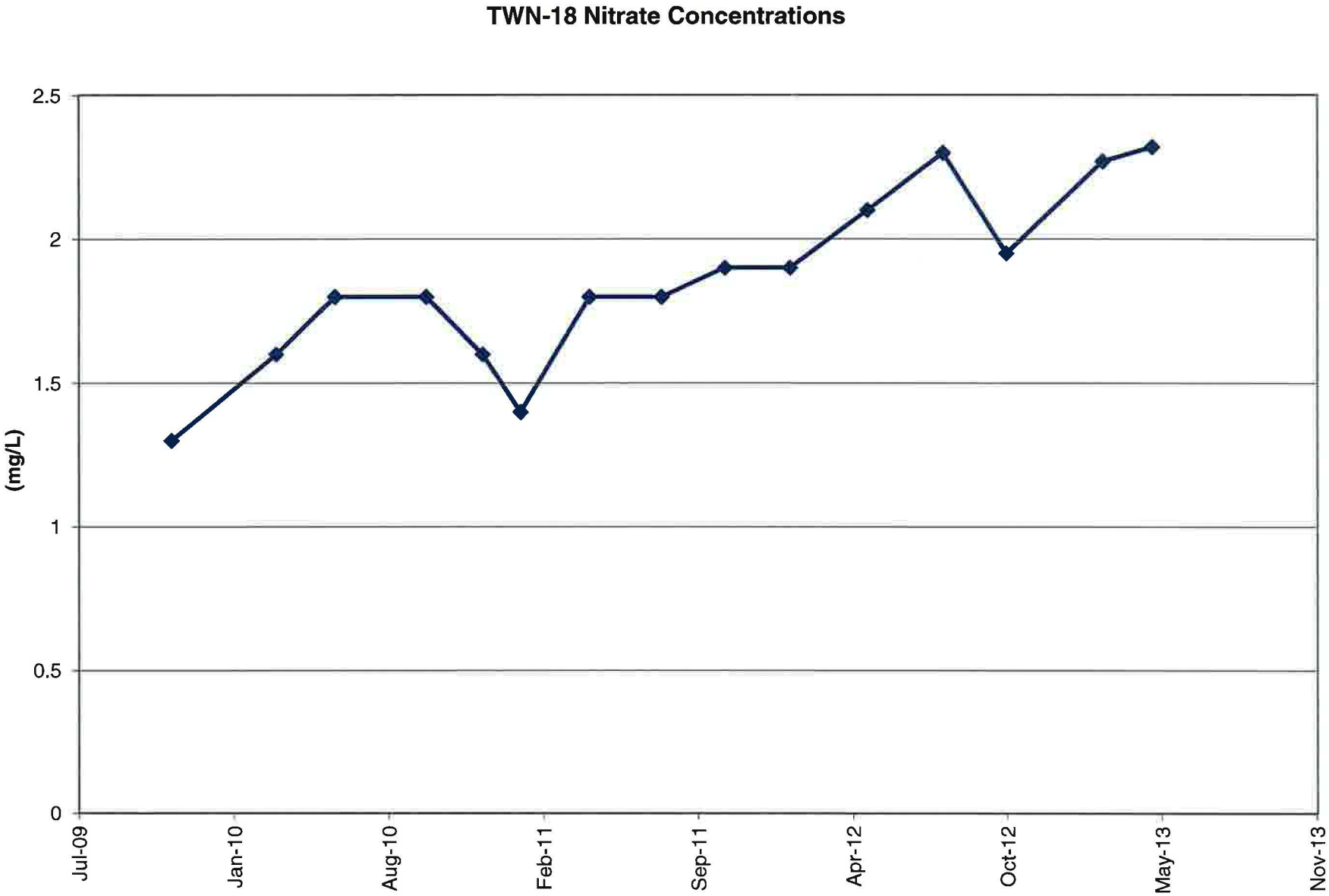


TWN-17 Nitrate Concentrations

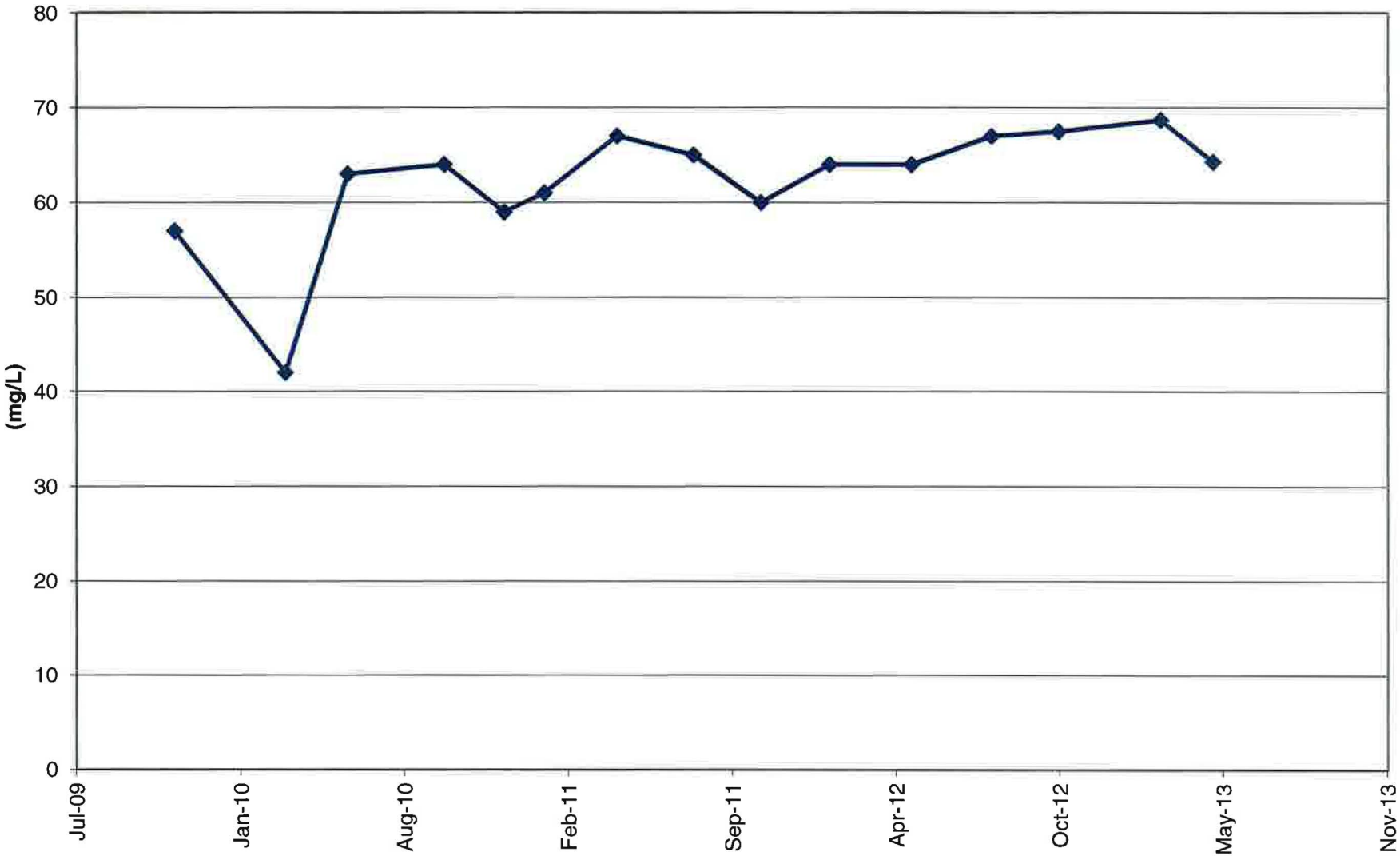


TWN-17 Chloride Concentrations

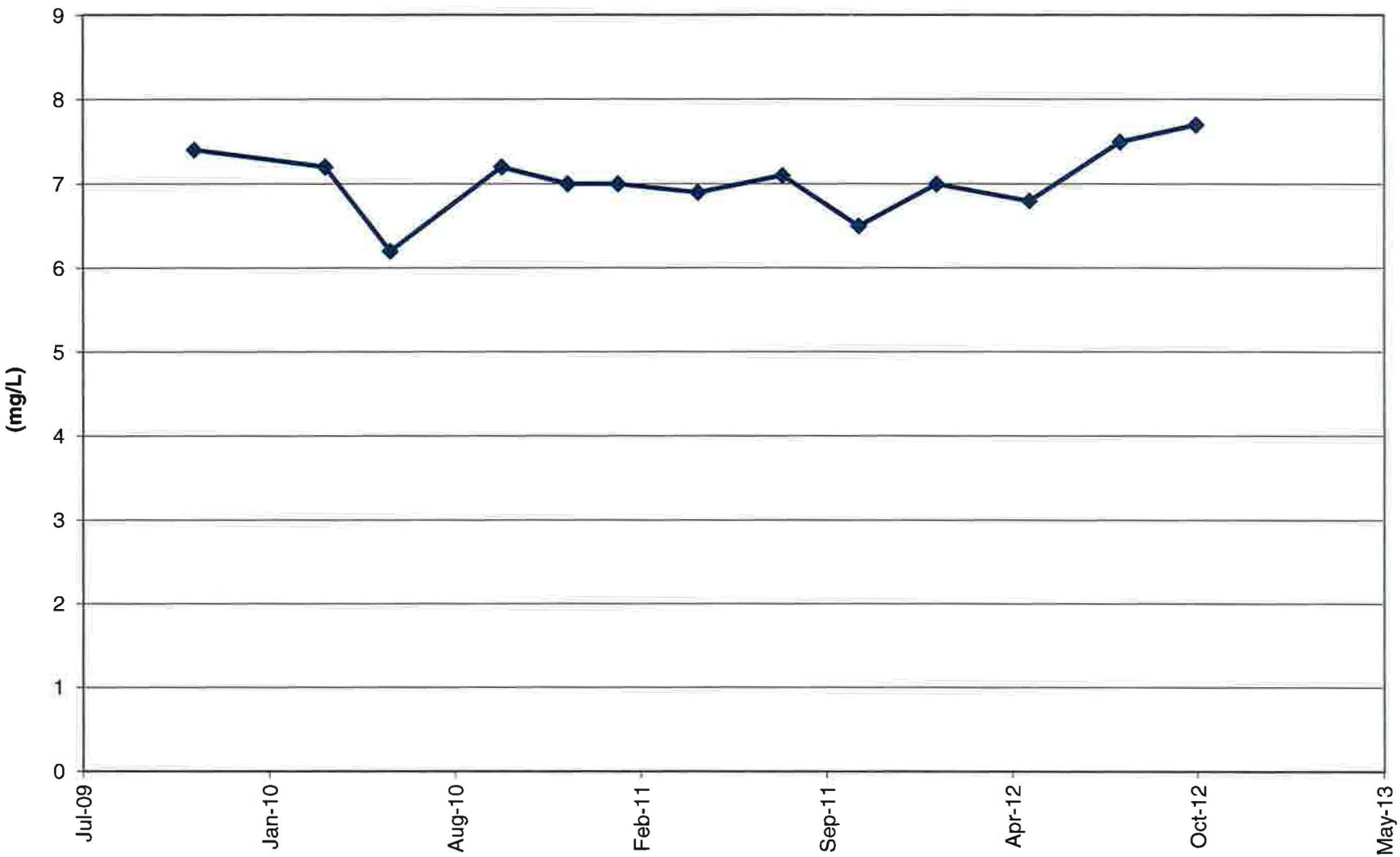



TWN-18 Nitrate Concentrations
(mg/L)
2.5
2
1.5
1
0.5
0
Jul-09
Jan-10
Aug-10
Feb-11
Sep-11
Apr-12
Oct-12
May-13
Nov-13

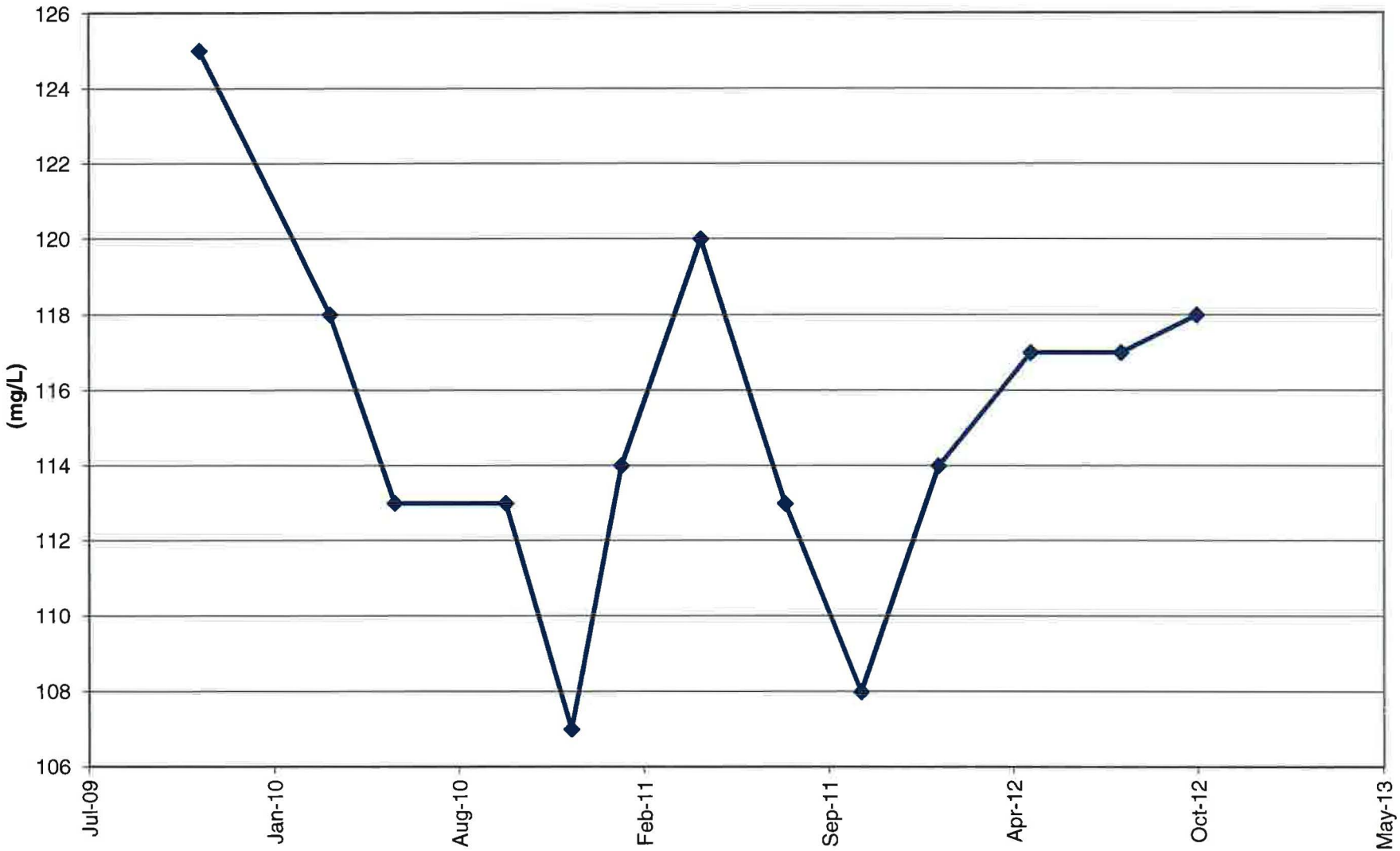
TWN-18 Chloride Concentrations



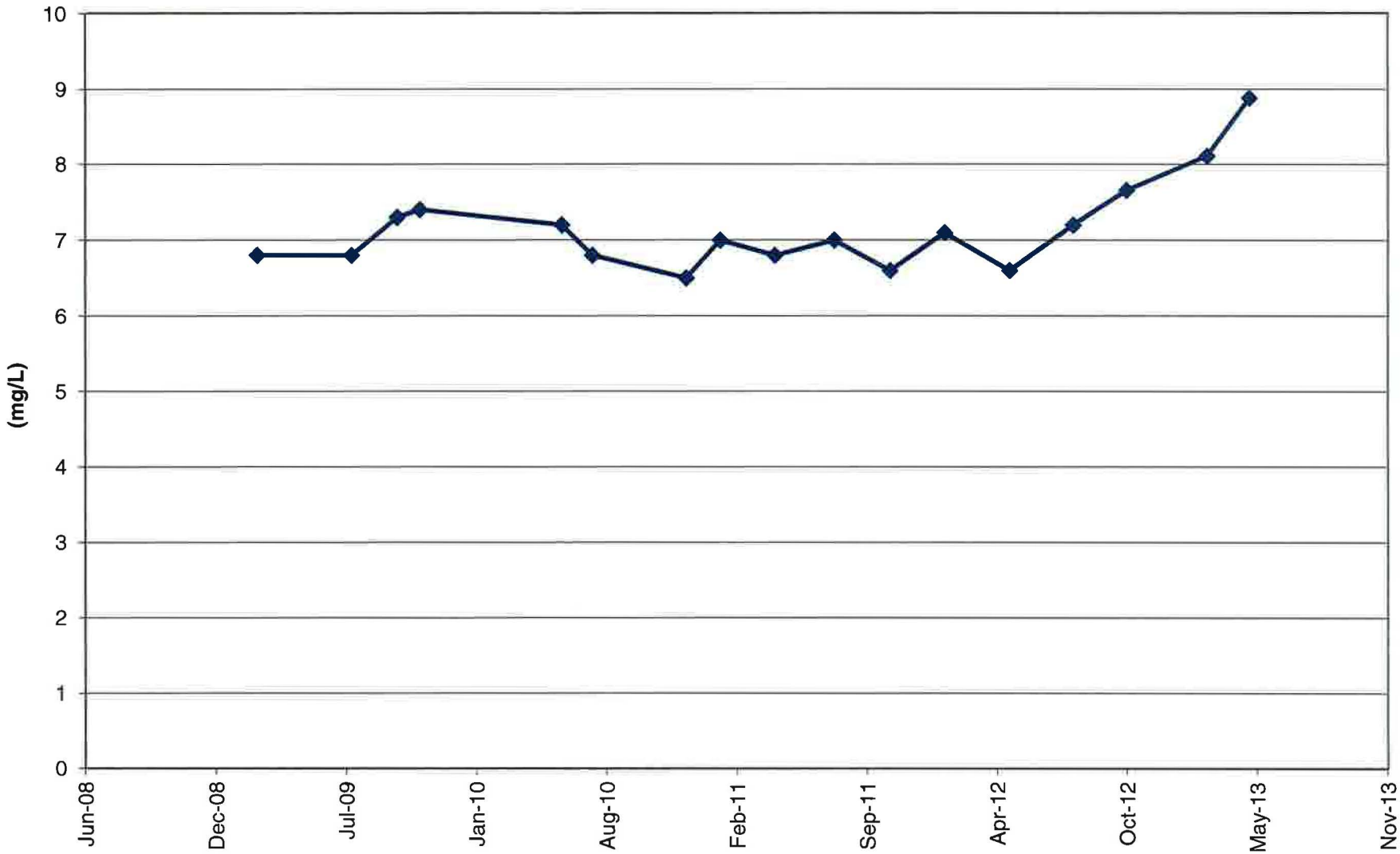
TWN-19 Nitrate Concentrations



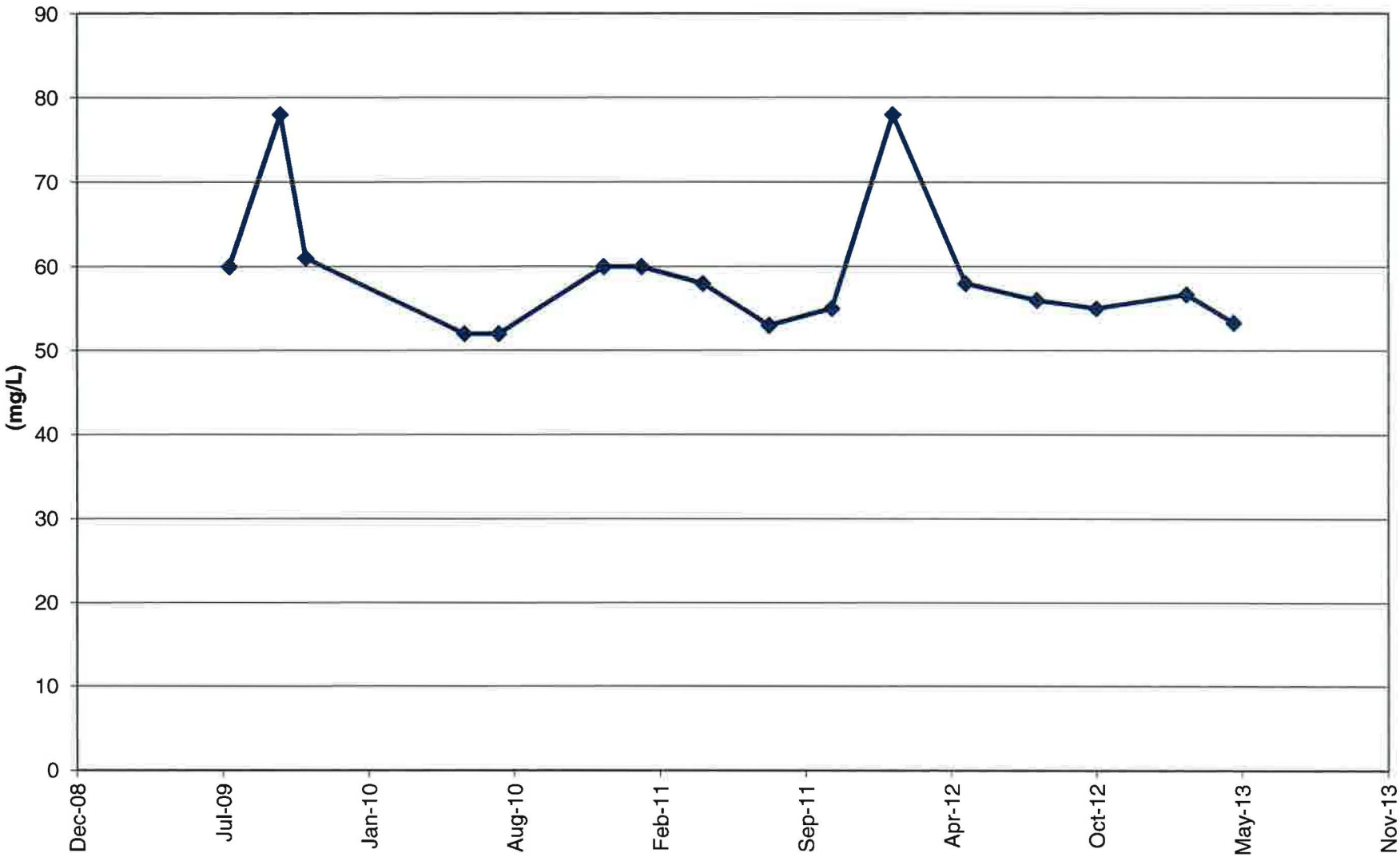
TWN-19 Chloride Concentrations



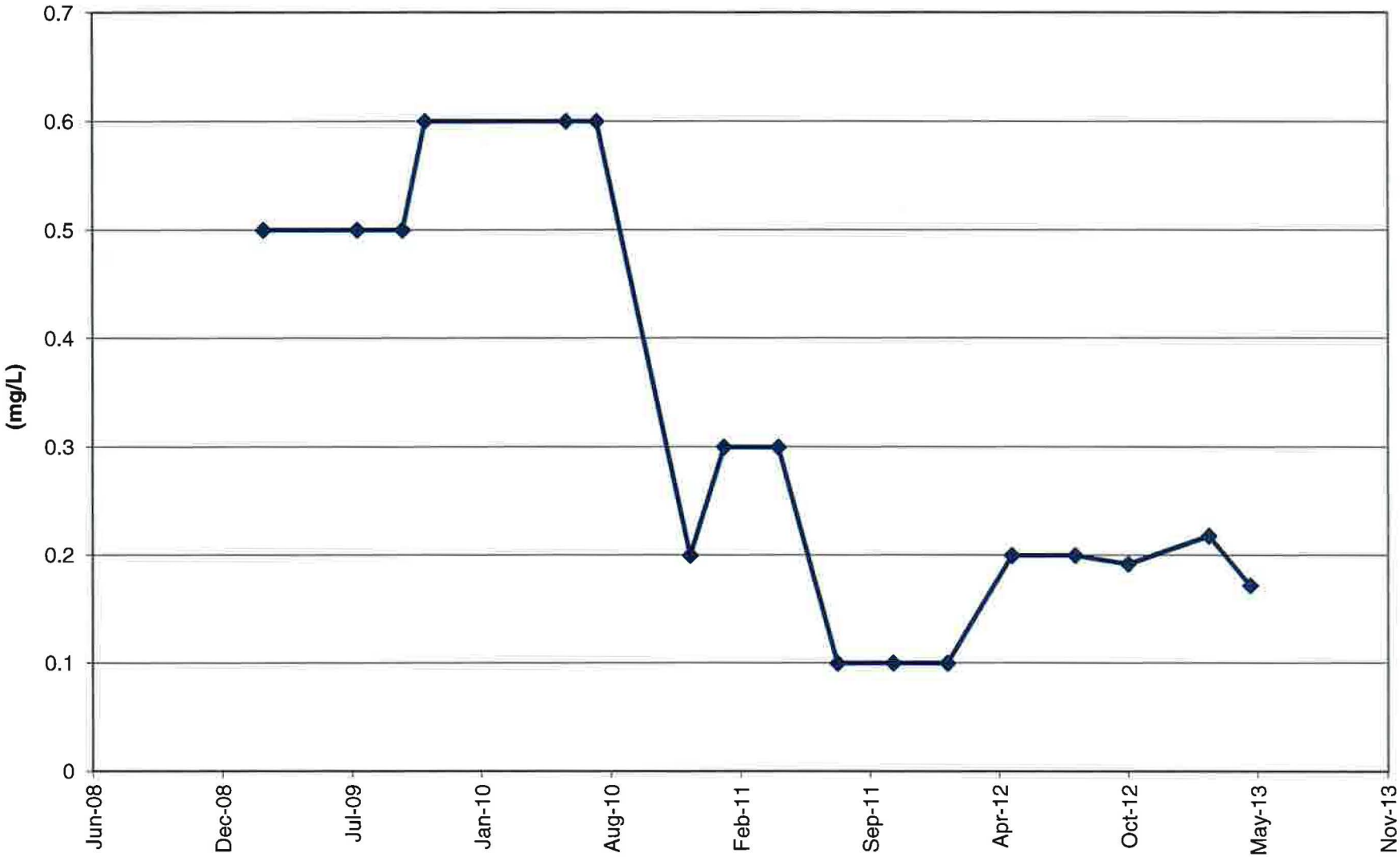
Piezometer 1 Nitrate Concentrations



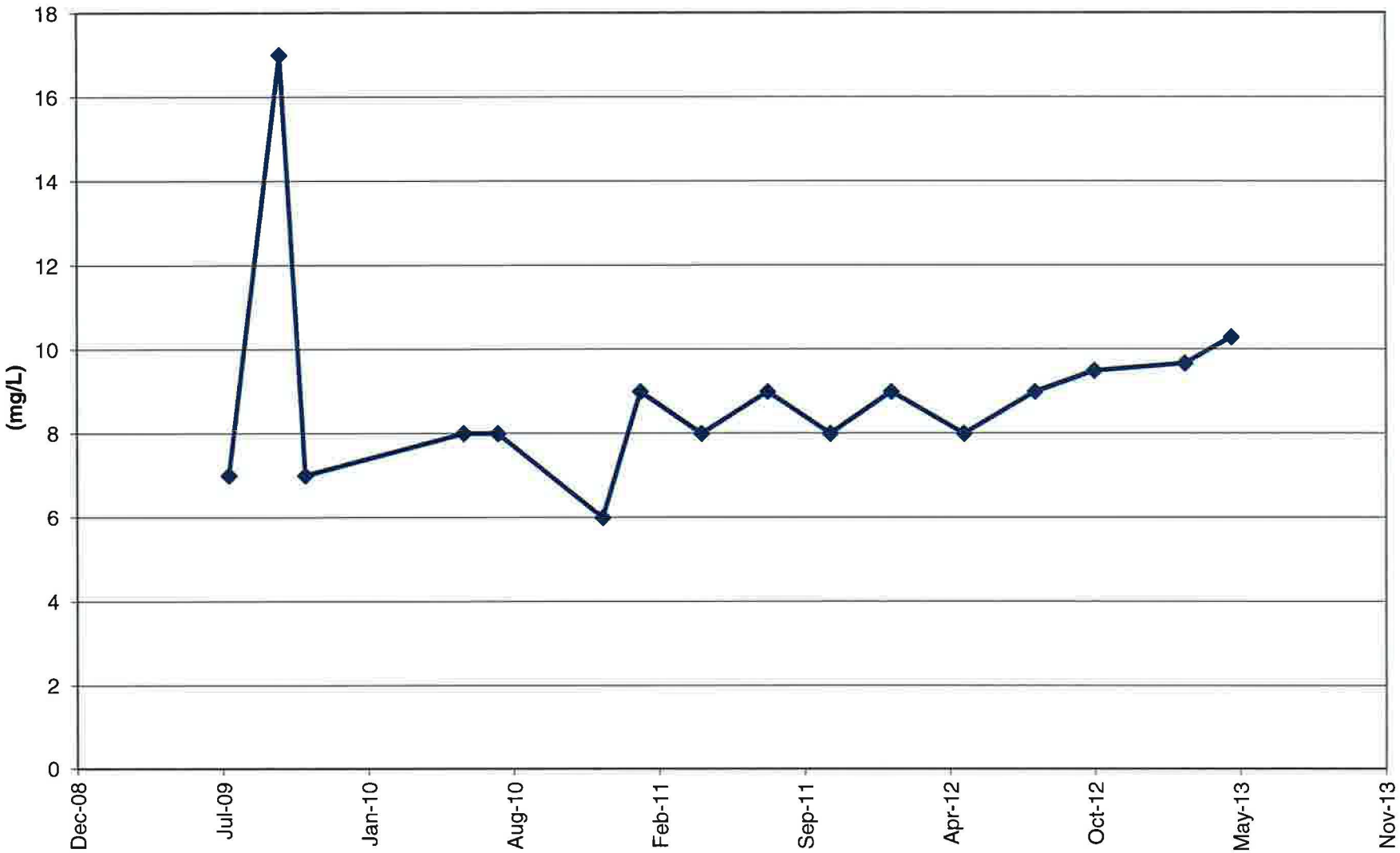
Piezometer 1 Chloride Concentrations



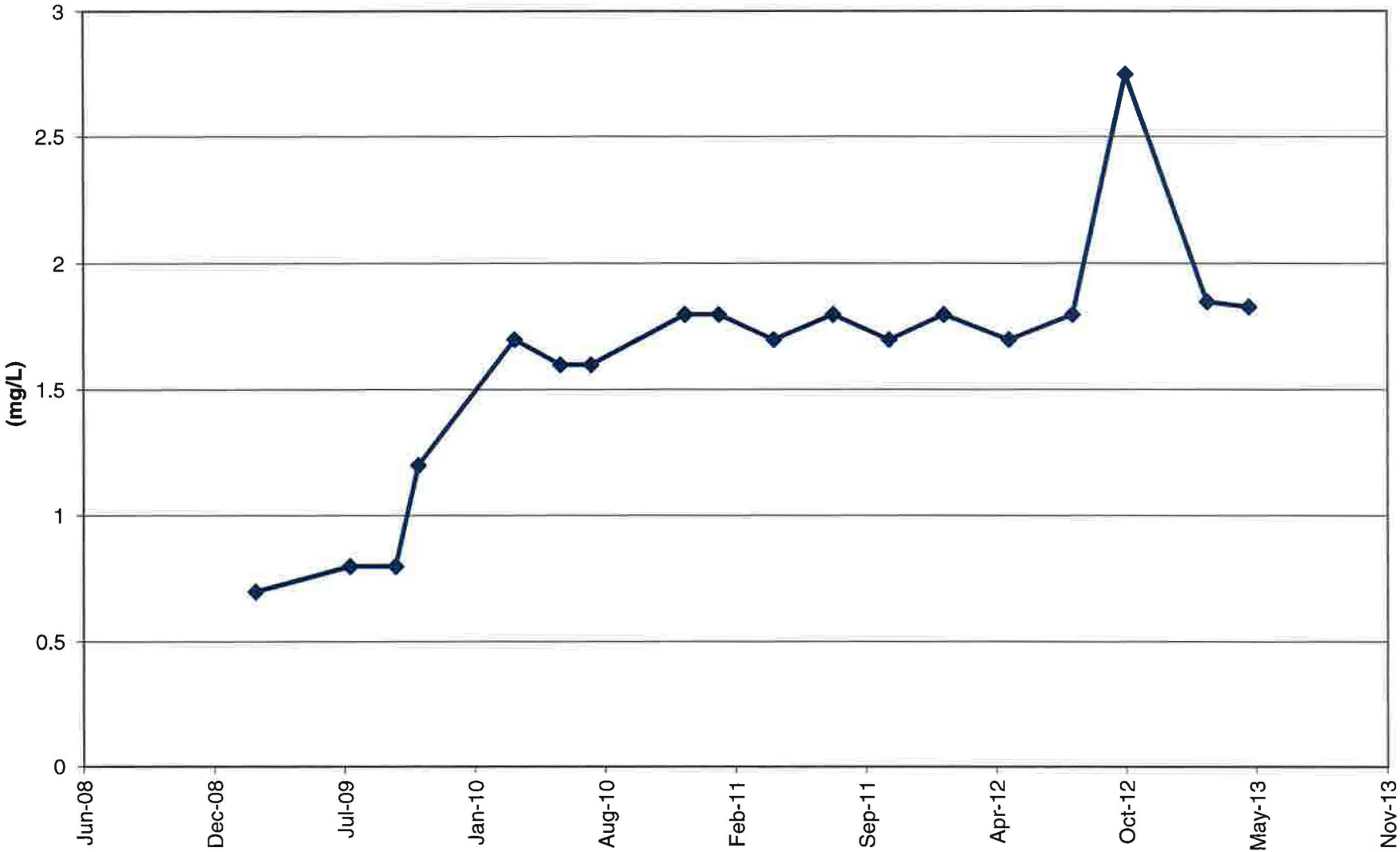
Piezometer 2 Nitrate Concentrations



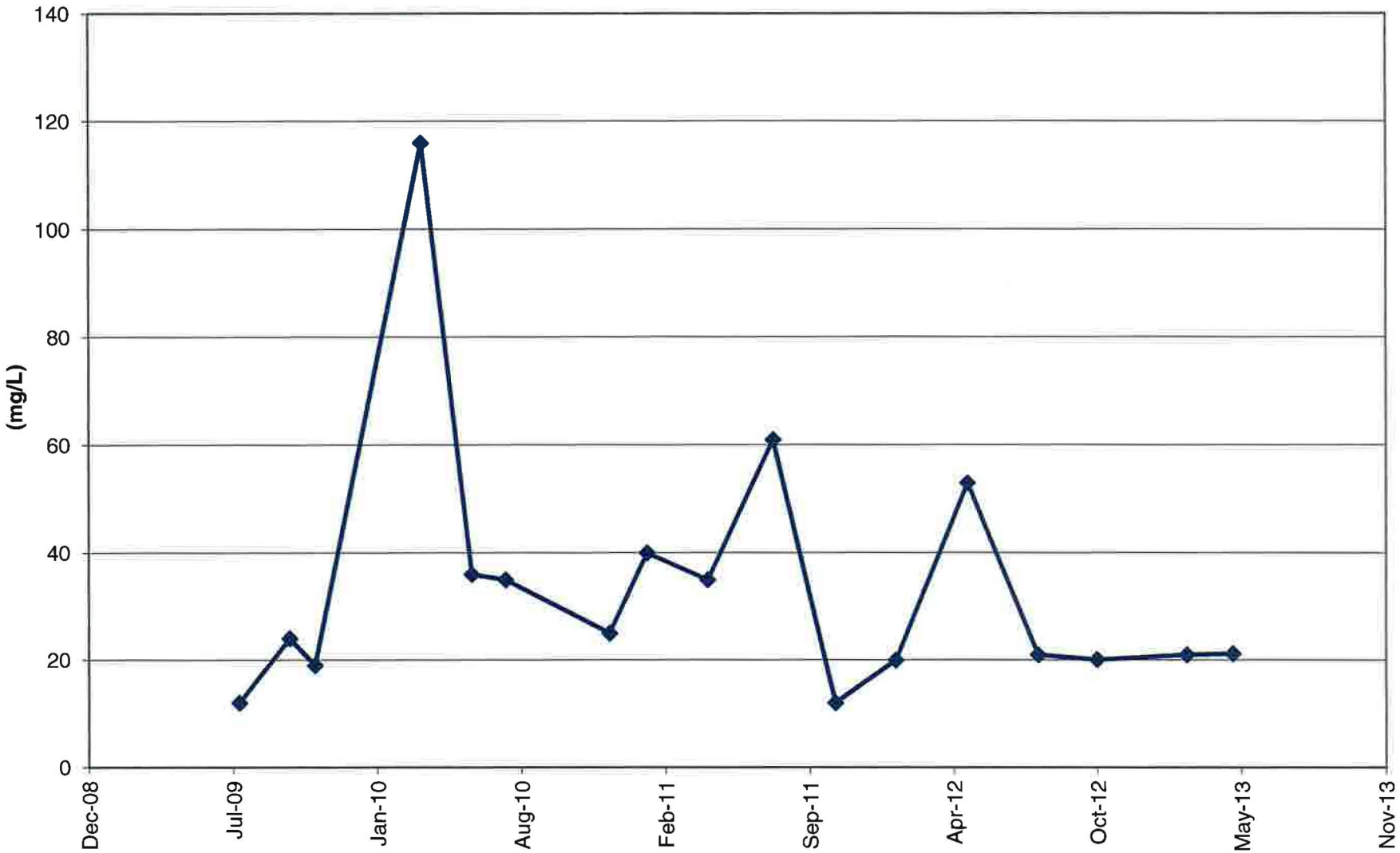
Piezometer 2 Chloride Concentrations

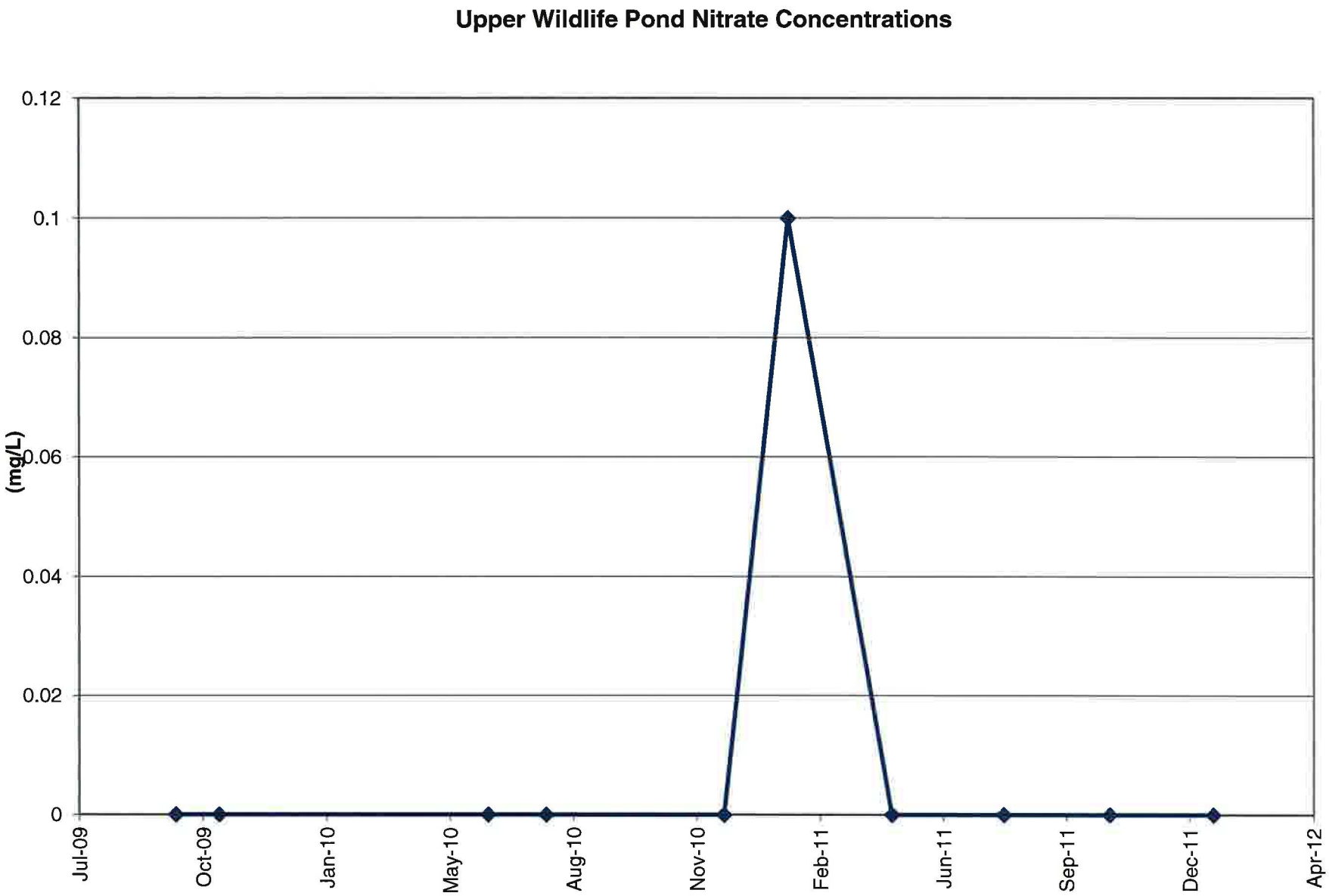


Piezometer 3 Nitrate Concentrations

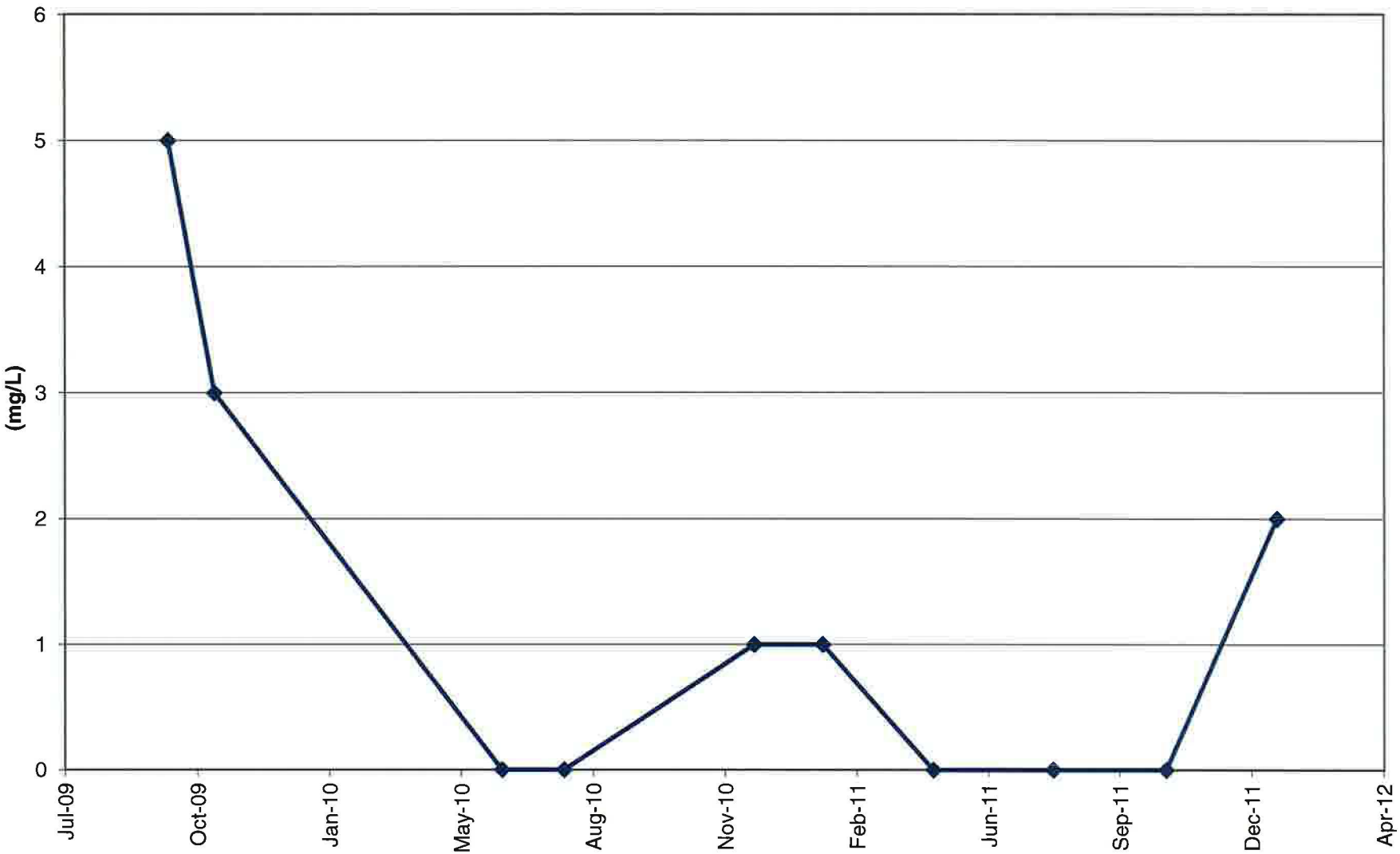


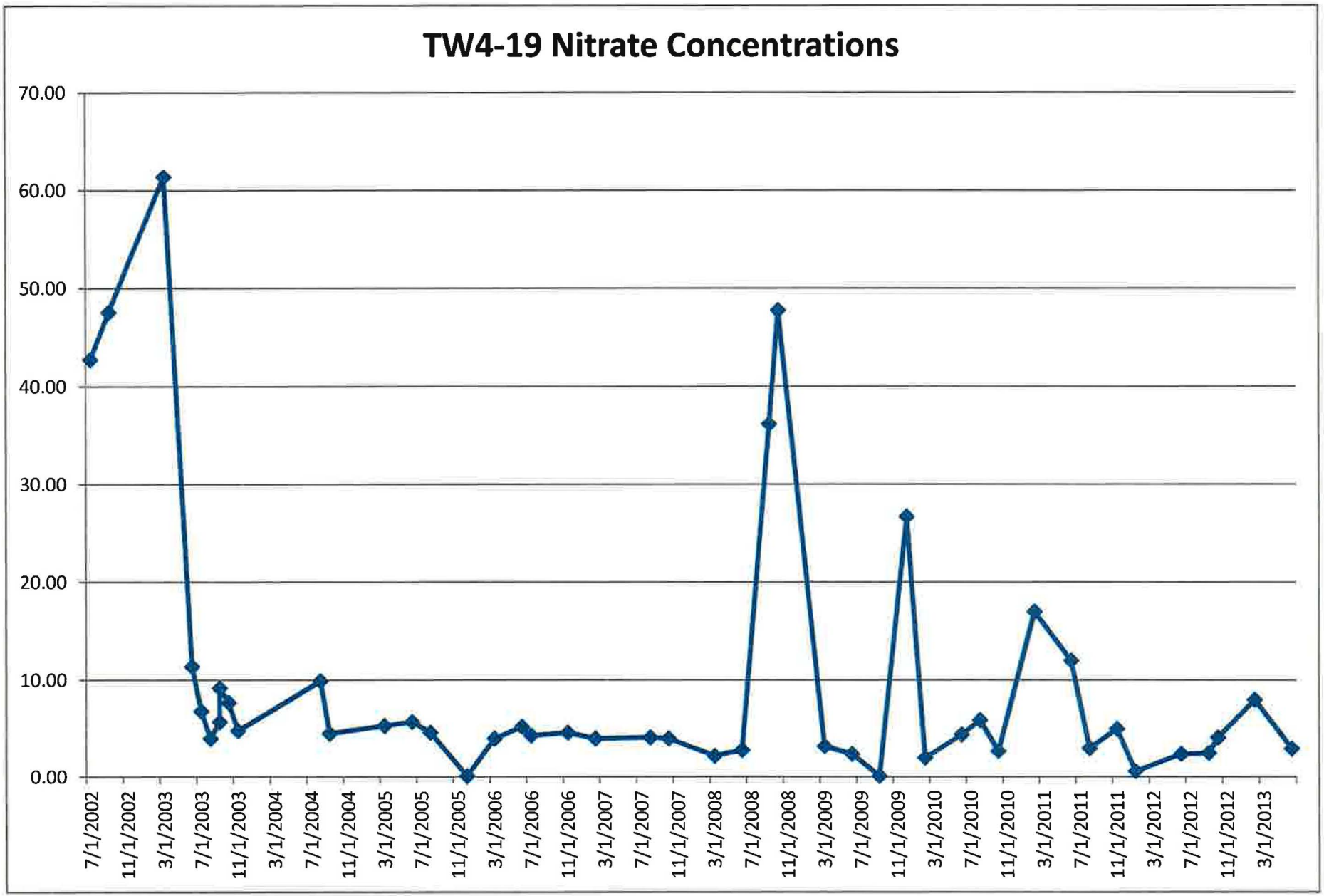
Piezometer 3 Chloride Concentrations

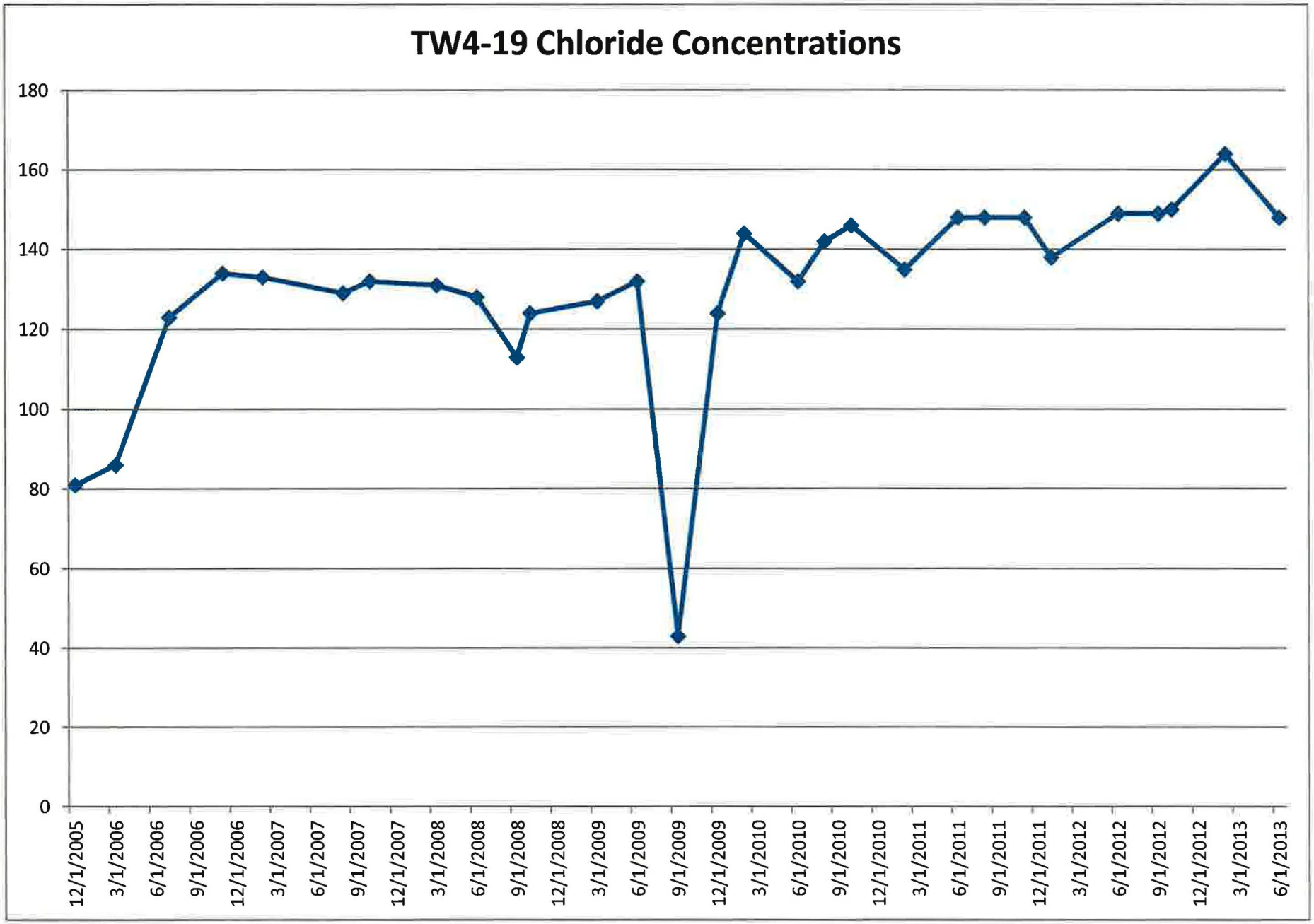


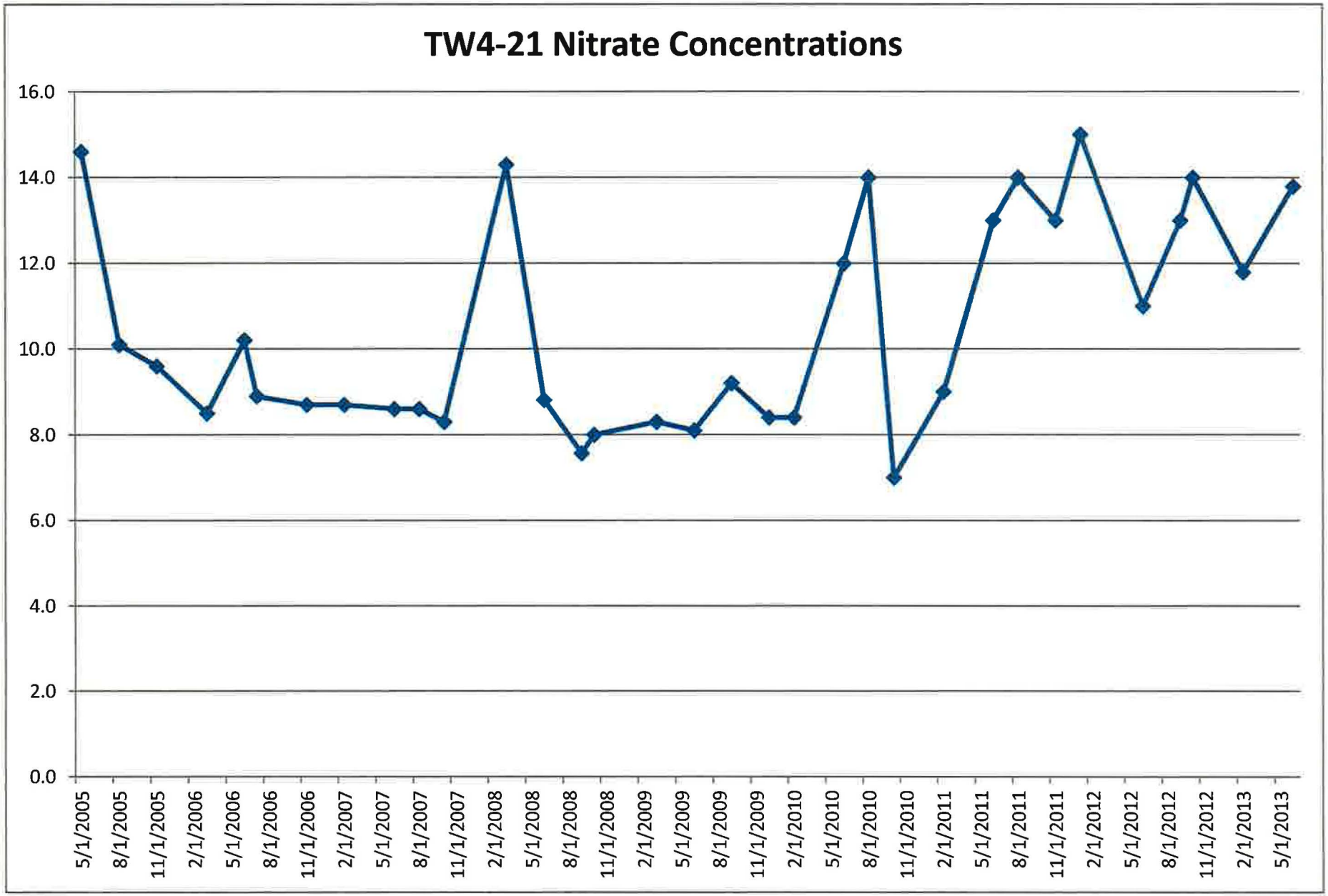

Upper Wildlife Pond Nitrate Concentrations
0.12
0.1
0.08
0.06
0.04
0.02
0
(mg/L)
Jul-09
Oct-09
Jan-10
May-10
Aug-10
Nov-10
Feb-11
Jun-11
Sep-11
Dec-11
Apr-12

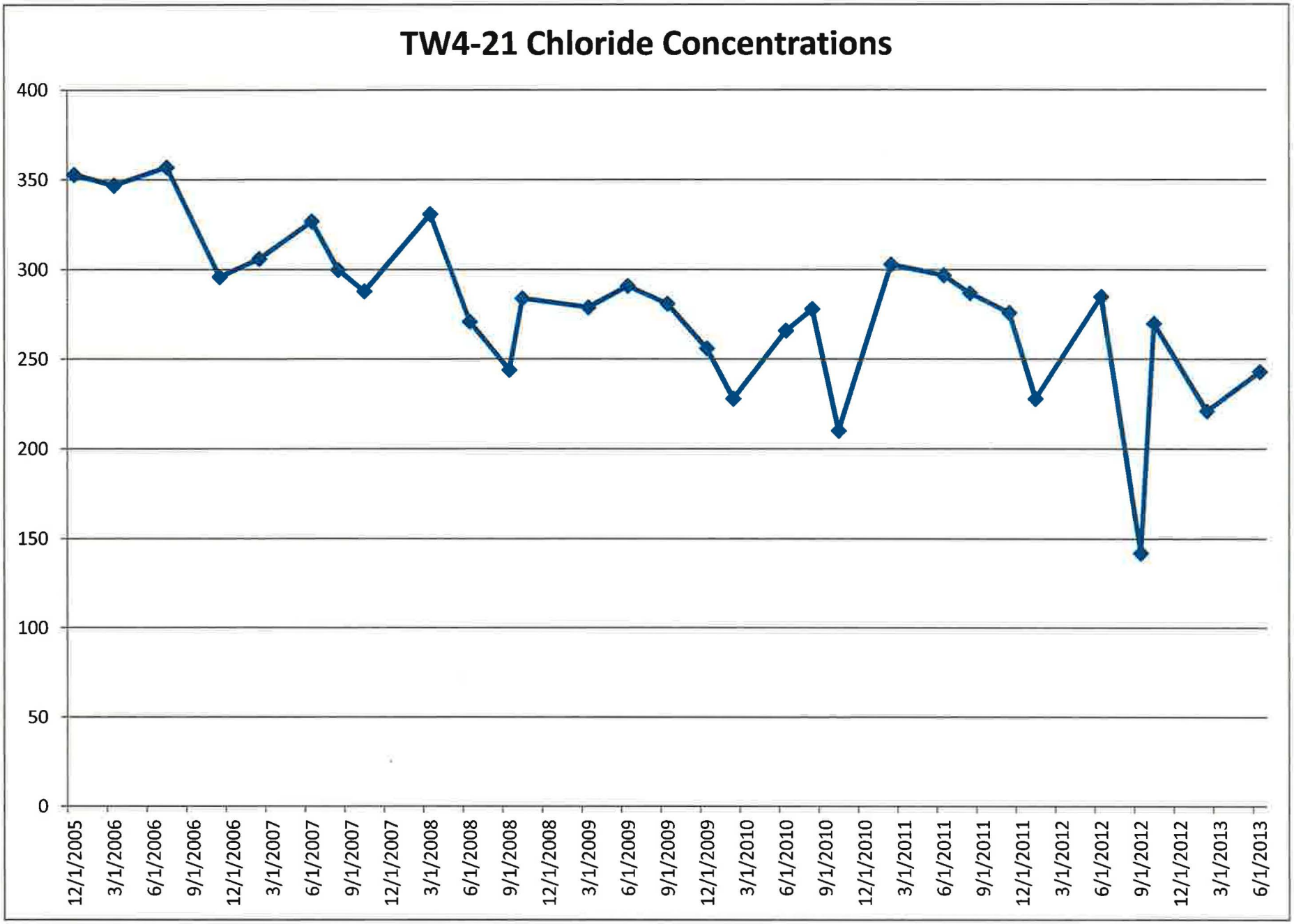
Upper Wildlife Pond Chloride Concentrations

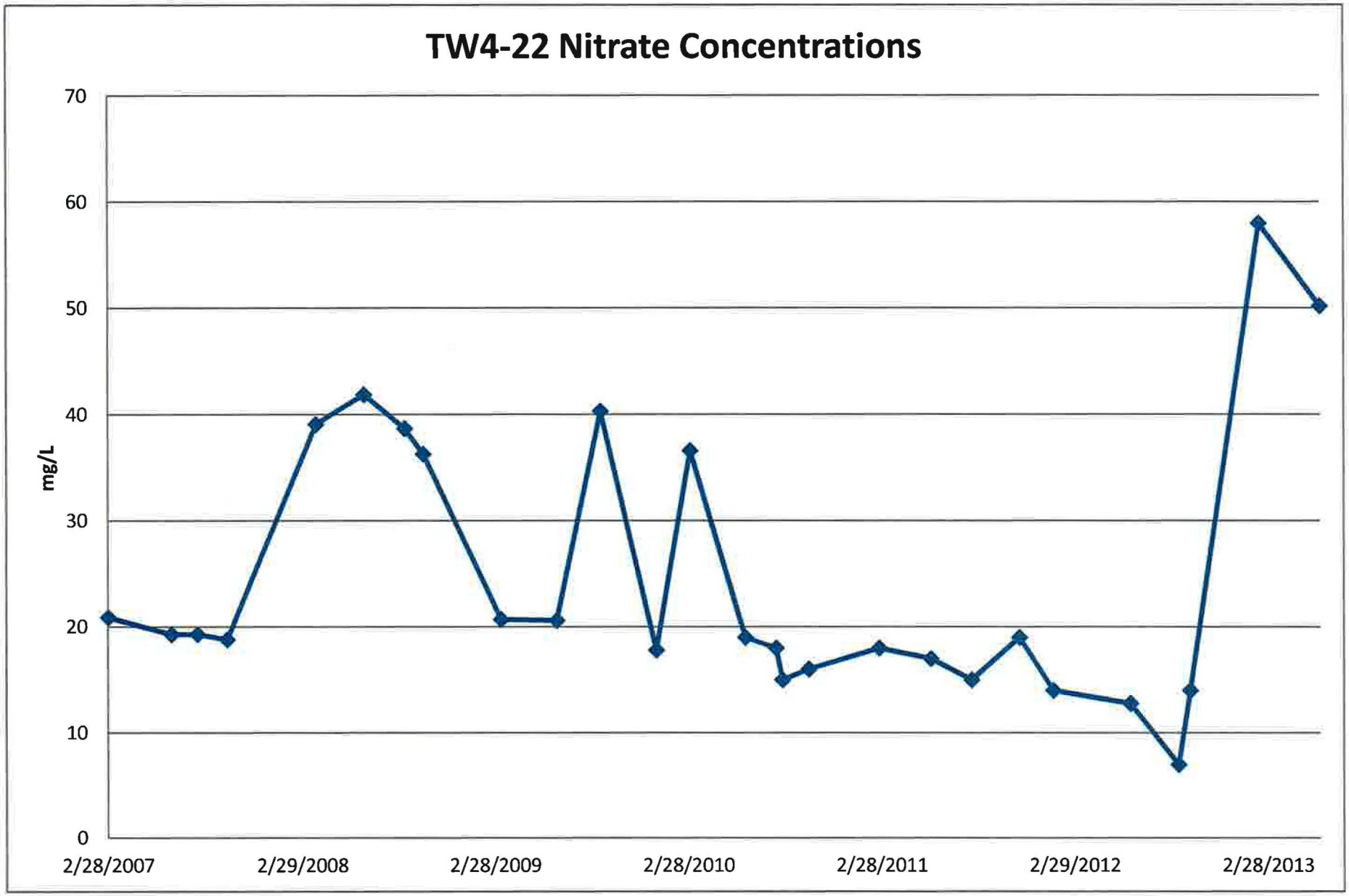


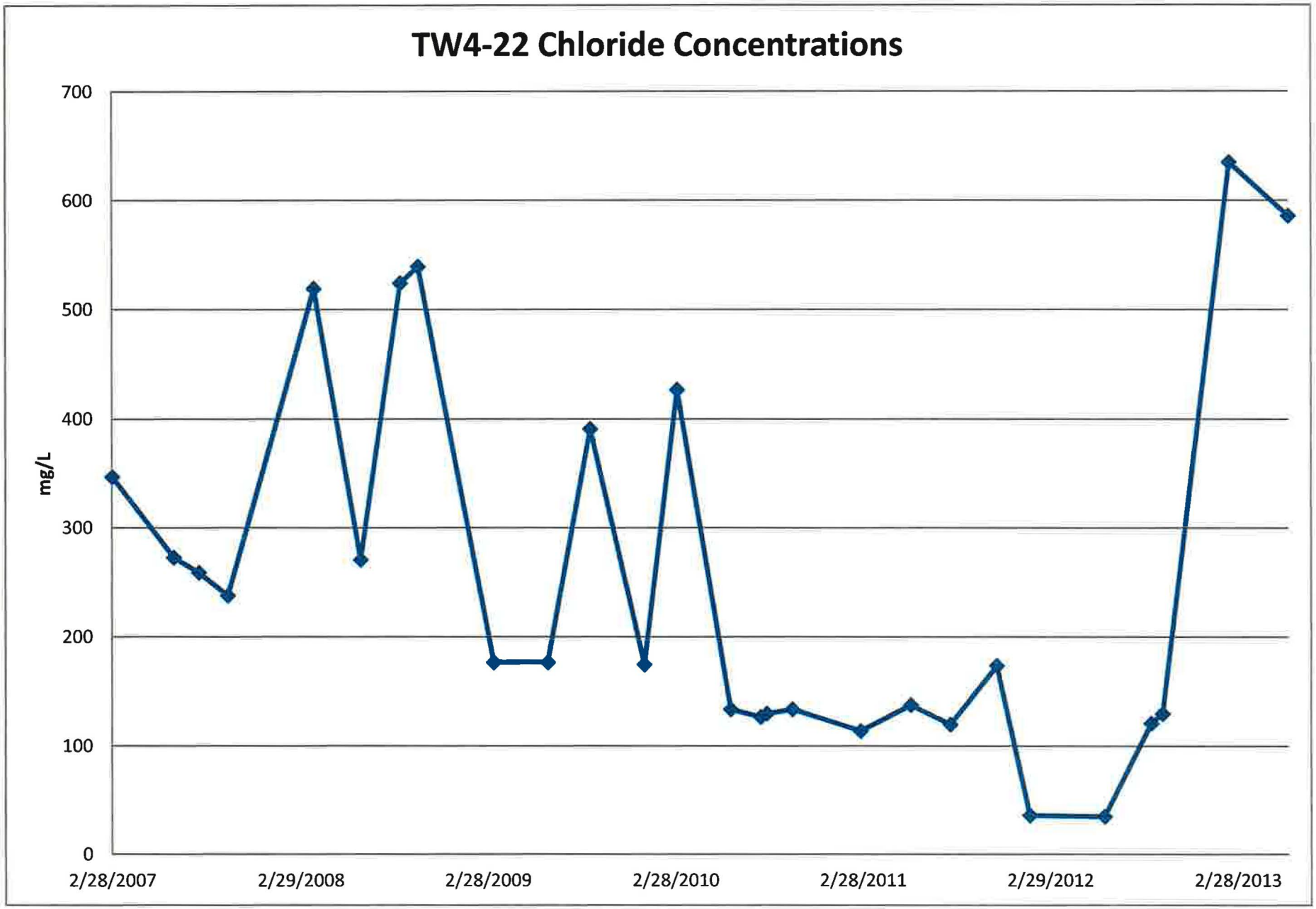

TW4-19 Nitrate Concentrations
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
7/1/2002
11/1/2002
3/1/2003
7/1/2003
11/1/2003
3/1/2004
7/1/2004
11/1/2004
3/1/2005
7/1/2005
11/1/2005
3/1/2006
7/1/2006
11/1/2006
3/1/2007
7/1/2007
11/1/2007
3/1/2008
7/1/2008
11/1/2008
3/1/2009
7/1/2009
11/1/2009
3/1/2010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

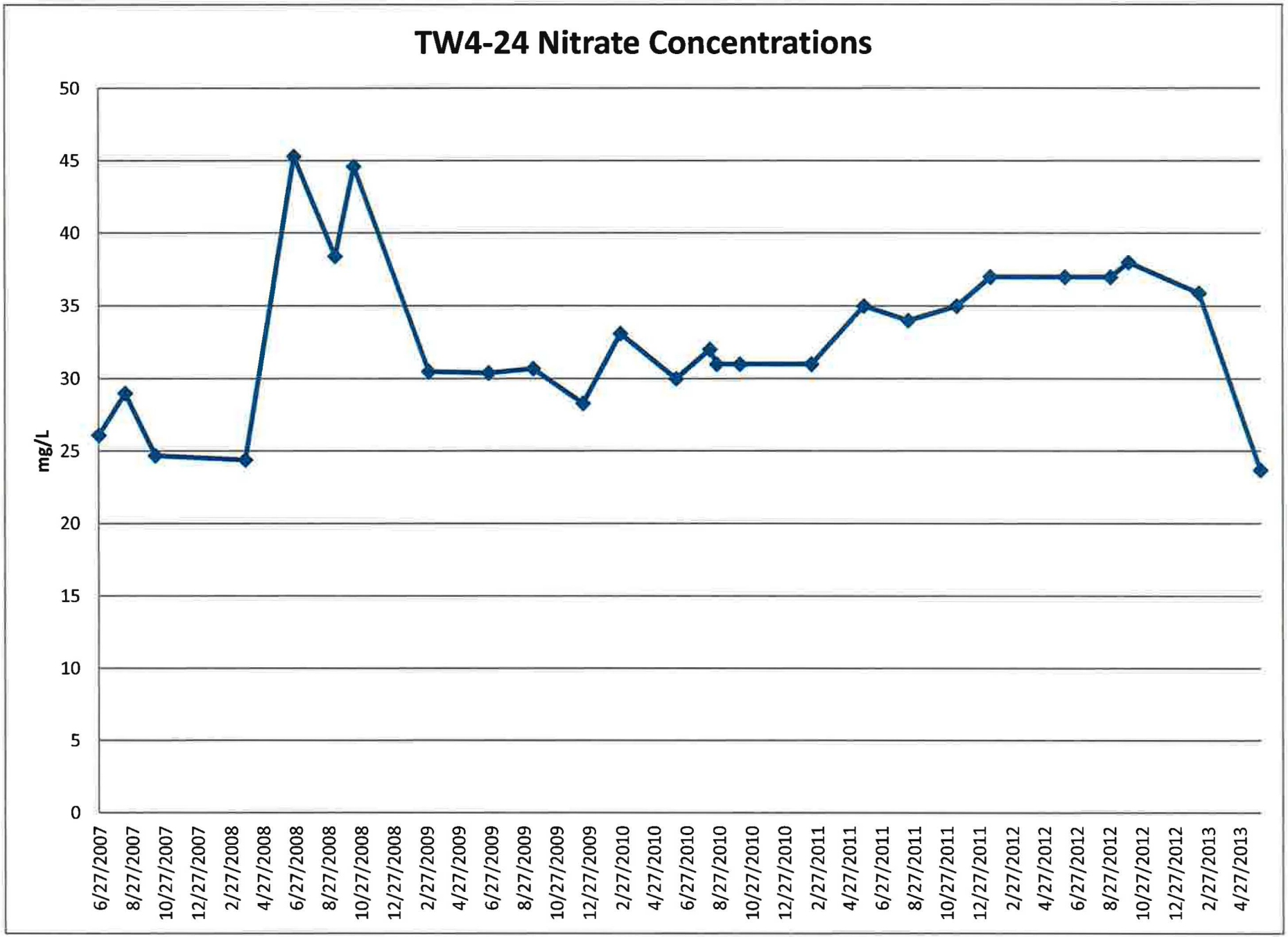

TW4-19 Chloride Concentrations
180
160
140
120
100
80
60
40
20
0
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013

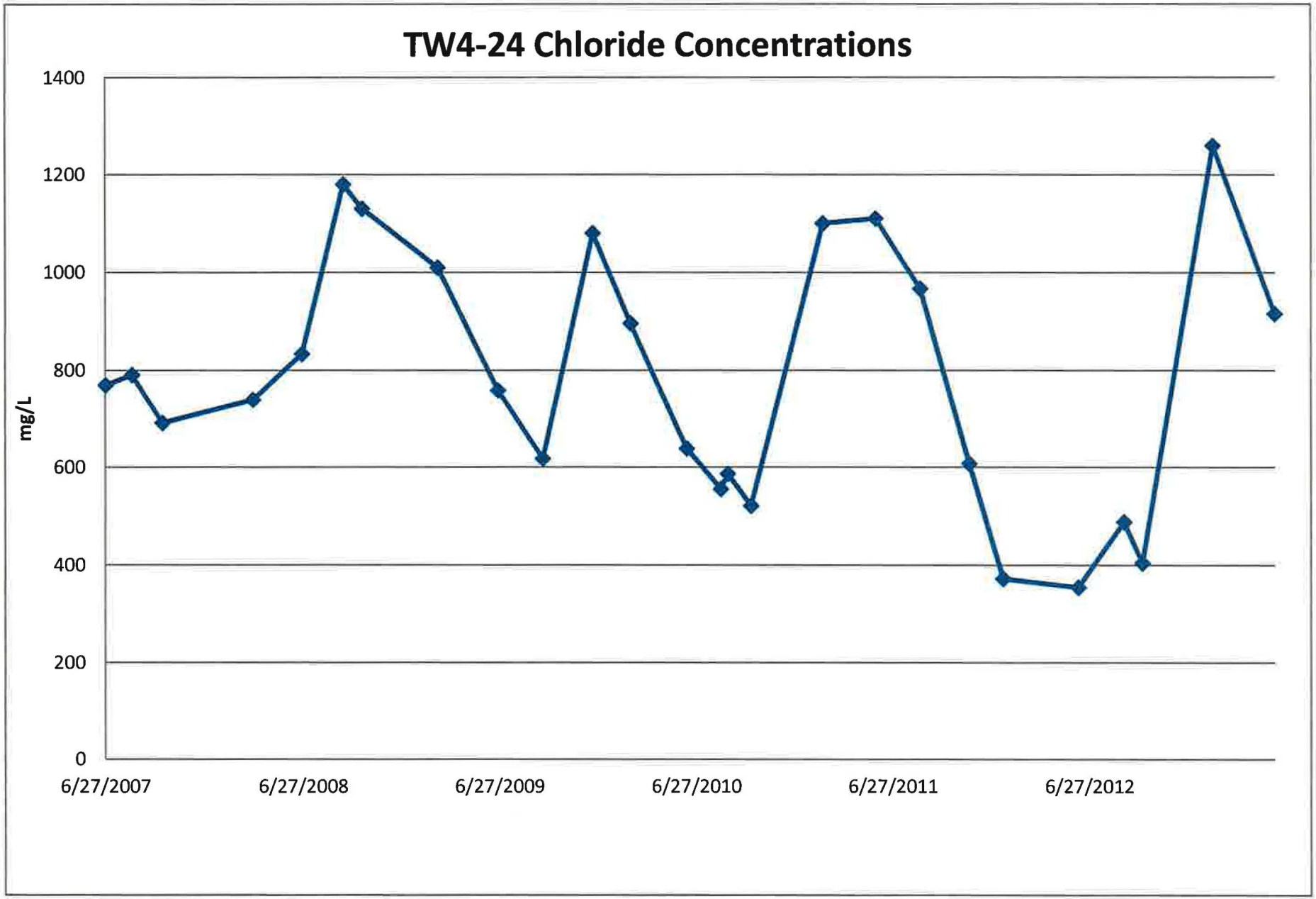

TW4-21 Nitrate Concentrations
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
5/1/2005
8/1/2005
11/1/2005
2/1/2006
5/1/2006
8/1/2006
11/1/2006
2/1/2007
5/1/2007
8/1/2007
11/1/2007
2/1/2008
5/1/2008
8/1/2008
11/1/2008
2/1/2009
5/1/2009
8/1/2009
11/1/2009
2/1/2010
5/1/2010
8/1/2010
11/1/2010
2/1/2011
5/1/2011
8/1/2011
11/1/2011
2/1/2012
5/1/2012
8/1/2012
11/1/2012
2/1/2013
5/1/2013

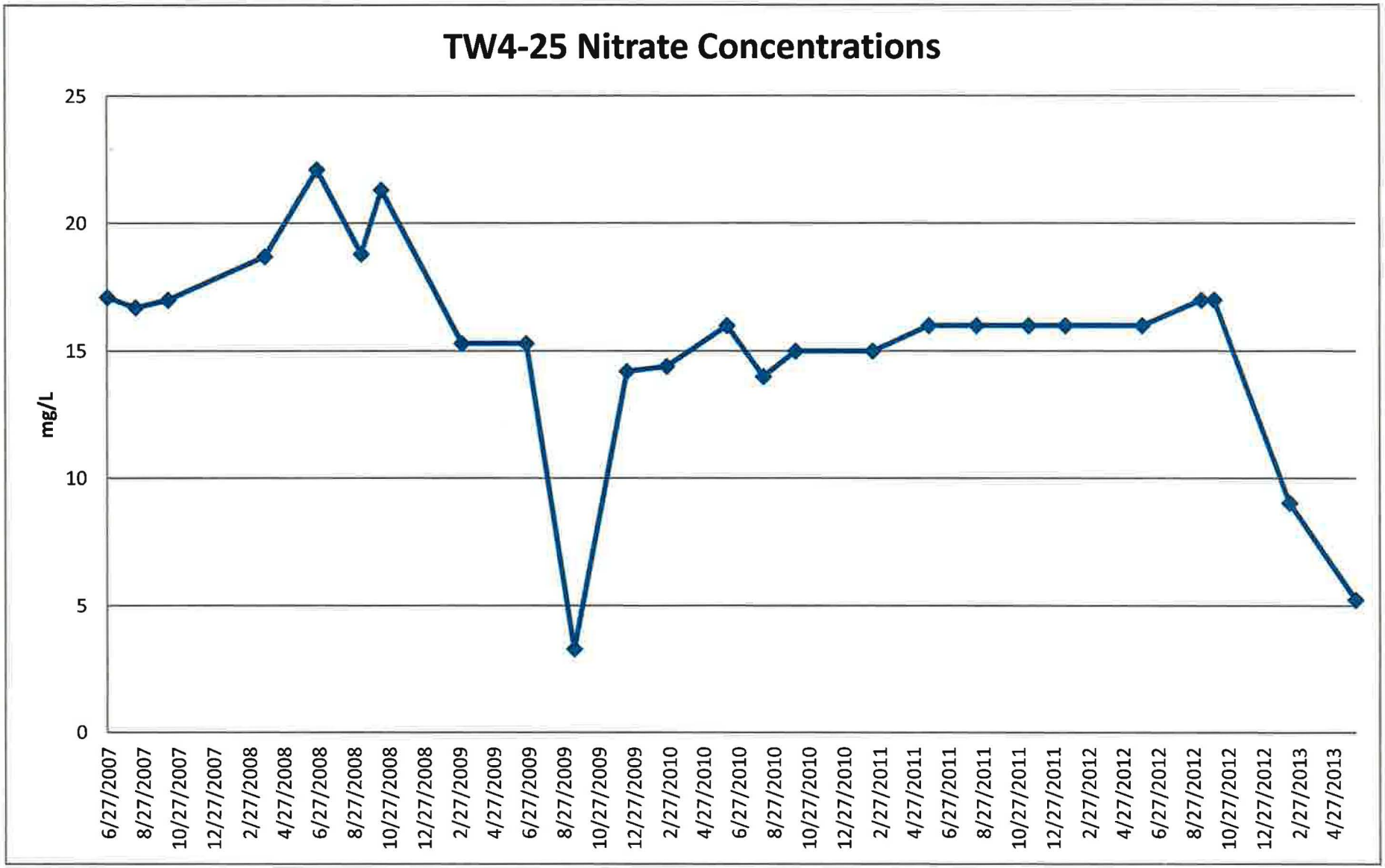

TW4-21 Chloride Concentrations
400
350
300
250
200
150
100
50
0
12/1/2005
3/1/2006
6/1/2006
9/1/2006
12/1/2006
3/1/2007
6/1/2007
9/1/2007
12/1/2007
3/1/2008
6/1/2008
9/1/2008
12/1/2008
3/1/2009
6/1/2009
9/1/2009
12/1/2009
3/1/2010
6/1/2010
9/1/2010
12/1/2010
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013


TW4-22 Nitrate Concentrations
70
60
50
40
30
20
10
0
mg/L
2/28/2007
2/29/2008
2/28/2009
2/28/2010
2/28/2011
2/29/2012
2/28/2013


TW4-22 Chloride Concentrations
700
600
500
400
300
200
100
0
mg/L
2/28/2007
2/29/2008
2/28/2009
2/28/2010
2/28/2011
2/29/2012
2/28/2013


TW4-24 Nitrate Concentrations
mg/L
50
45
40
35
30
25
20
15
10
5
0
6/27/2007
8/27/2007
10/27/2007
12/27/2007
2/27/2008
4/27/2008
6/27/2008
8/27/2008
10/27/2008
12/27/2008
2/27/2009
4/27/2009
6/27/2009
8/27/2009
10/27/2009
12/27/2009
2/27/2010
4/27/2010
6/27/2010
8/27/2010
10/27/2010
12/27/2010
2/27/2011
4/27/2011
6/27/2011
8/27/2011
10/27/2011
12/27/2011
2/27/2012
4/27/2012
6/27/2012
8/27/2012
10/27/2012
12/27/2012
2/27/2013
4/27/2013


TW4-24 Chloride Concentrations
1400
1200
1000
800
600
400
200
0
mg/L
6/27/2007
6/27/2008
6/27/2009
6/27/2010
6/27/2011
6/27/2012


TW4-25 Nitrate Concentrations
mg/L
25
20
15
10
5
0
6/27/2007
8/27/2007
10/27/2007
12/27/2007
2/27/2008
4/27/2008
6/27/2008
8/27/2008
10/27/2008
12/27/2008
2/27/2009
4/27/2009
6/27/2009
8/27/2009
10/27/2009
12/27/2009
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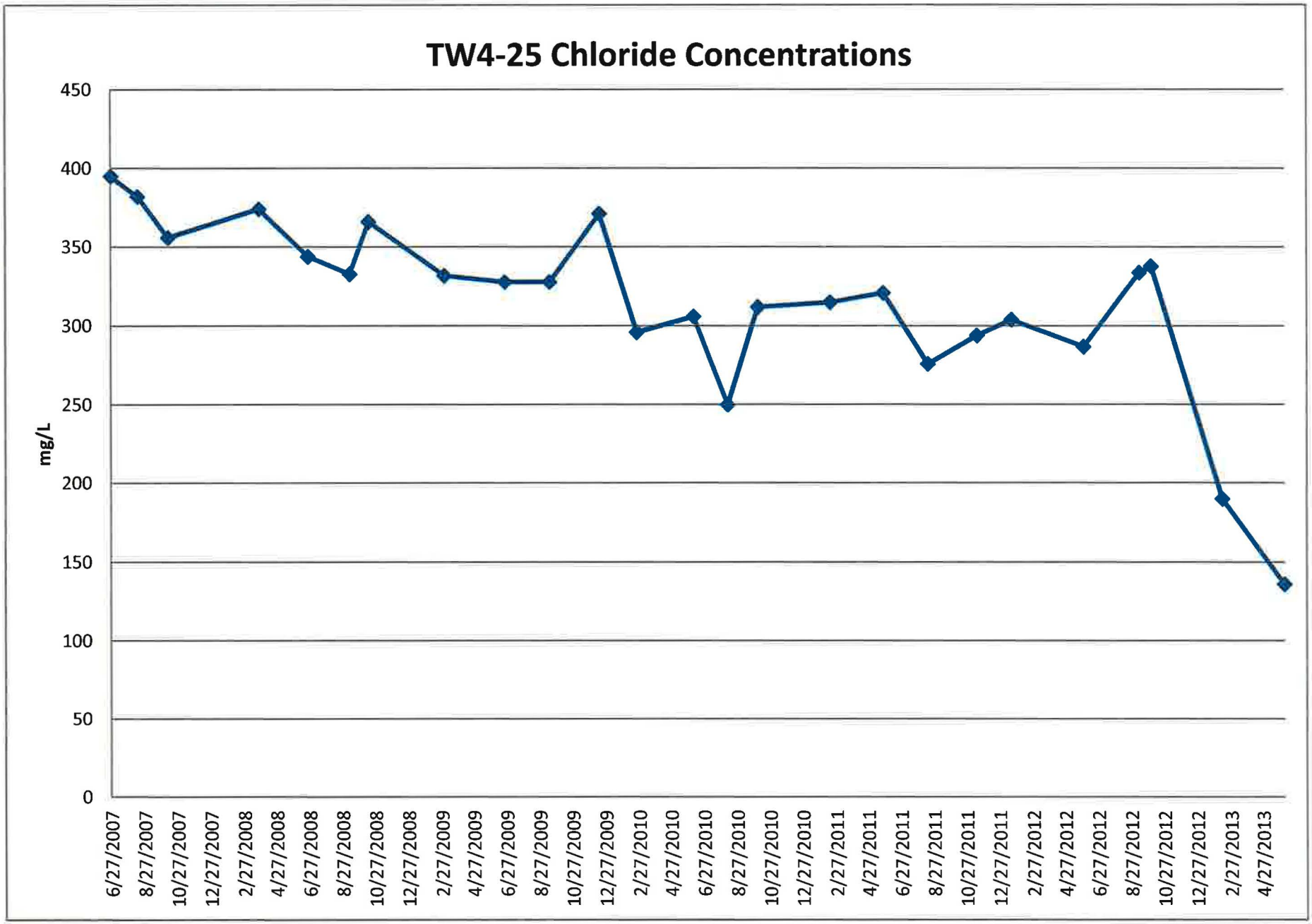
4/27/2010
6/27/2010
8/27/2010
10/27/2010
12/27/2010
2/27/2011
4/27/2011
6/27/2011
8/27/2011
10/27/2011
12/27/2011
2/27/2012
4/27/2012
6/27/2012
8/27/2012
10/27/2012
12/27/2012
2/27/2013
4/27/2013


TW4-25 Chloride Concentrations
mg/L
450
400
350
300
250
200
150
100
50
0
6/27/2007
8/27/2007
10/27/2007
12/27/2007
2/27/2008
4/27/2008
6/27/2008
8/27/2008
10/27/2008
12/27/2008
2/27/2009
4/27/2009
6/27/2009
8/27/2009
10/27/2009
12/27/2009
2/27/2010
4/27/2010
6/27/2010
8/27/2010
10/27/2010
12/27/2010
2/27/2011
4/27/2011
6/27/2011
8/27/2011
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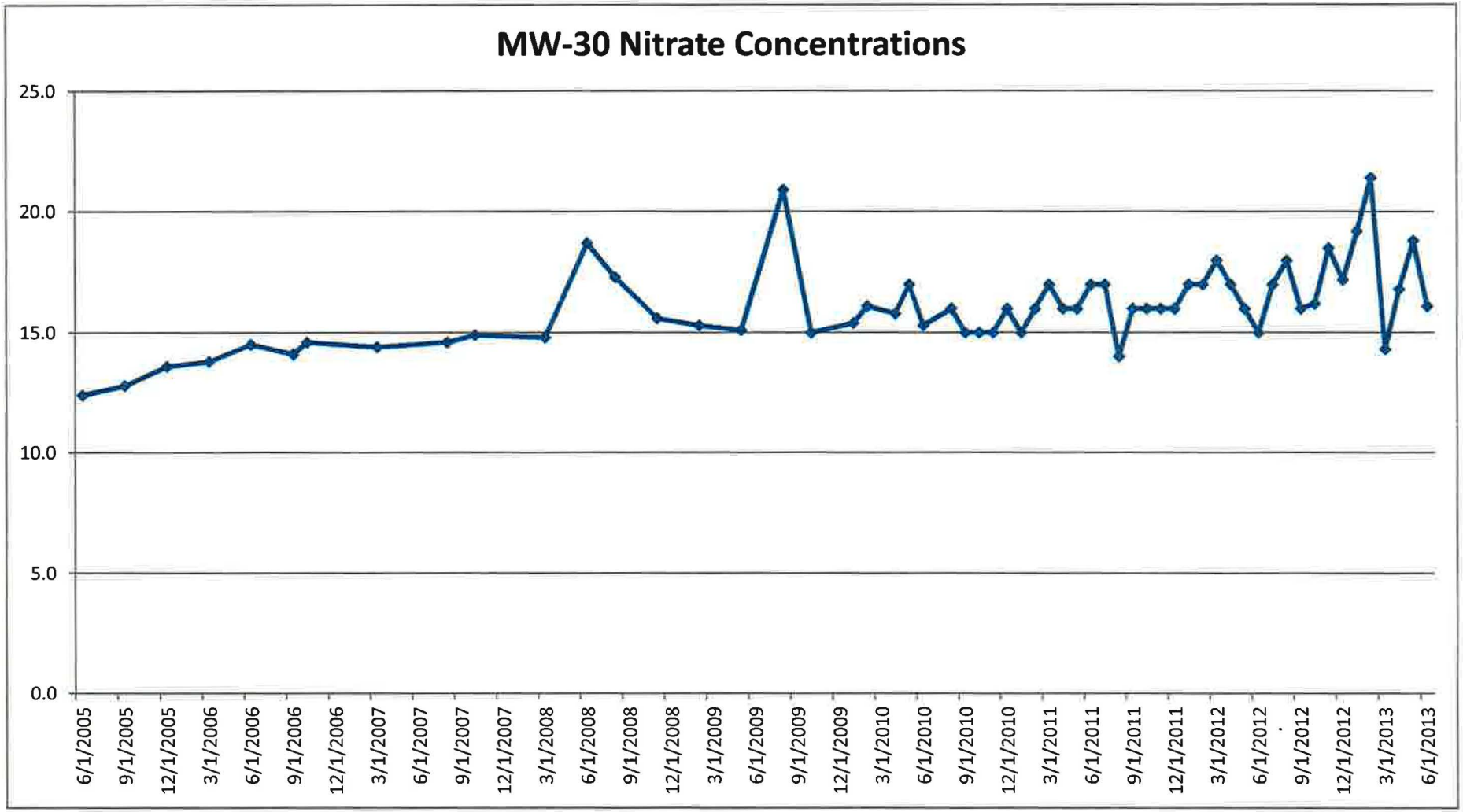
12/27/2012
2/27/2013
4/27/2013


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
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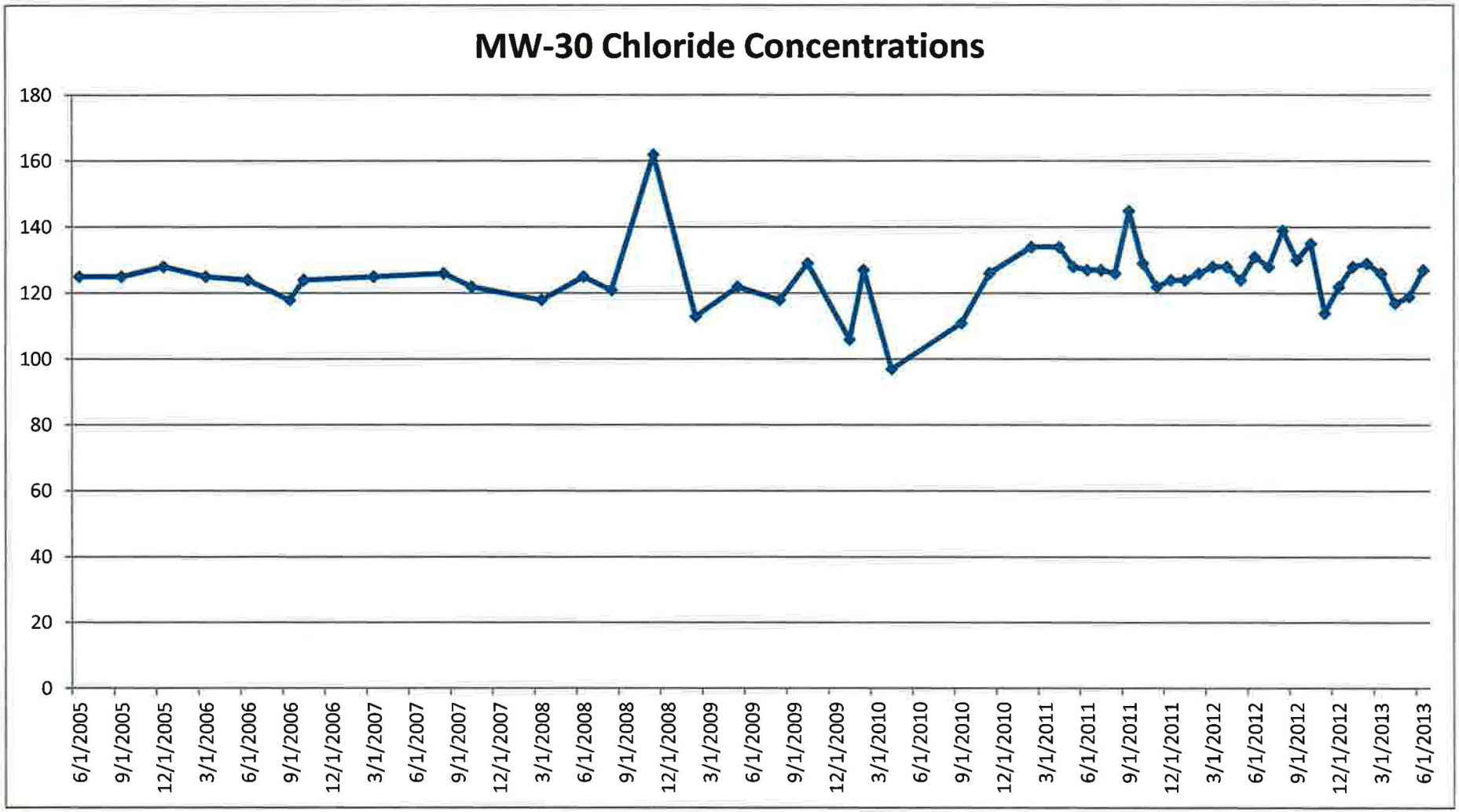
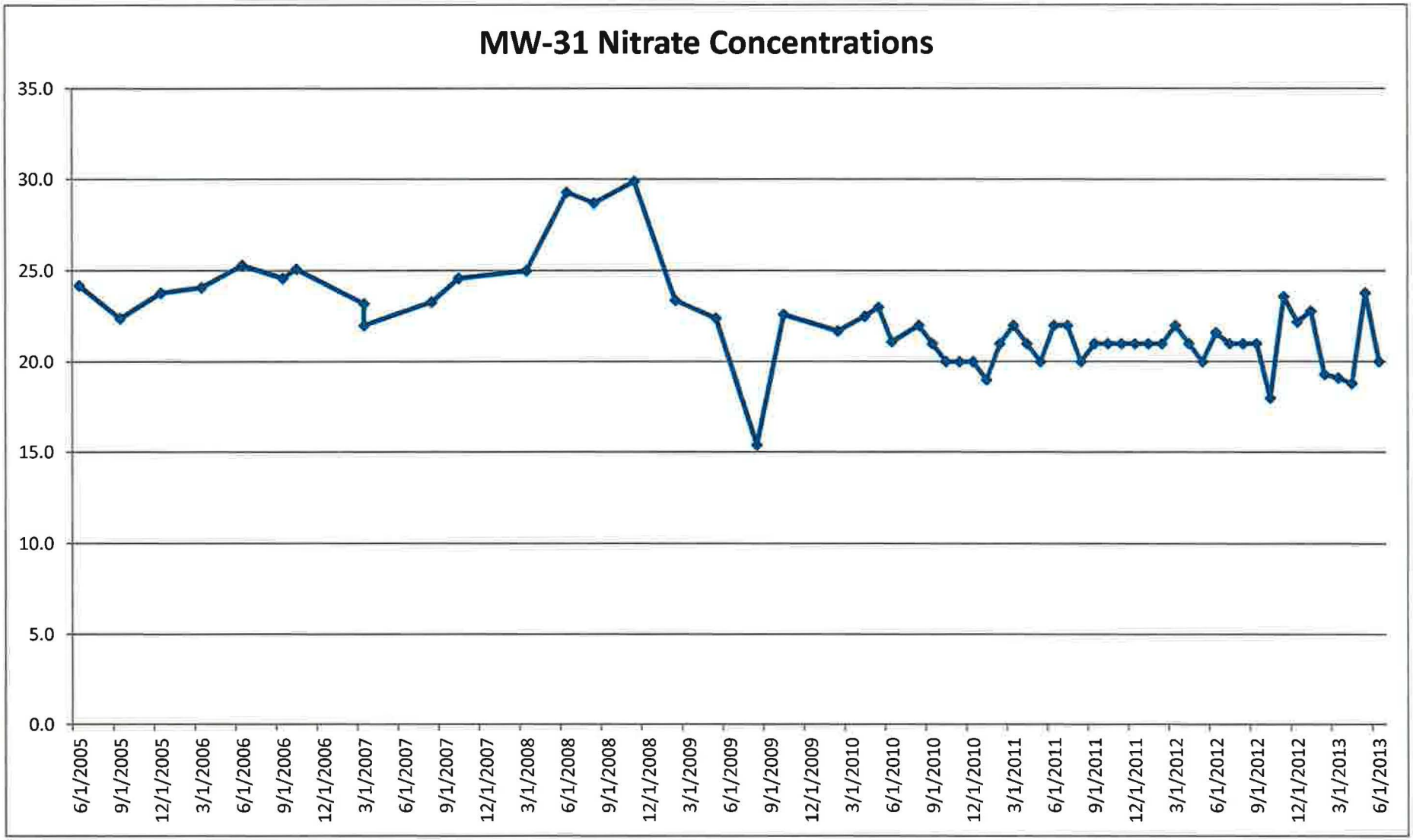
12/1/2012
3/1/2013
6/1/2013


MW-30 Chloride Concentrations
180
160
140
120
100
80
60
40
20
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


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
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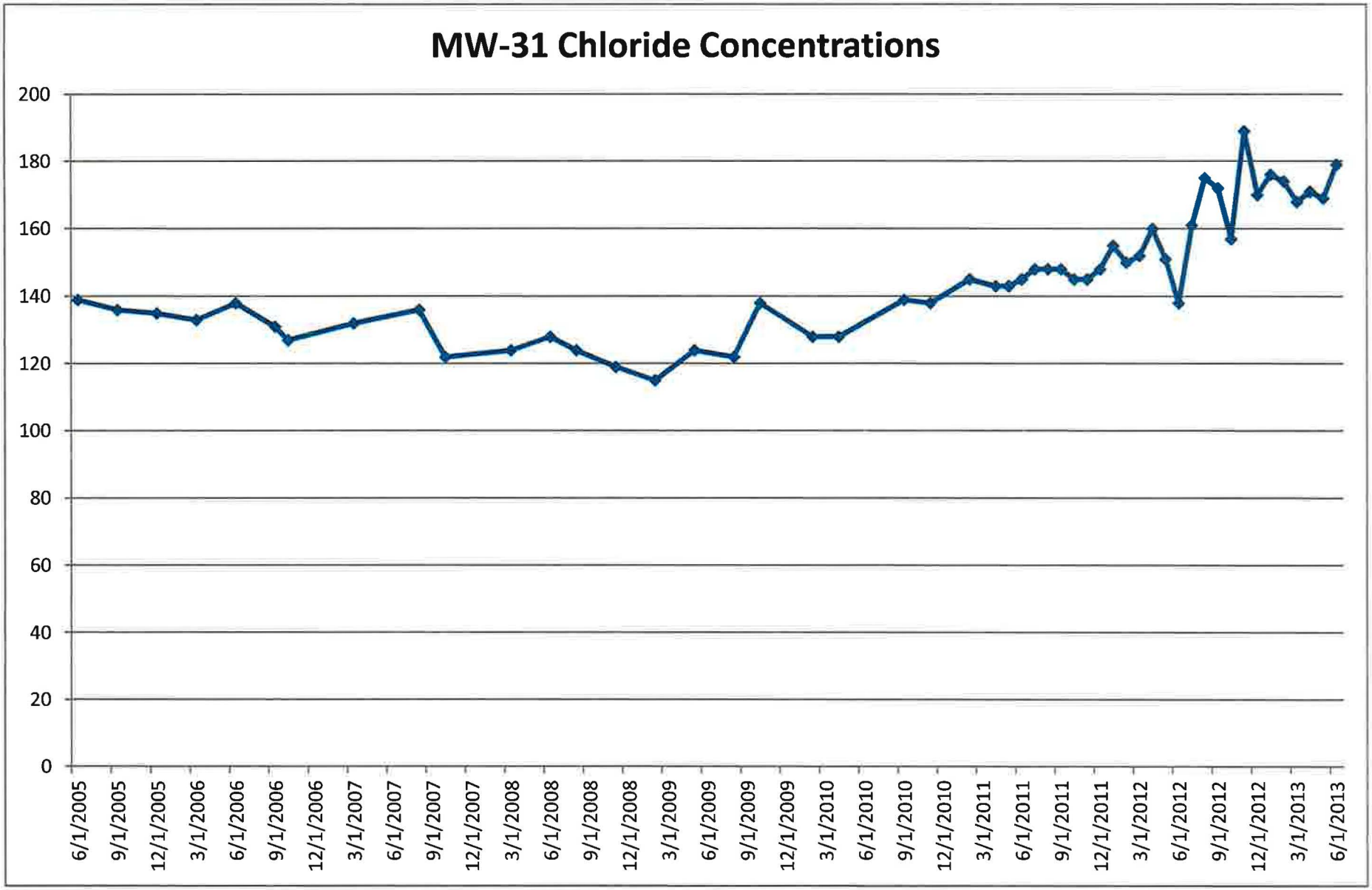
3/1/2011
6/1/2011
9/1/2011
12/1/2011
3/1/2012
6/1/2012
9/1/2012
12/1/2012
3/1/2013
6/1/2013


MW-31 Chloride Concentrations
200
180
160
140
120
100
80
60
40
20
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
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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

Tab L

CSV Transmittal Letter

Kathy Weinel

From: Kathy Weinel
Sent: Monday, August 26, 2013 9:30 AM
To: Rusty Lundberg
Cc: 'Phillip Goble'; 'Thomas Rushing'; 'Dean Henderson'; Harold Roberts; Dan Hillsten; David Frydenlund; David Turk; Jo Ann Tischler; Jaime Massey
Subject: Transmittal of CSV Files White Mesa Mill 2013 Q2 Nitrate Monitoring
Attachments: 1304696-EDD-rev1.csv

Dear Mr. Lundberg,

Attached to this e-mail are electronic copies of laboratory results for nitrate monitoring conducted at the White Mesa Mill during the second quarter of 2013, in Comma Separated Value (CSV) format.

Please contact me at 303-389-4134 if you have any questions on this transmittal.

Yours Truly

Kathy Weinel